SUMMARY

Learn how to configure and manage printers using the HP Embedded Web Server (EWS). This guide is intended for network administrators. The information is specific to the EWS for Enterprise and Managed printers/MFPs running HP FutureSmart firmware.
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1 Overview of the HP Embedded Web Server (EWS)

The HP Embedded Web Server (EWS) resides on a printer in the firmware instead of as software that is installed on a network server. The EWS provides an interface to the printer that anyone who has a network-connected computer and a standard Web browser can open and use. No additional software or drivers are required. Use the EWS to view the printer status and manage the printing functions from a computer instead of from the printer control panel.

- Introduction
- Before you begin
- HP Embedded Web Server features

**NOTE:** This information is specific to the HP Embedded Web Server (EWS) for Enterprise and Managed printers/MFPs running HP FutureSmart firmware.

An administrator password can be set to prevent unauthorized users from remotely configuring the printer or from gaining access to functionality reserved for the network administrator from the control panel. Some tabs, pages, and settings are available only when an administrator password is set. For more information about assigning an administrator password, see the General Security page on the Security tab.

**NOTE:** By default, no administrator password is set. HP recommends securing the printer by setting the admin password for the EWS. For more information about printer security, see Configure printer security on page 43.

If an administrator password is set, only the Information tab is available when a user first accesses the EWS. To gain access to the other tabs and settings in the EWS, click the Sign In button located in the upper-right corner of the page, and then sign in with the administrator password. To maintain security for the printer, click the Sign Out button when finished using the EWS.

The tabs for the EWS are available across the top of the page. On small, narrow devices, the tabs are collapsed and available from the menu icon.

**NOTE:** All features might not be available on every device.

Introduction

Use the HP Embedded Web Server to manage printing functions from a computer instead of the printer control panel.

- View printer status information
- Determine the remaining life for all supplies and order new ones
- View and change tray configurations
- View and change the printer control-panel menu configuration
- View and print internal pages
- Receive notification of printer and supplies events
- View and change network configuration

The HP Embedded Web Server works when the printer is connected to an IP-based network. The HP Embedded Web Server does not support IPX-based printer connections. Internet access is not needed to open and use the HP Embedded Web Server.

When the printer is connected to the network, the HP Embedded Web Server is automatically available.

**NOTE:** The HP Embedded Web Server is not accessible beyond the network firewall.

**Before you begin**

To use the HP Embedded Web Server, the browser must meet the following requirements:

**Windows® 7**
- Internet Explorer (version 8.x or greater)
- Google Chrome (version 34.x or greater)
- Firefox (version 20.x or greater)

**Windows® 8 or greater**
- Internet Explorer (version 9.x or greater)
- Google Chrome (version 34.x or greater)
- Firefox (version 20.x or greater)

**macOS**
- Safari (version 5.x or greater)
- Google Chrome (version 34.x or greater)

**Linux**
- Google Chrome (version 34.x or greater)
- Firefox (version 20.x or greater)
HP Embedded Web Server features

Learn about the HP Embedded Web Server (EWS) features available on each tab.

- Information tab
- General tab
- Other Links list
- Copy/Print tab
- Scan/Digital Send tab
- Fax tab
- Supplies tab
- Troubleshooting tab
- Security tab
- HP Web Services tab
- Networking tab

Figure 1-1: EWS Tabs

Information tab

Refer to the table for settings in the Information tab.
Table 1-1  HP Embedded Web Server Information tab

<table>
<thead>
<tr>
<th>Menu</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Device Status</td>
<td>Shows the printer status and shows the estimated life remaining of HP supplies. The page also shows the type and size of paper set for each tray. To change the default settings, click the Change Settings link.</td>
</tr>
<tr>
<td>Job Log</td>
<td>Provides a list of the jobs that have been processed.</td>
</tr>
<tr>
<td>Configuration Page</td>
<td>Shows the information found on the configuration page.</td>
</tr>
<tr>
<td>Supplies Status Page</td>
<td>Shows the status of the supplies for the printer.</td>
</tr>
<tr>
<td>Event Log Page</td>
<td>Shows a list of all printer events and errors. Use the HP Instant Support link (in the Other Links area on all HP Embedded Web Server pages) to connect to a set of dynamic web pages that help solve problems. These pages also show additional services available for the printer.</td>
</tr>
<tr>
<td>Usage Page</td>
<td>Shows a summary of the number of pages the printer has printed, grouped by size, type, and paper print path.</td>
</tr>
<tr>
<td>Device Information</td>
<td>Shows the printer network name, address, and model information. To customize these entries, click the Device Information menu on the General tab.</td>
</tr>
<tr>
<td>Control Panel Snapshot</td>
<td>Shows an image of the current screen on the control panel display.</td>
</tr>
<tr>
<td>Remote Control-Panel</td>
<td>Provides a way to troubleshoot or manage the printer from a browser window on a desktop or laptop.</td>
</tr>
<tr>
<td>Print</td>
<td>Allows the user to send a print-ready file to the printer to be printed.</td>
</tr>
<tr>
<td>Printable Reports and Pages</td>
<td>Lists the internal reports and pages for the printer. Select one or more items to print.</td>
</tr>
<tr>
<td>Open Source Licenses</td>
<td>Shows a summary of the licenses for open source software programs that can be used with the printer.</td>
</tr>
</tbody>
</table>

General tab

Refer to the table for settings in the General tab.

Table 1-2  HP Embedded Web Server General tab

<table>
<thead>
<tr>
<th>Menu</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control Panel Customization</td>
<td>Reorder, show, or hide features on the control-panel display. Change the default display language and keyboard layouts.</td>
</tr>
<tr>
<td>Quick Sets</td>
<td>Configure jobs that are available in the Quick Sets area of the Home screen on the printer control panel.</td>
</tr>
<tr>
<td>Alerts</td>
<td>Set up email alerts for various printer and supplies events.</td>
</tr>
<tr>
<td>Control Panel Settings App</td>
<td>Shows the Settings app options that are available on the printer control panel.</td>
</tr>
<tr>
<td>General Settings</td>
<td>Configure how the printer recovers from jams and other general printer settings.</td>
</tr>
<tr>
<td>AutoSend</td>
<td>Configure the printer to send automated emails regarding printer configuration and supplies to specific email addresses.</td>
</tr>
<tr>
<td>Edit Other Links</td>
<td>Add or customize a link to another website. This link displays in the footer area on all HP Embedded Web Server pages.</td>
</tr>
</tbody>
</table>
Table 1-2  HP Embedded Web Server General tab (continued)

<table>
<thead>
<tr>
<th>Menu</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ordering Information</td>
<td>Enter information about ordering replacement toner cartridges. This information displays on the supplies status page.</td>
</tr>
<tr>
<td>Device Information</td>
<td>Name the printer and assign an asset number to it. Enter the name of the primary contact who will receive information about the printer.</td>
</tr>
<tr>
<td>Language</td>
<td>Set the language in which to display the HP Embedded Web Server information.</td>
</tr>
<tr>
<td>Firmware Upgrade</td>
<td>Download and install printer firmware upgrade files.</td>
</tr>
<tr>
<td>Date/Time Settings</td>
<td>Set the date and time or synchronize with a network time server.</td>
</tr>
<tr>
<td>Energy Settings</td>
<td>Set or edit a wake time, sleep time, and sleep delay for the printer. Set a different schedule for each day of the week and for holidays. Set which interactions with the printer cause it to wake from sleep mode.</td>
</tr>
<tr>
<td>Back up and Restore</td>
<td>Create a backup file that contains printer and user data. If necessary, use this file to restore data to the printer.</td>
</tr>
<tr>
<td>Reset Factory Settings</td>
<td>Restore printer settings to the factory defaults.</td>
</tr>
<tr>
<td>Solution Installer</td>
<td>Install or remove third-party software packages that extend or modify the functionality of the printer.</td>
</tr>
<tr>
<td>Job Statistics Settings</td>
<td>Provides connection information about third-party job-statistics services, or enables local serverless device job accounting.</td>
</tr>
<tr>
<td>Quota Settings</td>
<td>Provides connection information about third-party job-quota services, or enables local device quota service.</td>
</tr>
</tbody>
</table>

Other Links list

Configure which links display in the footer of the HP Embedded Web Server by using the Edit Other Links menu on the General tab.

⚠️ **NOTE:** The following are the default links.

Table 1-3  HP Embedded Web Server Other Links list

<table>
<thead>
<tr>
<th>Menu</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>HP Instant Support</td>
<td>Connect to the HP website to find solutions to printer problems.</td>
</tr>
<tr>
<td>Shop for Supplies</td>
<td>Connect to the HP SureSupply website for information on purchasing original HP supplies, such as cartridges and paper.</td>
</tr>
<tr>
<td>Product Support</td>
<td>Connect to the support site for the printer to search for help on various topics.</td>
</tr>
</tbody>
</table>

Copy/Print tab

Refer to the table for settings in the Copy/Print tab.

Table 1-4  HP Embedded Web Server Copy/Print tab

<table>
<thead>
<tr>
<th>Menu</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Print from USB Drive Settings</td>
<td>Enable or disable the Print from USB Drive menu on the control panel.</td>
</tr>
</tbody>
</table>
Table 1-4  HP Embedded Web Server Copy/Print tab (continued)

<table>
<thead>
<tr>
<th>Menu</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manage Stored Jobs</td>
<td>Enable or disable the ability to store jobs in the printer memory. Configure job-storage options.</td>
</tr>
<tr>
<td>Default Print Options</td>
<td>Configure the default options for print jobs.</td>
</tr>
<tr>
<td>Restrict Color</td>
<td>Permit or restrict color printing and copying. (Color printers only) Specify permissions for individual users or for jobs that are sent from specific software programs.</td>
</tr>
<tr>
<td>PCL and PostScript Settings</td>
<td>Adjust the PCL and PostScript settings for all print jobs, including copy jobs and received faxes.</td>
</tr>
<tr>
<td>Print Quality</td>
<td>Configure the print quality settings, including color adjustment, image registration, and allowed paper types.</td>
</tr>
<tr>
<td>Copy Settings</td>
<td>Configure the default options and Quick Sets for copy jobs. <strong>NOTE:</strong> If job-specific copy setting options are not set from the control panel at the start of a job, the default settings will be used for the job.</td>
</tr>
<tr>
<td>Expert Copy</td>
<td>Enable or disable Expert Copy and set the initial copy view. The Expert Copy feature is available only on some HP MFPs with larger control panels, and is available in FutureSmart 4 firmware 24.7.3 release or later.</td>
</tr>
<tr>
<td>Manage Trays</td>
<td>Configure settings for paper trays.</td>
</tr>
<tr>
<td>Manage Stapler/Stacker</td>
<td>Configure settings for the stapler/stacker for printers that have this feature.</td>
</tr>
</tbody>
</table>

Scan/Digital Send tab

Refer to the table for settings in the Scan/Digital Send tab.

Table 1-5  HP Embedded Web Server Scan/Digital Send tab

<table>
<thead>
<tr>
<th>Menu</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Email Setup</td>
<td>Configure the default email settings for digital sending, including the following:</td>
</tr>
<tr>
<td></td>
<td>● Settings for the outgoing mail (SMTP) server</td>
</tr>
<tr>
<td></td>
<td>● Settings for Email Quick Sets jobs</td>
</tr>
<tr>
<td></td>
<td>● Default message settings, such as the &quot;From&quot; address and the subject line</td>
</tr>
<tr>
<td></td>
<td>● Settings for digital signatures and encryption</td>
</tr>
<tr>
<td></td>
<td>● Settings for email notifications</td>
</tr>
<tr>
<td></td>
<td>● Default scan settings for email jobs</td>
</tr>
<tr>
<td></td>
<td>● Default file settings for email jobs</td>
</tr>
<tr>
<td>Menu</td>
<td>Description</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>-------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Scan to Network Folder</strong></td>
<td>Configure the network folder settings for digital sending, including the following:</td>
</tr>
<tr>
<td></td>
<td>● Settings for Quick Sets jobs saved in a network folder</td>
</tr>
<tr>
<td></td>
<td>● Settings for notifications</td>
</tr>
<tr>
<td></td>
<td>● Default scan settings for jobs saved in a network folder</td>
</tr>
<tr>
<td></td>
<td>● Default file settings for jobs saved in a network folder</td>
</tr>
<tr>
<td><strong>Scan to SharePoint®</strong></td>
<td>Configure the SharePoint settings for digital sending, including the following:</td>
</tr>
<tr>
<td></td>
<td>● Settings for Quick Sets jobs saved in a document library on the SharePoint site</td>
</tr>
<tr>
<td></td>
<td>● Default settings for jobs saved in a document library on the SharePoint site</td>
</tr>
<tr>
<td><strong>Scan to USB Drive</strong></td>
<td>Configure the USB settings for digital sending, including the following:</td>
</tr>
<tr>
<td></td>
<td>● Settings for Quick Sets jobs saved on a USB flash drive</td>
</tr>
<tr>
<td></td>
<td>● Settings for notifications</td>
</tr>
<tr>
<td></td>
<td>● Default scan settings for jobs saved on a USB flash drive</td>
</tr>
<tr>
<td></td>
<td>● Default file settings for jobs saved on a USB flash drive</td>
</tr>
<tr>
<td><strong>Contacts</strong></td>
<td>Manage contacts, including the following:</td>
</tr>
<tr>
<td></td>
<td>● Add email addresses into the printer one at a time.</td>
</tr>
<tr>
<td></td>
<td>● Import a large list of frequently-used email addresses onto the printer all at once, rather than adding them one at a time.</td>
</tr>
<tr>
<td></td>
<td>● Export contacts from the printer into a .CSV file on the computer to use as a data backup, or import the records onto another HP printer.</td>
</tr>
<tr>
<td></td>
<td>● Edit email addresses that have already been saved in the printer.</td>
</tr>
<tr>
<td><strong>Preferences</strong></td>
<td>Manage general scanning settings.</td>
</tr>
<tr>
<td><strong>Email and Scan to Network Folder Quick Setup Wizards</strong></td>
<td>Configure the printer to send scanned images as email attachments.</td>
</tr>
<tr>
<td></td>
<td>Configure the printer to save scanned images to network-folder Quick Sets. Quick Sets provide easy access to files saved on the network.</td>
</tr>
<tr>
<td><strong>Digital Sending Software Setup</strong></td>
<td>Configure settings related to using optional Digital Sending software.</td>
</tr>
</tbody>
</table>

**Fax tab**

Refer to the table for settings in the **Fax** tab.
### Table 1-6  HP Embedded Web Server Fax tab

<table>
<thead>
<tr>
<th>Menu</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fax Send Setup</td>
<td>Configure settings for sending faxes, including the following:</td>
</tr>
<tr>
<td></td>
<td>● Default settings for outgoing faxes</td>
</tr>
<tr>
<td></td>
<td>● Settings for fax Quick Sets jobs</td>
</tr>
<tr>
<td></td>
<td>● Settings for notifications</td>
</tr>
<tr>
<td></td>
<td>● Default setting for sending faxes using the internal fax modem</td>
</tr>
<tr>
<td></td>
<td>● Settings for using a LAN fax service</td>
</tr>
<tr>
<td></td>
<td>● Settings for using an Internet fax service</td>
</tr>
<tr>
<td>Fax Speed Dials</td>
<td>Manage speed dials, including the following:</td>
</tr>
<tr>
<td></td>
<td>● Import .CSV files containing email addresses, fax numbers, or user records, so that they can be accessed on this printer.</td>
</tr>
<tr>
<td></td>
<td>● Export email, fax, or user records from the printer into a file on the computer to use as a data backup, or import the records onto another HP printer.</td>
</tr>
<tr>
<td>Fax Receive Setup</td>
<td>Configure default print options for incoming faxes, and set up a fax printing schedule.</td>
</tr>
<tr>
<td>Fax Archive and Forwarding</td>
<td>Enable or disable fax archiving and fax forwarding, and configure basic settings for each:</td>
</tr>
<tr>
<td></td>
<td>● Fax archiving is a method to send a copy of all incoming and outgoing faxes to an email address, a network folder, or an FTP server.</td>
</tr>
<tr>
<td></td>
<td>● Fax forwarding is a method to forward incoming faxes to a different fax device.</td>
</tr>
<tr>
<td>Fax Activity Log</td>
<td>Contains a list of the faxes that have been sent from or received by this printer.</td>
</tr>
</tbody>
</table>

### Supplies tab

Refer to the table for settings in the Supplies tab.

### Table 1-7  HP Embedded Web Server Supplies tab

<table>
<thead>
<tr>
<th>Menu</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manage Supplies</td>
<td>Configure how the printer reacts when supplies reach a Very Low state.</td>
</tr>
</tbody>
</table>

### Troubleshooting tab

Refer to the table for settings in the Troubleshooting tab.
### General Troubleshooting
Use the following options as appropriate:

- **Reports and Tests** area: Select and print several types of reports and tests. Some reports can be viewed in the EWS by clicking the **View** button.
- **Fax Tools** area: Configure settings for fax troubleshooting. (MFP and Digital Sender products with HP analog fax accessory only)
- **OXPd Troubleshooting** area: Enable or disable the **Allow a Non-Secure Connection for Web Services** option
- **Auto Recovery** area: Enable or disable the **Enable Auto Recovery** option, which allows the printer to auto recover from errors that might require the power to be turned off and on (for example, a 49 error).

### Online Help
Link to HP cloud-based online help to assist in troubleshooting printing issues.

### Diagnostic Data
Export printer information to a file that can be useful for HP technical support to use for detailed problem analysis.

**NOTE:** This item is available only if an administrator password is set from the **Security** tab.

### Calibration/Cleaning
Enable the automatic cleaning feature, create and print the cleaning page, and select an option to calibrate the printer immediately.

**NOTE:** (Color LaserJet printers only)

### Reset Factory Settings
Restore printer settings to factory defaults.

### Firmware Upgrade
Download and install printer firmware upgrade files.

---

**Security tab**

Refer to the table for settings in the **Security** tab.

### Table 1-9  HP Embedded Web Server Security tab

<table>
<thead>
<tr>
<th>Menu</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>General Security</strong></td>
<td>Settings for general security, including the following:</td>
</tr>
<tr>
<td></td>
<td>- Configure an administrator password to restrict access to certain features on the printer.</td>
</tr>
<tr>
<td></td>
<td>- Set a custom device Service Access Code.</td>
</tr>
<tr>
<td></td>
<td>- Set PJL password for processing PJL commands.</td>
</tr>
<tr>
<td></td>
<td>- Set file system access and firmware upgrade security.</td>
</tr>
<tr>
<td></td>
<td>- Enable or disable the Host USB port on the control panel or the USB connectivity port on the formatter for printing directly from a computer.</td>
</tr>
<tr>
<td></td>
<td>- View the status of all security settings.</td>
</tr>
<tr>
<td><strong>Account Policy</strong></td>
<td>Enable administrator account settings.</td>
</tr>
<tr>
<td><strong>Access Control</strong></td>
<td>Configure access to printer functions for specific individuals or groups, and select the method individuals use to sign in to the printer.</td>
</tr>
</tbody>
</table>
Table 1-9  HP Embedded Web Server Security tab (continued)

<table>
<thead>
<tr>
<th>Menu</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Protect Stored Data</td>
<td>Configure and manage the internal storage for the printer.</td>
</tr>
<tr>
<td></td>
<td>Configure settings for jobs that are stored on the printer internal storage.</td>
</tr>
<tr>
<td>Manage Remote Apps</td>
<td>Manage or whitelist remote apps by importing or deleting certificates that allow devices to use this product.</td>
</tr>
<tr>
<td>Certificate Management</td>
<td>Install and manage security certificates for access to the printer and the network.</td>
</tr>
<tr>
<td>Email Domain Restriction</td>
<td>If email functionality is enabled, administrators can limit the email addresses to which the printer can send messages.</td>
</tr>
<tr>
<td>Web Service Security</td>
<td>Allow resources on this printer to be accessed by web pages from different domains. If no sites are added to the list, then all sites are trusted.</td>
</tr>
<tr>
<td>Self Test</td>
<td>Verify that the security functions are running according to expected system parameters.</td>
</tr>
</tbody>
</table>

HP Web Services tab

Use the HP Web Services tab to configure and enable HP Web Services for this printer. It is necessary to Enable HP Web Services to use the HP ePrint feature.

Table 1-10  HP Embedded Web Server HP Web Services tab

<table>
<thead>
<tr>
<th>Menu</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Web Services Setup</td>
<td>Connect this printer to HP Connected on the web by enabling HP Web Services.</td>
</tr>
<tr>
<td>Web Proxy</td>
<td>Configure a proxy server if there are issues enabling HP Web Services or connecting the printer to the Internet.</td>
</tr>
<tr>
<td>HP JetAdvantage</td>
<td>Access solutions that extend the capabilities of the printer</td>
</tr>
<tr>
<td>Smart Cloud Print</td>
<td>Enable Smart Cloud Print, which allows access to web-based apps that extend the capabilities of the printer.</td>
</tr>
</tbody>
</table>

Networking tab

Use the Networking tab to configure and secure network settings for the printer when it is connected to an IP-based network. This tab does not display if the printer is connected to other types of networks.

Table 1-11  HP Embedded Web Server Networking tab > Configuration settings

<table>
<thead>
<tr>
<th>Menu</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wireless Station</td>
<td>Configure the initial wireless settings.</td>
</tr>
<tr>
<td></td>
<td><strong>NOTE:</strong> The configuration options available depend on the print server model.</td>
</tr>
<tr>
<td>Wi-Fi Direct</td>
<td>Configure Wi-Fi Direct settings for printers that include embedded Wi-Fi Direct Print and NFC printing or that have a wireless accessory installed.</td>
</tr>
<tr>
<td></td>
<td><strong>NOTE:</strong> The configuration options available depend on the print server model.</td>
</tr>
<tr>
<td></td>
<td><strong>NOTE:</strong> The configuration options available depend on the print server model.</td>
</tr>
</tbody>
</table>
### Table 1-11  HP Embedded Web Server Networking tab > Configuration settings (continued)

<table>
<thead>
<tr>
<th>Menu</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Network Settings</strong></td>
<td>Configure IPX/SPX, AppleTalk, DLC/LLC, and SNMP settings, depending on the print server model.</td>
</tr>
<tr>
<td><strong>Other Settings</strong></td>
<td>Configure general printing protocols and services supported by the print server. The available options depend on the print server model, but can include firmware update, LPD queues, USB settings, support information, and refresh rate.</td>
</tr>
<tr>
<td><strong>AirPrint</strong></td>
<td>Enable, set up, or disable network printing from Apple-supported printers.</td>
</tr>
<tr>
<td><strong>Select Language</strong></td>
<td>Change the language displayed by the HP Embedded Web Server. This page displays if the web pages support multiple languages. Optionally, select supported languages through language-preference settings in the browser.</td>
</tr>
<tr>
<td><strong>Select Location</strong></td>
<td>Select a country/region for the printer.</td>
</tr>
</tbody>
</table>

### Table 1-12  HP Embedded Web Server Networking tab > Google Cloud Print settings

<table>
<thead>
<tr>
<th>Menu</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Setup</strong></td>
<td>Set up Google Cloud Print options.</td>
</tr>
<tr>
<td><strong>Web Proxy</strong></td>
<td>Configure proxy settings.</td>
</tr>
</tbody>
</table>

### Table 1-13  HP Embedded Web Server Networking tab > Security settings

<table>
<thead>
<tr>
<th>Menu</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Settings</strong></td>
<td>View and restore current security settings to factory-default values. Configure security settings using the Security Configuration Wizard.</td>
</tr>
<tr>
<td><strong>Authorization</strong></td>
<td>Control configuration management and use of this printer, including limiting host access to this printer through an Access Control List (ACL) (for selected print servers on IPv4 networks only).</td>
</tr>
<tr>
<td><strong>Secure Communication</strong></td>
<td>Configure Transport Layer Security (TLS) protocol and encryption options.</td>
</tr>
</tbody>
</table>
| **Mgmt. Protocols** | Configure and manage security protocols for this printer, including the following:  \     
  - Set the security management level for the HP Embedded Web Server, and control traffic over HTTP and HTTPS.  \     
  - Configure the SNMP (Simple Network Management Protocol) operation. Enable or disable the SNMP v1/v2c or SNMP v3 agents on the print server.  \     
  - Control access through protocols that may not be secure, such as printing protocols, print services, discovery protocols, name resolution services, and configuration-management protocols. |
| **802.1X Authentication** | Configure 802.1X authentication settings on the Jetdirect print server as required for client authentication on the network, and reset the 802.1X authentication settings to factory-default values.  \     
  **CAUTION:** When changing the 802.1X authentication settings; the printer might lose its connection. To reconnect, it might be necessary to reset the print server to a factory-default state and reinstall the printer. |
### Table 1-13  HP Embedded Web Server Networking tab > Security settings (continued)

<table>
<thead>
<tr>
<th>Menu</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>IPsec/Firewall</td>
<td>View or configure a Firewall policy or an IPsec/Firewall policy.</td>
</tr>
<tr>
<td>Announcement Agent</td>
<td>Enable or disable the HP Device Announcement Agent, set the configuration server, and configure mutual authentication using certificates.</td>
</tr>
</tbody>
</table>

### Table 1-14  HP Embedded Web Server Networking tab > Diagnostics settings

<table>
<thead>
<tr>
<th>Menu</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Network Statistics</td>
<td>Display network statistics that are collected and stored on the HP Jetdirect print server.</td>
</tr>
<tr>
<td>Protocol Info</td>
<td>View a list of network-configuration settings on the HP Jetdirect print server for each protocol.</td>
</tr>
<tr>
<td>Configuration Page</td>
<td>View the HP Jetdirect configuration page, which contains status and configuration information.</td>
</tr>
</tbody>
</table>
2 Open the HP Embedded Web Server (EWS)

Learn how to look up the printer’s IP address and access the EWS.

- Overview
- Open the HP Embedded Web Server (EWS)

Overview

The HP Embedded Web Server (EWS) is included in the printer firmware for HP printers. This document is specific to HP Enterprise or HP Managed printers. Use the EWS to view the printer status, and to configure and manage the printer remotely without having to access the control panel.

Open the HP Embedded Web Server (EWS)

To learn how to open the EWS, follow these steps:

- **NOTE:** Typically, a system administrator sets a password to secure the printer. If you are unable to access the EWS or certain tabs, contact your system administrator.

1. Have the printer IP address or host name available.
   
   - **FutureSmart 3:** From the Home screen on the printer control panel, touch the Network icon to display the IP address or host name.
   
   - **FutureSmart 4:** From the Home screen on the printer control panel, touch the Information icon, and then touch the Ethernet icon to display the IP address or host name.

2. Open a web browser.

3. In the url field, type the IP address or host name of the printer as displayed following the above instructions, and then press Enter.

   **Figure 2-1** Example of an IP address in a browser window

   ![https://10.10.XXXX/](https://10.10.XXXX/)

4. If the web browser displays a message indicating that accessing the website might not be safe, select the option to continue to the website.
NOTE: Accessing this website will not harm the computer. This message is received if the printer enforces HTTPS. To prevent this message from displaying when the EWS is accessed, disable HTTPS on the printer. To do this, click the Networking tab and select Mgmt. Protocols from the left navigation pane. On the Web Mgmt. tab, clear the Encrypt All Web Communication (not including IPP) check box, and then click Apply.

The EWS opens.

- On standard desktops, the tabs for the EWS are available across the top of the page.
- On small, narrow devices such as phones, the tabs are collapsed and not immediately visible. To open the tabs, use the menu icon.

For more information about a specific page in the EWS, click the Help link located in the upper-right corner of the page. Some pages in the EWS do not have a Help link.

For more information about the EWS, watch the following video.

Introduction to the HP Embedded Web Server
3 Customize the control panel and EWS appearance

Learn how to customize the printer’s control panel and the information shown in the EWS.

- Customize the Control-Panel Home screen
- Configure the EWS display language
- Customize the information shown on the Device Information page
- Customize the ordering information shown on the Supplies page
- Add links to the bottom of an EWS screen
- Configure the EWS Help options
Customize the Control-Panel Home screen

Learn about the options for customizing the control-panel Home screen.

- **Introduction**
- **Navigate to the Control Panel Customization menu**
- **Change the items that display on the Home screen**
- **Change the order in which the items appear on the Home screen**
- **Change the Home screen background**
- **Change the display settings**
- **Change the control-panel language and keyboard layout**
- **Create a custom welcome screen**

**Introduction**

It is quick and easy to configure a printer’s control panel. Configure the Home screen to save both time and money on frequently-performed tasks.

The following control-panel Home screen options can be customized:

- Which menu options display
- The order in which the menu options display
- The background that displays.
- The connection information that displays
- Language selection and languages that display
- Keyboard layouts

To restrict the ability to customize the control-panel display only to administrators, assign an administrator password.

**NOTE:** This feature requires JavaScript®. Verify that JavaScript is enabled for the browser being used.

**Navigate to the Control Panel Customization menu**

Use the following steps to locate the **Control Panel Customization** menu.

1. Using the top navigation tabs, click **General**.
2. In the left navigation pane, click **Control Panel Customization**, and then complete one or more of the procedures that follow in this document.

**Figure 3-1  Control Panel Customization menu**

Change the items that display on the Home screen

Use the following information to change the menu items shown on the control panel Home screen.

- **View a video on how to change the menu items that display on the Home screen**

1. Under the **Control Panel Customization** menu, click **Home Screen Customization**.
To use a different application for the Home screen, use the Home Screen App list to select the app, and then click Apply.

2. Use the Home Screen Arrangement section to hide or show items on Home screen as follows:
   - To hide a menu item: Click and hold the cursor over the menu item to be hidden, drag the item to the Hidden Items section, and then release the mouse button.
   - To show a hidden item: Click and hold the cursor over the menu item to be shown, drag the item to the Home Screen section, and then release the mouse button.

Figure 3-3 Example of moving a menu item to Hidden Items
3. (Optional) In the **Home Screen** section, use the Folder and Configuration icons at the bottom of this section to add a folder, move an item into a folder, or access the setup page for an item.

   **Figure 3-4** Folder and Configuration icons

4. FutureSmart 3: Click the **Apply** button at the bottom of the EWS window to save the changes.

   FutureSmart 4: The updates are automatically saved.

   **NOTE:** The **Quick Sets** menu item must be displayed on the Home screen to use Quick Sets.

**Change the order in which the items appear on the Home screen**

Use the following steps to change the order in which menu items appear.

1. On the **Home Screen Customization** page, click and hold the cursor over a menu item to be moved.

2. Drag the menu item to the new location, and then release the mouse button.

   **Figure 3-5** Example of moving a menu item

3. FutureSmart 3: Click the **Apply** button at the bottom of the EWS window to save the changes.

   FutureSmart 4: The updates are automatically saved.

**Change the Home screen background**

Use the following steps to change the Home screen background.

1. On the **Home Screen Customization** page, locate the **Wallpaper Customization** section. This section shows you which file types are supported as well as the maximum file resolution.
2. To set wallpaper, click **Set Wallpaper**, browse to the image file, and then click **Open**.

   **NOTE:** The wallpaper image is placed with the top-left corner of the picture in the top-left corner of the control panel.

   To clear wallpaper, click **Clear Wallpaper**.

**Change the display settings**

The date and time display on many control-panel screens. Information such as fax number, IP address, and HP ePrint address, as well as instructions on how to connect to the product display in the **How to Connect** menu by default. Use the following procedure to control which information displays in these areas.

1. Under the **Control Panel Customization** menu, click **Display Settings**.

2. On the **Display Settings** page, select or deselect the individual options.

3. Click the **Apply** button at the bottom of the EWS window to save the changes.
Change the control-panel language and keyboard layout

Use the following steps to change the language and keyboard layout.

1. Under the Control Panel Customization menu, click Control Panel Language and Keyboard Layouts.

   Figure 3-8  Control Panel Language and Keyboard Layouts page

   ![Control Panel Language and Keyboard Layouts](image)

2. Select the radio button next to the preferred default language from the Language column.

3. Select the preferred keyboard layout from the Keyboard Layout drop-down menu.

4. Enable or disable the Allow users to choose another language for their session option.

5. Enable or disable the Show alternate keyboard button on keyboard screens option, and then select the languages to display. If the feature is enabled, select the preferred keyboard layouts.

Create a custom welcome screen

Use this procedure to select the screen-border color and the text that displays while the product is inactive.

1. Under the Control Panel Customization menu, click Display Settings.

2. On the Display Settings page, select Show Welcome Message.
3. Enter a title in the **Title** field, enter the message into the **Text** field, and then select a color from the **Header Background Color** choices.

**Figure 3-9** Welcome Message settings

Configure the EWS display language

Use the **Language** page, located in the **General** tab to control which language the EWS uses. You can set up the EWS to use the web browser language, the language that the printer is using, or another language.

**Figure 3-10** Language page
Customize the information shown on the Device Information page

Use the Device Information page in the General tab to edit the device information. This information will then be displayed on the Device Information page in the Information tab.

**Figure 3-11 Device Information page**

Customize the ordering information shown on the Supplies page

Use the Ordering Information page, located in the General tab, to add specific supplies-ordering information that is displayed on the Supplies Status Page page.

To view the printer-specific supply information that can be added on this page, click Shop for Supplies at the bottom of the page.

**Figure 3-12 Ordering Information page**
Add links to the bottom of an EWS screen

By default, the HP EWS webpage contains links to the HP Instant Support, Shop for Supplies, and Product Support websites. Use the Edit Other Links page, located in the General tab, to add up to five additional links to the footer of the EWS page.

Figure 3-13 Edit Other Links page

Configure the EWS Help options

Use the Online Help page, located in the Troubleshooting tab, to configure settings for the EWS online help.

To configure where Help links are shown for events, select or clear the following options (for Admin users only):

- Show QR code in control panel event details
- Show links in the EWS Event log

To connect to the correct Help page, the product sends information to HP including the model number, firmware revision, and FutureSmart level. When clicking a Help link, a notice is displayed, which allows the user to continue or cancel.

To turn off this notice, select Do not show EWS help notice.
Configure the EWS Help options
Configure the network to which a printer is attached

Configure the network using the Networking tab in the EWS.

- Introduction
- Home Tab
- Networking Tab
- Other Links

Introduction

This Help provides an overview of the Embedded Web Server (EWS) interface provided by the HP Jetdirect print server. For detailed help, see the following resources:

- The HP.com support Web page: www.hp.com/support
- The Administrator's Guide or other documentation for this print server model. These documents are typically provided on CD-ROM with each Jetdirect product.
- The printer's User Guide or other documentation supplied with your network device.

The Embedded Web Server provides a simple way to manage your HP Jetdirect print server or attached network device (such as a printer or multifunction, all-in-one peripheral). Using your Web browser, you can monitor status, configure network parameters, or access device features. Tabs across the top of the interface provide access to device and networking pages.

The tabs and functions displayed will vary depending on your print server model and the capabilities of the attached device. For example, the Jetdirect print server will provide a generic Home tab if the attached device does not supply Web pages. In addition, features that are displayed for full-featured print servers may not be available for value-based print servers.

Menu items in the left margin for each tab provide links to configuration and status pages.

Home Tab

A special Home tab will be displayed by the Jetdirect print server only for printers or devices that do not support EWS services. The print server will attempt to display basic networking and device information that can be retrieved.

For detailed information, see Jetdirect EWS.
Networking Tab

This tab provides access to network configuration, security, and diagnostic parameters on the HP Jetdirect print server.

- **Configuration**
- **Google Cloud Print**
- **Security**
- **Diagnostics**

For detailed information, see [Jetdirect EWS](#).

**Figure 4-1** Networking tab
Configuration

Use these menu items to set general network configuration parameters.

- Wireless Station
- Wi-Fi Direct
- Wireless Direct
- TCP/IP Settings
- Network Settings
- Other Settings
- AirPrint
- Select Language

Wireless Station

(Wireless print servers only.) Use this page to configure wireless station connection settings required by your network. You can manually configure the settings, or run a wizard that guides you through the wireless configuration process. Typically, you will provide the following information about your wireless network:

- Wireless network name (SSID) and network topology. Ad hoc and channel 11 are selected by default.
- Network security. Select from no security, WEP - Personal, WEP - Enterprise, WPA/WPA2 - Personal, or WPA/WPA2 - Enterprise.
  
  WEP - Personal. Select the authentication (Open System, Shared Key, or Automatic), and enter the WEP key and key index.
  
  WEP - Enterprise. Select the protocol (LEAP, PEAP, and EAP-TLS), and the user name, password, server ID, encryption strength, and certification details.
  
  WPA/WPA2 - Personal. Enter the passphrase.
  
  WPA/WPA2 - Enterprise. Select the protocol (Auto, LEAP, PEAP, or EAP-TLS), and enter the user name, password, server ID, encryption strength, and certification details.

Wi-Fi Direct

HP Wi-Fi Direct is a feature that allows your Wi-Fi capable devices to make a wireless network connection directly to your printer without using a wireless router or access point. A print application must be installed in order to use the printer over the HP Wi-Fi Direct connection.

- Wi-Fi Direct Name: The unique name of the printer given by the user. This name is used to identify the printer in the wireless network.

- Connection Method:
Advanced: This connection method includes security features such as hiding the Wi-Fi Direct name in addition to authentication by the user.

Manual: This connection method requires simple authentication by the user using a password.

Auto: There will be no authentication. The mobile device can connect automatically to the printer and print the document.

- **Password**: The password given by the user for Advanced and Manual connections.
- **Channel**: Allows the user to choose the frequency band at which the printer operates.
- **IP Address**: IP address to access the printer wirelessly.
- **Connected Clients**: Identifies the IP addresses of the Connected Clients.

**Wireless Direct**

HP Wireless Direct is a feature that allows your Wi-Fi capable devices to make a wireless network connection directly to your printer without using a wireless router or access point. A print application must be installed in order to use the printer over the HP Wireless Direct connection.

- **Network Name (SSID)**: The unique name of the network given by the user, used to identify the printer in the wireless network.
- **Allow Broadcast of Name (SSID)**: Allows the user to advertise or hide the network name.
- **Passphrase**: The password given by the user when Wireless Direct Printing is enabled with Security.
- **Channel**: Allows the user to choose among the channels which operate on 2.4 GHz frequency band.
- **IP Address**: IP address to access the printer wirelessly.
- **Connected Clients**: Identifies the IP Addresses of the Connected Clients.

**TCP/IP Settings**

The configuration options available depend on your print server model. Use the tabs on this page to view or configure TCP/IP (Transmission Control Protocol / Internet Protocol) settings for IPv4 and IPv6 networks.

**Summary**. Provides a summary of the current TCP/IP configuration settings.

**Network Identification**. Provides access to identification settings such as the hostname, IPv4/IPv6 Domain Names, FQDN update options, DNS and WINS(IPv4) server addresses, and Bonjour Service Name.

**HP Connection Inspector**. An Intrusion Detection technique that focuses on identifying malwares based on their behavioral patterns rather than on their signatures. This focuses particularly on detecting and preventing malwares based on their network behaviors. Select the **Enable** check box to enable this feature.

- **Protection Mode settings**
– **DNS Failure Threshold** - Failure threshold value to enable throttle mode for detecting false alarms.

– **Monitoring Window** - Time duration to monitor failed DNS queries for enabling throttle mode.

– **Protected Mode Duration** - (Throttle mode duration) The duration where the printer operates in a safe mode after and initial detection.

**Remediation settings**

– **Number of Times in a Protected Mode** - Maximum number of times the printer can enter into Throttle mode before remediation action.

– **Cumulative Protected Mode Duration** - Maximum duration the printer can be in Throttle mode before remediation action.

**Advanced settings**

– **White List / Exception List** - White list table entries are considered as safe DNS queries during throttling mode.

**Restore settings**

– To restore HP Connection Inspector to default values, click the **Restore Defaults** button.

**NOTE:** If you enter a value, click **Apply** to set it, or click **Cancel** to ignore the entry.

**USE CAUTION** when changing IP addresses; the connection to the Embedded Web Server will be closed, and client printing may be affected. To re-establish a connection, use the new IP address.

TCP/IP cannot be disabled. It is required for communication with the Embedded Web Server.

**TCP/IPv4**. Allows you to configure IP version 4 (IPv4) parameters, including server-based or manual IPv4 address settings. For Auto IP, a link-local address is assigned automatically by the print server.

**TCP/IPv6**. Allows you to configure IP version 6 (IPv6) parameters, including server-based or manual IPv6 address settings. Multiple IPv6 addresses may be configured. A stateful address may be assigned, for example, from a DHCPv6 server. A stateless address, such as a link-local address, is assigned automatically by the print server.

**Config Precedence**. Provides access to a configuration precedence table, to indicate which configuration method has precedence over another.

**Advanced**. Provides access to other TCP/IP network settings, including idle timeout, LPD banner page, FQDN Update Options, Web Proxy Server and Syslog Server settings. You can also enable HP Customer Care Center logging.

**Web Proxy Setup** - Use this page when you must manually configure a proxy server for use with HP Web Services. This might be necessary if you have issues when enabling HP Web Services.

**Proxy Server**. Proxy server to use by embedded applications in your printer/MFP. Enter up to 64 alphanumeric characters. A proxy server is typically used by network clients for Internet access. It caches Web pages and provides a degree of Internet security for those clients. Enter its IP address or FQDN. On some networks, you might need to contact your ISP for the proxy server address.

**Proxy Server Port**. Port number used by the proxy server for client support. Enter a value from 0 to 65535. The port number identifies the port reserved for proxy activity on your network.

**Proxy Server User Name**. If a user account is set on the proxy server, enter the user name.

**Proxy Server Password**. If a user account is set on the proxy server, enter the user password.
Proxy Server Exception List. Web addresses, host names, or domain names not requiring access through the proxy server. Use a semicolon (;) to separate addresses.

Network Settings

Use the tabs on this page to configure other network protocols. Depending on the print server model, you can view or configure SNMP settings.

If you enter a value, click Apply to set it, or click Cancel to ignore the entry.

SNMP: Configure SNMP (Simple Network Management Protocol) operation. You may enable or disable the SNMP v1/v2c or SNMP v3 agents on the print server. For SNMP v1/v2c, you can choose to control access through custom SNMP community names and selectable options for the Get Community Name "public". For SNMP v3, you may set up an account that allows a management application to access the SNMP v3 agent.

Other Settings

Use the tabs on this page to configure general printing protocols and services supported by the print server. Depending on the print server model, you can configure the following items:

Misc. Settings. Enable or disable printing protocols and services. In addition, you can set 10/100/1000Base-T Link settings, assign a locally administered address, configure networking features for supported multifunction/scanning devices, determine name resolution, specify Bonjour priority service, and whether to clear device settings (Erase Data) during a cold reset.

Firmware Upgrade. Upgrade your HP Jetdirect print server firmware. (For print servers that support firmware upgrades.)

LPD Queues. Set up custom LPD (Line Printer Daemon) queues for printing.

USB Settings. (For HP Jetdirect external print servers with a USB printer port.) Configure Universal Serial Bus port parameters for communications between the print server and connected device. The configurable parameters available depend on the HP Jetdirect model and firmware version.

Support Info. Specify the Support page links. Designate a Support contact or phone number, or specify URL addresses for product and technical support.

Refresh Rate. Specifies the time interval (in seconds) for embedded Web page updates. To disable the refresh rate, set this value to 0 (zero).

AirPrint

AirPrint™ enables easy network printing from Apple supported products with no need to install drivers or download software. AirPrint works on wireless and wired networks and over USB. AirPrint MUST be either enabled by default or the Printer MUST have a single top-level menu item that enables all network interfaces, networking services, and printing protocols required by AirPrint. The user can modify the AirPrint settings parameter using Edit settings page.

- Device Name: A unique name given to the printer by the User. The default name is the Bonjour Service name of the printer.
- Device Location: Describes the location of the printer.
- Use Degrees Minutes Seconds: Describes the exact location of the printer by mentioning latitude and longitude coordinate values in Degrees, Minutes, and Seconds (DMS).
- Use Decimal degrees: Describes the exact location of the printer by mentioning latitude and longitude coordinate values in Decimal Degrees, (DD).
Select Language

This page appears if the Web pages support multiple languages. (Optionally, supported languages can be selected through language preference settings in your browser. See your browser’s Help).
Google Cloud Print

- Before you begin
- Setup
- Web Proxy

Learn how to set up Google Cloud Print.

Before you begin

Before you can set up Google Cloud Print, the HP printer must be connected to a network with an active internet connection. The Google Cloud Print feature will not work if the HP printer is not connected to a network.
Setup

The printer has a feature that allows you to configure Google Cloud Print with your HP printer using the HP Embedded Web Server (EWS). Google Cloud Print allows you to print to your printer from anywhere with any web-connected device, such as your computer, phone, or tablet.

- Step one: Print the claim sheet
- Step two: Complete Google Cloud Print registration

Step one: Print the claim sheet

Before setting up the printer to use Google Cloud Print, you will need to print the Claim Sheet, which contains a Claim URL and QR Code that are both generated by Google.

1. Using the EWS top navigation tabs, click Networking.

2. In the left navigation pane, under Google Cloud Print, click Setup. The Setup page will indicate the Google Cloud Print status as Not Registered and provide a Print Claim Sheet button.

3. Click the Print Claim Sheet button to send printer capabilities and model number to Google and print a sheet of registration instructions from Google.

   **NOTE:** A Communicating with Google Cloud message displays on the screen. DO NOT leave this page until the process completes, which can take up to two minutes.

4. When the claim sheet is retrieved from the Google Cloud, the EWS will indicate that the sheet will print and prompt you to follow the instructions.

   **CAUTION:** Registration must be completed within 15 minutes of printing the claim sheet, otherwise you will have to repeat this process.

5. Click OK.
Step two: Complete Google Cloud Print registration

- **Cancel registration**
- **Complete the registration**
- **Registration when an admin password is set**
- **Privet or local registration**
- **Remove Google Cloud Print**

Use the following procedures to complete Google Cloud Print registration.

**Cancel registration**

You can choose to cancel the Google Cloud Print registration after you have printed the claim sheet. Click the **Cancel Setup** button, and then click **Yes** to confirm.

**Complete the registration**

Follow the instructions on the printed claim sheet to complete registration on a Google account.

When the registration is complete, the **Google Cloud Print** page will indicate the Google Cloud Print status as **Registered** and provide a **Remove Google Cloud** button.

The **Troubleshooting** area provides an option to **Disable PDF Printing** on Google Cloud Print jobs in order to resolve print errors. Select this check box if jobs fail to print; however, this can cause images and fonts to look slightly rougher.

**Registration when an admin password is set**

If the system admin password is set on the device, you must enter in the admin password to have access to the following:

- Google Cloud Print page in the EWS
- Control Panel menu to complete a registration for Google Cloud Print (Magic Frame displays only)
- Control Panel menu to Print the Info Sheet (2 line displays only)

**Privet or local registration**

Privet or local registration is initiated from your Chromebook and not the printer control panel or EWS. During Privet registration, the EWS displays a **A registration request has been sent to this printer. To complete registration, go to the printer control panel and press OK.** message. Go to the printer control panel. The display should show a **Press [OK] to allow <username>@gmail.com to register this printer with Google Cloud Print.** message. Touch OK.

**Remove Google Cloud Print**

When the printer is registered with a Google account, the EWS **Google Cloud Print** page will say that Google Cloud Print is **Registered**. Click the button to remove your printer from Google Cloud Print, and then click **Yes** to confirm.

**Web Proxy**

**Web Proxy Setup** - Use this page when you must manually configure a proxy server for use with HP Web Services. This might be necessary if you have issues when enabling HP Web Services.
Proxy Server. Proxy server to use by embedded applications in your printer/MFP. Enter up to 64 alphanumeric characters. A proxy server is typically used by network clients for Internet access. It caches Web pages and provides a degree of Internet security for those clients. Enter its IP address or FQDN. On some networks, you might need to contact your ISP for the proxy server address.

Proxy Server Port. Port number used by the proxy server for client support. Enter a value from 0 to 65535. The port number identifies the port reserved for proxy activity on your network.

Proxy Server User Name. If a user account is set on the proxy server, enter the user name.

Proxy Server Password. If a user account is set on the proxy server, enter the user password.

Proxy Server Exception List. Web addresses, host names, or domain names not requiring access through the proxy server. Use a semicolon (;) to separate addresses.

If you enter a value, click Apply to set it, or click Cancel to ignore the entry.

Please note:

- **USE CAUTION** when changing IP addresses; the connection to the Embedded Web Server will be closed, and client printing may be affected. To re-establish a connection, use the new IP address.

- TCP/IP cannot be disabled. It is required for communication with the Embedded Web Server.
Security

The security features that may be configured depend on your particular HP Jetdirect print server model.

- Settings
- Authorization
- Mgmt. Protocols
- 802.1X Authentication
- IPsec / Firewall
- Announcement Agent

Settings

This page provides a tab to run the Security Configuration Wizard, an interactive utility that will help you configure security settings.

Please note: Do not use the Security Configuration Wizard if you configure security settings using network management applications, such as HP Web Jetadmin.

In addition, tabs to view current settings and to restore security settings to factory-default values are also provided.

Authorization

This page provides methods to control configuration management and use of this device.

Certificates. Request, install, and manage digital certificates on the HP Jetdirect print server. Certificates are used to identify the Jetdirect print server both as a valid Web server for network clients, and as a valid client requesting access on a secure network. By default, the Jetdirect print server contains a self-signed preinstalled certificate. (When using the self-signed certificate, you can select an encryption key length of 1024 or 2048 bits.)

Access Control. (For selected print servers on IPv4 networks only) Limit host access to this device through an Access Control List (ACL). Each entry in the list consists of an IP address, and a Mask (a Mask is usually used to identify a network or group of host systems). Up to 10 entries can be entered. If the list is empty, any supported system may access the device.

If you are using a Proxy Server or Network Address Translator for your HTTP connection, ensure that HTTP connections are configured to bypass the Access Control List.

Mgmt. Protocols

This page allows you to configure and manage security protocols for this device.

Web Mgmt. Set the security management level for the Embedded Web Server. You can allow traffic over both HTTP and HTTPS, or choose HTTPS only. For secure management, HTTPS (Secure HTTP) is used to ensure secure communications between a Web browser and the Embedded Web Server. For HTTPS, you may use the preinstalled Jetdirect certificate (X.509) or configure a new one, and you can select an encryption level (supported cipher suites are DES, RC4, 3DES).

The factory-default setting depends on the print server model and the features supported by the device. Typically, the default setting is to allow traffic over HTTP and HTTPS. However, for selected print server models on devices that support IPsec, the factory default requires all traffic (except IPP traffic) to use HTTPS only.
**SNMP**. Configure SNMP (Simple Network Management Protocol) operation. You may enable or disable the SNMP v1/v2c or SNMP v3 agents on the print server. For SNMP v1/v2c, you can choose to control access through custom SNMP community names and selectable options for the Get Community Name "public". For SNMP v3, you may set up an account that allows a management application to access the SNMP v3 agent.

**Other**. Enable or disable printing protocols, print services, discovery protocols, name resolution services, and configuration management protocols as desired for security. This allows you to control access through protocols that may not be secure.

**802.1X Authentication**

This page allows you to configure 802.1X authentication settings on the Jetdirect print server as required for client authentication on your network. In addition, you can reset the 802.1X authentication settings to factory-default values.

**USE CAUTION** when changing the 802.1X authentication settings; you may lose your connection. If communication with the device is lost, you may need to reset the print server to a factory-default state and reinstall the device.

Supported 802.1X authentication protocols and configuration settings depend on the print server model and firmware version. Full-featured print servers support the following protocols:

- **PEAP**. Protected Extensible Authentication Protocol (PEAP) is a mutual authentication protocol that uses digital certificates for network server authentication and passwords for client authentication.

- **EAP-TLS**. Extensible Authentication Protocol using Transport Layer Security (EAP-TLS) is a mutual authentication protocol based on digital certificates for authentication of both the client and the network authentication server.

Both PEAP and EAP-TLS use dynamic encryption keys for secure communications. If an authentication failure occurs, you can select whether to connect anyway or block access.

**Please note:** Many infrastructure components, such as LAN switches, use 802.1X protocols to control a port’s access to the network. Before network installation on these ports, you must initially configure the Jetdirect print server with 802.1X settings using an isolated LAN, or directly using a cross-over cable.

**IPsec / Firewall**

A Firewall or IP Security (IPsec) policy allows you to control traffic to or from the device using network-layer protocols. Either **Firewall** or **IPsec / Firewall** pages will appear depending on whether IPsec is supported by the print server and device. If IPsec is not supported, Firewall pages will be displayed and a Firewall policy can be configured.

**Please note:** Before you enable a Firewall or IPsec policy, you should secure access to your configuration management settings (for example, through an administrator password). This will ensure your policy is not easily disabled through Telnet, control panel menus, or other management tools.

- **Firewall**. Use this page to view or configure a Firewall policy. A Firewall policy consists of up to 10 rules, where each rule specifies the IP addresses and services allowed by the print server and device. To add a rule, click **Add Rule**. This runs a wizard that will help you configure each rule.

- **IPsec / Firewall**. (Selected HP Jetdirect models only) Use this page to view or configure an IPsec / Firewall policy. An IPsec / Firewall policy consists of up to 10 rules. As with a Firewall policy, each rule specifies the IP addresses and services allowed by the print server and device. With IPsec support, you can apply IPsec authentication and encryption protocols for those addresses and services. To add a rule, click **Add Rule**. This runs a wizard that will help you configure each rule.
Announcement Agent

Use this page to enable or disable the HP Device Announcement Agent, to set the configuration server, and to indicate whether to require mutual authentication using certificates. When enabled (the default), the HP Device Announcement Agent sends an announcement to a configuration server when the device first connects to your network. The configuration server, such as the HP Imaging and Printing Security Center, then sends the pre-established configuration settings to the device.
Diagnostics

Use these pages to troubleshoot or enhance network operation.

- **Network Statistics**
- **Protocol Info**
- **Configuration Page**

**Network Statistics**

Displays network statistics that have been collected and stored on the HP Jetdirect print server. Network statistics are often useful to diagnose network performance and operational problems.

**Protocol Info**

Provides a list of network configuration settings on the HP Jetdirect print server for each protocol.

**Configuration Page**

Displays the HP Jetdirect configuration page, which contains HP Jetdirect status and configuration information. See the HP Jetdirect documentation on your CD-ROM for a detailed description of the configuration page contents.
Other Links

- Support

Learn about other resources available in the Networking tab.

Support

This page displays a list of resource links for additional help. The local and remote resource links on this list may be configured using the Support Info page. To open this page, select the Networking tab and choose the Other Settings menu, then select the Support Info tab.
5 Configure printer security

Configure printer security using the **Security** tab in the EWS.

- Printer security features
- Configure the Account Policy settings
- Configure Access Control settings for walk-up features
- Protect printer data
- Install certificates
- Restrict email domains
- Specify websites able to access a printer

HP recommends reviewing the following security best practices documents.

- HP Printers - Minimum security settings for products on the open Internet
Printer security features

Learn how to configure the printer security features using the EWS.

- Introduction
- Video overview
- Security statements
- Assign an administrator password
- IP Security
- Lock the formatter
- Encryption support: HP High Performance Secure Hard Disks

Introduction

The printer includes several security features to restrict who has access to configuration settings, to secure data, and to prevent access to valuable hardware components.

**NOTE:** The steps vary according to the type of control panel.

<table>
<thead>
<tr>
<th>Firmware version</th>
<th>Control panels</th>
</tr>
</thead>
<tbody>
<tr>
<td>FutureSmart 3</td>
<td><img src="image" alt="FutureSmart 3 Control Panels" /></td>
</tr>
<tr>
<td>FutureSmart 4</td>
<td><img src="image" alt="FutureSmart 4 Control Panels" /></td>
</tr>
</tbody>
</table>

Video overview

View information about how to set the printer’s security features.

**NOTE:** This video applies to multi-function printers (MFPs) with FutureSmart 4 firmware installed.

View a video demonstration on how to set the security features
Security statements

The printer supports security standards and recommended protocols that help you keep the printer secure, protect critical information on your network, and simplify the way you monitor and maintain the printer.
Assign an administrator password

HP recommends securing the printer by setting the admin password for the EWS. If the password is not set, anyone with access to the printer can configure any setting and discover information about your network.

- Assign the password
- Sign in at the printer

Some tabs, pages, and settings are available only when an administrator password is set. For more information about assigning an administrator password, see the General Security page on the Security tab.

Assign the password

Assign an administrator password for access to the printer and the HP Embedded Web Server so that unauthorized users cannot change the printer settings.

1. In the address line of your web browser, type the IP address or host name of the printer to open the EWS. For more information, see Open the HP Embedded Web Server (EWS) on page 13.

2. On the EWS Home page, click the Sign In button on the top right corner of the page, and then enter the Administrator credentials, as follows:
   - **Local Device Account:** Administrator
   - **Password:** admin

3. Click the Security tab.

![Security tab](image)

4. In the left navigation pane, click General Security.

5. In the User Name field, enter or select the desired administrator user name.

6. Enter a password in the New Password field, and then enter it again in the Verify Password field.
NOTE: For more information about password requirements for length and complexity, see Enable password complexity on page 50.

NOTE: To change an existing password, first enter the existing password in the Old Password field.

NOTE: Make note of the password and store it in a safe place. The administrator password cannot be recovered. If the administrator password is lost or forgotten, contact HP Support at support.hp.com for the assistance required to completely reset the printer.

7. Click Apply to save the settings.

NOTE: To maintain security, click Sign Out when you have finished using the EWS.

Sign in at the printer

Some features on the printer control panel can be secured so that unauthorized people cannot use them. When a feature is secured, the printer prompts you to sign in before you can use it.

You can also sign in without waiting for a prompt by selecting Sign In from the printer control panel. Typically, the credentials for signing in to the printer are the same as for signing in to the network. Consult the network administrator for this printer if you have questions about which credentials to use.

1. From the Home screen on the printer control panel, select Sign In.
2. Follow the prompts to enter the credentials.

NOTE: To maintain security for the printer, select Sign Out when you have finished using the printer.

IP Security

IP Security (IPsec) is a set of protocols that control IP-based network traffic to and from the printer. IPsec provides host-to-host authentication, data integrity, and encryption of network communications.

For printers that are connected to the network and have an HP Jetdirect print server, you can configure IPsec by using the Networking tab in the HP Embedded Web Server.

Lock the formatter

The formatter has a slot that you can use to attach a security cable. Locking the formatter prevents someone from removing valuable components from it.

Encryption support: HP High Performance Secure Hard Disks

The Protect Stored Data page shows the current method of overwriting stored and temporary files on the device hard drive. The hard disk provides hardware-based encryption to protect sensitive data without impacting printer performance. This hard disk uses the latest Advanced Encryption Standard (AES) and has versatile time-saving features and robust functionality.

Use the Protect Stored Data page in the HP Embedded Web Server to configure the disk.

1. In the address line of your web browser, type the IP address or host name of the printer to open the EWS. For more information, see Open the HP Embedded Web Server (EWS) on page 13.
2. On the EWS Home page, click the Security tab.
3. In the left navigation pane, click **Protect Stored Data**.

![Protect Stored Data page](image)

4. Configure the desired options and then click **Apply**.
Configure the Account Policy settings

Learn how to configure the Account Policy settings in the EWS.

- Introduction
- Configure the Account Policy settings

Introduction

The account policy should be configured to match the printers network account policy as closely as possible. The default policy was created by matching the Microsoft Active Directory security defaults. HP suggests working with your customer’s IT department to make sure the MFP account is secure.

ℹ️ **NOTE:** Remote configuration accounts include access to management tools, such as HP Web Jetadmin.
Configure the Account Policy settings

Learn how to configure the Account Policy settings.

- Enable account lockout
- Enable password complexity

Enable account lockout

The Account lockout feature allows administrators to specify the number of failed log in attempts before the printer enters Protected Mode, which makes the account unavailable for the duration of the lockout period.

**NOTE:** Before reducing the number of maximum log in attempts, make sure that the total number of EWS credentials stored in Web Jetadmin do not exceed the number of allowed log in attempts. If the number of credentials exceeds the number of log in attempts, a status communication error might occur if Web Jetadmin discovers a new printer.

1. Click the Security tab.
2. Open the Account Policy menu.
3. In the area labeled Local Administrator Password or the area labeled Remote Configuration Password, select Enable account lockout.
4. In Maximum attempts, type the number of times an administrator can enter an incorrect password before being locked out of the account.

**NOTE:** The default number of attempts is 5. The allowable number of attempts can range between 3 and 30.

5. In Lockout interval, type the number of seconds for which the account will be locked.

**NOTE:** The default number of seconds is 300. The allowable number of seconds can range between 5 and 1800 seconds.

6. In Reset lockout counter interval, type the number of seconds that must pass after a failed log in attempt before the failed log in attempt counter resets to 0.

**NOTE:** The default number of seconds is 300. The allowable number of seconds can range between 5 and 1800 seconds.

7. Click the Apply button to save the settings.

Enable password complexity

The password complexity feature means that you must select three different character types when selecting a password. The options include uppercase letter, lowercase letter, numbers, and special characters. This is based on the Microsoft default for password complexity requirements.

For more information, see Microsoft complexity requirements.

1. Click the Security tab.
2. Open the Account Policy menu.
3. In the area labeled Local Administrator Password or the area labeled Remote Configuration Password, select Enable Password Complexity.
NOTE: When password complexity is enabled, administrator account passwords must contain three of the following characteristics:

- Uppercase letters
- Lowercase letters
- Numbers
- Special Characters

4. In Minimum password length, type the minimum numbers of characters that the password must contain.

NOTE: The default number of characters is 8. The number of characters required in a password can range from 0 to 16. Setting the number of characters to 0 indicates that the minimum number of characters is disabled and that no password is required to access an account.

5. Click the Apply button to save the settings.
Configure Access Control settings for walk-up features

Learn how to configure Access Control settings for walk-up printing features.

- **Introduction**
- **Step one: Set up the sign-in methods**
- **Step two: Set up print feature permissions**
- **Step three: Set up the Job Status and Screen Behavior settings**
- **Step four: Set up the default permissions for each sign-in method**
- **Step five: Set up Device User Accounts**
- **Step six: Complete the setup**

**Introduction**

Use the **Access Control** page to manage the print features users can access:

- **Enable and Configure Sign-In Methods** – set up how users log in at the printer control panel or from the computer to access print features
- **Sign-In and Permission Policies** – set up access restrictions for user types, access types, and sign-in methods
- **Device User Accounts** – create, edit, import, export, and delete user and group accounts for accessing printer features

The following steps explain how to use the Access Control feature.
Step one: Set up the sign-in methods

The Access Control sign-in methods can be enabled for the printer, but only one can be the default sign-in method. If more than one method is enabled, access the non-default method from the printer control panel by touching Sign In, and then touch Advanced.

- Windows sign-in setup
- LDAP sign-in setup

**NOTE:** If an HP Smart Card Reader solution is installed, disable all other sign-in methods on this page because signing in is required with this solution. Install certificates on the Certificate Management page if required.

### Sign-in methods

- Windows
- LDAP
- Installed third-party sign-in solutions — See the documentation that came with the third-party solution for information about setting up that sign-in method.

### Windows sign-in setup

Use the following steps to set up Windows sign-in.

1. Using the EWS top navigation tabs, click Security.
2. In the left navigation pane, click Access Control.
3. To configure the Windows sign-in method, click the Setup link for this method on the Access Control page.
4. Select the Enable Windows Sign In (Kerberos and NTLM) check box.
5. Add Windows domains to be recognized by the printer:
   a. Enter the FQDN or IP address in the Trusted Domains field.
   b. Click Add.

Enter the fully-qualified host name or an IP address in dotted-decimal notation.

**NOTE:** If DNS settings are not set appropriately, a fully-qualified domain name might be required.

By default, the first domain added to the trusted domain list is automatically selected as the Default Windows Domain. If other trusted domains have been added, they can be selected as the default domain in the Default Windows Domain field.

6. Select the Show Preferred Domain Servers check box to create a list of preferred domain servers.

The specified Preferred Domain Servers will be used first, and if these servers do not work, the firmware will find domain servers based on the Trusted Domains list.

   a. Enter the FQDN or IP address in the Preferred Domain Servers field.
   b. Click Add.

7. Verify the match and retrieval default attributes and update if necessary.
The Enable reverse DNS lookups option is selected by default. Use a secure connection (SSL) is disabled by default.

**Match and retrieve attribute fields**

- **Match the name entered with this attribute:** The sAMAccountName attribute is entered by default. This attribute retrieves the Windows Active Directory account name to verify the user names.

- **Retrieve the user's e-mail address using this attribute:** The mail attribute is entered by default and is the recommended attribute. This attribute retrieves the Windows Active Directory user's email address to pre-populate address fields as appropriate.

- **Retrieve the device user's name using this attribute:** The displayName attribute is entered by default. This attribute retrieves the Windows Active Directory display name.

8. To verify that the sign-in method is working correctly, enter a valid Username and Password in the Test Windows Sign in area, and then click Test.

9. At the bottom of the page, click OK to save the settings.

**NOTE:** To remove a domain, select the domain, and then click Remove.

**LDAP sign-in setup**

Use the following steps to set up LDAP sign-in.

1. Using the EWS top navigation tabs, click Security.

2. In the left navigation pane, click Access Control.

3. To enable the LDAP sign-in method, click the Setup link for this method on the Access Control page.

4. Select the Enable LDAP Sign In check box in the Setup area.

5. Enter an LDAP address in the LDAP Server Address field. The address can be a fully-qualified host name or an IP address in dotted-decimal notation.

6. Select Use a secure connection (SSL) to use SSL when connecting, and then enter the port number on the LDAP server in the Port field.

**NOTE:** When using TSL or SSL, port 636 is used by default.

7. Specify the authentication requirements in the Server Authentication Requirements area.
   
   a. Select Use Device User’s Credentials, and then enter the Bind Prefix.

   b. Select Use LDAP Administrator’s Credentials, and then enter values in the LDAP Administrator’s DN and Password fields.

8. In the LDAP Database Search Settings area, enter the Bind and Search Root, and then click Add.

9. Verify the match and retrieval default attributes and update if necessary.

**Match and retrieve attribute fields:**

- **Match the name entered with this attribute:** Enter the name of an attribute

- **Retrieve the user e-mail address using this attribute:** Enter the name of an attribute
• **Retrieve the device user’s name using this attribute**: Enter the name of an attribute
• **Retrieve the device user’s group using this attribute**: The `objectClass` attribute is entered by default

**NOTE:** The **Exact match on Group attribute** option is selected by default.

10. To verify that the sign-in method is working correctly, enter a valid **Username** and **Password** in the **Test LDAP Sign In** area, and then click **Test**.

11. At the bottom of the page, click **OK** to save the settings.

### Step two: Set up print feature permissions

The following instructions provide information on how to configure access restrictions for user types, access types, and sign-in methods.

**NOTE:** By default, all print features for **Device Guest** are set to **Access Granted** and **Device User** are set to **Full Access**, which do not require a sign-in method. Sign-in is not required unless the sign-in method is changed in the **Sign In Method** column from **Use Default** to one of the three sign-in methods (**Local Device**, **LDAP**, or **Windows**).

1. Determine the appropriate level of Guest access in the **Device Guest** column.
   - Access Granted: Allows a **Device Guest** to use the specified print feature without signing in
   - Requires Sign In: Requires a **Device Guest** to sign in to use the specified print feature
   a. Disable all print features by clicking the check box under **Device Guest**. The check boxes are now set to **Requires Sign In** to use the print features.

   **OR**

   b. To disable a specific print feature, click the check box to the right of the feature in the **Device Guest** column. The print feature is now set to **Requires Sign In** to use the feature.
2. Determine the level of access for a **Device User**.
   
   - **Full Access**: Allows a **Device User** to use the specified print feature without signing in
   - **Access Denied**: Requires a **Device User** to sign in to use the specified print feature

   a. Disable all print features by clicking the check box under **Device User**. The check boxes are now set to **Access Denied**. If a print feature is set to **Access Denied** in the **Device User** column, the access in the **Device Guest** column automatically changes to **Requires Sign In**.

   b. To disable a specific print feature, click the check box to the right of the feature in the **Device User** column. The print feature is now set to **Access Denied**. If a print feature is set to **Access Denied** in the **Device User** column, the access in the **Device Guest** column automatically changes to **Requires Sign In**.

3. Determine the **Sign In Method** for print features for walk-up users at the printer’s control panel.
   
   **NOTE**: By default, the **Sign In Method** is set as **Local Device**; however, this does not require sign in to use a print feature unless the sign-in method is changed for the specific print feature from **Use Default** to **Local Device**.

4. To require users to use the sign-in method set for each print feature, do not check the check box for **Allow users to choose alternate sign-in methods**.

---

**Step three: Set up the Job Status and Screen Behavior settings**

Use the following steps to configure an automatic sign out from the printer.

1. Click the **Automatically sign out** check box, and click the radio button for either **Sign out immediately when job starts** or **Sign out after 10 seconds with option to stay signed in**.

2. Under **Default Retain Settings Behavior**, select the job types to retain settings by clicking the following check boxes:
Step four: Set up the default permissions for each sign-in method

Use the following steps to configure the default permission set type for Windows or LDAP sign-in methods.

1. Set the default permissions for all users and groups by clicking the drop-down lists for LDAP and Windows, and select the appropriate option.

2. If specific users or groups need different permissions from the default permissions, click New... The New User or Group to Permission Set Relationship page opens.
   a. From the User or Group drop-down list, select either User or Group.
   b. Using the Permission Set drop-down list, select either Device Administrator or Device User.
   c. From the Sign In Method drop-down list, either LDAP or Windows.
   d. In the Network User or Group Name field, enter a user or group name.
   e. Click OK.

Step five: Set up Device User Accounts

Use the following steps to set up individual Device User Accounts that use an access code for the Local Device sign-in method.

1. From the Default Permission Set for new accounts drop-down list, select either Device Administrator or Device User.

2. Click New... to create a new Device User Account, and enter the following information:
   - Display Name: Enter a Device User Account name
   - E-mail Address: Enter the user e-mail address
   - Network Name: Enter the network name
   - Access Code: Use this generated Access Code or assign a new code
   - Permission Set: From the drop-down list, select either Device Administrator or Device User

3. Click OK.

Step six: Complete the setup

On the Access Control page, review the selected settings, and then click Apply to complete the setup.
Protect printer data

Learn how to protect printer data on the printer hard drive(s).

- Introduction
- Step one: Set up Protect Stored Data
- Step two: Complete the setup

Introduction

There are several methods to protect data stored on the printer hard drive(s). One of the best solutions is to purchase a printer with an encrypted drive or upgrade to an encrypted drive if the option is available.

The data on an encrypted drive is not accessible if removed from the printer. Data on the drive should be erased prior to donating, recycling, or transferring ownership of this printer. To ensure that print or scan job images are not retained on the hard drive (until overwritten by another job) select a secure file erase mode in the Managing Temporary Job Files area of the Protect Stored Data page.

**NOTE:** If a job is in process at the same time a data erase mode operation is initiated, the job will complete before the data erase operation begins.
Step one: Set up Protect Stored Data

Learn how to set up Protect Stored Data using the EWS.

- Drive Status
- Erase Job Data
- Change Password for Encrypted Drives
- Managing Temporary Job Files
- Manage Stored Jobs

Drive Status

Click on the Security tab, and then select Protect Stored Data to access the Drive Status in the EWS.

The Drive Status area of the Protect Stored Data page contains the following information about each drive installed on the printer:

- Type of drive
- Content on the drive
- Serial number
- Encryption status

If multiple drives are installed on the printer, use this Drive Status area to specify which drive the printer uses by using the Use Drive... operation and also to perform an Erase Drive... operation on a specified drive.

Erase Job Data

Use the following steps to select a data erase mode.

Types of data erase modes available for performing a data erase operation:

- Non-Secure Fast Erase (No overwrite)
- Secure Fast Erase (Overwrite 1 time) — overwrites the data once and has little effect on printer performance
- Secure Sanitize Erase (Overwrite 3 times) — overwrites the data three times and might have an affect on printer performance

Data erased when performing a data erase operation:

- Stored jobs
- Temporary job files (created as the result of processing jobs)
- Installed solutions that are stored as job data
1. Select a data erase mode in the **Job Data** area of the **Protect Stored Data** page.

2. At the bottom of the page, click the **Apply** button.

**NOTE:** The printer automatically restarts after the Erase Job Data operation completes. The printer control panel displays the splash screen while the operation is in progress. Erase Job Data operations can take varying lengths of time, from minutes to hours, depending on the amount of data being erased.
Change Password for Encrypted Drives

Learn how to change the password for encrypted drives.

- **Generate a new random password for all encrypted drives**
- **Manually set a new password for all encrypted drives**

If an EIO drive is installed on the printer, its information will be displayed in the Drive Status section and a Change Password... button will be available in the Change Password for Encrypted Drives area.

**Generate a new random password for all encrypted drives**

Use the following steps to generate a new password for encrypted drives.

1. Select **Generate a new random password (Recommended)**.
2. Click the **Change Password...** button.

**Manually set a new password for all encrypted drives**

Use the following steps to manually set a new password for encrypted drives.

1. Select **Manually set a new drive password**.
2. Enter a password in the Password: and Confirm Password: fields.
3. Click the **Change Password...** button.

Managing Temporary Job Files

Use the Managing Temporary Job Files area to set the data erase mode used when temporary job files are erased during a data erase operation.

The following types of data erase modes are available for data erase operations on temporary job files:

- **Non-Secure Fast Erase (No overwrite)**
- **Secure Fast Erase (Overwrite 1 time)** — overwrites the data once and has little effect on printer performance
- **Secure Sanitize Erase (Overwrite 3 times)** — overwrites the data three times and might have an affect on printer performance

Manage Stored Jobs

Use the Manage Stored Jobs area to manage settings for jobs stored on the printer and for Quick Copy jobs; stored jobs sent from the print driver.
The following settings are available for configuration:

- **Allow stored jobs on this device** - select this check box to enable job storage on the printer.
- **Quick Copy Job Held Timeout** - specify how long Quick Copy jobs are held on the printer. The following settings are available:
  - **Off** (default)
  - 30 minutes
  - 1 hour
  - 4 hours
  - 1 day
  - 1 week
  - 4 weeks
  - 3 days
- **Quick Copy Job Storage Limit** - specify how many Quick Copy jobs can be stored on the printer.
- **Sort Stored Jobs By** - specify how stored jobs are sorted, either by **Job Name** (default) or **Date**. The job sort order also affects the jobs that are in the print queue on the device.
- **Default Folder Name** - the default folder where jobs are stored.

Click the **Apply** button to save any changes made on the **Protect Stored Data** page.

**Step two: Complete the setup**

On the **Protect Stored Data** page, review the selected settings, and then click **Apply** to complete the setup.
Install certificates

Learn how to install certificates.

- Install certificates to ensure data security in the EWS
- Install certificates for whitelisting remote apps on the printer
Install certificates to ensure data security in the EWS

Learn how to install and configure security certificates.

- **Introduction**
- **Create or install certificates**
- **Configure the certificate validation settings**

**Introduction**

Use the **Certificate Management** page to manage certificates for identification of the printer on a network and to encrypt data used by the printer.

The printer comes with a self-signed identity certificate and a self-signed Certificate Authority (CA) certificate. The printer also comes with three Root CA Certificates from popular Certificate Authorities. These Root CA Certificates can be used to authenticate popular email services including Gmail, Yahoo, and MS Office 365.

Certificates are managed from the **Security** tab > **Certificate Management** page of the EWS. The **Certificate Management** page contains the following tabs:

- **Certificate** tab – Use to import, view details, remove, export, and use for e-mailing signing with certificates
- **Certificate Validation** tab – Use to disable or enable validation of Kerberos server certificates with either the OCSP or CDP validation

The printer supports the following import formats for certificates:

- .DER (binary)
- .CER (binary or Base64)
- .PEM (Base64, installs single certificate)
- .PFX (identity certificate)
- .P7B (CA certificates only)
Create or install certificates

Learn how to create or install security certificates.

- Create a new self-signed certificate
- Create a certificate signing request
- Install an identity certificate
- Import an identity certificate
- Install a certificate

Create a new self-signed certificate

Use this feature to create a new, self-signed identity certificate for the printer. A self-signed identity certificate is installed on the printer by default for data-encryption purposes only. Self-signed identity certificates are not accepted for authentication since they are not issued by a trusted Certificate Authority (CA).

NOTE: To create an identity certificate signed by a CA, see the following sections on creating a certificate signing request (CSR) and installing an identity certificate from a CSR.

Creating a new, self-signed certificate overwrites and replaces the existing self-signed certificate on the printer.

1. Using the top navigation tabs, click Security.
2. In the left navigation pane, click Certificate Management.
3. Click Create... in the Create New Self-Signed Certificate area.
4. Enter the identifying information for the printer in the Identifying Information area.
5. Select an encryption key length in the RSA Key Length: drop-down menu in the Key Options area.

NOTE: If the Trusted Platform Module (TPM) is installed, the private key may be marked as exportable. However, if Mark private key as exportable is selected, the private key will not be generated on the TPM.
6. Select a signature algorithm from the Signature Algorithm drop-down menu in the Signature Algorithm area.
7. Enter the validity period for the certificate in the Certificate Validity area. The default validity period is five years from the system date at creation time.
8. Click OK to go to the new, self-signed certification confirmation page. To return to the main Certificates page without updating the current, signed certificate, click Cancel.

Create a certificate signing request

Use the following steps to create a certificate signing request.

1. Using the top navigation tabs, click Security.
2. In the left navigation pane, click Certificate Management.
3. Click Create... in the Create Certificate Signing Request area.
4. Enter the identifying information for the organization to which the certificate will be issued in the Identifying Information area.
5. Select an encryption key length for the requested certificate in the **RSA Key Length** drop-down menu in the **Key Options** area.

**NOTE:** If the Trusted Platform Module (TPM) is installed, the private key may be marked as exportable. However, if **Mark private key as exportable** is selected, the private key will not be generated on the TPM.

6. Select a signature algorithm for the requested certificate from the **Signature Algorithm** drop-down menu in the **Signature Algorithm** area.

7. Click **OK** to proceed to the **Create Certificate Signing Request** confirmation page.

8. Copy, or save to a file, the contents of the certificate signing request on the **Create Certificate Signing Request** confirmation page. The contents of the certificate signing request must be presented to a CA to complete the request process.

### Install an identity certificate

Use this to install an identity certificate created from a CSR.

1. Using the top navigation tabs, click **Security**.
2. In the left navigation pane, click **Certificate Management**.
3. Select **Install Identity Certificate from CSR**.
4. Click **Browse** next to the **Choose File** field.
5. Locate the certificate for import, and then click **Open**.
6. Click **Install**.

### Import an identity certificate

Use the following steps to import an identity certificate.

1. Using the top navigation tabs, click **Security**.
2. In the left navigation pane, click **Certificate Management**.
3. Select **Import Identity Certificate with Private Key**.

**NOTE:** If Trusted Platform Module (TPM) is installed, HP recommends creating and using a certificate signed by a CA.

4. Click **Browse** next to the **Choose File** field.
5. Locate the certificate for import, and then click **Open**.
6. Click **Install**.

### Install a certificate

Use the following steps to install a certificate.

1. In the left navigation pane, click **Certificate Management**.
2. Click **Browse** next to the **Choose File** field.
3. Locate the certificate for import, and then click **Open**.
NOTE: Identity type certificates, as well as Certificate Authority type certificates, are valid types for importation and use with this printer.

4. If the certificate has a private key (for example, a .pfx file), enter the password for the certificate in the Certificate Password field. Use the same password used to encrypt the private key.

5. Click Import.
Configure the certificate validation settings

Use the following information to configure the certificate validation settings in the EWS.

- Configure OCSP certificate validation
- Configure CDP certificate validation

Configure OCSP certificate validation

Use the following steps to set up OCSP certificate validation.

**NOTE:** Certificates might need to be installed in the Certificates tab for the OCSP servers.

1. Using the top navigation tabs, click Security.
2. In the left navigation pane, click Certificate Management.
3. Click the Certificate Validation tab of the Certificate Management page.
4. Select the Perform OCSP Validation on the certificate trust chain option on the Certificate Validation tab.
5. Enter a URL for an OCSP server, and then click Add.

**NOTE:** Multiple OCSP servers can be added for certificate validation. The URLs for the OCSP server(s) might be fully-qualified domain names or IP addresses.

6. Select the Treat Unknown certificate status as valid check box, if necessary.
7. Click Apply to save the settings.

Configure CDP certificate validation

Use the following steps to configure CDP certificate validation.

1. Using the top navigation tabs, click Security.
2. In the left navigation pane, click Certificate Management.
3. Click the Certificate Validation tab of the Certificate Management page.
4. Select the Perform CDP Validation on the certificate trust chain option on the Certificate Validation page.
5. Click Apply to save the settings.
Install certificates for whitelisting remote apps on the printer

Learn how to install certificates for remote apps.

- Introduction
- Install remote app certificates

Introduction

The Manage Remote Apps page is available only for printers that have FutureSmart 4 with firmware version 4.5 or later. Use the Manage Remote Apps page to install and manage the certificates for the remote apps that are available on mobile devices. When a certificate is installed, the remote app is added to a whitelist that allows it to be used on the printer.

The printer supports the following import formats for certificates:

- .DER (binary)
- .CER (binary or Base64)
- .PEM (Base64, installs single certificate)

Install remote app certificates

Use the following steps to install remote app certificates:

1. Sign in to the EWS using administrator credentials.
2. Using the top navigation tabs, click Security.
3. In the left navigation pane, click Manage Remote Apps.
4. Click Browse next to the Choose File field.
5. Locate the certificate for import, and then click Open.

**NOTE:** The certificate can be a self-signed certificate.

6. Click Import.

Restrict email domains

Use the Email Domain Restriction page, located in the Security tab, to restrict the domains to which the users are allowed to send email jobs and job notifications.
Specify websites able to access a printer

Use the **Web Service Security** page, located in the **Security** tab, to enable Cross-Origin Resource Sharing (CORS), which allows resources on this printer to be accessed by web pages from different domains, and manually add trusted sites for this printer.
6 Configure printer features using the EWS

Learn how to configure printer features using the EWS.

- Configure the printer
- Configure printing
- Configure copying
- Configure scanning and digital sending
- Configure faxing
Configure the printer

Use the following information to configure printer features using the EWS.

- Configure the color calibration and cleaning cycles
- Configure the Manage Trays settings
- Configure the Manage Supplies settings
- Configure jam recovery
- Configure energy-conservation settings
- Enable the USB port for printing
- Configure the initial copy view (Expert Copy)
- Install third-party solutions
Configure the color calibration and cleaning cycles

Learn how to configure the color calibration and cleaning cycles using the EWS. These features are available in the Troubleshooting tab.

- Introduction
- Calibration Timing and Duration
- Worst Case Delays
- Steps to minimize interruptions
- Background – Explanation of Calibration and Cleaning
- Calibration Controls
- Cleaning Cycles

Introduction

Multifunction printers automatically calibrate and clean at various times to maintain the highest level of print quality. The purpose of this document is to provide an understanding of these processes and suggest possible configuration changes that will minimize interruptions to the user.

While the printer is calibrating and cleaning, the printer will pause normal print operations for the amount of time it takes to complete the calibration or cleaning. For most calibrations and cleaning, the printer will not interrupt a print job, but will wait for the job to complete (or in the case of a job with multiple copies, a copy boundary) before calibrating or cleaning. In the case of very large jobs, a calibration may occur before the job completes.

The end result of any calibration is to achieve an optimal printing state. This desired state is the result of carefully measuring print performance over the life of several printers in different environmental conditions.

Calibration Timing and Duration

Please note that all of the below times are “best case” times. Color Plane Registration (CPR) calibrations may require additional retry sequences before they complete with satisfactory results.

Table 6-1 Normal Timings and Durations

<table>
<thead>
<tr>
<th>When</th>
<th>Cycle Performed</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>The product is powered on or brought to Ready from sleep mode.</td>
<td>Dhalf, Dmax</td>
<td>1 minute 21 seconds</td>
</tr>
<tr>
<td><strong>NOTE:</strong> Dhalf¹ and Dmax² calibrations are not performed when the printer is powered on or brought to Ready and the fuser temperature registers 122 degrees F (50 degrees C) or more.</td>
<td>Color Plane Registration (CPR)¹</td>
<td></td>
</tr>
</tbody>
</table>
Table 6-1  Normal Timings and Durations (continued)

<table>
<thead>
<tr>
<th>When</th>
<th>Cycle Performed</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>One or more new print cartridges are installed.</td>
<td>● Dhalf, Dmax</td>
<td>1 minute 21 seconds</td>
</tr>
<tr>
<td><strong>NOTE:</strong> Dhalf and Dmax calibration are run after 50 pages are</td>
<td>● Color Plane Registration (CPR)</td>
<td></td>
</tr>
<tr>
<td>printed on the new cartridge(s).</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intermediate Transfer Belt (ITB)(^4) is replaced.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Laser Scanner is replaced.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>After 1000 pages have printed since the last calibration.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>NOTE:</strong> The printer will finish printing the current job before</td>
<td></td>
<td></td>
</tr>
<tr>
<td>calibrating.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>After 8 hours has elapsed since the last print job.</td>
<td>● Dhalf, Dmax</td>
<td>43 seconds</td>
</tr>
<tr>
<td>After 15 minutes of continuous printing.</td>
<td>● Color Plane Registration (CPR)</td>
<td>38 seconds</td>
</tr>
<tr>
<td>In the middle of print operations.</td>
<td>● Color Plane Registration (CPR)</td>
<td>38 seconds</td>
</tr>
<tr>
<td><strong>NOTE:</strong> When the printer needs to perform a CPR calibration, it</td>
<td></td>
<td></td>
</tr>
<tr>
<td>will wait until the end of the print job or 100 pages before</td>
<td></td>
<td></td>
</tr>
<tr>
<td>execution.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>When Quick Calibration is selected from the control panel menu.</td>
<td>● Dhalf, Dmax</td>
<td>43 seconds</td>
</tr>
<tr>
<td>When Full Calibration is selected from the control panel menu.</td>
<td>● Dhalf, Dmax</td>
<td>1 minute 21 seconds</td>
</tr>
<tr>
<td>● Color Plane Registration (CPR)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>When the printer needs to evaluate toner level in print cartridge.</td>
<td>● Cleaning, toner level sensing</td>
<td>45 seconds</td>
</tr>
<tr>
<td>When the printer needs to perform periodic lubrication and cleaning</td>
<td>● Toner Purge</td>
<td>21 seconds</td>
</tr>
<tr>
<td>of toner cartridges.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>After a mis-print.</td>
<td>● Cleaning primary transfer</td>
<td>13 seconds</td>
</tr>
<tr>
<td>After a paper jam.</td>
<td>● Clearing paper path</td>
<td>28 seconds</td>
</tr>
</tbody>
</table>

1 Density Halftone (Dhalf): A means of calibrating the print tone characteristics.
2 Density Maximum (Dmax): The maximum density that can be printed.
3 Color Plane Registration (CPR): A method of aligning the 4 primary color planes.
4 Intermediate Transfer Belt (ITB): The medium onto which the print image is intermediately formed and then transferred to print media.

Worst Case Delays

The calibration and cleaning processes run independently. If they happen to coincide, then the resulting delay could be as long as 1 minute 42 seconds.

At power on, if the fuser is cold, the combined time for boot-up (3 minutes) plus calibration (1 minute 21 seconds) could result in a total delay of 4 minutes 21 seconds before the printer is Ready.

**NOTE:** Delay times depend on the printer model.

Steps to minimize interruptions

Use the following recommendations to minimize interruptions for printer users.

- Set the Sleep Delay to 120 minutes (2 hours).
- Administration, General Settings, Energy Settings, Sleep delay

- Set Delay Calibration at Wake/Power On to NO.
  - Device Maintenance, Calibration/Cleaning, Delay Calibration at Wake/Power On

- Set the Wake Time for each day to 15 minutes before the first expected use of the product.
  - Control Panel: Administration, Display Settings, Sleep Mode, Use Sleep Schedule
  - Embedded Web Server: General Tab, Sleep Schedule

These steps will ensure that the printer has completed the calibration and cleaning cycles before users are expected to need the product. Setting the Sleep Delay to 2 hours will prevent the product from going into sleep mode (this assumes the product will not be inactive more than two hours).
Background – Explanation of Calibration and Cleaning

The purpose of a print alignment calibration is to adjust one or more elements of the print system such that print and image quality is returned to an optimal state. These calibrations carefully measure each CMYK print result to ensure that the colors are properly aligned in the resulting image.

- Color Plane Registration
- Maximum Density (Dmax) Calibration
- Halftone Density (Dhalf) Calibration

Color Plane Registration

CPR Calibration sets several printer parameters; top of page (vertical scanning start position), start of line (horizontal scanning start position), and scale in the scan direction (horizontal scanning magnification). We refer to registration errors as being in the Process Direction (PD) or the Scan Direction (SD). Process Direction is in the direction of motion of the paper through the printer; Scan Direction is perpendicular to the Process Direction.

- **Top of page** calibration sets the delay, or offset, between each of the colors, CMYK, so that the color planes are lined up in the process direction.
- **Start of line** calibration aligns each of the colors in the scan direction.

As with Halftone Adjustment, CPR calibration is done by writing patterns on the image transfer belt and then using sensors to read the patterns. Variations in the timing of the patterns tell the printer how to compensate for top of page, start of line, and scale in the scan direction.

There are several sources of CPR error in the print system. While cartridge and ITB variation are large contributors, there are other factors which may contribute to CPR error. These include the laser scanner assembly and heat dissipation during printing. Therefore, following long periods of print operation, the printer may require a calibration to be performed.

Maximum Density (Dmax) Calibration

The purpose of Maximum Density calibration is to set the maximum density (100% exposure) of each of the primary print colors (cyan, magenta, yellow, and black). During Dmax calibration, patches are generated and developed onto the image transfer belt (ITB). The developed patches pass by two internal sensors that “read” the patches and the data is used by the printer to adjust the print parameters so that the printer generates the desired “nominal” maximum density.

Halftone Density (Dhalf) Calibration

The purpose of the Halftone Density (Dhalf) calibration is to adjust the density between zero and 100%. As with CPR calibration, patches are developed onto the image transfer belt (ITB) and read by the sensors. The data is then used to calculate the halftone mapping that will generate the desired nominal performance. The result of this calibration is a halftone which is adjusted to compensate for the non-linearity of the laser printing system. The halftones (which are also called an “ordered dither” halftone set) that are adjusted are used for normal print operations (not the scan/copy path).

In the case of a measurement failure, the printer is designed to use an average calibration which is an average of several printers measured over life in different environments. While not optimal, this average should give most customers a reasonably well calibrated printer. Errors will be written to the event log in this case.

Calibration Controls

Calibration execution controls are found under the Calibration/Cleaning menu structure (Device Maintenance, Calibration/Cleaning).
The specific controls are:

- Quick Calibration
- Full Calibration

**Cleaning Cycles**

The purpose of the cleaning cycle is to ensure the highest level of print quality by eliminating excess toner and paper dust that accumulates in the primary transfer stage of the electro photographic process.
Configure the Manage Trays settings

Learn how to configure the Manage Tray settings in the EWS.

- **Introduction**
  - **Step one: Configure the tray settings**
  - **Step two: Load the trays**

**Introduction**

You can use the HP Embedded Web Server (EWS) to manage tray settings for the printer. In addition to managing the paper size and type settings for specific trays, you can also manage general tray settings for features such as Alternative Letterhead Mode, duplexing, and prompts.

**Step one: Configure the tray settings**

Use the following steps to configure the paper tray settings.

1. Click the *Copy/Print* or *Print* tab.
2. Open the *Manage Trays* menu.
3. Modify the tray settings.

   - To set the paper size and type for a tray, complete the following procedure:
     1. In the area labeled *Trays*, click the *Modify* link next to the name of the tray.
     2. To change the default paper size, select a paper size from the *Size* drop-down list.
     3. To change the default paper type, select the paper type from the *Type* drop-down list.
     4. Click *OK* to return to the main Manage Trays page.

   - To change the general tray settings, complete the following procedure:
     - In the area labeled *General Tray Settings*, open the drop-down list of the appropriate feature.
     - Select the appropriate setting.

4. Click *Apply* to save the settings.
Step two: Load the trays

Load paper into the trays as follows.

- **Load Tray 1**
- **Load Tray 2 and the optional 500–sheet input trays**

**NOTE:** To avoid jams, never add or remove paper from Tray 1 during printing.

**NOTE:** Labels on each tray indicate the correct way to load paper. If you change the size or type of paper that is loaded in the tray, you need to configure the tray for the new size or type.

### Load Tray 1

Use the following steps to load Tray 1.

1. Open Tray 1.
2. Pull out the tray extension to support the paper and set the side guides to the correct width.
3. Load paper in the tray.
4. Make sure the stack fits under the tabs on the guides and does not exceed the load-level indicators.
5. Adjust the side guides so that they lightly touch the paper stack but do not bend it.

### Load Tray 2 and the optional 500–sheet input trays

Use the following steps to load Tray 2 and optional trays.

1. Open the tray.
   
   **NOTE:** Do not open the tray while it is in use.

2. Adjust the paper-length and paper-width guides by squeezing the adjustment latches and sliding the guides to the size of the paper being used.
3. Load paper into the tray. Check the paper to verify the guides lightly touch the stack, but do not bend it.
   
   **NOTE:** To prevent jams, do not overfill the tray. Be sure the top of the stack is below the tray full indicator.

   **NOTE:** If the tray is not adjusted correctly, an error message might appear during printing or the paper might jam.

4. Close the tray.
5. The control panel shows the tray’s paper type and size. If the configuration is not correct, follow the instructions on the control panel to change the size or type.

### Configure the Manage Supplies settings

Use the Manage Supplies page, located in the Supplies tab, to apply settings for the product supplies.

**NOTE:** To configure the printer to automatically send notifications regarding supplies, see Configure the printer to send notifications for cartridge or paper events on page 118.
Configure jam recovery

The General Settings page, located in the General tab, provides access to the Jam Recovery settings. Use this page to specify when jammed pages are printed.

Figure 6-2 Jam Recovery page
Configure energy-conservation settings

Learn how to configure the printer energy-conservation settings to balance the needs for speed and energy use.

- **Introduction**
- **Print with EconoMode (mono models only)**
- **Set the idle settings (FutureSmart 4 only)**
- **Set the sleep timer and configure the printer to use 1 watt or less of power**
- **Configure the date and time settings**
- **Set the sleep schedule**

**Introduction**

The printer includes several features to help reduce energy consumption.
Print with EconoMode (mono models only)

Some printers have an EconoMode option for printing drafts of documents. Using EconoMode can use less toner. However, using EconoMode can also reduce print quality.

- Configure EconoMode from the print driver
- Configure EconoMode from the printer control panel (FutureSmart 3)
- Configure EconoMode from the printer control panel (FutureSmart 4)

HP does not recommend the full-time use of EconoMode. If EconoMode is used full-time, the toner supply might outlast the mechanical parts in the toner cartridge. If print quality begins to degrade and is no longer acceptable, consider replacing the toner cartridge.

**NOTE:** If this option is not available in your print driver, you can set it using the printer control panel.

Configure EconoMode from the print driver

Use the following steps to configure EconoMode from the print driver.

1. From the software program, select the **Print** option.
2. Select the printer, and then click the **Properties** or **Preferences** button.
3. Click the **Paper/Quality** tab.
4. Click the **EconoMode** check box to enable the feature, and then click **OK**.

Configure EconoMode from the printer control panel (FutureSmart 3)

Use the following steps to configure EconoMode from the control panel for FutureSmart 3.

1. Press the Home button on the printer control panel.
2. Open the following menus:
   a. **Administration**
   b. **General Settings**
   c. **Print Quality**
3. Select **EconoMode**.
4. Select **On** or **Off** to enable or disable the feature, and then touch **Save** or press the **OK** button.

Configure EconoMode from the printer control panel (FutureSmart 4)

Use the following steps to configure EconoMode from the control panel for FutureSmart 4.

1. From the Home screen on the printer control panel, open the **Settings** menu.
2. Open the following menus:
a. Copy/Print or Print
b. Default Print Options
c. Economode

3. Select On or Off to enable or disable the feature.

**Set the idle settings (FutureSmart 4 only)**

Use the following steps to set the idle settings.

By default the printer stays warm between jobs to optimize speed and print the first page of jobs faster. To conserve energy, set the printer to cool between jobs.

1. From the Home screen on the printer control panel, open the Settings menu.
2. Open the following menus:
   a. General
   b. Energy Settings
   c. Idle Settings
3. Adjust the slider to the right to save energy. Touch Done to save the setting.
Set the sleep timer and configure the printer to use 1 watt or less of power

The printer has several options for the energy-saving sleep timer feature. The time delay to enter the Sleep/Auto Off state is adjustable, and the power usage during the Sleep/Auto Off state varies according to selection for the Wake/Auto On option.

- FutureSmart 3
- FutureSmart 4

**NOTE:** HP does not recommend using deep sleep settings if you have Security Solutions installed. In some situations, the printer does not wake from deep sleep. For additional information, contact your HP representative.

**NOTE:** The steps vary according to the type of control panel.

<table>
<thead>
<tr>
<th>Table 6-2 Control panel types</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Version</strong></td>
</tr>
<tr>
<td>FutureSmart 3</td>
</tr>
<tr>
<td>FutureSmart 4</td>
</tr>
</tbody>
</table>

**FutureSmart 3**

Use the following steps to manage the energy settings (FutureSmart 3).

1. Press the Home button on the printer control panel.
2. Open the following menus:
   a. Administration
   b. General Settings
   c. Energy Settings
   d. Sleep Timer Settings
3. **4-line control panels only:** Select Sleep/Auto Off Timer, and then select Enabled. Press the OK button.
4. Select Sleep/Auto Off After.
5. Use the keypad to enter the appropriate time period, and then touch the Save button, or press the OK button.

6. Select one of the Wake/Auto On to These Events options:
   - All events: The printer wakes when it receives any print job (through the USB port, network port, or wireless connection), or when someone presses a button on the control panel, or opens any door or tray.
   - Network port: The printer wakes when it receives a print job sent through the network port, or when someone presses a button on the control panel, or opens any door or tray. With this setting, the printer uses 1 watt or less of power while in the Sleep/Auto Off state.
   - Power button only: The printer wakes only when someone presses the power button. With this setting, the printer uses 1 watt or less of power while in the Sleep/Auto Off state.

FutureSmart 4

Use the following steps to manage the energy settings (FutureSmart 4).

View a video demonstration on how to manage the energy settings

1. From the Home screen on the printer control panel, open the Settings menu.

2. Open the following menus:
   a. General Settings
   b. Energy Settings
   c. Sleep Settings

3. Select Sleep after inactivity to specify the number of minutes the printer is inactive before it enters sleep mode. Enter the appropriate time period.

   NOTE: The sleep-mode default time is 0 minutes. Zero (0) indicates that the printer will go to sleep in less than 1 minute.

4. Select Auto Off after sleep to put the printer into a deeper power save mode after a period of sleep. Enter the appropriate time period.

   NOTE: By default, the printer will wake from Auto Off in response to any activity other than USB or Wi-Fi, but can be set to wake only to the power button.

5. Select Done to save the settings.

Configure the date and time settings

Use the HP Embedded Web Server (EWS) to set the printer date and time settings to match those of your country/region.

NOTE: The steps vary according to the type of control panel.
Table 6-3  Control panels

<table>
<thead>
<tr>
<th>Firmware version</th>
<th>Control panel</th>
</tr>
</thead>
<tbody>
<tr>
<td>FutureSmart 3</td>
<td>![Control panel image]</td>
</tr>
<tr>
<td>FutureSmart 4</td>
<td>![Control panel image]</td>
</tr>
</tbody>
</table>

1. In the address line of your web browser, type the IP address or host name of the printer to open the EWS. For more information, see Open the HP Embedded Web Server (EWS) on page 13.

2. Click the General tab.

3. Open the Date/Time Settings menu.

4. In the area labeled Device Time, configure the date and time.

5. In the area labeled Date/Time Format, select the preferred date and time formats.

6. In the area labeled Network Time Server, select whether or not the printer should automatically synchronize with a Network Time Server. By default, Automatically Synchronize with a Network Time Server is selected.

7. Click the Apply button.
Set the sleep schedule

Use the Sleep Schedule feature to configure the printer to automatically wake or go into Sleep/Auto Off mode at specific times on specific days of the week.

- Set the sleep schedule from the printer control panel
- Set the sleep schedule from the HP Embedded Web Server (EWS)

**NOTE:** Configure the date and time settings before setting the Sleep Schedule feature.

Set the sleep schedule from the printer control panel

Use the following steps to set the printer’s sleep schedule.

1. From the Home screen on the printer control panel, scroll to and touch the Administration button.
2. Open the following menus:
   a. General Settings
   b. Date/Time Settings
3. Open the Date/Time Format menu and configure the following settings:
   - Date Format
   - Time Format
4. Touch the Save button.
5. Open the Date/Time menu and configure the following settings:
   - Date/Time
   - Time Zone
   If you are in an area that uses daylight savings time, select the Adjust for Daylight Savings box.
6. Touch the Save button.
7. Touch the back-arrow button to return to the Administration screen.
8. Open the following menus:
   a. General Settings
   b. Energy Settings
   c. Sleep Schedule
9. Touch the Add button, and then select the type of event to schedule: Wake or Sleep.
10. Configure the following settings:
    - Time
    - Event Days
11. Touch the OK button, and then touch the Save button.
Set the sleep schedule from the HP Embedded Web Server (EWS)

Use the following steps to set the sleep schedule.

**NOTE:** The steps vary according to the type of control panel.

Table 6-4 Control panels

<table>
<thead>
<tr>
<th>Firmware version</th>
<th>Control panel</th>
</tr>
</thead>
<tbody>
<tr>
<td>FutureSmart 3</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>FutureSmart 4</td>
<td></td>
</tr>
</tbody>
</table>

1. In the address line of your web browser, type the IP address or host name of the printer to open the EWS. For more information, see Open the HP Embedded Web Server (EWS) on page 13.

2. Click the **General** tab.

3. Open the **Date/Time Settings** menu.

4. In the area labeled **Device Time**, configure the date and time.

5. In the area labeled **Date/Time Format**, select the preferred date and time formats.

6. In the area labeled **Network Time Server**, select whether or not the printer should automatically synchronize with a Network Time Server. By default, **Automatically Synchronize with a Network Time Server** is selected.

7. Click the **Apply** button.

The power-button light can indicate the printer status. Use the following table to interpret the printer status.

Table 6-5 Printer status

<table>
<thead>
<tr>
<th>Control-panel status</th>
<th>Power-button status</th>
<th>Printer status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black or Blank</td>
<td>Blinking in one second intervals</td>
<td>The printer is in Sleep/Auto Off mode</td>
</tr>
<tr>
<td></td>
<td></td>
<td>The Wake/Auto On Event is set to <strong>All events</strong></td>
</tr>
<tr>
<td>Control-panel status</td>
<td>Power-button status</td>
<td>Printer status</td>
</tr>
<tr>
<td>----------------------</td>
<td>------------------------------</td>
<td>--------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Black or Blank</td>
<td>Blinking in 0.25 second intervals</td>
<td>The printer is in Sleep/Auto Off mode</td>
</tr>
<tr>
<td></td>
<td></td>
<td>The Wake/Auto On Event is set to <strong>Network port</strong></td>
</tr>
<tr>
<td>Active</td>
<td>Blinking</td>
<td>The printer is in one of the following transitional states:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Entering Sleep/Auto Off mode</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Exiting Sleep/Auto Off mode</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Entering Auto On mode</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Entering Auto Off mode</td>
</tr>
</tbody>
</table>
Enable the USB port for printing

The USB port is disabled by default. Before using this feature, enable the USB port. Use one of the following methods to enable the port:

- **Method one:** Enable the USB port from the printer control panel
- **Method two:** Enable the USB port from the HP Embedded Web server (network-connected printers only)
Method one: Enable the USB port from the printer control panel

Learn how to enable the USB port from the control panel for either FutureSmart 3 or 4.

- **FutureSmart 3**
- **FutureSmart 4**

**FutureSmart 3**

Use the following steps to enable the USB port from the control panel (FutureSmart 3).

1. From the Home screen on the printer control panel, select the **Administration** button.
2. Open the following menus:
   a. **General Settings**
   b. **Enable Retrieve from USB**
3. Select the **Enabled** option, and then select the **Save** button or press the **OK** button.

**FutureSmart 4**

Use the following steps to enable the USB port from the control panel (FutureSmart 4).

1. From the Home screen on the printer control panel, navigate to and select the **Settings** menu.
2. Open the following menus:
   a. **Copy/Print** or **Print**
   b. **Enable Device USB**
3. Select **Enabled** to enable the USB port.
Method two: Enable the USB port from the HP Embedded Web server (network-connected printers only)

Learn how to enable the USB port from the EWS for either FutureSmart 3 or 4.

- FutureSmart 3
- FutureSmart 4

FutureSmart 3

Use the following procedure to enable the USB port from the EWS for FutureSmart 3.

1. In the address line of your web browser, type the IP address or host name of the printer to open the EWS. For more information, see Open the HP Embedded Web Server (EWS) on page 13.
2. On the EWS Home page, open the Print tab.
3. On the left side of the screen, click Retrieve from USB Setup.
4. Select the Enable Retrieve from USB check box.
5. Click Apply.

FutureSmart 4

Use the following procedure to enable the USB port from the EWS for FutureSmart 4.

1. In the address line of your web browser, type the IP address or host name of the printer to open the EWS. For more information, see Open the HP Embedded Web Server (EWS) on page 13.
2. On the navigation bar at the top of the EWS home page, click the Copy/Print tab (for MFP models), or the Print tab (for SFP models).
3. In the left navigation pane, select Print from USB Drive Settings.
4. Select Enable Print from USB Drive, and then click Apply.

Configure the initial copy view (Expert Copy)

The Expert Copy page, located in the Copy/Print tab, allows you to enable or disable Expert Copy and set the initial copy view.

**NOTE:** The Expert Copy feature is available only on some HP MFPs with larger control panels. Expert Copy mode allows users to perform some copy jobs quickly and with fewer steps than standard copy. An Administrator can configure which version of copy shows first when the Copy app is opened on the printer’s control panel.

- To enable the feature, select Enable Expert Copy.
- In the Initial Copy View list, select which version of the Copy app to show first, Copy (standard copy) or Expert Copy.
Figure 6-3  Expert Copy page
Install third-party solutions

Use the EWS to install third-party software packages that extend or modify the functionality of the printer.

- Introduction
- Before you begin
- Step one: Install a solution
- Step two: Remove a solution

Introduction

The EWS solution installer page can be used to install example applications that come as part of the software development kit (SDK).

If the solution partner develops applications similar to those provided in the SDK—for example, a custom menu (create a custom menu under administrator menu), a custom internal page (that displays on the EWS), a custom pdl (page description language) using OPI interface, a custom authentication agent—they can be installed by making use of the Solution Installer page on EWS.

Many current third party solutions use OXP 1.5 interface apis in the solution to install the bundle. For example, when Safecom or HPAC (versions before 15.0) secure pull-print applications are configured, they install the solution bundles containing the custom authentication agent by using OXP 1.5 “Install” api automatically without requiring the user to go to EWS to install.

Before you begin

Before installing a solution, verify that there is a non-blank administrator password set on the General Security page under the Security tab.

For solutions that require a restart of the printer to complete the installation, click the Restart Now button to restart the printer immediately, or click the Restart Later button to delay the restart.

Before reinstalling a solution, look for the solution in the Installed Solutions area, and then remove the solution. If an existing solution is installed again, a message displays warning that the installation is about to overwrite the existing solution. In this message, click OK to continue, or click Cancel to stop the installation.

After-market solutions require a digital signature to ensure that they come from a trusted source and have not been modified.

Firmware upgrades cannot be performed using the Solution Installer page. Install firmware upgrades on the Firmware Upgrade page.

Step one: Install a solution

Use the following steps to install a new solution.

1. Using the top navigation tabs, click General.
2. In the left navigation pane, click Solution Installer.
3. Click the **Browse...** button in the **Install New Solution** area to locate and open the installation file from the network.

4. Click the **Install** button. Installed solutions display in the **Installed Solutions** area.

**Step two: Remove a solution**

Use the following procedure to remove an installed solution.

1. Select a solution in the **Installed Solutions** area.

2. Click the **Remove...** button.

3. Restart the printer to complete the removal of the solution.
Configure printing

Use the following information to configure printing features using the EWS.

- **Set up default print options**
- **Configure hold off print jobs**
- **Restrict the number of color pages printed**
- **Customize printer job short-cuts using Quick Sets**
- **Set the default PCL, PostScript, and font settings for a printer**
- **Configure print quality and allowable paper types per tray**
- **Set volume limits using Quota and Statistics**
- **Configure the printer to send notifications for cartridge or paper events**

Set up default print options

Use the **Default Print Options** page, located in the **Copy/Print** tab, to set the default settings for print jobs on this printer. These settings include the default paper size, paper type, and print quality setting. An Administrator password is required to access this page.

Configure hold off print jobs

The **General Settings** page, located in the **Copy/Print** tab, provides access to the **Hold Off Print Job** settings, also referred to as "job interrupt."

Use this page to prevent print jobs from starting while a user is initiating a copy job from the control panel, printing a job from the product job storage, or printing from a USB drive. Held print jobs start printing after these types of jobs have finished.

**Figure 6-4** Hold Off Print Job page
Restrict the number of color pages printed

Use this feature to restrict the number of color pages produced from the printer.

- Introduction
- Step one: Configure the color settings using the Restrict Color feature
- Step two: Complete the setup

Introduction

For unrestricted color usage, select Enable color. To only allow black pages, select Disable color. To restrict color based upon the computer application used to print the job or upon user permissions, select Set custom color access.
Step one: Configure the color settings using the Restrict Color feature

Configure the color settings as follows.

- **Main Color Setting**
- **Color Usage Job Log**

To access the Restrict Color feature:

1. Click **Copy/Print** from the top navigation tabs.
2. Click **Restrict Color** in the left navigation pane.

**Figure 6-5** Restrict Color page
Main Color Setting

The Main Color Setting area of the Restrict Color page provides three methods for managing color use on the printer:

- **Use the Set custom color access method to define the color printing capabilities for specific computer programs:**
- **Use the Set custom color access method to restrict color printing by a user or group:**
- **Method one: Enable Color**
  - Select Enable color to print all color print jobs in color.
- **Method two: Disable Color**
  - Select Disable color to print all color print jobs in black or grayscale only.
- **Method three: Set custom color access**
  - Select Set custom color access to define the color printing capability for computer programs, or to print color jobs in black or grayscale only if the user or group does not have permission to print in color.

Use the Set custom color access method to define the color printing capabilities for specific computer programs:

Use the following procedure to restrict color printing for some computer applications.

1. Select the Set Custom Color Access option.
2. Select the Restrict color printing for some computer applications check box.

**Figure 6-6** Settings for restricting color by computer application

3. Set a default color control setting by selecting from the Default color control for computer applications drop-down list in the Restrict color printing for some computer applications area. The color-control choices are:
● Remove All Color
● Allow Color

The Default color control for computer applications setting applies to print jobs originating from computer programs that do not have a specific color control associated with them.

4. Click Add to apply a color control setting to a specific computer program:
   a. Enter the name of the program to apply a color control setting to in the Application Name field.
   b. Select a color control type from the Color Control drop-down list.
   c. Click Apply.

5. Click Edit to modify the color control setting for a software program from the list of programs that have a color control setting specified.

6. Click Remove... to remove a software program from the list of programs that have a color control setting specified.

Use the Set custom color access method to restrict color printing by a user or group:

Use the following procedure to restrict color printing by a user or group.

1. Select the Set Custom Color Access method in the Main Color Setting area.
2. Select the Restrict color by user or group permissions check box.

Figure 6-7 Settings for restricting color by user or group permissions

3. The following users/groups can have their access set:
Device Guest
Device Administrator
Device User

The following levels of access are available for setting:

- Access Granted
- Requires Sign In
- Full Access
- Access Denied

4. Click the Manage Permission Sets... button to add, edit, copy, or delete a permission set.

5. Click the Go to Access Control Page button to open the Access Control page on the Security tab of the EWS and view detailed access control settings.

Color Usage Job Log

The Color Usage Job Log displays the following information about the printer and the color prints jobs processed through the printer:

- Printer Information
  - Device Serial Number
  - Printer Name

- Usage Totals
  - Total Jobs in Log
  - Total Mono Sides
  - Total Color Sides
  - Total Sheets

- Job Log
  - The Job Log area contains specific information about color print job processed through the printer, including date/time, the print job user, the print job name, the application the print job came from, and information about the number of sides and sheets for the print job.

Step two: Complete the setup

On the Restrict Color page, review the selected settings, and then click Apply to complete the setup.
Customize printer job short-cuts using Quick Sets

Quick Sets are short-cut jobs that are available from the Home screen or within the Quick Sets feature on the printer control panel and do not impact the defaults set for the base application.

- Introduction
- Add and manage Quick Sets
- Example Quick Sets

Introduction

To use a Quick Set on the printer control panel, enable the base application. Create Quick Sets for the following base applications to improve job accuracy and the time to complete a job:

- **E-mail** — Use email Quick Sets to configure and save commonly used settings for sending jobs from the printer via email as email attachments.
- **Fax** — Use fax Quick Sets to configure and save commonly used settings for fax jobs.
- **Save to Network Folder** — Use Save to Network Folder Quick Sets to configure and save commonly used settings for saving jobs to a network folder.
- **Save to USB** — Use Save to USB Quick Sets to configure and save commonly used settings for saving jobs to a USB device.
- **Copy** (MFPs only) — Use Copy Quick Sets to configure and save commonly used settings for copy jobs.
- **Save to SharePoint®** — Use Save to SharePoint Quick Sets to configure and save commonly used settings for saving jobs to a SharePoint site.

Select from various job settings, such as starting a job immediately upon selection of a quick set or requiring an image preview before starting a job.
Add and manage Quick Sets

Learn how to add and manage Quick Sets.

- Add a Quick Set
- Edit a Quick Set
- Copy a Quick Set
- Remove a Quick Set
- Quick Set settings and options

Add a Quick Set

Use the following steps to add a new Quick Set.

1. Using the top navigation tabs, click General.
2. In the left navigation pane, click Quick Sets Setup.
3. Click Add to begin the Quick Set Wizard.

**NOTE:** Click Cancel on any page of the Quick Set Wizard to cancel the current changes, exit the Quick Set Wizard, and return to the Quick Sets Setup page.

4. Select a Quick Set Type, and then click Next. The following Quick Set types are available for selection, depending on your printer:

**NOTE:** A Quick Set Type only needs to be determined when a quick set is created by using the General EWS tab.

- E-mail
- Fax
- Save to Network Folder
- Save to USB
- Copy (MFPs only)
- Scan to SharePoint®

5. Enter a title for the Quick Set in the Quick Set Title (required) field.

6. Select the location for the quick set to appear on the printer from the Button Location drop-down list. This setting determines whether the Quick Set displays on the Home screen or within the Quick Sets area on the printer control panel.

7. Enter a description of the Quick Set in the Quick Set Description (required) field.

8. Select a Quick Set Start Option to determine what occurs after selecting a Quick Set on the printer control panel, and then click Next.

9. Select settings and complete tasks in the wizard. Click Next to proceed to the next page of available options until reaching the Summary page.
**NOTE:** The settings available in the Quick Set Wizard vary by the type of Quick Set being added. Refer to the tables in *Quick Set settings and options on page 105* to see the available settings and options for each type of Quick Set.

10. Review the summary of settings, and then click **Finish** to save the Quick Set, or click **Previous** to edit the settings.

### Edit a Quick Set

Use the following steps to edit the settings of an existing Quick Set.

1. Using the top navigation tabs, click **General**.
2. In the left navigation pane, click **Quick Sets Setup**.
3. In the **Quick Sets** area, click the check box next to the appropriate Quick Set, and then click **Edit**. The **Quick Set Wizard** opens.

**NOTE:** Click **Cancel** on any page of the **Quick Set Wizard** to cancel the current changes, exit the **Quick Set Wizard**, and return to the **Quick Sets Setup** page.

4. If necessary, modify the following settings, and then click **Next**:
   - Quick Set Title
   - Button Location
   - Control Panel location
   - Quick Set Description
   - Quick Set Start Option
5. Select settings and complete tasks in the wizard. Click **Next** to proceed to the next page of available options until reaching the **Summary** page.

**NOTE:** The settings available in the Quick Set Wizard vary by the type of Quick Set being edited. Refer to the tables in *Quick Set settings and options on page 105* to see the available settings and options for each type of Quick Set.

6. Review the **Summary** page, and then click **Finish** to save changes made to the Quick Set.

Following is an example of a **Scan to USB Drive** icon, which displays after that quick set has been created.
Copy a Quick Set

Use the following steps to copy a Quick Set.

1. Using the top navigation tabs, click General.
2. In the left navigation pane, click Quick Sets Setup.
3. In the Quick Sets area, click the check box next to the appropriate Quick Set, and then click Copy. The Quick Set Wizard opens.

**NOTE:** Click Cancel on any page of the Quick Set Wizard to cancel the current changes, exit the Quick Set Wizard, and return to the Quick Sets Setup page.

4. If necessary, modify the following settings, and then click Next:
   - Quick Set Title
   - Button Location
   - Control Panel location
   - Quick Set Description
   - Quick Set Start Option

5. Select settings and complete tasks in the wizard. Click Next to proceed to the next page of available options until reaching the Summary page.

**NOTE:** The settings available in the Quick Set Wizard vary by the type of Quick Set being copied. Refer to the tables in Quick Set settings and options on page 105 to see the available settings and options for each type of Quick Set.

6. Review the Summary page, and then click Finish to save the Quick Set.

Remove a Quick Set

Use the following steps to remove a Quick Set.

1. Using the top navigation tabs, click General.
2. In the left navigation pane, click Quick Sets Setup.
3. In the Quick Sets area, click the check box next to the appropriate Quick Set, and then click Remove....
4. When the Confirmation Page opens, click Remove to finish removing the Quick Set.

Quick Set settings and options

The following tables list the settings and options available in the Quick Set Wizard when adding, editing, or copying a Quick Set.

**Table 6-6 Address and Message Field Control — Email Quick Sets**

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Address Field Restrictions</td>
<td>Use the Address Field Restrictions drop-down list to specify whether users can type an email address or select an email address from an address book.</td>
</tr>
</tbody>
</table>
Table 6-6  Address and Message Field Control — Email Quick Sets (continued)

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>From:</strong></td>
<td>Use the <strong>From:</strong> drop-down list to set the email address that displays in the <strong>From:</strong> field of the email.</td>
</tr>
<tr>
<td></td>
<td>If <strong>Default From:</strong> is selected, the email address listed in the <strong>Default From:</strong> field is used.</td>
</tr>
<tr>
<td></td>
<td>If <strong>User's address (sign-in required)</strong> is selected, the user is required to sign in to the printer with their email address when using the Quick Set.</td>
</tr>
<tr>
<td></td>
<td>This field can be set to be user-editable.</td>
</tr>
<tr>
<td><strong>Default From:</strong></td>
<td>The <strong>Default From:</strong> field is used to define the email address used when <strong>Default From:</strong> is selected in the <strong>From:</strong> drop-down list.</td>
</tr>
<tr>
<td><strong>Default Display Name:</strong></td>
<td>Use this field to set the name displayed on the printer's control panel. If this field is not set, the value in the <strong>Default From:</strong> displays on the printer's control panel. This field is optional.</td>
</tr>
<tr>
<td><strong>To:</strong></td>
<td>Use these drop-down lists to set the email recipient, CC (carbon copy) and BCC (blind carbon copy) values.</td>
</tr>
<tr>
<td><strong>CC:</strong></td>
<td>The options for each of these fields are:</td>
</tr>
<tr>
<td><strong>BCC:</strong></td>
<td>• <strong>User's address (sign-in required)</strong></td>
</tr>
<tr>
<td></td>
<td>• <strong>Blank</strong></td>
</tr>
<tr>
<td></td>
<td>• <strong>Specify address</strong></td>
</tr>
<tr>
<td></td>
<td>These fields can be set to be user-editable.</td>
</tr>
<tr>
<td><strong>Subject:</strong></td>
<td>Use this field to set the value that appears in the subject line of the email.</td>
</tr>
<tr>
<td></td>
<td>This field can be set to be user-editable.</td>
</tr>
<tr>
<td><strong>Message:</strong></td>
<td>Use this field to set the value for the body of the email.</td>
</tr>
<tr>
<td></td>
<td>This field can be set to be user-editable.</td>
</tr>
</tbody>
</table>

Table 6-7  Signing and Encryption — Email Quick Sets

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Signing:</strong></td>
<td>Use the <strong>Signing</strong> drop-down list to specify whether the email sent using the Quick Set is digitally signed.</td>
</tr>
<tr>
<td></td>
<td>This field can be set to be user-editable.</td>
</tr>
<tr>
<td><strong>Hashing Algorithm:</strong></td>
<td>Use the <strong>Hashing Algorithm</strong> drop-down list to set the type hashing algorithm used with signed emails. The following hashing algorithms are available:</td>
</tr>
<tr>
<td></td>
<td>• <strong>SHA-1</strong></td>
</tr>
<tr>
<td></td>
<td>• <strong>SHA-256 (recommended)</strong></td>
</tr>
<tr>
<td></td>
<td>• <strong>SHA-384</strong></td>
</tr>
<tr>
<td></td>
<td>• <strong>SHA-512</strong></td>
</tr>
<tr>
<td><strong>Encryption:</strong></td>
<td>Use the <strong>Encryption</strong> drop-down list to specify whether the email sent using the Quick Set is encrypted.</td>
</tr>
<tr>
<td></td>
<td>This field can be set to be user-editable.</td>
</tr>
</tbody>
</table>
### Table 6-7  Signing and Encryption — Email Quick Sets (continued)

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Encryption Algorithm</strong></td>
<td>Use the Encryption Algorithm drop-down list to set the encryption algorithm used for encrypted emails sent using the Quick Set.</td>
</tr>
<tr>
<td><strong>Attribute for Recipient Public Key</strong></td>
<td>The Attribute for Recipient Public Key field is used to set the attribute used for retrieving the email recipient’s public key from LDAP for signed or encrypted emails.</td>
</tr>
</tbody>
</table>

### Table 6-8  Scan settings — Email, Fax, Save to Network Folder, and Save to USB Quick Sets

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Default File Type</strong></td>
<td>Select the default file type for the scanned document:</td>
</tr>
<tr>
<td>● PDF</td>
<td></td>
</tr>
<tr>
<td>● JPEG</td>
<td></td>
</tr>
<tr>
<td>● TIFF</td>
<td></td>
</tr>
<tr>
<td>● MTIFF</td>
<td></td>
</tr>
<tr>
<td>● XPS</td>
<td></td>
</tr>
<tr>
<td>● PDF/A</td>
<td></td>
</tr>
<tr>
<td>● Text (OCR)</td>
<td></td>
</tr>
<tr>
<td>● Unicode Text (OCR)</td>
<td></td>
</tr>
<tr>
<td>● RTF (OCR)</td>
<td></td>
</tr>
<tr>
<td>● Searchable PDF (OCR)</td>
<td></td>
</tr>
<tr>
<td>● Searchable PDF/A (OCR)</td>
<td></td>
</tr>
<tr>
<td>● HTML (OCR)</td>
<td></td>
</tr>
<tr>
<td>● CSV (OCR)</td>
<td></td>
</tr>
<tr>
<td><strong>Default Color Preferences</strong></td>
<td>Select the default color setting for the scanned document:</td>
</tr>
<tr>
<td>● Color</td>
<td></td>
</tr>
<tr>
<td>● Black</td>
<td></td>
</tr>
<tr>
<td>● Black/Gray</td>
<td></td>
</tr>
<tr>
<td>● Automatically detect</td>
<td></td>
</tr>
</tbody>
</table>
### Table 6-8  Scan settings — Email, Fax, Save to Network Folder, and Save to USB Quick Sets (continued)

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Default Output Quality</strong></td>
<td>Select the default output quality for the scanned document:</td>
</tr>
<tr>
<td></td>
<td>● Low (small file)</td>
</tr>
<tr>
<td></td>
<td>● Medium</td>
</tr>
<tr>
<td></td>
<td>● High (large file)</td>
</tr>
<tr>
<td><strong>Default Resolution</strong></td>
<td>Select the default scan resolution for the scanned document:</td>
</tr>
<tr>
<td></td>
<td>● 75 dpi</td>
</tr>
<tr>
<td></td>
<td>● 150 dpi</td>
</tr>
<tr>
<td></td>
<td>● 200 dpi</td>
</tr>
<tr>
<td></td>
<td>● 300 dpi</td>
</tr>
<tr>
<td></td>
<td>● 400 dpi</td>
</tr>
<tr>
<td></td>
<td>● 600 dpi</td>
</tr>
</tbody>
</table>

### Table 6-9  File settings — Email, Save to Network Folder, and Save to USB Quick Sets

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>File Name Prefix</strong></td>
<td>Set the default file name prefix used for files saved to a network folder.</td>
</tr>
<tr>
<td><strong>Default File Name</strong></td>
<td>Default file name for the file to be saved.</td>
</tr>
<tr>
<td></td>
<td>Select the <strong>User editable</strong> check box to make this setting editable at the product control panel.</td>
</tr>
<tr>
<td><strong>File Name Suffix</strong></td>
<td>Set the default file name suffix used for files saved to a network folder.</td>
</tr>
<tr>
<td></td>
<td>Duplicate filename suffix default [filename]_YYYYMMDDT</td>
</tr>
<tr>
<td><strong>File Number Format</strong></td>
<td>Select a file name format for when the job is divided into multiple files.</td>
</tr>
<tr>
<td><strong>Default File Type</strong></td>
<td>Select the file format for the saved file.</td>
</tr>
<tr>
<td></td>
<td>Select the <strong>User editable</strong> check box to make this setting editable at the product control panel.</td>
</tr>
<tr>
<td><strong>File Name Preview</strong></td>
<td>Enter a file name, and then click the <strong>Update Preview</strong> button.</td>
</tr>
<tr>
<td><strong>Default Color Preference</strong></td>
<td>Select whether the file is in black &amp; white or in color.</td>
</tr>
<tr>
<td><strong>Default Output Quality</strong></td>
<td>Select the quality for the file. Higher-quality images require a larger file size than lower-quality images, and they take more time to send.</td>
</tr>
<tr>
<td><strong>Default Resolution</strong></td>
<td>Set the resolution for the file. Higher resolution images have more dots per inch (dpi), so they show more detail. Lower resolution images have fewer dots per inch and show less detail, but the file size is smaller.</td>
</tr>
<tr>
<td><strong>Compression</strong></td>
<td>Specify if the file uses Normal or High compression when saving a scanned document as a PDF or XPS file. If compression is set to High, the scanned file is smaller, but the scanning process might take longer than Normal compression.</td>
</tr>
<tr>
<td><strong>Black TIFF Compression</strong></td>
<td>Select the black TIFF compression algorithm to be used to compress the generated TIFF file.</td>
</tr>
<tr>
<td><strong>Color/Grayscale TIFF Compression</strong></td>
<td>Select the color/grayscale TIFF compression algorithm to be used to compress the generated TIFF file.</td>
</tr>
</tbody>
</table>
**Table 6-9  File settings — Email, Save to Network Folder, and Save to USB Quick Sets (continued)**

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PDF encryption</td>
<td>If the file type is PDF, then this option encrypts the output PDF file. A password must be specified as part of the encryption. The same password must be used to open the file. The user will be prompted to enter a password prior to scanning their job if one has not been set prior to pressing start.</td>
</tr>
<tr>
<td>Disable OCR file types</td>
<td>Select this setting to prevent OCR file types from being available from the product control panel.</td>
</tr>
<tr>
<td>Enable Blank Page Suppression</td>
<td>If the Enable Blank Page Suppression option is enabled, blank pages will be ignored.</td>
</tr>
</tbody>
</table>

**Table 6-10  Copy settings — Copy Quick Sets**

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Copies</td>
<td>Set the default number of copies.</td>
</tr>
<tr>
<td>Sides</td>
<td>Select a Copy Sides option:</td>
</tr>
<tr>
<td></td>
<td>● 1-sided original, 1-sided output</td>
</tr>
<tr>
<td></td>
<td>● 2-sided original, 2-sided output</td>
</tr>
<tr>
<td></td>
<td>● 1-sided original, 2-sided output</td>
</tr>
<tr>
<td></td>
<td>● 2-sided original, 1-sided output</td>
</tr>
<tr>
<td>Color/Black</td>
<td>Specify whether copies are printed in color or in black and white:</td>
</tr>
<tr>
<td></td>
<td>● Auto Detect: Prints color documents in color (for printers that support color copying), and black and white documents in black and white. For mixed documents, the printer will determine whether to print in color or black and white.</td>
</tr>
<tr>
<td></td>
<td>● Color: Prints documents in color (for printers that support color copying).</td>
</tr>
<tr>
<td></td>
<td>● Black: Prints documents in black and white.</td>
</tr>
<tr>
<td>Collate</td>
<td>For printers that support print-job finishing, each set of copied pages are assembled in the same order as the original document.</td>
</tr>
<tr>
<td></td>
<td>NOTE: If the printer has a stapler installed, select a staple option. To not staple the copies, select None.</td>
</tr>
<tr>
<td></td>
<td>Select a Collate option.</td>
</tr>
<tr>
<td></td>
<td>● Collate on (Sets in page order): If making more than one copy, select to assemble pages in the correct order for each set of copies.</td>
</tr>
<tr>
<td></td>
<td>● Collate off (Pages grouped): Select to group the same pages together. For example, if making five copies of an original document that has two pages, all five first pages are grouped together and all five second pages are grouped together.</td>
</tr>
<tr>
<td>Reduce/Enlarge</td>
<td>Use the Reduce/Enlarge feature to scale the size of the document up or down.</td>
</tr>
<tr>
<td></td>
<td>Select one of the predefined percentages, or touch the Scaling field, and enter a percentage between 25 and 400 for the flatbed scanner and between 25 and 200 for the document feeder. You can also select these options:</td>
</tr>
<tr>
<td></td>
<td>● Auto: The printer automatically scales the image to fit the paper size in the tray.</td>
</tr>
<tr>
<td></td>
<td>● Auto Include Margins: The printer reduces the image slightly to fit the entire scanned image within the printable area on the page.</td>
</tr>
<tr>
<td></td>
<td>NOTE: To reduce the image, select a scaling percentage that is less than 100. To enlarge the image, select a scaling percentage that is greater than 100.</td>
</tr>
</tbody>
</table>
**Table 6-10  Copy settings — Copy Quick Sets (continued)**

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Paper Selection</strong></td>
<td>Select which tray to use when printing or making copies:</td>
</tr>
<tr>
<td>Manually feed</td>
<td>The Paper Selection option is automatically set to <strong>Tray 1: Any Type, Any Size</strong></td>
</tr>
<tr>
<td>Automatically Detect</td>
<td>Automatically matches the paper size of the original to a paper size in one of the trays</td>
</tr>
<tr>
<td>Tray 1: Any Type, Any Size</td>
<td></td>
</tr>
<tr>
<td>Tray 2: Plain, Letter (8.5x11)</td>
<td></td>
</tr>
<tr>
<td><strong>Image Adjustment</strong></td>
<td>Use the settings to improve the overall quality of the copy. For example, adjust the <strong>Darkness</strong> and <strong>Sharpness</strong>, and use the Background Cleanup setting to remove faint images from the background or to remove a light background color.</td>
</tr>
<tr>
<td>Darkness</td>
<td>Adjust to increase or decrease the amount of white and black in the colors</td>
</tr>
<tr>
<td>Contrast</td>
<td>Adjust to increase or decrease the difference between the lightest and darkest color on the page</td>
</tr>
<tr>
<td>Background Cleanup</td>
<td>Adjust if you are having trouble copying a faint image</td>
</tr>
<tr>
<td>Sharpness</td>
<td>Adjust to sharpen or soften the image. For example, increasing the sharpness could make text look clearer, but decreasing it could make photographs look smoother.</td>
</tr>
<tr>
<td><strong>Content Orientation</strong></td>
<td>For some features to work correctly, specify the way the content of the original document is placed on the page. If you are making two-sided copies, select a 2-sided format option.</td>
</tr>
<tr>
<td>Orientation:</td>
<td></td>
</tr>
<tr>
<td>Portrait</td>
<td>The short edge of the page is along the top.</td>
</tr>
<tr>
<td>Landscape</td>
<td>The long edge of the page is along the top.</td>
</tr>
<tr>
<td><strong>2-Sided Format:</strong></td>
<td></td>
</tr>
<tr>
<td>Book-style</td>
<td>The back side of the original is printed right-side-up, and the back side of the copy is printed the same way. Use this option for originals and copies that are bound along the left edge.</td>
</tr>
<tr>
<td>Flip-style</td>
<td>The back side of the original is printed upside-down, and the back side of the copy is printed the same way. Use this option for originals and copies that are to be bound along the top edge.</td>
</tr>
<tr>
<td>Book-style original; Flip-style copy</td>
<td>The back side of the original is printed right-side-up, but the back side of the copy is printed upside-down. Use this option when the original is bound along the left edge, but the copies need to be bound along the top edge.</td>
</tr>
<tr>
<td>Flip-style original; Book-style copy</td>
<td>The back side of the original is printed upside-down, but the back side of the copy is printed right-side-up. Use this option when the original is bound along the top edge, but the copies need to be bound along the left edge.</td>
</tr>
<tr>
<td><strong>Optimize Text/ Picture</strong></td>
<td>Select the option for how to handle output of a particular type content being printed:</td>
</tr>
<tr>
<td>Manually adjust</td>
<td>Manually optimize the setting for each document</td>
</tr>
<tr>
<td>Text</td>
<td>Use for documents that contain mostly text</td>
</tr>
<tr>
<td>Printed picture</td>
<td>Use for line drawings and preprinted images, such as magazine clippings or pages from books</td>
</tr>
<tr>
<td>NOTE:</td>
<td>If bands of irregular intensity print on the copies, try selecting <strong>Printed picture</strong> to improve the quality.</td>
</tr>
<tr>
<td>Photograph</td>
<td>Use for photographic prints</td>
</tr>
</tbody>
</table>

Select an Optimize For value for the manual adjustment.
### Table 6-10  Copy settings — Copy Quick Sets (continued)

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pages per Sheet</strong></td>
<td>Select how many pages to print on one sheet and the page order: to copy to one, two, or four Pages per Sheet and select whether to Add page borders.</td>
</tr>
<tr>
<td><strong>Pages per Sheet</strong></td>
<td>• One (1)</td>
</tr>
<tr>
<td></td>
<td>• Two (2)</td>
</tr>
<tr>
<td></td>
<td>• Four (4)</td>
</tr>
<tr>
<td><strong>Page Order</strong></td>
<td>• Right, then down: Prints the pages in rows</td>
</tr>
<tr>
<td></td>
<td>• Down, then right: Prints the pages in columns</td>
</tr>
<tr>
<td></td>
<td>Click the <strong>Add page borders</strong> check box to add borders on the pages.</td>
</tr>
<tr>
<td><strong>Original Size</strong></td>
<td>Specify the size of the original document:</td>
</tr>
<tr>
<td></td>
<td>• Automatically detect</td>
</tr>
<tr>
<td></td>
<td>• Letter (8.5x11)</td>
</tr>
<tr>
<td></td>
<td>• Mixed Letter/Legal</td>
</tr>
<tr>
<td></td>
<td>• Legal (8.5x14)</td>
</tr>
<tr>
<td></td>
<td>• Executive (7.25x10.5)</td>
</tr>
<tr>
<td></td>
<td>• Statement (5.5x8.5)</td>
</tr>
<tr>
<td></td>
<td>• Oficio (8.5x13)</td>
</tr>
<tr>
<td></td>
<td>• A4 (210x297 mm)</td>
</tr>
<tr>
<td></td>
<td>• A5 (148x210 mm)</td>
</tr>
<tr>
<td></td>
<td>• B5 (182x257 mm)</td>
</tr>
<tr>
<td></td>
<td>• 16k (195x270 mm)</td>
</tr>
<tr>
<td></td>
<td>• DPostcard JIS (148x200 mm)</td>
</tr>
<tr>
<td></td>
<td>• Oficio (216x340 mm)</td>
</tr>
<tr>
<td><strong>Booklet</strong></td>
<td>Select to have Booklet Format off or on. If on, select either a 1-sided or 2-sided booklets and whether to enable Borders on each page.</td>
</tr>
<tr>
<td><strong>Edge-to-Edge</strong></td>
<td>Use to avoid shadows that can display along the edges of copies when the original document is printed close to the edges.</td>
</tr>
<tr>
<td></td>
<td>Combine this feature with the <strong>Reduce/Enlarge</strong> feature to ensure that the entire page is printed on the copies.</td>
</tr>
<tr>
<td></td>
<td>When the Edge-to-Edge feature is turned on, the printer minimizes margins and prints as close to the edge of the paper as possible.</td>
</tr>
<tr>
<td><strong>Multi-feed Detection</strong></td>
<td>Use this feature to detect when multiple pages are fed simultaneously into the ADF (automatic document feeder) or sheet-feed scanner, alert the user, and stop the scanning job so the proper action can be taken. By default this feature is <strong>Enabled</strong> so that it automatically improves the scanning experience and results.</td>
</tr>
</tbody>
</table>
Table 6-10  Copy settings — Copy Quick Sets (continued)

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-sided ID Scan</td>
<td>Select to have 2-sided ID Scan on or off to scan both sides of a card, such as an identification card or business card.</td>
</tr>
<tr>
<td>Book Mode</td>
<td>Select to have Book Mode off or on.</td>
</tr>
</tbody>
</table>

Example Quick Sets

Below is an example of what the Quick Sets area looks like after quick sets have been created.

Set the default PCL, PostScript, and font settings for a printer

Use the PCL and PostScript Settings page, located in the Copy/Print tab, to set the default PCL, PostScript, and font settings for print jobs on this printer.

NOTE: The specific application or printer driver you use might override the settings you configured on this page.
Configure print quality and allowable paper types per tray

Use the Print Quality pages to configure the Image Registration settings for each individual tray and control the list of allowable paper types for this printer.

Go to the Copy/Print tab of the EWS and expand Print Quality to access the following pages:

- On the Image Registration page, click the Modify link next to each tray to modify the image registration shift settings.
- On the Adjust Paper Types page, select the radio button next to the paper type to enable or disable it on the printer. Paper types that have been disabled cannot be configured in the tray settings.
- On the Auto Sense Behavior page, select the auto-sense action for Tray 1 and All Other Trays. The product can use sensors to detect the attributes of the paper and adjust settings to automatically achieve the best print quality, however, this can slow printing speed.
Set volume limits using Quota and Statistics

Use the following information to set limits on the number of printed pages using quota and statistics services.

- Introduction
- Before you begin
- Step one: Configure statistics and quota services
- Step two: Complete the setup

Introduction

Use the Quota and Statistics Services feature in the Embedded Web Server (EWS) to control the volume of printed or scanned pages on a per-user basis.

Before you begin

Connecting to a quota server ensures that each user stays within an acceptable range of printed or scanned pages. When connected, the printer will query the server each time a job is started to ensure that the user has pages available. If the server is unavailable, the user account is not known by the server, or pages are not available for the user, then the user may not be able to complete his or her job. Please refer to documentation from the company providing the quota server software for more information.

NOTE: If the printer is connected to an external Job Statistics Service, network-connection problems with that service could prevent users from completing jobs with the printer. Consider disconnecting the Job Statistics Service to prevent conflicts.

Disconnect a Job Statistics Service:

1. In the EWS, click the General tab.
2. In the left navigation pane, click Job Statistics Settings.
3. If one or more Job Statistics Services are listed on this page, select them, and then click the Remove button, or click the Remove All button to disconnect all services.
4. Click the Apply button to save the settings.

Step one: Configure statistics and quota services

Use the following steps to configure statistics and quota services.

Connecting to a quota service ensures that each user stays within a pre-defined range of printed or scanned pages.

When connected, the printer queries the server each time a job is started to ensure that the user has pages available. Any of the following quota-server conditions might prevent the user from completing their job.
● The quota server is unavailable.
● The user account is not known by the server.
● The user has exceeded their page quota.

If your business uses a quota server, please refer to documentation from the company providing the quota server software for more information.

For smaller businesses, printing or scanning can also be limited for users or groups with local Device User Accounts (Server-less Job Accounting). For more information, refer to the steps below on how to enable and configure the local quota service.

1. In the EWS, click the **General** tab.

2. In the left navigation pane, click **Job Statistics Settings**. Configure the job statistics settings as follows:
   a. If the printer is connected to a job statistics service, and the service is available, this connection is listed under **Job Statistics Service**.
   b. To capture user data in a statistics log, select **Enable Device User Statistics Log**, and then click **Apply**.

   ![Figure 6-9 Job Statistics Settings page](image)

3. In the left navigation pane, click **Quota Settings**. Configure the quota settings as follows:
   a. If the printer is connected to a remote quota service, and the service is available, this connection is listed under **Remote Quota Service**.
   b. To connect to a legacy quota service installed on a network server, select **Connect this device to a Legacy Quota Server**, and complete the following:
      - Enter the URL for the quota server in the **Quota Server URL** field.
      - Enter a **Username** and **Password** for accessing the quota server.
- Set a **Connection Timeout** value from 10–300 seconds, or accept the default setting of 60 seconds. The **Connection Timeout** is the time after which the connection to the Quota Server is closed after the user completes the job.

- Set a **Response Timeout** value from 10–300 seconds, or accept the default setting of 60 seconds. The **Response Timeout** is the time after which the printer stops attempting to connect to the Quota Server if there is no response from the server.

**Figure 6-10** Legacy Quota Server settings

---

To enable local quotas for users or groups with local Device User Accounts, select **Enable local quota service**, and then click **Apply**.

**Figure 6-11** Enable local quota service

---

Once the local quota service is enabled, click **Local Quota Configuration** in the left navigation pane to configure the quotas for local Device User Accounts.

For more information, see the white paper **Server-less Job Accounting (SJA) with Local Quotas**.
When a print or scan job is started from the printer control panel, the printer connects to the specified quota server and retrieves quota transaction data, or utilizes the local quota service.

**Step two: Complete the setup**

On the **General** tab in the EWS, do the following:

- Select **Job Statistics Settings**, review the selected settings, and then click **Apply** to complete the setup.
- Select **Quota Settings**, review the selected settings, and then click **Apply** to complete the setup.

For more information about using the local quota service, see the white paper [Server-less Job Accounting (SJA) with Local Quotas](#).
Configure the printer to send notifications for cartridge or paper events

Learn how to configure the printer to send automatic notifications for cartridge or paper events.

- Introduction
- Before you begin
- Step one: Set up the outgoing email servers (SMTP)
- Step two: Set up the alert subscriptions
- Step three: Set up the Product E-mail Address
- Step four: Complete the setup
- Order supplies

Introduction

Configure the printer to automatically send alerts for several events, such as when supplies are low or when there is a paper jam. The alert can be sent as an email, a text message to a mobile phone, or as a posting to a website.

Before you begin

Administrators need the following information before beginning the configuration process.

- Administrative access to the printer
- DNS suffix (e.g., companyname.com)
- SMTP server (e.g., smtp.mycompany.com)

**NOTE:** If you do not know the SMTP server name, SMTP port number, or authentication information, contact the email/Internet service provider or system administrator for the information. SMTP server names and port names are typically found by doing an Internet search. For example, use terms like "Gmail smtp server name" or "Yahoo smtp server name" to search.

- SMTP server authentication requirements for outgoing email messages, including the user name and password used for authentication, if applicable.

**NOTE:** Consult your email service provider's documentation for information on digital sending limits for your email account. Some providers may temporarily lock your account if you exceed your sending limit.
Step one: Set up the outgoing email servers (SMTP)

Learn how to set up the outgoing email servers for notifications.

- Start the Outgoing E-mail Servers (SMTP) wizard
- Option one: Use a server already in use by another function
- Option two: I know my SMTP server address or host name
- Option three: Search network for outgoing email server

Start the Outgoing E-mail Servers (SMTP) wizard

Use the following procedure to start the wizard.

1. Using the top navigation tabs, click General.
2. In the left navigation pane, click Alerts.
3. Click the Add button in the Outgoing E-mail Servers (SMTP) area.

![Figure 6-12 Location of Add button]
4. On the **Outgoing E-mail Servers (SMTP)** page, select one of the following options and complete the configuration using the procedures that follow.

**Figure 6-13** Options on the Outgoing E-mail Servers (SMTP) page

---

**Option one: Use a server already in use by another function**

Use this option when SMTP is already configured by another app and does not include the **Automated e-mail** option.

1. Select **Use a server already in use by another function**, and then click **Next**.
2. Verify the information, and then click **Finish**.

**Option two: I know my SMTP server address or host name**

Use the following steps if you know the SMTP server address or host name.

1. Select **I know my SMTP server address or host name**, enter the SMTP server address in the field, and click **Next**.
2. Enter the **Server Name** and **Port Number**, and then click **Next**.

---

**NOTE:** In most cases, the default port number does not need to be changed.

**NOTE:** If you are using a hosted SMTP service such as gmail, verify the SMTP address, port number, and SSL settings from the service provider’s website or other sources. Typically, for gmail, the SMTP address is smtp.gmail.com, port number 465, and the SSL should be enabled. Please refer to online sources to confirm these server settings are current and valid at the time of configuration.

3. On the **Server Authentication Requirements** page, select one of the following from the drop-down list:
   - Select **Use credentials of user to connect after Sign In at the control panel**, and click **Next** (MFP and network scanner printers only).
   - OR-
   - Select **Always use these credentials**, and enter a **Username** and **Password** in the fields. Click **Next**.
4. On the **Server Usage** page, select which of the following functions will send email through the server:

   - **E-mail**: Send scanned documents and job status notifications
   - **Fax**: Send faxes when the fax send method is set to Internet Fax
   - **Automated E-mails**: Device alerts sent to an administrator or archived faxes are examples of automated emails sent by this device
   - **AutoSend**: Send device information to HP or other recipients

5. On the **Summary and Test** page, review the settings. Enter an email address in the **Send a test e-mail to** field, and click **Test** to test the configuration. Click **Finish** when done.

---

**Option three: Search network for outgoing email server**

Use this option to search for outgoing SMTP servers.

**NOTE:** This option finds outgoing SMTP servers inside your firewall only.

1. Select **Search network for outgoing e-mail server**, and then click **Next**.
2. Select the appropriate server from the **Finding SMTP servers** list, and then click **Next**.
3. Set the basic information necessary to connect to the server, and then click **Next**.
4. On the **Server Authentication Requirements** page, select one of the following from the drop-down list:
   - Select **Use credentials of user to connect after Sign In at the control panel**, and click **Next** (MFP and network scanner printers only).
   - OR-
   - Select **Always use these credentials**, and enter a **Username** and **Password** in the fields. Click **Next**.

5. On the **Server Usage** page, select which of the following functions will send email through the server:

   - **E-mail**: Send scanned documents and job status notifications
   - **Fax**: Send faxes when the fax send method is set to Internet Fax
   - **Automated E-mails**: Device alerts sent to an administrator or archived faxes are examples of automated emails sent by this device
   - **AutoSend**: Send device information to HP or other recipients

6. On the **Summary and Test** page, review the settings. Enter an email address in the **Send a test e-mail to** field, and click **Test** to test the configuration. Click **Finish** when done.

---

**Step two: Set up the alert subscriptions**

An alert subscription is a group of one or more recipients that are notified of printer events. Configure several subscriptions, with different recipients, to be notified of different printer events.
1. In the **Alert Subscriptions** area, click **New Subscription** to open the Alerts configuration page. Follow the steps in sequence on this page.

2. In the **Step 1: Type the subscription name** area, enter a name for the subscription in the **Alert Subscription Name** field.

3. In the **Step 2: Recipients for this alert subscription** area, enter the recipients in the **Alert Recipients** field.

   **NOTE:** Use email addresses, mobile text message addresses, web URLs, or a combination of these. Separate each recipient with a comma or semicolon.

4. In the **Step 3: Select Alerts** area, select which alerts these recipients will receive, and set alerts for several events for the same subscription. Click **Show All Alerts** for the complete list of alerts for the printer.

5. To suppress control panel messages on the printer related to any of these events, in the **Step 4: Select Control Panel Messages to Suppress** area, select the appropriate options from the list of available messages. Suppressing the messages means that no user interaction is required at the printer when the event occurs.

   **NOTE:** This feature is not supported by network scanner printers.

6. In the **Step 5: Select e-mail attachments (optional)** area, select the attachments to include with each email alert message for the subscription.

7. When finished configuring the subscription, click **OK**.

**Step three: Set up the Product E-mail Address**

Set the email address “From” for the email alerts sent from the printer.

Select **Use default address**, or select **Specify address** to add a specific email address in the field that appears.

**Step four: Complete the setup**

On the **Alerts** page, review the selected settings, and then click **Apply** to complete the setup.

**Order supplies**

Use the following information to order supplies.

<table>
<thead>
<tr>
<th>Table 6-11</th>
<th>Ordering supplies</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ordering method</strong></td>
<td><strong>Contact information</strong></td>
</tr>
<tr>
<td>Order supplies and paper</td>
<td><a href="http://www.hp.com/go/suresupply">www.hp.com/go/suresupply</a></td>
</tr>
<tr>
<td>Order through service or support providers</td>
<td>Contact an HP-authorized service or support provider.</td>
</tr>
<tr>
<td>Order using the HP Embedded Web Server (EWS)</td>
<td>To access, in a supported Web browser on your computer, enter the printer IP address or host name in the address/URL field. The EWS contains a link to the HP SureSupply Web site, which provides options for purchasing Original HP supplies.</td>
</tr>
</tbody>
</table>
Configure copying

Use the following information to configure copy features for a printer.

- Introduction
- Step one: Set up default copy settings
- Step two: Complete the setup

**NOTE:** All features might not be available on every device.

Introduction

Use this feature to configure the default options for copy jobs.

Step one: Set up default copy settings

Use the following steps to set up the default copy settings for a printer.

1. **FutureSmart 3:** Navigate to the [Copy Settings](#) area.

   **FutureSmart 4:** Navigate to the [Copy/Print](#) area and then select Copy Settings.

   **NOTE:** FutureSmart 4 firmware uses a different menu under [Copy Settings](#), including [Default Job Options](#) and [Quick Sets](#).

The following settings are available for configuration:

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Copies</td>
<td>Set the default number of copies.</td>
</tr>
<tr>
<td>Sides</td>
<td>Select a Copy Sides option:</td>
</tr>
<tr>
<td></td>
<td>- 1-sided original, 1-sided output</td>
</tr>
<tr>
<td></td>
<td>- 2-sided original, 2-sided output</td>
</tr>
<tr>
<td></td>
<td>- 1-sided original, 2-sided output</td>
</tr>
<tr>
<td></td>
<td>- 2-sided original, 1-sided output</td>
</tr>
<tr>
<td>Color/Black</td>
<td>Specify whether copies are printed in color or in black and white:</td>
</tr>
<tr>
<td></td>
<td>- Automatically Detect: Prints color documents in color (for printers that support color copying), and black and white documents in black and white. For mixed documents, the printer will determine whether to print in color or black and white.</td>
</tr>
<tr>
<td></td>
<td>- Color: Prints documents in color (for printers that support color copying).</td>
</tr>
<tr>
<td></td>
<td>- Black: Prints documents in black and white.</td>
</tr>
<tr>
<td>Option</td>
<td>Description</td>
</tr>
<tr>
<td>-----------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Quality Level</td>
<td>Select a Quality Level:</td>
</tr>
<tr>
<td></td>
<td>• Professional</td>
</tr>
<tr>
<td></td>
<td>• General Office</td>
</tr>
<tr>
<td>Watermark</td>
<td>Use the Watermark options to specify if you want to include a text watermark and what to include in the watermark.</td>
</tr>
<tr>
<td></td>
<td>Select a Watermark Type:</td>
</tr>
<tr>
<td></td>
<td>• None</td>
</tr>
<tr>
<td></td>
<td>• Text</td>
</tr>
<tr>
<td></td>
<td>Under Copy Settings (left pane), click Watermark. Use the Watermark page to enter custom text or select pre-defined text.</td>
</tr>
<tr>
<td>Stamps</td>
<td>Use the Stamps options to specify if you want to include a personalized text stamp and where to position the stamp.</td>
</tr>
<tr>
<td></td>
<td>Under Stamps, select the position you want for the stamp, such as Top Right.</td>
</tr>
<tr>
<td></td>
<td>Enter or select the Stamp Content:</td>
</tr>
<tr>
<td></td>
<td>• To enter personalized text: Select the empty text box, and then enter text in the box. Choose the font, text size and color.</td>
</tr>
<tr>
<td></td>
<td>• To use pre-defined text: Select the list box (default is None). In the list, select a pre-defined text stamp, such as Date and time.</td>
</tr>
<tr>
<td></td>
<td>Under Copy Settings (left pane), click Stamps to customize the stamps available to users or to enforce use of a stamp in a certain position.</td>
</tr>
<tr>
<td>Scan Mode</td>
<td>Select a Scan Mode:</td>
</tr>
<tr>
<td></td>
<td>• Select Standard document to scan most documents. Select if you want the Prompt to scan additional pages.</td>
</tr>
<tr>
<td></td>
<td>• Select Book to scan bound book pages.</td>
</tr>
<tr>
<td></td>
<td>• Select 2-sided ID Scan to scan both sides of a card, such as an identification card or business card. Select if you want the Prompt to scan both sides.</td>
</tr>
<tr>
<td>Reduce/Enlarge</td>
<td>Use the Reduce/Enlarge feature to scale the size of the document up or down.</td>
</tr>
<tr>
<td></td>
<td>Select one of the predefined percentages, or touch the Scaling field, and enter a percentage between 25 and 400 for the flatbed scanner and between 25 and 200 for the document feeder. You can also select these options:</td>
</tr>
<tr>
<td></td>
<td>• Auto: The printer automatically scales the image to fit the paper size in the tray.</td>
</tr>
<tr>
<td></td>
<td>• Auto Include Margins: The printer reduces the image slightly to fit the entire scanned image within the printable area on the page.</td>
</tr>
<tr>
<td></td>
<td>NOTE: To reduce the image, select a scaling percentage that is less than 100. To enlarge the image, select a scaling percentage that is greater than 100.</td>
</tr>
<tr>
<td>Image Shift</td>
<td>Choose Image Shift options if you want to offset where the copied image prints on the page.</td>
</tr>
<tr>
<td></td>
<td>• Select Use Inches to use inches instead of millimeters.</td>
</tr>
<tr>
<td></td>
<td>• For the Front Side: Enter the values for Horizontal and Vertical offset.</td>
</tr>
<tr>
<td></td>
<td>• For the Back Side (2-sided output): Enter the values for Horizontal and Vertical offset.</td>
</tr>
<tr>
<td>Option</td>
<td>Description</td>
</tr>
<tr>
<td>-----------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Original Size</td>
<td>• Automatically detect</td>
</tr>
<tr>
<td></td>
<td>• Letter (8.5x11)</td>
</tr>
<tr>
<td></td>
<td>• Mixed Letter/Legal</td>
</tr>
<tr>
<td></td>
<td>• Legal (8.5x14)</td>
</tr>
<tr>
<td></td>
<td>• Executive (7.25x10.5)</td>
</tr>
<tr>
<td></td>
<td>• Statement (5.5x8.5)</td>
</tr>
<tr>
<td></td>
<td>• Oficio (8.5x13)</td>
</tr>
<tr>
<td></td>
<td>• A4 (210x297 mm)</td>
</tr>
<tr>
<td></td>
<td>• A5 (148x210 mm)</td>
</tr>
<tr>
<td></td>
<td>• B5 (182x257 mm)</td>
</tr>
<tr>
<td></td>
<td>• 16k (195x270 mm)</td>
</tr>
<tr>
<td></td>
<td>• DPostcard JIS (148x200 mm)</td>
</tr>
<tr>
<td></td>
<td>• Oficio (216x340 mm)</td>
</tr>
</tbody>
</table>

Specify the size of the original document:

<table>
<thead>
<tr>
<th>Paper Selection</th>
<th>Select which tray to use when printing or making copies:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Manually feed: The Paper Selection option is automatically set to Tray 1: Any Type, Any Size</td>
</tr>
<tr>
<td></td>
<td>• Automatically Detect: Automatically matches the paper size of the original to a paper size in one of the trays</td>
</tr>
<tr>
<td></td>
<td>• Tray 1: Any Type, Any Size</td>
</tr>
<tr>
<td></td>
<td>• Tray 2: Plain, Letter (8.5x11)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Booklet</th>
<th>Select to have Booklet Format off or on. If on, select either a 1-sided or 2-sided booklets and whether to enable Borders on each page.</th>
</tr>
</thead>
</table>

Table 6-12  Copy Settings (continued)

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Content Orientation</td>
<td>For some features to work correctly, specify the way the content of the original document is placed on the page. If you are making two-sided copies, select a 2-sided format option.</td>
</tr>
</tbody>
</table>
| **Orientation**    | *Portrait:* The short edge of the page is along the top.  
*Landscape:* The long edge of the page is along the top. |
| **2-Sided Format:**| *Book-style:* The back side of the original is printed right-side-up, and the back side of the copy is printed the same way. Use this option for originals and copies that are bound along the left edge.  
*Flip-style:* The back side of the original is printed upside-down, and the back side of the copy is printed the same way. Use this option for originals and copies that are bound along the top edge.  
*Book-style original; Flip-style copy:* The back side of the original is printed right-side-up, but the back side of the copy is printed upside-down. Use this option when the original is bound along the left edge, but the copies need to be bound along the top edge.  
*Flip-style original; Book-style copy:* The back side of the original is printed upside-down, but the back side of the copy is printed right-side-up. Use this option when the original is bound along the top edge, but the copies need to be bound along the left edge. |
| Pages per Sheet    | Select how many pages to print on one sheet and the page order: to copy to one, two, or four Pages per Sheet and select whether to Add page borders. |
| **Pages per Sheet** | *One (1)*  
*Two (2)*  
*Four (4)* |
| **Page Order**     | *Right, then down:* Prints the pages in rows  
*Down, then right:* Prints the pages in columns |
|                   | Click the Add page borders check box to add borders on the pages. |
| Image Adjustment   | Use the settings to improve the overall quality of the copy. For example, adjust the Darkness and Sharpness, and use the Background Cleanup setting to remove faint images from the background or to remove a light background color. |
| **Darkness**       | Adjust to increase or decrease the amount of white and black in the colors |
| **Contrast**       | Adjust to increase or decrease the difference between the lightest and darkest color on the page |
| **Background Cleanup** | Adjust if you are having trouble copying a faint image |
| **Sharpness**      | Adjust to sharpen or soften the image. For example, increasing the sharpness could make text look clearer, but decreasing it could make photographs look smoother. |
Table 6-12  Copy Settings (continued)

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Optimize Text/ Picture</strong></td>
<td>Select an option for how to handle output of a particular type content being printed:</td>
</tr>
<tr>
<td>Manually adjust</td>
<td>Manually optimize the setting for each document</td>
</tr>
<tr>
<td>Text</td>
<td>Use for documents that contain mostly text</td>
</tr>
<tr>
<td>Printed picture</td>
<td>Use for line drawings and preprinted images, such as magazine clippings or pages from books</td>
</tr>
<tr>
<td><strong>NOTE:</strong></td>
<td>If bands of irregular intensity print on the copies, try selecting Printed picture to improve the quality.</td>
</tr>
<tr>
<td>Photograph</td>
<td>Use for photographic prints</td>
</tr>
<tr>
<td><strong>Edge-to-Edge</strong></td>
<td>Use to avoid shadows that can display along the edges of copies when the original document is printed close to the edges.</td>
</tr>
<tr>
<td></td>
<td>Combine this feature with the Reduce/Enlarge feature to ensure that the entire page is printed on the copies.</td>
</tr>
<tr>
<td></td>
<td>When the Edge-to-Edge feature is turned on, the printer minimizes margins and prints as close to the edge of the paper as possible.</td>
</tr>
<tr>
<td><strong>Erase Edges</strong></td>
<td>Use the Erase Edges options if you want to remove content or lines along the edges of the page.</td>
</tr>
<tr>
<td></td>
<td>Select Use Inches to use inches instead of millimeters.</td>
</tr>
<tr>
<td></td>
<td>Define the erase options for Front Side and Back Side, including the width to erase on each edge.</td>
</tr>
<tr>
<td><strong>Collate</strong></td>
<td>For printers that support print-job finishing, each set of copied pages are assembled in the same order as the original document.</td>
</tr>
<tr>
<td><strong>NOTE:</strong></td>
<td>If the printer has a stapler installed, select a staple option. To not staple the copies, select None.</td>
</tr>
<tr>
<td></td>
<td>Select a Collate option.</td>
</tr>
<tr>
<td>Collate on (Sets in page order)</td>
<td>If making more than one copy, select to assemble pages in the correct order for each set of copies.</td>
</tr>
<tr>
<td>Collate off (Pages grouped)</td>
<td>Select to group the same pages together. For example, if making five copies of an original document that has two pages, all five first pages are grouped together and all five second pages are grouped together.</td>
</tr>
<tr>
<td><strong>Image Preview</strong></td>
<td>Select an Image Preview option:</td>
</tr>
<tr>
<td>Disable preview</td>
<td></td>
</tr>
<tr>
<td>Make optional</td>
<td></td>
</tr>
<tr>
<td>Require preview</td>
<td></td>
</tr>
</tbody>
</table>

2. Click **Apply** to save the settings.

**Step two: Complete the setup**

On the **Copy Settings** page, review the selected settings, and then click **Apply** to complete the setup.
Configure scanning and digital sending

Use the following information to set up scan/digital send features using the EWS.

- Set up Scan to Email
- Set up Scan to Network Folder
- Set up Scan to SharePoint
- Set up Scan to USB Drive
- Set up and configure the Address Book
- Configure scanner job shortcuts using Quick Sets
- Manage multiple devices with Digital Sending Software
- Set volume limits on scanned pages

NOTE: All features might not be available on every device.
Set up Scan to Email

Learn how to set up the Scan to Email feature.

- **FutureSmart 3**
- **FutureSmart 4**

**NOTE:** The steps vary according to the type of control panel.

<table>
<thead>
<tr>
<th>Table 6-13 Control panels</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Firmware Version</strong></td>
</tr>
<tr>
<td>FutureSmart 3</td>
</tr>
<tr>
<td>FutureSmart 4</td>
</tr>
</tbody>
</table>
FutureSmart 3

Use the following steps for FutureSmart 3.

- Introduction
- Before you begin
- Step one: Configure the Network Identification settings
- Step two: Configure the Send to E-mail feature
- Step three: Configure the Quick Sets (optional)
- Step four: Set up Send to E-mail to use Office 365 Outlook (optional)

Introduction

The printer has a feature that enables it to scan a document and send it to one or more email addresses. To use this scan feature, the printer must be connected to a network; however, the feature is not available until it has been configured.

There are two methods for configuring Scan to Email, the Scan to Email Setup Wizard for basic and Email Setup for advanced. Use the following information to set up the Scan to Email feature.

View a video demonstration on how to set up the Scan to Email feature on FutureSmart 3 printers

Before you begin

To set up the Scan to Email feature, the printer must have an active network connection.

Administrators need the following information before beginning the configuration process.

- Administrative access to the printer
- DNS suffix (e.g., companyname.com)
- SMTP server (e.g., smtp.mycompany.com)

**NOTE:** If you do not know the SMTP server name, SMTP port number, or authentication information, contact the email/Internet service provider or system administrator for the information. SMTP server names and port names are typically found by doing an Internet search. For example, use terms like “Gmail smtp server name” or “Yahoo smtp server name” to search.

- SMTP server authentication requirements for outgoing email messages, including the user name and password used for authentication, if applicable.

**NOTE:** Consult your email service provider's documentation for information on digital sending limits for your email account. Some providers may temporarily lock your account if you exceed your sending limit.

Step one: Configure the Network Identification settings

Use the following steps to configure the Network Identification settings.
**NOTE:** Configuring email setup on the **Networking** tab is an advanced process and might require the assistance of a system administrator.

1. Using the EWS top navigation tabs, click **Networking**.

   **NOTE:** For configuring the network settings for use with Office 365, **Step four: Set up Send to E-mail to use Office 365 Outlook (optional) on page 141**.

2. In the left navigation pane, click **TCP/IP Settings**. A username/password might be required to access the **Network Identification** tab of the EWS.

3. On the **TCP/IP Settings** dialog, click the **Network Identification** tab.

4. If DNS is required on the network, in the **TCP/IP Domain Suffix** area, verify that the DNS suffix for the email client being used is listed. DNS suffixes have this format: *companyname.com*, *gmail.com*, etc.

   **NOTE:** If the Domain Name suffix is not set up, use the IP address.

5. Click **Apply**.

6. Click **OK**.

---

**ENWW**

Configure scanning and digital sending 131
Step two: Configure the Send to E-mail feature

The two options for configuring Send to Email are the E-mail Setup Wizard for basic configuration and E-mail Setup for advanced configuration. Use the following options to configure the Send to E-mail feature:

- Method one: Basic configuration using the E-mail Setup Wizard
- Method two: Advanced configuration using the E-mail Setup

Method one: Basic configuration using the E-mail Setup Wizard

This option opens the E-mail Setup Wizard in the HP Embedded Web Server (EWS) for basic configuration.

1. Using the EWS top navigation tabs, click Scan/Digital Send.
2. In the E-mail and Save to Network Folder Quick Setup Wizards area, click the E-mail Setup Wizard link.
3. On the E-mail Setup Wizard dialog, click Continue to proceed with the configuration.
4. On the Configure E-mail Servers (SMTP) dialog, select one of the following options and complete the steps:

   **Option one: Use a server already in use by E-mail**
   - Select Use a server already in use by E-mail, and then click Next.

   **Option two: Search network for outgoing e-mail server**

This option finds outgoing SMTP servers inside your firewall only.

a. Select Search network for outgoing e-mail server, and then click Next.

b. Select the appropriate server from the Configure E-mail Server (SMTP) list, and then click Next.

c. Select the option that describes the server’s authentication requirements:
   – Server does not require authentication: Select Server does not require authentication, and then click Next.
   -OR-
   – Server requires authentication: From the drop-down list, select an authentication option:
     ○ Use credentials of user to connect after Sign In at the control panel: Select Use credentials of user to connect after Sign In at the control panel, and then click Next.
Always use these credentials: Select Always use these credentials, enter the User name and Password, and then click Next.

Option three: Add SMTP server

a. Select Add SMTP server

b. Enter the Server Name and Port Number, and then click Next.

**NOTE:** In most cases, the default port number does not need to be changed.

**NOTE:** If you are using a hosted SMTP service such as Gmail, verify the SMTP address, port number, and SSL settings from the service provider's website or other sources. Typically, for Gmail, the SMTP address is smtp.gmail.com, port number 465, and the SSL should be enabled.

Please refer to online sources to confirm these server settings are current and valid at the time of configuration.

c. Select the appropriate server authentication option:

   - Server does not require authentication: Select Server does not require authentication, and then click Next.

   -OR-

   - Server requires authentication: Select an option from the Server requires authentication dropdown list:

     ○ Use credentials of user to connect after Sign In at the control panel: Select Use credentials of user to connect after Sign In at the control panel, and then click Next.

   -OR-

     ○ Always use these credentials: Select Always use these credentials, enter the User name and Password, and then click Next.

5. On the Configure E-mail Settings dialog, enter the following information about the sender’s email address, and then click Next.

**NOTE:** When setting up the From, Subject, and Message fields, if the User editable check box is unchecked, users will not be able to edit those fields at the printer control panel when sending an email.

**Table 6-14 Email settings**

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>From (Required)</td>
<td>Select one of the following options from the From drop-down list:</td>
</tr>
<tr>
<td></td>
<td>● User's address (sign-in required)</td>
</tr>
<tr>
<td></td>
<td>● Default From: Enter a default email address and display name in the Default From Email Address and Default Display Name fields</td>
</tr>
<tr>
<td></td>
<td><strong>NOTE:</strong> Create an e-mail account for the printer, and use this address for the default e-mail address.</td>
</tr>
<tr>
<td></td>
<td><strong>NOTE:</strong> Configure the e-mail feature so that users must sign in before using it. This prevents users from sending an e-mail from an address that is not their own.</td>
</tr>
</tbody>
</table>
### Table 6-14  Email settings (continued)

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subject</td>
<td>Provide a default subject line for the e-mail messages. <strong>(Optional)</strong></td>
</tr>
<tr>
<td>Message</td>
<td>Create a custom message. <strong>(Optional)</strong> To use this message for all e-mails sent from the printer, clear the User editable check box for Message.</td>
</tr>
</tbody>
</table>

6. In the **Configure File Scan Settings** area, set the default scanning preferences, and then click **Next**.

### Table 6-15  Scan settings

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Default File Type</td>
<td>Select the default file type that the for the scanned document:</td>
</tr>
<tr>
<td></td>
<td>● PDF</td>
</tr>
<tr>
<td></td>
<td>● JPEG</td>
</tr>
<tr>
<td></td>
<td>● TIFF</td>
</tr>
<tr>
<td></td>
<td>● MTIFF</td>
</tr>
<tr>
<td></td>
<td>● XPS</td>
</tr>
<tr>
<td></td>
<td>● PDF/A</td>
</tr>
<tr>
<td></td>
<td>● Text (OCR)</td>
</tr>
<tr>
<td></td>
<td>● Unicode Text (OCR)</td>
</tr>
<tr>
<td></td>
<td>● RTF (OCR)</td>
</tr>
<tr>
<td></td>
<td>● Searchable PDF (OCR)</td>
</tr>
<tr>
<td></td>
<td>● Searchable PDF/A (OCR)</td>
</tr>
<tr>
<td></td>
<td>● HTML (OCR)</td>
</tr>
<tr>
<td></td>
<td>● CSV (OCR)</td>
</tr>
<tr>
<td>Default Color Preferences</td>
<td>Select the default color setting for the scanned document:</td>
</tr>
<tr>
<td></td>
<td>● Color</td>
</tr>
<tr>
<td></td>
<td>● Black</td>
</tr>
<tr>
<td></td>
<td>● Black/Gray</td>
</tr>
<tr>
<td></td>
<td>● Automatically detect</td>
</tr>
<tr>
<td>Option</td>
<td>Description</td>
</tr>
<tr>
<td>------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Default Output Quality</strong></td>
<td>Select the default output quality for the scanned document:</td>
</tr>
<tr>
<td></td>
<td>● Low (small file)</td>
</tr>
<tr>
<td></td>
<td>● Medium</td>
</tr>
<tr>
<td></td>
<td>● High (large file)</td>
</tr>
<tr>
<td><strong>Default Resolution</strong></td>
<td>Select the default scan resolution for the scanned document:</td>
</tr>
<tr>
<td></td>
<td>● 75 dpi</td>
</tr>
<tr>
<td></td>
<td>● 150 dpi</td>
</tr>
<tr>
<td></td>
<td>● 200 dpi</td>
</tr>
<tr>
<td></td>
<td>● 300 dpi</td>
</tr>
<tr>
<td></td>
<td>● 400 dpi</td>
</tr>
<tr>
<td></td>
<td>● 600 dpi</td>
</tr>
</tbody>
</table>

7. Review the Summary area, and then click Finish to complete the setup.

**Method two: Advanced configuration using the E-mail Setup**

Use the following steps for advanced configuration using the E-mail Setup dialog.

1. Using the EWS top navigation tabs, click Scan/Digital Send, and then click E-mail Setup in the left navigation pane.

2. On the E-mail Setup dialog, select the Enable Send to E-mail check box. If this check box is not selected, the feature is unavailable at the printer control panel.

3. In the Outgoing E-mail Servers (SMTP) area, complete the steps for one of the following options:
   ● Select an existing server from the Outgoing E-mail Servers (SMTP) table.
   -OR-
   Click Add to start the SMTP wizard.
   1. In the SMTP wizard, select one of the following options:
      ○ Option one: I know my SMTP server address or host name: Enter the address of an SMTP server, and then click Next
      ○ Option two: If you do not know the address of the SMTP server, select Search network for outgoing e-mail server, and then click Next. Select the server, and then click Next.
NOTE: If an SMTP server was already created for another printer function, the **Use a server already in use by another function** option displays. Select this option, and then configure it to be used for the email function.

2. On the **Set the basic information necessary to connect to the server** dialog, set the options to use, and then click **Next**.

NOTE: Some servers have problems sending or receiving emails that are larger than 5 megabytes (MB). These problems can be prevented by entering a number in **Split e-mails if larger than (MB)**.

NOTE: In most cases, the default port number does not need to be changed. However, when using the **Enable SMTP SSL Protocol** option, port 587 must be used.

NOTE: If you are using Google™ Gmail for email service, select the **Enable SMTP SSL Protocol** check box. Typically, for gmail, the SMTP address is smtp.gmail.com, port number 465, and the SSL should be enabled.

Please refer to online sources to confirm these server settings are current and valid at the time of configuration.

3. On the **Server Authentication Requirements** dialog, select the option that describes the server’s authentication requirements:
   - **Server does not require authentication**, and then click **Next**.
   - **Server requires authentication**
     - From the drop-down box, select **Use credentials of user to connect after Sign In at the control panel**, and then click **Next**.
     - From the drop-down box, select **Always use these credentials**, enter the **Username** and **Password**, and then click **Next**.

NOTE: If using a signed-in user's credentials, set email to require sign in by the user on the printer control panel. Deny device guest access to email by clearing the check box for email in the **Device Guest** column in the **Sign in and Permission Policies** area on the **Access Control** dialog of the **Security** tab. The icon in the check box changes from a check mark to a lock.

4. On the **Server Usage** dialog, choose the printer functions that will send email through this SMTP server, and then click the **Next** button.

NOTE: If the server requires authentication, a user name and password for sending automatic alerts and reports from the printer will be required.

5. On the **Summary and Test** dialog, enter a valid email address in the **Send a test e-mail to:** field, and then click **Test**.

6. Verify that all of the settings are correct, and then click **Finish** to complete the outgoing email server set up.

4. In the **Quick Sets** area, select one of the following options:

**NOTE:** Quick Sets are optional short-cut jobs that can be accessed on the main Home screen or within the Quick Sets application at the product.

- Select an existing Quick Set under **Quick Sets Application** in the table.
Click Add to start the Quick Set Wizard. Complete the following information:

- **Quick Set Title**: Enter a title for the new Quick Set.
- **Button Location**: From the Button Location drop-down list, select either Home Screen or Quick Sets Application.
- **Quick Set Description**: Enter a description of the Quick Set.
- **Quick Set Start Option**: To set how the Quick Set starts, click either Enter application, and then user presses Start or Start instantly upon selection.

5. In the Address and Message Field Control area, enter a Default From: setting and any of the other optional settings.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Address Field Restrictions</td>
<td>Specify whether users must select an email address from an address book or whether users are allowed to enter in an email address manually.</td>
</tr>
<tr>
<td><strong>CAUTION</strong>: Users must select from address book is selected, and any of the address fields are also set as User editable, changes to those editable fields also change the corresponding values in the address book.</td>
<td></td>
</tr>
<tr>
<td>To prevent users from changing contacts in the Address Book at the printer control panel, go to the Access Control page on the Security tab, and deny Device Guest access to address book modifications.</td>
<td></td>
</tr>
<tr>
<td>Allow invalid e-mail address formats</td>
<td>Select to allow an invalid email address format.</td>
</tr>
<tr>
<td>User editable</td>
<td>To use the Default From address and Default Display Name for all emails sent from this printer (unless a user is signed in), do not select the User editable check box.</td>
</tr>
<tr>
<td>When setting up the address fields, if the User editable check box is unchecked, users will not be able to edit those fields at the printer control panel when sending an email. For send-to-me functionality, clear the User editable check boxes for all of the address fields, including the From:, To:, CC: and BCC: fields, and then set that user’s send email From: their own email address and To: their own email address.</td>
<td></td>
</tr>
<tr>
<td>Default From: and Default Display Name:</td>
<td>Provide an email address and name to use for the From: address for the email message.</td>
</tr>
<tr>
<td><strong>NOTE</strong>: Create an email account for the printer, and use this address for the default email address.</td>
<td></td>
</tr>
<tr>
<td><strong>NOTE</strong>: Configure the email feature so that users must sign in before using it. This prevents users from sending an email from an address that is not their own.</td>
<td></td>
</tr>
<tr>
<td>To:</td>
<td>Provide a To (recipient) email address for emails.</td>
</tr>
<tr>
<td>CC:</td>
<td>Provide a CC email address for emails.</td>
</tr>
<tr>
<td>BCC:</td>
<td>Provide a BCC email address for emails.</td>
</tr>
<tr>
<td>Subject:</td>
<td>Provide a default subject line for the email messages.</td>
</tr>
<tr>
<td>Message:</td>
<td>Create a custom message. To use this message for all emails sent from the printer, clear or do not select the User editable check box for Message:</td>
</tr>
</tbody>
</table>

6. In the Signing and Encryption area, set the signing and encryption preferences.
### Table 6-17 Signing and Encryption settings

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Signing</td>
<td>Select whether to sign the email with a security certificate. Select the <strong>User editable</strong> check box to make this setting editable at the printer control panel.</td>
</tr>
<tr>
<td>Hashing Algorithm</td>
<td>Select the algorithm to use for signing the certificate.</td>
</tr>
<tr>
<td>Encryption</td>
<td>Select whether to encrypt the email. Select the <strong>User editable</strong> check box to make this setting editable at the printer control panel.</td>
</tr>
<tr>
<td>Encryption Algorithm</td>
<td>Select the algorithm to use for encrypting the email.</td>
</tr>
<tr>
<td>Attribute for Recipient Public Key</td>
<td>Enter which attribute to use to retrieve the recipient’s public key certificate from LDAP.</td>
</tr>
<tr>
<td>Use the recipient public key certificate to verify the recipient</td>
<td>Select this setting to use the recipient’s public key certificate to verify the recipient.</td>
</tr>
</tbody>
</table>

7. In the **Notification Settings** area, select when users will receive notifications about sent emails. The default setting is using the signed in user’s email address. If the recipient email address is blank, no notification is sent.

8. In the **Scan Settings** area, set the default scanning preferences.

### Table 6-18 Scan settings

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Original Size</td>
<td>Select the page size of the original document.</td>
</tr>
<tr>
<td>Original Sides</td>
<td>Select whether the original document is single-sided or double-sided.</td>
</tr>
<tr>
<td>Optimize Text/Picture</td>
<td>Select to optimize for the output of a particular type of content, or select <strong>Manually adjust</strong>.</td>
</tr>
<tr>
<td>Optimize For</td>
<td>This setting is only available when <strong>Optimize Text/Picture</strong> is set to <strong>Manually adjust</strong>. Select a manual-adjust value.</td>
</tr>
<tr>
<td>Content Orientation</td>
<td>Select the way the content of the original document is placed on the page: <strong>Portrait</strong> or <strong>Landscape</strong>, or select <strong>Automatically detect</strong>.</td>
</tr>
<tr>
<td>2-Sided Format</td>
<td>This setting is not available when <strong>Content Orientation</strong> is set to <strong>Automatically detect</strong>. Select to describe the binding of the page to specify if the back side of the page is upside down or right side up.</td>
</tr>
<tr>
<td>Background Cleanup</td>
<td>Select a value to remove faint images from the background or to remove a light background color.</td>
</tr>
<tr>
<td>Darkness</td>
<td>Select a value to adjust the darkness of the file.</td>
</tr>
<tr>
<td>Contrast</td>
<td>Select a value to adjust the contrast of the file.</td>
</tr>
<tr>
<td>Sharpness</td>
<td>Select a value to adjust the sharpness of the file.</td>
</tr>
<tr>
<td>Image Preview</td>
<td>Select whether to require or make optional a displayed preview of the job or to disable a preview.</td>
</tr>
<tr>
<td>Cropping Options</td>
<td>Select whether or not to allow a job to be cropped and the type of cropping option.</td>
</tr>
<tr>
<td>Job Build</td>
<td>Select this setting to combine several sets of original documents into one email attachment. Also, use this setting to scan an original document that has more pages than the document feeder can accommodate at one time.</td>
</tr>
<tr>
<td>Automatic Tone</td>
<td>Select this setting to set to automatic the <strong>Darkness</strong>, <strong>Contrast</strong>, and <strong>Background cleanup</strong> settings, which then makes these settings unavailable on this page.</td>
</tr>
</tbody>
</table>
### Table 6-18  Scan settings (continued)

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multi-feed Detection</td>
<td>Select this setting to enable detection of multi-feed jobs.</td>
</tr>
<tr>
<td>Erase Edges</td>
<td>Select this setting to specify the width of edge margins to be erased, in either inches or millimeters, for the front side and back side of a job.</td>
</tr>
</tbody>
</table>

9. In the **File Settings** area, set the default file settings preferences.

### Table 6-19  File settings

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>File Name Prefix</td>
<td>Set the default file name prefix used for files saved to a network folder.</td>
</tr>
<tr>
<td>Default File Name</td>
<td>Default file name for the file to be saved.</td>
</tr>
<tr>
<td></td>
<td>Select the <strong>User editable</strong> check box to make this setting editable at the printer control panel.</td>
</tr>
<tr>
<td>File Name Suffix</td>
<td>Set the default file name suffix used for files saved to a network folder.</td>
</tr>
<tr>
<td></td>
<td>Duplicate filename suffix [filename]_YYYYMMDDT</td>
</tr>
<tr>
<td>File Number Format</td>
<td>Select a file name format for when the job is divided into multiple files.</td>
</tr>
<tr>
<td>Default File Type</td>
<td>Select the file format for the saved file.</td>
</tr>
<tr>
<td></td>
<td>Select the <strong>User editable</strong> check box to make this setting editable at the printer control panel.</td>
</tr>
<tr>
<td>File Name Preview</td>
<td>Enter a file name, and then click the <strong>Update Preview</strong> button.</td>
</tr>
<tr>
<td>Default Color Preference</td>
<td>Select whether the file is in black &amp; white or in color.</td>
</tr>
<tr>
<td>Default Output Quality</td>
<td>Select the quality for the file. Higher-quality images require a larger file size than lower-quality images, and they take more time to send.</td>
</tr>
<tr>
<td>Default Resolution</td>
<td>Set the resolution for the file. Higher resolution images have more dots per inch (dpi), so they show more detail. Lower resolution images have fewer dots per inch and show less detail, but the file size is smaller.</td>
</tr>
<tr>
<td>Compression</td>
<td>Specify if the file uses Normal or High compression when saving a scanned document as a PDF or XPS file. If compression is set to High, the scanned file is smaller, but the scanning process might take longer than Normal compression.</td>
</tr>
<tr>
<td>Black TIFF Compression</td>
<td>Select the black TIFF compression algorithm to be used to compress the generated TIFF file.</td>
</tr>
<tr>
<td>Color/Grayscale TIFF Compression</td>
<td>Select the color/grayscale TIFF compression algorithm to be used to compress the generated TIFF file.</td>
</tr>
<tr>
<td>PDF encryption</td>
<td>If the file type is PDF, then this option encrypts the output PDF file. A password must be specified as part of the encryption. The same password must be used to open the file. The user will be prompted to enter a password prior to scanning their job if one has not been set prior to pressing start.</td>
</tr>
<tr>
<td>Disable OCR file types</td>
<td>Select this setting to prevent OCR file types from being available from the product control panel.</td>
</tr>
<tr>
<td>Enable Blank Page Suppression</td>
<td>If the Enable Blank Page Suppression option is enabled, blank pages will be ignored.</td>
</tr>
</tbody>
</table>

10. Review the selected options to verify that they are accurate, and then click **Apply** to complete the setup.
Step three: Configure the Quick Sets (optional)

Quick Sets are optional short-cut jobs that can be accessed on the main Home screen or within the Quick Sets application at the printer. Use the following procedure to configure the Quick Sets.

1. In the **Quick Sets** area, select one of the following options:
   - Select an existing Quick Set under Quick Sets Application in the table.
   - OR-
   - Click **Add** to start the Quick Set Wizard.

2. If you selected **Add**, the **Quick Sets Wizard** opens. Complete the following information:
   - **Quick Set Title**: Enter a title for the new Quick Set.
   - **Button Location**: From the Button Location drop-down list, select either **Home Screen** or **Quick Sets Application**.
   - **Quick Set Description**: Enter a description of the Quick Set.
   - **Quick Set Start Option**: To set how the Quick Set starts, click either **Enter application, and then user presses Start** or **Start instantly upon selection**.
Step four: Set up Send to E-mail to use Office 365 Outlook (optional)

Complete the following to enable the printer to send an email with an Office 365 Outlook account from the control panel.

- **Introduction**
- **Configure the outgoing e-mail server (SMTP) to send an e-mail from an Office 365 Outlook account**

**Introduction**

Microsoft Office 365 Outlook is a cloud-based email system provided by Microsoft which uses Microsoft’s Simple Mail Transfer Protocol (SMTP) server to send or receive emails.

**NOTE:** You must have an email address account with Office 365 Outlook to configure the settings in the EWS.

**Configure the outgoing e-mail server (SMTP) to send an e-mail from an Office 365 Outlook account**

Use the following steps to configure the outgoing email server.

1. Using the EWS top navigation tabs, click **Networking**.
2. In the left navigation pane, click **TCP/IP Settings**.
3. In the **TCP/IP Settings** area, click the **Network Identification** tab.
4. If DNS is required on the network, in the **TCP/IP Domain Suffix** area, verify that the DNS suffix for the email client being used is listed. DNS suffixes have this format: companyname.com, Gmail.com, etc.

**NOTE:** If the Domain Name suffix is not set up, use the IP address.

5. Click **Apply**.
6. Click the **Scan/Digital Send** tab.
7. On the left navigation pane, click **E-mail Setup**.
8. On the E-mail Setup page, select the Enable Send to E-mail check box. If this check box is not available, the feature is unavailable at the printer control panel.

9. In the Outgoing E-mail Servers (SMTP) area, click Add to start the SMTP wizard.

10. In the I know my SMTP server address or host name field, type smtp.onoffice.com, and then click Next.

11. On the Set the basic information necessary to connect to the server dialog, in the Port Number field, type 587.

   **NOTE:** Some servers have problems sending or receiving e-mails that are larger than 5 megabytes (MB). These problems can be prevented by entering a number in Split emails if larger than (MB).

12. Select the Enable SMTP SSL Protocol check box, and then click Next.

13. On the Server Authentication Requirements dialog, complete the following information:
   
a. Select Server requires authentication.

   b. From the drop-down list, select Always use these credentials

   c. In the Username field, type the Office 365 Outlook email address.

   d. In the Password field, type the Office 365 Outlook account password, and then click Next.

14. On the Server Usage dialog, choose the printer functions that will send email through this SMTP server, and then click the Next button.

15. On the Summary and Test dialog, enter a valid email address in the Send a test email to: field, and then click Test.

16. Verify that all of the settings are correct, and then click Finish to complete the outgoing email server set up.
FutureSmart 4

Use the following steps for FutureSmart 4.

- Introduction
- Before you begin
- Step one: Configure the Network Identification settings
- Step two: Configure the Scan to Email feature
- Step three: Configure the Quick Sets (optional)
- Step four: Set up Scan to Email to use Office 365 Outlook (optional)

Introduction

The printer has a feature that enables it to scan a document and send it to one or more email addresses. To use this scan feature, the printer must be connected to a network; however, the feature is not available until it has been configured.

There are two methods for configuring Scan to Email, the Scan to Email Setup Wizard for basic and Email Setup for advanced. Use the following information to set up the Scan to Email feature.

View a video on how to set up the Scan to Email feature on FutureSmart 4 printers

Before you begin

To set up the Scan to Email feature, the printer must have an active network connection.

Administrators need the following information before beginning the configuration process.

- Administrative access to the printer
- DNS suffix (e.g., companyname.com)
- SMTP server (e.g., smtp.mycompany.com)

**NOTE:** If you do not know the SMTP server name, SMTP port number, or authentication information, contact the email/Internet service provider or system administrator for the information. SMTP server names and port names are typically found by doing an Internet search. For example, use terms like "Gmail smtp server name" or "Yahoo smtp server name" to search.

- SMTP server authentication requirements for outgoing email messages, including the user name and password used for authentication, if applicable.

**NOTE:** Consult your email service provider's documentation for information on digital sending limits for your email account. Some providers may temporarily lock your account if you exceed your sending limit.

Step one: Configure the Network Identification settings

Use the following steps to configure the Network Identification settings.
Configuring email setup on the Networking tab is an advanced process and might require the assistance of a system administrator.

1. Using the EWS top navigation tabs, click Networking.

   **NOTE:** For configuring the network settings for use with Office 365, see "Step five: Set up Scan to Email to use Office 365 Outlook (optional)."

2. In the left navigation pane, click TCP/IP Settings. A username/password might be required to access the Network Identification tab of the EWS.

3. On the TCP/IP Settings dialog, click the Network Identification tab.

4. If DNS is required on the network, in the TCP/IP Domain Suffix area, verify that the DNS suffix for the email client being used is listed. DNS suffixes have this format: companyname.com, gmail.com, etc.

   ![Figure 6-14 TCP/IP Domain Suffix settings](image)

   **NOTE:** If the Domain Name suffix is not set up, use the IP address.

5. Click Apply.

6. Click OK.
Step two: Configure the Scan to Email feature

The two options for configuring Scan to Email are the Email Setup Wizard for basic configuration and Email Setup for advanced configuration. Use the following options to configure the Scan to Email feature:

- Method one: Basic configuration using the Email Setup Wizard
- Method two: Advanced configuration using the Email Setup

Method one: Basic configuration using the Email Setup Wizard

Perform basic configuration using the Email Setup Wizard.

This option opens the Email Setup Wizard in the HP Embedded Web Server (EWS) for basic configuration.

1. Using the EWS top navigation tabs, click Scan/Digital Send.
2. In the left navigation pane, click Email and Scan to Network Folder Quick Setup Wizards.
3. In the Email and Scan to Network Folder Quick Setup Wizards dialog, click the Email Setup link.

**NOTE:** If a message displays indicating that the Scan to Email feature is disabled, click Continue to proceed with the configuration and enable the Scan to Email feature upon completion.

4. On the Configure Email Servers (SMTP) dialog, select one of the following options and complete the steps:
   - Option one: Use a server already in use by Email.
     Select **Use a server already in use by Email**, and then click Next.
   - Option two: Search the network for the outgoing email server.
     This option finds outgoing SMTP servers inside your firewall only.
1. Select Search network for outgoing email server, and then click Next.

2. Select the appropriate server from the Configure Email Server (SMTP) list, and then click Next.

3. Select the option that describes the server’s authentication requirements:
   - Server does not require authentication: Select Server does not require authentication, and then click Next.
   - Server requires authentication: From the drop-down list, select an authentication option:
     - Select Use credentials of user to connect after Sign in at the control panel, and then click Next.
     - OR-
     - Select Always use these credentials, enter the User name and Password, and then click Next.

4. Option three: Add the SMTP server.
   1. Select Add SMTP server.
   2. Enter the Server Name and Port Number, and then click Next.

   **NOTE:** In most cases, the default port number does not need to be changed.

   **NOTE:** If you are using a hosted SMTP service such as Gmail, verify the SMTP address, port number, and SSL settings from the service provider's website or other sources. Typically, for Gmail, the SMTP address is smtp.gmail.com, port number 465, and the SSL should be enabled.

   Please refer to online sources to confirm these server settings are current and valid at the time of configuration.

3. Select the appropriate server authentication option:
   - Server does not require authentication: Select Server does not require authentication, and then click Next.
   - OR-
   - Server requires authentication: Select an option from the Server requires authentication drop-down list:
     - Select Use credentials of user to connect after Sign in at the control panel, and then click Next.
     - OR-
     - Select Always use these credentials, enter the User name and Password, and then click Next.

5. On the Configure Email Settings dialog, enter the following information about the sender’s email address, and then click Next.

   **NOTE:** When setting up the From, Subject, and Message fields, if the User editable check box is unchecked, users will not be able to edit those fields at the printer control panel when sending an email.
Table 6-20  Send email settings

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
</table>
| From (Required) | Select one of the following options from the From drop-down list:  
  - User’s address (sign-in required)  
  - Default From: Enter a default email address and display name in the Default From Email Address and Default Display Name fields  
  **NOTE:** Create an email account for the printer, and use this address for the default email address.  
  **NOTE:** Configure the email feature so that users must sign in before using it. This prevents users from sending an email from an address that is not their own. |
| Subject (Optional) | Provide a default subject line for the email messages. |
| Message (Optional) | Create a custom message.  
  To use this message for all emails sent from the printer, clear the User editable check box for Message. |

6. In the **Configure File Scan Settings** area, set the default scanning preferences, and then click **Next**.

Table 6-21  Scan settings

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
</table>
| File Type | Select the default file type for the scanned document:  
  - PDF  
  - JPEG  
  - TIFF  
  - MTIFF  
  - XPS  
  - PDF/A  
  HP LaserJet Enterprise Flow MFP printers or MFP printers that are connected to a digital send software (DSS) server also support the following OCR file types:  
  - Text (OCR)  
  - Unicode Text (OCR)  
  - RTF (OCR)  
  - Searchable PDF (OCR)  
  - Searchable PDF/A (OCR)  
  - HTML (OCR)  
  - CSV (OCR) |
Table 6-21  Scan settings (continued)

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color/Black</td>
<td>Select the default color setting for the scanned document:</td>
</tr>
<tr>
<td></td>
<td>● Color</td>
</tr>
<tr>
<td></td>
<td>● Black</td>
</tr>
<tr>
<td></td>
<td>● Black/Gray</td>
</tr>
<tr>
<td></td>
<td>● Automatically detect</td>
</tr>
<tr>
<td>Quality and File Size</td>
<td>Select the default output quality for the scanned document:</td>
</tr>
<tr>
<td></td>
<td>● Low (small file)</td>
</tr>
<tr>
<td></td>
<td>● Medium</td>
</tr>
<tr>
<td></td>
<td>● High (large file)</td>
</tr>
<tr>
<td>Resolution</td>
<td>Select the default scan resolution for the scanned document:</td>
</tr>
<tr>
<td></td>
<td>● 75 dpi</td>
</tr>
<tr>
<td></td>
<td>● 150 dpi</td>
</tr>
<tr>
<td></td>
<td>● 200 dpi</td>
</tr>
<tr>
<td></td>
<td>● 300 dpi</td>
</tr>
<tr>
<td></td>
<td>● 400 dpi</td>
</tr>
<tr>
<td></td>
<td>● 600 dpi</td>
</tr>
</tbody>
</table>

7. Review the **Summary** area, and then click **Finish** to complete the setup.

**Method two: Advanced configuration using the Email Setup**

Use the following steps for advanced configuration using the **E-mail Setup** dialog.

1. Using the EWS top navigation tabs, click **Scan/Digital Send**, expand the **Email Setup** menu in the left navigation pane, and then click **Default Job Options**.

   The **Default Job Options** page displays the **Basic Settings** for Scan to Email setup. To access additional settings, click the **Advanced Settings** button at the bottom of the page. To switch back to basic settings, click the **Basic Settings** button.

   **NOTE:** This procedure covers the steps for **Basic Settings** first and then the steps for **Advanced Settings**.
2. On the Default Job Options page, select the Enable Scan to Email check box. If this check box is not selected, the feature is unavailable at the printer control panel.

3. In the Outgoing Email Servers (SMTP) area, complete the steps for one of the following options:
   - Select one of the displayed servers.
   - Click Add to start the SMTP wizard.
   1. In the SMTP wizard, select one of the following options:
- **Option one:** I know my SMTP server address or host name: Enter the address of an SMTP server, and then click Next.

- **Option two:** If you do not know the address of the SMTP server, select Search network for outgoing email server, and then click Next. Select the server, and then click Next.

**NOTE:** If an SMTP server was already created for another printer function, the **Use a server already in use by another function** option displays. Select this option, and then configure it to be used for the email function.

2. On the **Set the basic information necessary to connect to the server** dialog, set the options to use, and then click Next.

   - Some servers have problems sending or receiving emails that are larger than 5 megabytes (MB). These problems can be prevented by entering a number in Split emails if larger than (MB).

   - In most cases, the default port number does not need to be changed. However, when using the Enable SMTP SSL Protocol option, port 587 must be used.

   - If you are using Google™ Gmail for email service, select the Enable SMTP SSL Protocol check box. Typically, for gmail, the SMTP address is smtp.gmail.com, port number 465, and the SSL should be enabled. Refer to online sources to confirm these server settings are current and valid at the time of configuration.

3. On the **Server Authentication Requirements** dialog, select the option that describes the server’s authentication requirements:

   - **Server does not require authentication**, and then click Next.

   - **Server requires authentication**
     - From the drop-down box, select Use credentials of user to connect after Sign In at the control panel, and then click Next.
     - From the drop-down box, select Always use these credentials, enter the Username and Password, and then click Next.

**NOTE:** If using a signed-in user’s credentials, set email to require sign in by the user on the printer control panel. Deny device guest access to email by clearing the check box for email in the Device Guest column in the Sign in and Permission Policies area on the Access Control dialog of the Security tab. The icon in the check box changes from a check mark to a lock.

4. On the **Server Usage** dialog, choose the printer functions that will send email through this SMTP server, and then click the Next button.

   If the server requires authentication, a user name and password for sending automatic alerts and reports from the printer will be required.

5. On the **Summary and Test** dialog, enter a valid email address in the Send test email to: field, and then click Test.

6. Verify that all of the settings are correct, and then click Finish to complete the outgoing email server set up.

4. In the **Address and Message Field Control** area, enter a From: setting and any of the other optional settings.
### Table 6-22 Address and Message Field Control (Basic Settings)

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>User editable</td>
<td>To use the Default From address and Default Display Name for all emails sent from this printer (unless a user is signed in), clear the User editable check box.</td>
</tr>
<tr>
<td></td>
<td>When setting up the address fields, if the User editable check box is cleared, users will not be able to edit those fields at the printer control panel when sending an email. For send-to-me functionality, clear the User editable check boxes for all of the address fields, including the From, To, CC, and BCC fields, and then set that user’s send email From: their own email address and To: their own email address.</td>
</tr>
<tr>
<td>Default From: and Default Display Name:</td>
<td>Provide an email address and name to use for the From: address for the email message.</td>
</tr>
<tr>
<td></td>
<td><strong>NOTE:</strong> Create an email account for the printer, and use this address for the default email address.</td>
</tr>
<tr>
<td></td>
<td><strong>NOTE:</strong> Configure the email feature so that users must sign in before using it. This prevents users from sending an email from an address that is not their own.</td>
</tr>
<tr>
<td>Subject:</td>
<td>Provide a default subject line for the email messages.</td>
</tr>
<tr>
<td>Message:</td>
<td>Create a custom message. To use this message for all emails sent from the printer, clear or do not select the User editable check box for Message.</td>
</tr>
</tbody>
</table>

### Table 6-23 Address and Message Field Control (Advanced Settings - optional)

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Address Field Restrictions</td>
<td>Specify whether users must select an email address from an address book or whether users are allowed to enter an email address manually.</td>
</tr>
<tr>
<td></td>
<td><strong>CAUTION:</strong> If Users must select from address book is selected, and any of the address fields are also set as User editable, changes to those editable fields also change the corresponding values in the address book.</td>
</tr>
<tr>
<td></td>
<td>To prevent users from changing contacts in the Address Book at the printer control panel, go to the Access Control page on the Security tab, and deny Device Guest access to address book modifications.</td>
</tr>
<tr>
<td>Allow invalid email address formats</td>
<td>Select to allow an invalid email address format.</td>
</tr>
<tr>
<td>To:</td>
<td>Provide a To (recipient) email address for emails.</td>
</tr>
<tr>
<td>CC:</td>
<td>Provide a CC email address for emails.</td>
</tr>
<tr>
<td>BCC:</td>
<td>Provide a BCC email address for emails.</td>
</tr>
</tbody>
</table>

5. In the File Settings area, set the default file settings preferences.

### Table 6-24 File Settings (Basic Settings)

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>File Name</td>
<td>Default file name for the file to be saved. Select the User editable check box to make this setting editable at the printer control panel.</td>
</tr>
<tr>
<td>File Type</td>
<td>Select the file format for the saved file. Select the User editable check box to make this setting editable at the printer control panel.</td>
</tr>
</tbody>
</table>
Table 6-24  File Settings (Basic Settings) (continued)

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resolution</td>
<td>Set the resolution for the file. Higher resolution images have more dots per inch (dpi), so they show more detail. Lower resolution images have fewer dots per inch and show less detail, but the file size is smaller.</td>
</tr>
<tr>
<td>Quality and File Size</td>
<td>Select the quality for the file. Higher-quality images require a larger file size than lower-quality images, and they take more time to send.</td>
</tr>
<tr>
<td>Color/Black</td>
<td>Specify whether copies are to be printed in color, black and gray, or black only.</td>
</tr>
</tbody>
</table>

Table 6-25  File settings (Advanced Settings - optional)

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>File Name Prefix</td>
<td>Set the default file name prefix used for files saved to a network folder.</td>
</tr>
<tr>
<td>File Name Suffix</td>
<td>Set the default file name suffix used for files saved to a network folder. Duplicate filename suffix default [filename]_YYYYMMDDT</td>
</tr>
<tr>
<td>File Name Preview</td>
<td>Enter a file name, and then click the Update Preview button.</td>
</tr>
<tr>
<td>File Numbering Format</td>
<td>Select a file name format for when the job is divided into multiple files.</td>
</tr>
<tr>
<td>Add numbering when job has just one file (ex. _1–1)</td>
<td>Select this setting to add numbering to a file name when the job is only one file instead of multiple files.</td>
</tr>
<tr>
<td>High Compression (smaller file)</td>
<td>Select this setting to compress the scanned file, which reduces the file size. However, the scanning process for a High compression file might take longer than for a Normal compression file.</td>
</tr>
<tr>
<td>PDF encryption</td>
<td>If the file type is PDF, then this option encrypts the output PDF file. A password must be specified as part of the encryption. The same password must be used to open the file. The user will be prompted to enter a password prior to scanning their job if one has not been set prior to pressing start.</td>
</tr>
<tr>
<td>Suppress blank pages</td>
<td>If the Suppress blank pages option is enabled, blank pages will be ignored.</td>
</tr>
<tr>
<td>Create Multiple Files</td>
<td>Select this setting to scan pages into separate files based on a predetermined maximum number of pages per file.</td>
</tr>
</tbody>
</table>

6. Click the Advanced Settings button to display the following settings:
   - Signing and Encryption
   - Notification (job notification)
   - Scan Settings

7. In the Signing and Encryption area, set the signing and encryption preferences.

Table 6-26  Signing and Encryption settings

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Signing</td>
<td>Select whether to sign the email with a security certificate. Select the User editable check box to make this setting editable at the printer control panel.</td>
</tr>
<tr>
<td>Hashing Algorithm</td>
<td>Select the algorithm to use for signing the certificate.</td>
</tr>
</tbody>
</table>
Table 6-26  Signing and Encryption settings (continued)

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Encryption</td>
<td>Select whether to encrypt the email.</td>
</tr>
<tr>
<td></td>
<td>Select the User editable check box to make this setting editable at the printer control panel.</td>
</tr>
<tr>
<td>Encryption Algorithm</td>
<td>Select the algorithm to use for encrypting the email.</td>
</tr>
<tr>
<td>Attribute for Recipient Public Key</td>
<td>Enter which attribute to use to retrieve the recipient’s public key certificate from LDAP.</td>
</tr>
<tr>
<td>Use the recipient public key certificate to verify the recipient</td>
<td>Select this setting to use the recipient’s public key certificate to verify the recipient.</td>
</tr>
</tbody>
</table>

8. In the Notification area, select when users will receive notifications about sent emails. The default setting is using the signed in user’s email address. If the recipient email address is blank, no notification is sent.

9. In the Scan Settings area, set the default scanning preferences.

Table 6-27  Scan Settings

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Original Size</td>
<td>Select the page size of the original document.</td>
</tr>
<tr>
<td>Original Sides</td>
<td>Select whether the original document is single-sided or double-sided.</td>
</tr>
<tr>
<td>Optimize Text/Picture</td>
<td>Select to optimize the output of a particular type of content.</td>
</tr>
<tr>
<td>Content Orientation</td>
<td>Select the way the content of the original document is placed on the page: Portrait or Landscape.</td>
</tr>
<tr>
<td>Background Cleanup</td>
<td>Select a value to remove faint images from the background or to remove a light background color.</td>
</tr>
<tr>
<td>Darkness</td>
<td>Select a value to adjust the darkness of the file.</td>
</tr>
<tr>
<td>Contrast</td>
<td>Select a value to adjust the contrast of the file.</td>
</tr>
<tr>
<td>Sharpness</td>
<td>Select a value to adjust the sharpness of the file.</td>
</tr>
<tr>
<td>Image Preview</td>
<td>Select whether to require or make optional a displayed preview of the job or to disable a preview.</td>
</tr>
<tr>
<td>Cropping Options</td>
<td>Select whether or not to allow a job to be cropped and the type of cropping option.</td>
</tr>
<tr>
<td>Erase Edges</td>
<td>Select this setting to specify the width of edge margins to be erased, in either inches or millimeters, for the front side and back side of a job.</td>
</tr>
</tbody>
</table>

10. Review the selected options to verify that they are accurate, and then click Apply to complete the setup.

Step three: Configure the Quick Sets (optional)

Quick Sets are optional short-cut jobs that can be accessed on the main Home screen or within the Quick Sets application at the printer. Use the following procedure to configure the Quick Sets.

1. In the Email Setup area of the left navigation pane, click Quick Sets.

2. Select one of the following options:
   * Select an existing Quick Set under Quick Sets Application in the table.
   * -OR-
   * Click Add to start the Quick Set Wizard.
3. If you selected Add, the Quick Sets Setup page opens. Complete the following information:
   - **Quick Set Name**: Enter a title for the new Quick Set.
   - **Quick Set Description**: Enter a description of the Quick Set.
   - **Quick Set Start Option**: To set how the Quick Set starts, click either Enter application, then user presses Start or Start instantly when selected from the Home Screen.

4. Define the following settings for the Quick Set: Address and Message Field Control, Signing and Encryption, Notification, Scan Settings, File Settings.

5. Click **Finish** to save the Quick Set.
Step four: Set up Scan to Email to use Office 365 Outlook (optional)

Enable the printer to send an email with an Office 365 Outlook account from the control panel.

- **Introduction**
- **Configure the outgoing email server (SMTP) to send an email from an Office 365 Outlook account**

**Introduction**

Microsoft Office 365 Outlook is a cloud-based email system provided by Microsoft which uses Microsoft's Simple Mail Transfer Protocol (SMTP) server to send or receive emails. Complete the following to enable the printer to send an email with an Office 365 Outlook account from the control panel.

**NOTE:** You must have an email address account with Office 365 Outlook to configure the settings in the EWS.

**Configure the outgoing email server (SMTP) to send an email from an Office 365 Outlook account**

Configure the outgoing email server using the following procedure.

1. Using the EWS top navigation tabs, click **Networking**.
2. In the left navigation pane, click **TCP/IP Settings**.
3. In the **TCP/IP Settings** area, click the **Network Identification** tab.
4. If DNS is required on the network, in the **TCP/IP Domain Suffix** area, verify that the DNS suffix for the email client being used is listed. DNS suffixes have this format: `companyname.com`, `Gmail.com`, etc.

**NOTE:** If the Domain Name suffix is not set up, use the IP address.

5. Click **Apply**.
6. Click the **Scan/Digital Send** tab.
7. On the left navigation pane, click **Email Setup**.
8. On the Email Setup page, select the **Enable Scan to Email** check box. If this check box is not available, the feature is unavailable at the printer control panel.

![Email Setup page](image)

9. In the **Outgoing Email Servers (SMTP)** area, click **Add** to start the SMTP wizard.

10. In the **I know my SMTP server address or host name** field, type `smtp.onoffice.com`, and then click **Next**.

11. On the **Set the basic information necessary to connect to the server** dialog, in the **Port Number** field, type `587`.

   **NOTE:** Some servers have problems sending or receiving emails that are larger than 5 megabytes (MB). These problems can be prevented by entering a number in **Split emails if larger than (MB)**.

12. Select the **Enable SMTP SSL Protocol** check box, and then click **Next**.

13. On the **Server Authentication Requirements** dialog, complete the following information:
   a. Select **Server requires authentication**.
   b. From the drop-down list, select **Always use these credentials**.
   c. In the **Username** field, type the Office 365 Outlook email address.
   d. In the **Password** field, type the Office 365 Outlook account password, and then click **Next**.

14. On the **Server Usage** dialog, choose the printer functions that will send email through this SMTP server, and then click the **Next** button.

15. On the **Summary and Test** dialog, enter a valid email address in the **Send a test email to:** field, and then click **Test**.

16. Verify that all of the settings are correct, and then click **Finish** to complete the outgoing email server setup.
### Set up Scan to Network Folder

Learn how to set up the Scan to Network Folder feature.

- **FutureSmart 3**
- **FutureSmart 4**

**NOTE:** The steps vary according to the type of control panel.

<table>
<thead>
<tr>
<th>Table 6-28 Control panels</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Firmware Version</strong></td>
</tr>
<tr>
<td>FutureSmart 3</td>
</tr>
<tr>
<td>FutureSmart 4</td>
</tr>
</tbody>
</table>
FutureSmart 3

Use the following steps for FutureSmart 3.

- Introduction
- Before you begin
- Set up Save to Network Folder

Introduction

This document explains how to enable and configure the Scan to Network Folder function. The printer has a feature that enables it to scan a document and save it to a network folder. To use this scan feature, the printer must be connected to a network; however, the feature is not available until it has been configured. There are two methods for configuring Scan to Network Folder, the Save to Network Folder Quick Set Wizard for basic setup and Save to Network Folder Setup for advanced setup.

Before you begin

Review the following information before you set up the Scan to Network Folder feature.

NOTE: To set up the Scan to Network Folder feature, the printer must have an active network connection. Administrators need the following items before beginning the configuration process.

- Administrative access to the printer
- The fully-qualified domain name (FQDN) (e.g., \servername.us.companyname.net\scans) of the destination folder OR the IP address of the server (e.g., \16.88.20.20\scans).

NOTE: The use of the term “server” in this context refers to the computer where the shared folder resides.

NOTE: The network folder must be set up as a shared folder for the Scan to Network Folder feature to work. For more information about setting up a shared folder, see Set up a shared folder (c04431534).

View a video demonstration on how to set up the Scan to Network feature on FutureSmart 3 printers
Set up Save to Network Folder

Use one of the following methods to set up Save to Network Folder.

- Method one: Use the Save to Network Folder Wizard
- Method two: Use Scan to Network Folder Setup

Method one: Use the Save to Network Folder Wizard

This option opens the setup wizard that is in the HP Embedded Web Server (EWS) for the printer. The setup wizard includes the options for basic configuration.

**NOTE:** Before you begin: To display the printer’s IP address or host name, touch the Network button on the printer’s control panel.

1. Click the Scan/Digital Send tab. The E-mail and Save to Network Folder Quick Setup Wizards dialog opens.
2. Click the Save to Network Folder Quick Set Wizard link.
3. On the Add or Remove a Save to Network Folder Quick Set dialog, click Add.

**NOTE:** Quick Sets are short-cut jobs that can be accessed on the printer Home screen or within the Quick Sets application.

**NOTE:** The Save to Network Folder feature can be minimally configured without creating a quick set. However, without the quick set, users must enter the destination folder information at the control panel for each scan job. A quick set is required to include Save to Network Folder metadata.

4. On the Add Folder Quick Set dialog, complete the following information:

   a. In the Quick Set Title field, type a title.
      
      **NOTE:** Name the Quick Set something that users can understand quickly (e.g., “Scan and save to a folder”).

   b. From the Button Location drop-down, select one of the following options to indicate where the Quick Set button will display on the product control panel:
      
      - Quick Sets Application
      - Home Screen

   c. In the Quick Set Description field, type a description explaining what the Quick Set will save.

   d. Click Next.

5. On the Configure Destination Folder dialog, complete the following information:

   a. In the UNC Folder Path field, type a folder path where the scan will go.
      
      The folder path can either be the fully-qualified domain name (FQDN) or the IP address of the server. Be sure that the folder path (e.g., \scans) follows the FQDN or IP address.

      FQDN example: \servername.us.companyname.net\scans
      IP address example: \16.88.20.20\scans
NOTE: The FQDN can be more reliable than the IP address. If the server gets its IP address via DHCP, the IP address can change. However, the connection with an IP address might be faster because the printer does not need to use DNS to find the destination server.

b. From the Authentication Settings drop-down, select one of the following options:

- Use credentials of user to connect after Sign In at the control panel
- Always use these credentials

NOTE: If Always use these credentials is selected, a user name and password must be entered in the corresponding fields, and the printer’s access to the folder must be verified by clicking Verify Access.

c. In the Windows Domain field, type the Windows domain.

NOTE: To find the Windows domain in Windows 7, click Start, click Control Panel, click System. To find the Windows domain in Windows 8, click Search, enter System in the search box, and then click System. The domain is listed under Computer name, domain, and workgroup settings.

d. Click Next.

6. On the Configure File Scan Settings dialog, set the default scanning preferences for the Quick Set, and then click Next.

7. Review the Summary dialog, and then click Finish.

8. On the Save to Network Folder Setup dialog, review the selected settings, and then click Finish to complete the setup.
Method two: Use Scan to Network Folder Setup

This option enables advanced configuration of the Save to Network Folder feature using the HP Embedded Web Server (EWS) for the printer.

- **Step one: Begin the configuration**
- **Step two: Configure the Save to Network Folder settings**
- **Step three: Complete the configuration**

**NOTE:** Before you begin: To display the printer’s IP address or host name, touch the Network button on the printer’s control panel.

**Step one: Begin the configuration**

Use the following steps to begin the **Save to Network Folder Setup** setup.

1. Click the **Scan/Digital Send** tab.
2. On the left navigation menu, click the **Save to Network Folder Setup** link.
Step two: Configure the Save to Network Folder settings

Configure the Save to Network Folder settings as follows.

- Start the Quick Set Wizard
- Dialog one: Set the button location for the Quick Set and options for user interaction at the control panel
- Dialog two: Folder Settings
- Dialog three: Notification settings
- Dialog four: Scan Settings
- Dialog five: File Settings
- Dialog six: Summary

Start the Quick Set Wizard

Use the following steps to navigate to and start the Quick Set Wizard.

1. On the Save to Network Folder Setup dialog, select the Enable Save to Network Folder check box. If this box is not selected, the feature is unavailable at the printer control panel.

2. In the Quick Sets area, click Add. The Quick Set Wizard opens.

**NOTE:** Quick Sets are short-cut jobs that can be accessed on the printer Home screen or within the Quick Sets application.

**NOTE:** The Save to Network Folder feature can be minimally configured without creating a quick set. However, without the quick set, users must enter the destination folder information at the control panel for each scan job. A quick set is required to include Save to Network Folder metadata.

Complete all of the dialogs in the Quick Set Wizard to fully configure the Save to Network Folder feature.

Dialog one: Set the button location for the Quick Set and options for user interaction at the control panel

Use this dialog to configure where the Quick Set button will display on the printer control panel and to configure the level of user interaction at the printer control panel.

1. In the Quick Set Title field, type a title.

**NOTE:** Name the Quick Set something that users can understand quickly (e.g., “Scan and save to a folder”).

2. From the Button Location list, select one of the following to indicate where the Quick Set button will display on the product control panel:
   - Quick Sets Application
   - Home Screen

3. In the Quick Set Description field, type a description explaining what the Quick Set will save.

4. From the Quick Set Start Option list, select one of the following options:
   - Option one: Enter application, then user presses Start
   - Option two: Start instantly upon selection
Select one of the following options under **Original Sides Prompt**:

- Use application default
- Prompt for original sides

**NOTE:** If **Start instantly upon selection** is selected, the destination folder must be entered in the next step.

5. Click **Next**.
Dialog two: Folder Settings

Use the Folder Settings dialog to configure the types of folders the printer sends scanned documents to.

- Configure the destination folder for scanned documents
- Select the destination folder permissions

There are two types of destination folders to select from:

- Shared folders or FTP folders
- Personal shared folders

There are two types of folder permissions to select from:

- Read and write access
- Write access only

The following information describes how to configure the folder settings.

Quick Set Wizard

- Standard shared folders are a simple UNIX path without any variables. Personal shared folder paths are retrieved after a user signs in. An example would be a user’s home folder specified in Microsoft Active Directory.
- Save to shared folders or FTP folders
  - Click Add to create a destination
  - Save to a personal shared folder
  - Requires user sign-in and information specific to the user to create folder path.
- Send only to folders with read and write access
  - This option supports folder verification and job notifications.
- Verify folder access prior to job start
  - When unchecked, users can save jobs more quickly but jobs may fail if the folder is unavailable.
- Allow sending to folders with write access only
  - This option does not support folder verification or job notifications.
Configure the destination folder for scanned documents

Use one of the following options to configure the destination folder.

- Option 1: Shared folders or FTP folders
- Option 2: Personal shared folders

Option 1: Shared folders or FTP folders

To save scanned documents to shared folders or FTP folders, complete the following steps:

1. If it is not already selected, select Save to shared folders or FTP folders.
2. Click Add... The Add Network Folder Path dialog opens.
3. On the Add Network Folder Path dialog, select one of the following options:
   - Option one: Save to a standard shared network folder

![Quick Set Wizard](image)

**NOTE:** For more information about creating shared network folders see Set up a shared folder (c04431534).

1. If it is not already selected, select Save to a standard shared network folder.
2. In the UNC Folder Path field, type a folder path.
   
   The folder path can either be the fully-qualified domain name (FQDN) or the IP address of the server. Be sure that the folder path (e.g., \scans) follows the FQDN or IP address.
   
   FQDN example: \servername.us.companyname.net\scans
   
   IP address example: \16.88.20.20\scans

   **NOTE:** The FQDN can be more reliable than the IP address. If the server gets its IP address via DHCP, the IP address can change. However, the connection with an IP address might be faster because the printer does not need to use DNS to find the destination server.

3. To automatically create a subfolder for scanned documents in the destination folder, select a format for the subfolder name from the Custom Subfolder list.
To restrict the subfolder access to the user who creates the scan job, select **Restrict subfolder access to user**.

4. To view the complete folder path for scanned documents, click **Update Preview**.

5. From the **Authentication Settings** list, select one of the following options:
   - Use credentials of user to connect after Sign In at the control panel
   - Always use these credentials

   **NOTE:** If **Always use these credentials** is selected, a user name and password must be entered in the corresponding fields.

6. In the **Windows Domain** field, type the Windows domain.

   **NOTE:** To find the Windows domain in Windows 7, click **Start**, click **Control Panel**, click **System**.
   
   To find the Windows domain in Windows 8, click **Search**, enter **System** in the search box, and then click **System**.
   
   The domain is listed under **Computer name, domain, and workgroup settings**.

   **NOTE:** If a shared folder is set to be accessed by everyone, values for a workgroup name (default is "Workgroup"), a user name and password must be entered in the corresponding fields. However, if the folder is within a particular user’s folders and not Public, the user name and password of that user must be used.

   **NOTE:** An IP address might be necessary instead of a computer name. Many home routers do not handle computer names well, and there is no Domain Name Server (DNS). In this case, it is best to set up a static IP address on the shared PC to alleviate the problem of DHCP assigning a new IP address. On a typical home router, this is done by setting a static IP address that is on the same subnet, but outside the DHCP address range.

7. Click **OK**.

   ● **Option two:** **Save to an FTP Server**
NOTE: If an FTP site is outside the firewall, a proxy server must be specified under the network settings. These settings are located in the EWS Networking tab, under the Advanced options.

1. Select Save to an FTP Server.
2. In the FTP Server field, type the FTP server name or IP address.
3. In the Port field, type the port number.

NOTE: In most cases, the default port number does not need to be changed.

4. To automatically create a subfolder for scanned documents in the destination folder, select a format for the subfolder name from the Custom Subfolder list.
5. To view the complete folder path for scanned documents, click Update Preview.
6. From the FTP Transfer Mode list, select one of the following options:
   - Passive
   - Active
7. In the Username field, type the user name.
8. In the Password field, type the password.
9. Click Verify Access to confirm the destination can be accessed.
10. Click OK.

Option 2: Personal shared folders

To save scanned documents to a personal shared folder, complete the following steps:

NOTE: This option is used in domain environments where the administrator configures a shared folder for each user. If the Save to a personal shared folder feature is configured, users will be required to sign in at the printer control panel using Windows credentials or LDAP authentication.

1. Select Save to a personal shared folder.
2. In the Retrieve the device user's home folder using this attribute field, type the user’s home folder in the Microsoft Active Directory.

NOTE: Verify that the user knows where this home folder is located on the network.

3. To add a user name subfolder at the end of the folder path, select Create subfolder based on user name.
   To restrict the subfolder access to the user who creates the scan job, select Restrict subfolder access to user.
Select the destination folder permissions

Use one of the following options to select the destination folder permissions.

- Option 1: Read and write access
- Option 2: Write access only

Option 1: Read and write access

To send scanned documents to a folder configured for read and write access, complete the following steps:

**NOTE:** Send only to folders with read and write access supports folder verification and job notification

1. If it is not already selected, select Send only to folders with read and write access.
2. To require the printer to verify folder access before starting a scan job, select Verify folder access prior to job start.

**NOTE:** Scan jobs can complete more quickly if Verify folder access prior to job start is not selected; however, if the folder is unavailable, the scan job will fail.

3. Click Next.

Option 2: Write access only

To send scanned documents to a folder configured for write access only, complete the following steps:

**NOTE:** Allow sending to folders with write access only does not support folder verification or job notification

**NOTE:** If this option is selected, the printer cannot increment the scan filename. It sends the same filename for all scans.

Select a time-related filename prefix or suffix for the scan filename, so that each scan is saved as a unique file, and does not overwrite a previous file. This filename is determined by the information in the File Settings dialog in the Quick Set Wizard.

1. Select Allow sending to folders with write access only.
2. Click Next.

Dialog three: Notification settings

Learn how to configure Notification settings.

▲ On the Notification Settings dialog, complete one of the following tasks:

**NOTE:** In order to send notification emails, the printer must be set up to use an SMTP server for sending email jobs. For more information about setting up the SMTP server for sending emails see Set up Scan to Email (c04017973).

- Option one: Do not notify
  1. Select Do not notify.
  2. To prompt the user to review their notification settings, select Prompt user prior to job start, and then click Next.
- Option two: Notify when job completes
1. Select **Notify when job completes**.

2. Select the method for delivering the notification from the **Method Used to Deliver Notification** list.

   If the method of notification selected is **E-mail**, type the email address in the **Notification E-mail Address** field.

3. To include a thumbnail of the first scanned page in the notification, select **Include Thumbnail**.

4. To prompt the user to review their notification settings, select **Prompt user prior to job start**, and then click **Next**.

- Option three: **Notify only if job fails**

  1. Select **Notify only if job fails**.

  2. Select the method for delivering the notification from the **Method Used to Deliver Notification** list.

   If the method of notification selected is **E-mail**, type the email address in the **Notification E-mail Address** field.

  3. To include a thumbnail of the first scanned page in the notification, select **Include Thumbnail**.

  4. To prompt the user to review their notification settings, select **Prompt user prior to job start**, and then click **Next**.

**Dialog four: Scan Settings**

Learn about the Scan Settings.

On the **Scan Settings** dialog, set the default scanning preferences for the Quick Set, and then click **Next**.

**Table 6-29** Scan settings and descriptions

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Original Size</td>
<td>Select the page size of the original document.</td>
</tr>
<tr>
<td>Original Sides</td>
<td>Select whether the original document is single-sided or double-sided.</td>
</tr>
<tr>
<td>Optimize Text/Picture</td>
<td>Select to optimize for the output of a particular type of content, or select <strong>Manually adjust</strong>.</td>
</tr>
<tr>
<td>Optimize For</td>
<td>This setting is only available when <strong>Optimize Text/Picture</strong> is set to <strong>Manually adjust</strong>. Select a manual-adjust value.</td>
</tr>
<tr>
<td>Content Orientation</td>
<td>Select the way the content of the original document is placed on the page: <strong>Portrait</strong> or <strong>Landscape</strong>, or select <strong>Automatically detect</strong>.</td>
</tr>
<tr>
<td>2-Sided Format</td>
<td>This setting is not available when <strong>Content Orientation</strong> is set to <strong>Automatically detect</strong>. Select to describe the binding of the page to specify if the back side of the page is upside down or right side up.</td>
</tr>
<tr>
<td>Background Cleanup</td>
<td>Select a value to remove faint images from the background or to remove a light background color.</td>
</tr>
<tr>
<td>Darkness</td>
<td>Select a value to adjust the darkness of the file.</td>
</tr>
<tr>
<td>Contrast</td>
<td>Select a value to adjust the contrast of the file.</td>
</tr>
<tr>
<td>Sharpness</td>
<td>Select a value to adjust the sharpness of the file.</td>
</tr>
<tr>
<td>Image Preview</td>
<td>Select whether to require or make optional a displayed preview of the job or to disable a preview.</td>
</tr>
<tr>
<td>Cropping Options</td>
<td>Select whether or not to allow a job to be cropped and the type of cropping option.</td>
</tr>
</tbody>
</table>
### Table 6-29 Scan settings and descriptions (continued)

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job Build</td>
<td>Select this setting to combine several sets of original documents into one email attachment. Also, use this setting to scan an original document that has more pages than the document feeder can accommodate at one time.</td>
</tr>
<tr>
<td>Automatic Tone</td>
<td>Select this setting to set to automatic the Darkness, Contrast, and Background cleanup settings, which then makes these settings unavailable on this page.</td>
</tr>
<tr>
<td>Multi-feed Detection</td>
<td>Select this setting to enable detection of multi-feed jobs.</td>
</tr>
<tr>
<td>Erase Edges</td>
<td>Select this setting to specify the width of edge margins to be erased, in either inches or millimeters, for the front side and back side of a job.</td>
</tr>
</tbody>
</table>

### Dialog five: File Settings

Learn about the File Settings.

On the File Settings dialog, set the default file settings for the Quick Set, and then click Next.

### Table 6-30 File settings and descriptions

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>File Name Prefix</td>
<td>Set the default file name prefix used for files saved to a network folder.</td>
</tr>
<tr>
<td>Default File Name</td>
<td>Default file name for the file to be saved. Select the User editable check box to make this setting editable at the printer control panel.</td>
</tr>
<tr>
<td>File Name Suffix</td>
<td>Set the default file name suffix used for files saved to a network folder.</td>
</tr>
<tr>
<td>File Number Format</td>
<td>Select a file name format for when the job is divided into multiple files.</td>
</tr>
<tr>
<td>Default File Type</td>
<td>Select the file format for the saved file. Select the User editable check box to make this setting editable at the printer control panel.</td>
</tr>
<tr>
<td>File Name Preview</td>
<td>Enter a file name, and then click the Update Preview button.</td>
</tr>
<tr>
<td>Default Color Preference</td>
<td>Select whether the file is in black &amp; white or in color.</td>
</tr>
<tr>
<td>Default Output Quality</td>
<td>Select the quality for the file. Higher-quality images require a larger file size than lower-quality images, and they take more time to send.</td>
</tr>
<tr>
<td>Default Resolution</td>
<td>Set the resolution for the file. Higher resolution images have more dots per inch (dpi), so they show more detail. Lower resolution images have fewer dots per inch and show less detail, but the file size is smaller.</td>
</tr>
<tr>
<td>Compression</td>
<td>Specify if the file uses Normal or High compression when saving a scanned document as a PDF or XPS file. If compression is set to High, the scanned file is smaller, but the scanning process might take longer than Normal compression.</td>
</tr>
<tr>
<td>Black TIFF Compression</td>
<td>Select the black TIFF compression algorithm to be used to compress the generated TIFF file.</td>
</tr>
<tr>
<td>Color/Grayscale TIFF Compression</td>
<td>Select the color/grayscale TIFF compression algorithm to be used to compress the generated TIFF file.</td>
</tr>
<tr>
<td>PDF encryption</td>
<td>If the file type is PDF, then this option encrypts the output PDF file. A password must be specified as part of the encryption. The same password must be used to open the file. The user will be prompted to enter a password prior to scanning their job if one has not been set prior to pressing start.</td>
</tr>
</tbody>
</table>
**Table 6-30  File settings and descriptions (continued)**

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disable OCR file types</td>
<td>Select this setting to prevent OCR file types from being available from the product control panel.</td>
</tr>
<tr>
<td>Enable Blank Page Suppression</td>
<td>If the Enable Blank Page Suppress option is enabled, blank pages will be ignored.</td>
</tr>
</tbody>
</table>

**Dialog six: Summary**

Review the summary of the Scan to Network setup.

On the **Summary** dialog, review the **Summary** dialog, and then click **Finish**.

**Step three: Complete the configuration**

Complete the **Save to Network Folder** setup as follows:

▲ On the **Save to Network Folder** dialog, review the selected settings, and then click **Apply** to complete the setup.
FutureSmart 4

Use the following steps for FutureSmart 4.

- Introduction
- Before you begin
- Set up Scan to Network Folder

Introduction

This document explains how to enable and configure the Scan to Network Folder function. The printer has a feature that enables it to scan a document and save it to a network folder. To use this scan feature, the printer must be connected to a network; however, the feature is not available until it has been configured.

There are two methods for configuring Scan to Network Folder, the Save to Network Folder Setup Wizard for basic setup and Save to Network Folder Setup for advanced setup.

View a video on how to set up the Scan to Network feature on FutureSmart 4 printers

Before you begin

Have the following items available before you set up the Scan to Network feature.

**NOTE:** To set up the Scan to Network Folder feature, the printer must have an active network connection.

Administrators need the following items before beginning the configuration process.

- Administrative access to the printer.
- The fully-qualified domain name (FQDN) (e.g., \servername.us.companyname.net\scans) of the destination folder OR the IP address of the server (e.g., \16.88.20.20\scans).

**NOTE:** The use of the term "server" in this context refers to the computer where the shared folder resides.
Set up Scan to Network Folder

Use one of the following methods to set up Scan to Network Folder.

- Method one: Use the Scan to Network Folder Wizard
- Method two: Use Scan to Network Folder Setup

**Method one: Use the Scan to Network Folder Wizard**

Use this option for basic configuration of the Save to Network Folder feature using the Scan to Network Folder wizard.

**NOTE:** Before you begin: To display the printer’s IP address or host name, touch the Information icon, and then touch the Network icon on the printer’s control panel.

1. Using the EWS top navigation tabs, click Scan/Digital Send tab. The Email and Scan to Network Folder Quick Setup Wizards dialog opens.
2. In the left navigation pane, click Email and Scan to Network Folder Quick Setup Wizards.
3. Click the Save to Network Folder Quick Set Wizard link.
4. On the Add or Remove a Save to Network Folder Quick Set dialog, click Add.

**NOTE:** Quick Sets are shortcut jobs that can be accessed on the printer Home screen or within the Quick Sets application.

**NOTE:** The Save to Network Folder feature can be minimally configured without creating a quick set. However, without the Quick Set, users must enter the destination folder information at the control panel for each scan job. A quick set is required to include Save to Network Folder metadata.

5. On the Add Folder Quick Set dialog, complete the following information:
   a. In the Quick Set Title field, type a title.
      **NOTE:** Name the Quick Set something that users can understand quickly (e.g., “Scan and save to a folder”).
   b. In the Quick Set Description field, type a description explaining what the Quick Set will save.
   c. Click Next.
6. On the Configure Destination Folder dialog, complete the following information:
   a. In the UNC Folder Path field, type a folder path where the scan will go.
      The folder path can either be the fully-qualified domain name (FQDN) or the IP address of the server. Be sure that the folder path (e.g., \scans) follows the FQDN or IP address.
      
      FQDN example: \servername.us.companyname.net\scans
      IP address example: \16.88.20.20\scans
      
      **NOTE:** The FQDN can be more reliable than the IP address. If the server gets its IP address via DHCP, the IP address can change. However, the connection with an IP address might be faster because the printer does not need to use DNS to find the destination server.
   b. From the Authentication Settings drop-down, select one of the following options:
- Use credentials of user to connect after Sign In at the control panel
- Always use these credentials

**NOTE:** If *Always use these credentials* is selected, a user name and password must be entered in the corresponding fields, and the printer’s access to the folder must be verified by clicking *Verify Access*.

c. In the **Windows Domain** field, type the Windows domain.

**TIP:** To find the Windows domain in Windows 7, click **Start**, click **Control Panel**, click **System**.

To find the Windows domain in Windows 8, click **Search**, enter **System** in the search box, and then click **System**.

The domain is listed under **Computer name, domain, and workgroup settings**.

d. Click **Next**.

7. On the **Configure File Scan Settings** dialog, set the default scanning preferences for the Quick Set, and then click **Next**.

8. Review the **Summary** dialog, and then click **Finish**.
**Method two: Use Scan to Network Folder Setup**

This option enables advanced configuration of the Save to Network Folder feature using the HP Embedded Web Server (EWS) for the printer.

- **Step one: Begin the configuration**
- **Step two: Configure the Scan to Network Folder settings**
- **Step three: Complete the configuration**

**NOTE:** Before you begin: To display the printer's IP address or host name, touch the Information icon, and then touch the Network icon on the printer's control panel.

**Step one: Begin the configuration**

Use the following steps to begin Scan to Network Folder setup.

1. Click the **Scan/Digital Send** tab.
2. In the left navigation pane, click **Scan to Network Folder Setup**.
Step two: Configure the Scan to Network Folder settings

Use the following procedure to complete Scan to Network Folder setup.

- **Step one: Begin the configuration**
- **Dialog one: Set the Quick Set name, description, and options for user interaction at the control panel**
- **Dialog two: Folder Settings**
- **Dialog three: Notification Settings**
- **Dialog four: Scan Settings**
- **Dialog five: File Settings**
- **Dialog six: Summary**

**Step one: Begin the configuration**

Use the following steps to begin configuration.

1. On the Scan to Network Folder Setup page, select the **Enable Scan to Network Folder** check box. If this box is not selected, the feature is unavailable at the printer control panel.

2. In the Scan to Network Folder area of the left navigation pane, click **Quick Sets**. Click **Add** to open the **Quick Sets Setup** dialog.

   **NOTE:** Quick Sets are shortcut jobs that can be accessed on the printer Home screen or within the Quick Sets application.

   **NOTE:** The Scan to Network Folder feature can be minimally configured without creating a Quick Set. However, without the Quick Set, users must enter the destination folder information at the control panel for each scan job. A Quick Set is required to include Scan to Network Folder metadata.

   Complete all of the settings in the Quick Set Setup to fully configure the Scan to Network Folder feature.

**Dialog one: Set the Quick Set name, description, and options for user interaction at the control panel**

Set the Quick Set details for user interaction at the printer's control panel.

Use the **Set the button location for the Quick Set and options for user interaction at the control panel** dialog to configure where the **Quick Set** button will display on the printer control panel and to configure the level of user interaction at the printer control panel.

1. In the **Quick Set Name** field, type a title.

   **NOTE:** Name the Quick Set something that users can understand quickly (e.g., “Scan and save to a folder”).

2. In the **Quick Set Description** field, type a description explaining what the Quick Set will save.

3. From the **Quick Set Start Option** list, select one of the following options:

   - Option one: **Enter application, then user presses Start**.
   - Option two: **Start instantly upon selection**.

   Select one of the following prompt options:
- Prompt for original sides
- Prompt for additional pages
- Require Preview

**NOTE:** If Start instantly upon selection is selected, the destination folder must be entered in the next step.

4. Click **Next**.
Dialog two: Folder Settings

Use the **Folder Settings** dialog to configure the types of folders the printer sends scanned documents to and the folder permissions.

- Configure the destination folder for scanned documents
- Select the destination folder permissions

There are two types of destination folders to select from:

- Shared folders or FTP folders
- Personal shared folders

There are two types of folder permissions to select from:

- Read and write access
- Write access only
Configure the destination folder for scanned documents

Select one of the following options to set up a destination folder.

- Option 1: Configure the printer to save to a shared folder or FTP folder
- Option 2: Configure the printer to save to a personal shared folder

Option 1: Configure the printer to save to a shared folder or FTP folder

To save scanned documents to a standard shared folder or an FTP folder, complete the following steps.

1. If it is not already selected, select Save to shared folders or FTP folders.
2. Click Add.... The Add Network Folder Path dialog opens.
3. On the Add Network Folder Path dialog, select one of the following options:
   - Option one: Save to a standard shared network folder.

   1. If it is not already selected, select Save to a standard shared network folder.
   2. In the UNC Folder Path field, type a folder path.
      
      The folder path can either be the fully-qualified domain name (FQDN) or the IP address of the server. Be sure that the folder path (e.g., \scans) follows the FQDN or IP address.
      
      FQDN example: \servername.us.companyname.net\scans
      
      IP address example: \16.88.20.20\scans

      **NOTE:** The FQDN can be more reliable than the IP address. If the server gets its IP address via DHCP, the IP address can change. However, the connection with an IP address might be faster because the printer does not need to use DNS to find the destination server.

   3. To automatically create a subfolder for scanned documents in the destination folder, select a format for the subfolder name from the Custom Subfolder list.
To restrict the subfolder access to the user who creates the scan job, select **Restrict subfolder access to user**.

4. To view the complete folder path for scanned documents, click **Update Preview**.

5. From the **Authentication Settings** list, select one of the following options:
   - Use credentials of user to connect after Sign in at the control panel
   - Always use these credentials

   **NOTE:** If **Always use these credentials** is selected, a user name and password must be entered in the corresponding fields.

6. In the **Windows Domain** field, type the Windows domain.

   **NOTE:** To find the Windows domain in Windows 7, click **Start**, click **Control Panel**, click **System**.

   To find the Windows domain in Windows 8, click **Search**, enter **System** in the search box, and then click **System**.

   The domain is listed under **Computer name, domain, and workgroup settings**.

   **NOTE:** If a shared folder is set to be accessed by everyone, values for a workgroup name (default is "Workgroup"), a user name, and password must be entered in the corresponding fields. However, if the folder is within a particular user’s folders and not Public, the user name and password of that user must be used.

   **NOTE:** An IP address might be necessary instead of a computer name. Many home routers do not handle computer names well, and there is no Domain Name Server (DNS). In this case, it is best to set up a static IP address on the shared PC to alleviate the problem of DHCP assigning a new IP address. On a typical home router, this is done by setting a static IP address that is on the same subnet, but outside the DHCP address range.

7. Click **OK**.

   - Option two: **Save to an FTP Server**.
NOTE: If an FTP site is outside the firewall, a proxy server must be specified under the network settings. These settings are located in the EWS Networking tab, under the Advanced options.

1. Select Save to an FTP Server.
2. In the FTP Server field, type the FTP server name or IP address.
3. In the Port field, type the port number.

NOTE: In most cases, the default port number does not need to be changed.

4. To automatically create a subfolder for scanned documents in the destination folder, select a format for the subfolder name from the Custom Subfolder list.
5. To view the complete folder path for scanned documents, click Update Preview.
6. From the FTP Transfer Mode list, select one of the following options:
   - Passive
   - Active
7. In the Username field, type the user name.
8. In the Password field, type the password.
9. Click Verify Access to confirm the destination can be accessed.
10. Click OK.

Option 2: Configure the printer to save to a personal shared folder

To save scanned documents to a personal shared folder, complete the following steps.
NOTE: This option is used in domain environments where the administrator configures a shared folder for each user. If the Save to a personal shared folder feature is configured, users will be required to sign in at the printer control panel using Windows credentials or LDAP authentication.

1. Select **Save to a personal shared folder**.

2. In the **Retrieve the device user’s home folder using this attribute** field, type the user’s home folder in the Microsoft Active Directory.

   **NOTE:** Verify that the user knows where this home folder is located on the network.

3. To add a user name subfolder at the end of the folder path, select **Create subfolder based on user name**.

   To restrict the subfolder access to the user who creates the scan job, select **Restrict subfolder access to user**.
Select the destination folder permissions

Select one of the following options to set up destination folder permissions.

- **Option 1**: Configure read and write access
- **Option 2**: Configure write access only

**Option 1: Configure read and write access**

To send scanned documents to a folder configured for read and write access, complete the following steps.

**NOTE:** Send only to folders with read and write access supports folder verification and job notification.

1. If it is not already selected, select **Send only to folders with read and write access**.
2. To require the printer to verify folder access before starting a scan job, select **Verify folder access prior to job start**.

**NOTE:** Scan jobs can complete more quickly if Verify folder access prior to job start is not selected; however, if the folder is unavailable, the scan job will fail.

3. Click **Next**.

**Option 2: Configure write access only**

To send scanned documents to a folder configured for write access only, complete the following steps.

**NOTE:** Allow sending to folders with write access only does not support folder verification or job notification.

**NOTE:** If this option is selected, the printer cannot increment the scan filename. It sends the same filename for all scans.

Select a time-related filename prefix or suffix for the scan filename, so that each scan is saved as a unique file, and does not overwrite a previous file. This filename is determined by the information in the **File Settings** dialog in the Quick Set Wizard.

1. Select **Allow sending to folders with write access only**.
2. Click **Next**.

**Dialog three: Notification Settings**

Use the **Notification Settings** dialog to configure when notifications will be sent.

▲ On the **Notification Settings** dialog, complete one of the following tasks:

- **Option one**: Do not notify.
  1. Select **Do not notify**.
  2. To prompt the user to review their notification settings, select **Prompt user prior to job start**, and then click **Next**.

- **Option two**: Notify when job completes.
1. Select **Notify when job completes**.

2. Select the method for delivering the notification from the **Method Used to Deliver Notification** list.

   If the method of notification selected is **Email**, type the email address in the **Notification Email Address** field.

3. To include a thumbnail of the first scanned page in the notification, select **Include Thumbnail**.

4. To prompt the user to review their notification settings, select **Prompt user prior to job start**, and then click **Next**.

   - Option three: **Notify only if job fails**.

   1. Select **Notify only if job fails**.

   2. Select the method for delivering the notification from the **Method Used to Deliver Notification** list.

      If the method of notification selected is **Email**, type the email address in the **Notification Email Address** field.

   3. To include a thumbnail of the first scanned page in the notification, select **Include Thumbnail**.

   4. To prompt the user to review their notification settings, select **Prompt user prior to job start**, and then click **Next**.

**Dialog four: Scan Settings**

Complete the scan settings as follows.

On the **Scan Settings** dialog, set the default scanning preferences for the Quick Set, and then click **Next**.

<table>
<thead>
<tr>
<th><strong>Table 6-31</strong> Scan settings</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Feature</strong></td>
</tr>
<tr>
<td><strong>Original Size</strong></td>
</tr>
<tr>
<td><strong>Original Sides</strong></td>
</tr>
<tr>
<td><strong>Optimize Text/Picture</strong></td>
</tr>
<tr>
<td><strong>Content Orientation</strong></td>
</tr>
<tr>
<td><strong>Background Cleanup</strong></td>
</tr>
<tr>
<td><strong>Darkness</strong></td>
</tr>
<tr>
<td><strong>Contrast</strong></td>
</tr>
<tr>
<td><strong>Sharpness</strong></td>
</tr>
<tr>
<td><strong>Image Preview</strong></td>
</tr>
<tr>
<td><strong>Cropping Options</strong></td>
</tr>
<tr>
<td><strong>Erase Edges</strong></td>
</tr>
</tbody>
</table>
Dialog five: File Settings

Complete the file settings as follows.

On the **File Settings** dialog, set the default file settings for the Quick Set, and then click **Next**.

**Table 6-32  File settings**

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>File Name Prefix</td>
<td>Set the default file name prefix used for files saved to a network folder.</td>
</tr>
<tr>
<td>File Name</td>
<td>Default file name for the file to be saved.</td>
</tr>
<tr>
<td></td>
<td>Select the <strong>User editable</strong> check box to make this setting editable at the printer control panel.</td>
</tr>
<tr>
<td>File Name Suffix</td>
<td>Set the default file name suffix used for files saved to a network folder.</td>
</tr>
<tr>
<td>File Name Preview</td>
<td>Enter a file name, and then click the <strong>Update Preview</strong> button.</td>
</tr>
<tr>
<td>File Numbering Format</td>
<td>Select a file name format for when the job is divided into multiple files.</td>
</tr>
<tr>
<td>Add numbering when job has just one file (ex. _1–1)</td>
<td>Select this setting to add numbering to a file name when the job is only one file instead of multiple files.</td>
</tr>
<tr>
<td>File Type</td>
<td>Select the file format for the saved file.</td>
</tr>
<tr>
<td></td>
<td>Select the <strong>User editable</strong> check box to make this setting editable at the printer control panel.</td>
</tr>
<tr>
<td>High Compression (smaller file)</td>
<td>Select this setting to compress the scanned file, which reduces the file size. However, the scanning process for a High compression file might take longer than for a Normal compression file.</td>
</tr>
<tr>
<td>PDF encryption</td>
<td>If the file type is PDF, then this option encrypts the output PDF file. A password must be specified as part of the encryption. The same password must be used to open the file. The user will be prompted to enter a password prior to scanning their job if one has not been set prior to starting the scan.</td>
</tr>
<tr>
<td>Resolution</td>
<td>Set the resolution for the file. Higher resolution images have more dots per inch (dpi), so they show more detail. Lower resolution images have fewer dots per inch and show less detail, but the file size is smaller.</td>
</tr>
<tr>
<td>Quality and File Size</td>
<td>Select the quality for the file. Higher-quality images require a larger file size than lower-quality images, and they take more time to send.</td>
</tr>
<tr>
<td>Color/Black</td>
<td>Specify whether copies are to be printed in color, black and gray, or black only.</td>
</tr>
<tr>
<td>Suppress blank pages</td>
<td>If the <strong>Suppress blank pages</strong> option is enabled, blank pages will be ignored.</td>
</tr>
<tr>
<td>Metadata File Format</td>
<td>Use the drop-down list to select the file format for metadata information.</td>
</tr>
<tr>
<td>Create Multiple Files</td>
<td>Select this setting to scan pages into separate files based on a predetermined maximum number of pages per file.</td>
</tr>
</tbody>
</table>

Dialog six: Summary

On the **Summary** dialog, review the **Summary** dialog, and then click **Finish**.

Step three: Complete the configuration

Use the following steps to complete Scan to Network Folder setup.

1. In the left navigation pane, click **Scan to Network Folder**.
2. On the Scan to Network Folder page, review the selected settings, and then click **Apply** to complete the setup.
Set up Scan to SharePoint

Learn how to set up the Scan to SharePoint feature.

- Video overview
- FutureSmart 3
- FutureSmart 4

**NOTE:** The steps vary according to the type of control panel.

<table>
<thead>
<tr>
<th>Table 6-33 Control panels</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Firmware Version</strong></td>
</tr>
<tr>
<td>FutureSmart 3</td>
</tr>
</tbody>
</table>

Video overview

View information about how to enable Scan to SharePoint.

View a video demonstration on how to enable Scan to SharePoint and create a Save to SharePoint Quick Set.
FutureSmart 3

Use the following steps for FutureSmart 3.

- **Introduction**
- **Before you begin**
- **Enable Save to SharePoint and create a Save to SharePoint Quick Set**
- **Scan and save a file directly to a Microsoft SharePoint site**
- **Quick set scan settings and options for Save to SharePoint**

**Introduction**

Use Save to SharePoint® to scan documents directly to a Microsoft® SharePoint site. This feature eliminates the need to scan the documents to a network folder, USB flash drive, or email message, and then manually upload the files to the SharePoint site.

Save to SharePoint® supports all scanning options, including the ability to scan documents as images or use the OCR features to create text files or searchable PDFs.

The feature is disabled by default. Enable Save to SharePoint® in the HP Embedded Web Server (EWS).

**Before you begin**

Before this procedure can be completed, the destination folder that the scanned files will be saved to must exist on the SharePoint site, and write access must be enabled to the destination folder. Save to SharePoint® is disabled by default.

**Enable Save to SharePoint and create a Save to SharePoint Quick Set**

Use the following steps to enable the Save to SharePoint feature and create a Quick Set.

1. Using the top navigation tabs, click **Scan/Digital Send**.
2. In the left navigation pane, click **Save to SharePoint®**.

   **NOTE:** Quick Sets are short-cut jobs that can be accessed on the printer Home screen or within the Quick Sets application.

3. Select **Enable Save to SharePoint®**, and then click **Apply**.
4. Click **Add** in the Quick Sets area to launch the Quick Set Wizard.
5. Enter a **Quick Set Title** (for example, “Scan to SharePoint”) and a **Quick Set Description**.
6. Select a **Button Location** for the Quick Set to determine whether the Quick Set displays from the Home screen or within the Quick Sets area on the product control panel.
7. Select a **Quick Set Start Option** to determine what occurs after selecting a Quick Set on the product control panel, and then click the **Next** button.
8. Use the following steps to add the path to the SharePoint folder.
   a. Click **Add** on the SharePoint® Destination Settings page to open the Add SharePoint® Path page.
   b. Open another browser window, navigate to the SharePoint folder to use, and then copy the folder path for the SharePoint folder from that browser window.
c. Paste the SharePoint folder path into the **SharePoint® Path:** field.

d. By default, the printer overwrites an existing file that has the same file name as the new file. Clear **Overwrite existing files** so that a new file with the same name as an existing file is given an updated time/date stamp.

e. Select an option from the **Authentication Settings** drop-down menu. Select whether it is necessary to sign in to the SharePoint site with credentials, or store the credentials within the Quick Set.

**NOTE:** Use credentials of user to connect after **Sign In at the control panel** is selected in the **Authentication Settings** drop-down menu, the logged-in user must have permissions to write to the specified SharePoint site.

**NOTE:** For security purposes, the printer does not display credentials entered in the Quick Set Wizard.

f. Click **OK** to complete the SharePoint path setup and navigate back to the **SharePoint Destination Settings** page.

9. Select **Verify folder access prior to job start** to ensure that the SharePoint folder specified as the destination folder is accessible each time the Quick Set is used. If this option is not selected, jobs can be saved to the SharePoint folder more quickly. However, if this option is not selected and the SharePoint folder is inaccessible the job will fail.

10. Click **Next**.

11. Set a **Condition on Which to Notify:** on the **Notification Settings** page. This setting configures the Quick Set to either not notify, or to send email messages or print a summary page if a job either completes successfully or fails. Select one of the following options from the **Condition on Which to Notify:** drop-down menu:

   - Select **Do not notify** for the Quick Set to not perform any notification action when a job completes successfully or fails.
   - Select **Notify when job completes** for the Quick Set to send a notification when a job completes successfully.
   - Select **Notify only if job fails** for the Quick Set to send a notification only when a job fails.

Selecting either **Notify when job completes** or **Notify only if job fails** requires the **Method Used to Deliver Notification:** to be set. Select from the following options:

   - **E-mail:** Use this option to send an email when the selected notification condition occurs. This option requires a valid email address in the **Notification E-mail Address:** field.

     **NOTE:** To use the email notification feature, first configure the email feature on the printer.

   - **Print:** Use this option to print the notification when the selected notification condition occurs.

     **NOTE:** Select **Include Thumbnail** for either notification option to include a thumbnail image of the first page of the scanned page of the job.

12. Click **Next**.

13. Select options from the **Scan Settings** page, and then click **Next**. For more information, see **Table 6-34 Scan settings for Save to SharePoint on page 189**.
14. Select options from the **File Settings** page, and then click **Next**. For more information, see Table 6-35 File settings for Save to SharePoint on page 190.

15. Review the summary of settings, and then click the **Finish** button to save the Quick Set, or click the **Previous** button to edit the settings.

**Scan and save a file directly to a Microsoft SharePoint site**

Use the following steps to scan a document directly to a SharePoint site.

1. Place the document face-down on the scanner glass, or place it face-up in the document feeder and adjust the paper guides to fit the size of the document.
2. From the Home screen on the printer control panel, touch **Save to SharePoint®**.

   - **NOTE:** In this step, the Home screen will display the title that the user named the quick set. In this step, **Save to SharePoint®** is used as an example.

   - **NOTE:** It might be necessary to sign in to the printer to use this feature.
3. Select one of the items in the **Quick Sets** list.
4. Touch the **File Name** text field to open a keyboard, and then type the name for the file using either the on-screen keyboard or the physical keyboard. Touch **Ok**.
5. If necessary, touch the **File Type** drop-down menu to select a different output file format.
6. Touch **More Options** to view and configure settings for the document.

   - **NOTE:** Preview the image at any time by touching the Preview button in the upper-right corner of the screen. For more information about this feature, touch the Help button on the preview screen.
7. Touch the Start button to save the file.

**Quick set scan settings and options for Save to SharePoint**

The following tables list the settings and options available in the Quick Set Wizard when adding, editing, or copying a Save to SharePoint® Quick Set.

### Table 6-34 Scan settings for Save to SharePoint

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Original Size</td>
<td>Select the page size of the original document.</td>
</tr>
<tr>
<td>Original Sides</td>
<td>Select whether the original document is single-sided or double-sided.</td>
</tr>
<tr>
<td>Optimize Text/Picture</td>
<td>Select to optimize for the output of a particular type of content, or select Manually adjust.</td>
</tr>
<tr>
<td>Optimize For</td>
<td>This setting is only available when Optimize Text/Picture is set to Manually adjust. Select a manual-adjust value.</td>
</tr>
<tr>
<td>Content Orientation</td>
<td>Select the way the content of the original document is placed on the page: Portrait or Landscape, or select Automatically detect.</td>
</tr>
<tr>
<td>2–Sided Format</td>
<td>This setting is not available when Content Orientation is set to Automatically detect. Select to describe the binding of the page to specify if the back side of the page is upside down or right side up.</td>
</tr>
<tr>
<td>Background Cleanup</td>
<td>Select a value to remove faint images from the background or to remove a light background color.</td>
</tr>
<tr>
<td>Darkness</td>
<td>Select a value to adjust the darkness of the file.</td>
</tr>
</tbody>
</table>
### Table 6-34  Scan settings for Save to SharePoint (continued)

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contrast</td>
<td>Select a value to adjust the contrast of the file.</td>
</tr>
<tr>
<td>Sharpness</td>
<td>Select a value to adjust the sharpness of the file.</td>
</tr>
<tr>
<td>Image Preview</td>
<td>Select whether to require or make optional a displayed preview of the job or to disable a preview.</td>
</tr>
<tr>
<td>Cropping Options</td>
<td>Select whether or not to allow a job to be cropped and the type of cropping option.</td>
</tr>
<tr>
<td>Job Build</td>
<td>Select this setting to combine several sets of original documents into one email attachment. Also, use this setting to scan an original document that has more pages than the document feeder can accommodate at one time.</td>
</tr>
<tr>
<td>Automatic Tone</td>
<td>Select this setting to set to automatic the Darkness, Contrast, and Background cleanup settings, which then makes these settings unavailable on this page.</td>
</tr>
<tr>
<td>Multi-feed Detection</td>
<td>Select this setting to enable detection of multi-feed jobs.</td>
</tr>
<tr>
<td>Erase Edges</td>
<td>Select this setting to specify the width of edge margins to be erased, in either inches or millimeters, for the front side and back side of a job.</td>
</tr>
</tbody>
</table>

### Table 6-35  File settings for Save to SharePoint

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>File Name Prefix</td>
<td>Set the default file name prefix used for files saved to a network folder.</td>
</tr>
<tr>
<td>Default File Name</td>
<td>Default file name for the file to be saved.</td>
</tr>
<tr>
<td></td>
<td>Select the User editable check box to make this setting editable at the product control panel.</td>
</tr>
<tr>
<td>File Name Suffix</td>
<td>Set the default file name suffix used for files saved to a network folder.</td>
</tr>
<tr>
<td>File Number Format</td>
<td>Select a file name format for when the job is divided into multiple files.</td>
</tr>
<tr>
<td>Default File Type</td>
<td>Select the file name format for the saved file.</td>
</tr>
<tr>
<td></td>
<td>Select the User editable check box to make this setting editable at the product control panel.</td>
</tr>
<tr>
<td>File Name Preview</td>
<td>Enter a file name, and then click the Update Preview button.</td>
</tr>
<tr>
<td>Default Color Preference</td>
<td>Select whether the file is in black &amp; white or in color.</td>
</tr>
<tr>
<td>Default Output Quality</td>
<td>Select the quality for the file. Higher-quality images require a larger file size than lower-quality images, and they take more time to send.</td>
</tr>
<tr>
<td>Default Resolution</td>
<td>Set the resolution for the file. Higher resolution images have more dots per inch (dpi), so they show more detail. Lower resolution images have fewer dots per inch and show less detail, but the file size is smaller.</td>
</tr>
<tr>
<td>Compression</td>
<td>Specify if the file uses Normal or High compression when saving a scanned document as a PDF or XPS file. If compression is set to High, the scanned file is smaller, but the scanning process might take longer than Normal compression.</td>
</tr>
<tr>
<td>Black TIFF Compression</td>
<td>Select the black TIFF compression algorithm to be used to compress the generated TIFF file.</td>
</tr>
<tr>
<td>Color/Grayscale TIFF Compression</td>
<td>Select the color/grayscale TIFF compression algorithm to be used to compress the generated TIFF file.</td>
</tr>
</tbody>
</table>
Table 6-35  File settings for Save to SharePoint (continued)

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PDF encryption</td>
<td>If the file type is PDF, then this option encrypts the output PDF file. A password must be specified as part of the encryption. The same password must be used to open the file. The user will be prompted to enter a password prior to scanning their job if one has not been set prior to pressing start.</td>
</tr>
<tr>
<td>Disable OCR file types</td>
<td>Select this setting to prevent OCR file types from being available from the product control panel.</td>
</tr>
<tr>
<td>Enable Blank Page Suppression</td>
<td>If the Enable Blank Page Suppression option is enabled, blank pages will be ignored.</td>
</tr>
</tbody>
</table>
FutureSmart 4

Use the following steps for FutureSmart 4.

- **Introduction**
- **Before you begin**
- **Enable Scan to SharePoint and create a Scan to SharePoint Quick Set**
- **Quick Set scan settings and options for Scan to SharePoint**

**Introduction**

Set up the Scan to SharePoint feature, and then scan documents directly to a SharePoint site.

Scan to SharePoint supports all scanning options, including the ability to scan documents as images or use the OCR features to create text files or searchable PDFs.

The feature is disabled by default. Enable Save to SharePoint in the HP Embedded Web Server (EWS).

**NOTE:** The Scan to SharePoint feature is available only on workflow-equipped printers.

**Before you begin**

Before this procedure can be completed, the destination folder that the scanned files will be saved to must exist on the SharePoint site, and write access must be enabled to the destination folder. Scan to SharePoint is disabled by default.

**Enable Scan to SharePoint and create a Scan to SharePoint Quick Set**

Use the following steps to enable the Save to SharePoint feature and create a Quick Set.

1. Using the top navigation tabs, click Scan/Digital Send.
2. In the left navigation pane, click Scan to SharePoint®.

**NOTE:** Quick Sets are short-cut jobs that can be accessed on the printer Home screen or within the Quick Sets application.

3. Select the Enable Scan to SharePoint® check box, and then click Add....
4. Enter a Quick Set Name (for example, “Scan to SharePoint”) and a Quick Set Description.
5. Select a Quick Set Start Option to determine what occurs after selecting a Quick Set on the printer control panel, and then click the Next button.
6. Use the following steps to add the path to the SharePoint folder.
   a. Click Add on the SharePoint® Destination page to open the Add SharePoint® Path page.
   b. Open another browser window, navigate to the SharePoint folder to use, and then copy the folder path for the SharePoint folder from that browser window.
   c. Paste the SharePoint folder path into the SharePoint® Path: field.
   d. By default, the printer overwrites an existing file that has the same file name as the new file. Clear Overwrite existing files so that a new file with the same name as an existing file is given an updated time/date stamp.
e. Select an option from the Authentication Settings drop-down menu. Select whether it is necessary to sign in to the SharePoint site with credentials, or store the credentials within the Quick Set.

**NOTE:** If Use credentials of user to connect after Sign In at the control panel is selected in the Authentication Settings drop-down menu, the logged-in user must have permissions to write to the specified SharePoint site.

**NOTE:** For security purposes, the printer does not display credentials entered in the Quick Set Wizard.

f. Click OK to complete the SharePoint path setup and navigate back to the SharePoint Destination Settings page.

7. Select Verify folder access prior to job start to ensure that the SharePoint folder specified as the destination folder is accessible each time the Quick Set is used. If this option is not selected, jobs can be saved to the SharePoint folder more quickly. However, if this option is not selected and the SharePoint folder is inaccessible the job will fail.

8. Click Next.

9. Set a Condition on Which to Notify on the Notification page. This setting configures the Quick Set to either not notify, or to send email messages or print a summary page if a job either completes successfully or fails. Select one of the following options from the Condition on Which to Notify drop-down menu:
   - Select Do not notify for the Quick Set to not perform any notification action when a job completes successfully or fails.
   - Select Notify when job completes for the Quick Set to send a notification when a job completes successfully.
   - Select Notify only if job fails for the Quick Set to send a notification only when a job fails.

Selecting either Notify when job completes or Notify only if job fails requires the Method Used to Deliver Notification to be set. Select from the following options:
   - Email: Use this option to send an email when the selected notification condition occurs. This option requires a valid email address in the Notification Email Address field.

**NOTE:** To use the email notification feature, first configure the email feature on the printer.

   - Print: Use this option to print the notification when the selected notification condition occurs.

   **NOTE:** Select Include Thumbnail for either notification option to include a thumbnail image of the first page of the scanned page of the job.

10. Click Next.

11. Select options from the Scan Settings page, and then click Next. For more information, see the table “Scan settings for Scan to SharePoint”.

12. Select options from the File Settings page, and then click Next. For more information, see the table “File settings for Scan to SharePoint”.

13. Review the summary of settings, and then click the Finish button to save the Quick Set, or click the Previous button to edit the settings.
Quick Set scan settings and options for Scan to SharePoint

Review the settings and options available in the Quick Set Wizard when adding, editing, or copying a Scan to SharePoint Quick Set.

### Table 6-36 Scan settings for Scan to SharePoint

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Original Size</td>
<td>Select the page size of the original document.</td>
</tr>
<tr>
<td>Original Sides</td>
<td>Select whether the original document is single-sided or double-sided.</td>
</tr>
<tr>
<td>Optimize Text/Picture</td>
<td>Select to optimize for the output of a particular type of content.</td>
</tr>
<tr>
<td>Content Orientation</td>
<td>Select the way the content of the original document is placed on the page: Portrait or Landscape</td>
</tr>
<tr>
<td>Background Cleanup</td>
<td>Select a value to remove faint images from the background or to remove a light background color.</td>
</tr>
<tr>
<td>Darkness</td>
<td>Select a value to adjust the darkness of the file.</td>
</tr>
<tr>
<td>Contrast</td>
<td>Select a value to adjust the contrast of the file.</td>
</tr>
<tr>
<td>Sharpness</td>
<td>Select a value to adjust the sharpness of the file.</td>
</tr>
<tr>
<td>Image Preview</td>
<td>Select whether to require or make optional a displayed preview of the job or to disable a preview.</td>
</tr>
<tr>
<td>Cropping Options</td>
<td>Select whether or not to allow a job to be cropped and the type of cropping option.</td>
</tr>
<tr>
<td>Erase Edges</td>
<td>Select this setting to specify the width of edge margins to be erased, in either inches or millimeters, for the front side and back side of a job.</td>
</tr>
</tbody>
</table>

### Table 6-37 File settings for Scan to SharePoint

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>File Name Prefix</td>
<td>Set the default file name prefix used for files to be saved.</td>
</tr>
<tr>
<td>File Name</td>
<td>Default file name for the file to be saved.</td>
</tr>
<tr>
<td></td>
<td>Select the <strong>User editable</strong> check box to make this setting editable at the printer control panel.</td>
</tr>
<tr>
<td>File Name Suffix</td>
<td>Set the default file name suffix used for files to be saved.</td>
</tr>
<tr>
<td></td>
<td>Duplicate filename suffix default [filename]_YYYYYMMDDT</td>
</tr>
<tr>
<td>File Name Preview</td>
<td>Enter a file name, and then click the <strong>Update Preview</strong> button.</td>
</tr>
<tr>
<td>File Numbering Format</td>
<td>Select a file name format for when the job is divided into multiple files.</td>
</tr>
<tr>
<td>Add numbering when job has just one file (ex. _1–1)</td>
<td>Select this setting to add numbering to a file name when the job is only one file instead of multiple files.</td>
</tr>
<tr>
<td>File Type</td>
<td>Select the file format for the saved file.</td>
</tr>
<tr>
<td></td>
<td>Select the <strong>User editable</strong> check box to make this setting editable at the printer control panel.</td>
</tr>
<tr>
<td>High Compression (smaller file)</td>
<td>Select this setting to compress the scanned file, which reduces the file size. However, the scanning process for a High compression file might take longer than for a Normal compression file.</td>
</tr>
<tr>
<td>PDF encryption</td>
<td>If the file type is PDF, then this option encrypts the output PDF file. A password must be specified as part of the encryption. The same password must be used to open the file. The user will be prompted to enter a password prior to scanning their job if one has not been set prior to starting the scan.</td>
</tr>
<tr>
<td>Feature</td>
<td>Description</td>
</tr>
<tr>
<td>----------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Resolution</td>
<td>Set the resolution for the file. Higher resolution images have more dots per inch (dpi), so they show more detail. Lower resolution images have fewer dots per inch and show less detail, but the file size is smaller.</td>
</tr>
<tr>
<td>Quality and File Size</td>
<td>Select the quality for the file. Higher-quality images require a larger file size than lower-quality images, and they take more time to send.</td>
</tr>
<tr>
<td>Color/Black</td>
<td>Specify whether copies are to be printed in color, black and gray, or black only</td>
</tr>
<tr>
<td>Suppress blank pages</td>
<td>If the Suppress blank pages option is enabled, blank pages will be ignored.</td>
</tr>
<tr>
<td>Create Multiple Files</td>
<td>Select this setting to scan pages into separate files based on a predetermined maximum number of pages per file.</td>
</tr>
</tbody>
</table>
Set up Scan to USB Drive

Learn how to set up the Scan to USB drive feature.

- **Introduction**
- **FutureSmart 3**
- **FutureSmart 4**

**Introduction**

The printer has a feature that enables it to scan a document and save it to a USB flash drive. The feature is not available until it has been configured through the HP Embedded Web Server (EWS).
FutureSmart 3

Use the following steps for FutureSmart 3.

- **Step one: Enable Save to USB**
- **Step two: Create a Save to USB Quick Set (optional)**
- **Default scan settings for Save to USB setup**
- **Default file settings for Save to USB Setup**

**Step one: Enable Save to USB**

Use the following steps to enable Save to USB.

1. Select the Security tab.
2. Scroll to Hardware Ports and make sure that Enable Host USB plug and play is enabled.
3. Select the Scan/Digital Send tab.
4. In the left navigation pane, click Save to USB Setup.
5. Select the Enable Save to USB check box.
6. Click Apply at the bottom of the page.

**Step two: Create a Save to USB Quick Set (optional)**

Use the following steps to create a Save to USB Quick Set.

**NOTE:** Quick Sets are short-cut jobs that can be accessed on the printer Home screen or within the Quick Sets application.

1. Navigate to the Quick Sets Setup area of the EWS using the following steps:
   a. Using the top navigation tabs, click General.
   b. In the left navigation pane, click Quick Sets Setup.
2. Click Add. The Quick Set Wizard opens.
   **NOTE:** Click Cancel on any page of the Quick Set Wizard to cancel the current changes, exit the Quick Set Wizard, and return to the Quick Sets Setup page.
3. Select Save to USB for the Quick Set Type, and then click Next.
4. Enter a title for the Quick Set in the Quick Set Title (required) field.
5. Select the location for the Quick Set to appear on the printer from the Button Location drop-down list. This setting determines whether the Quick Set displays on the Home screen or within the Quick Sets area on the printer control panel.
6. Enter a description of the Quick Set in the Quick Set Description (required) field.
7. Select a Quick Set Start Option to determine what occurs after selecting a Quick Set on the printer control panel, and then click Next.
8. Select a default location where scanned files are saved on USB storage devices inserted into the USB port on the control panel, and then click Next. The default location options are:

- Save at root directory of the USB storage device
- Create or place in this folder on the USB Storage Device — The path to the folder on the USB storage device must be specified when using this file location option. A backslash \ must be used to separate folder\subfolder names in the path.

9. Select an option from the Condition on Which to Notify: drop-down list, and then click Next.

This setting determines if, or how, users are notified when a Save To USB Quick Set job completes or fails. The options for the Condition on Which to Notify: setting are:

- Do not notify
- Notify when job completes
- Notify only if job fails

10. Choose the Scan Settings for the Quick Set, and then click Next.

**NOTE:** For more information on the available scan settings, see Default scan settings for Save to USB setup on page 198.

11. Choose the File Settings for the Quick Set, and then click Next.

**NOTE:** For more information on the available file settings, see Default file settings for Save to USB Setup on page 200.

12. Review the summary of settings, and then click Finish to save the Quick Set, or click Previous to edit the settings.

**Default scan settings for Save to USB setup**

The following table lists the default settings.
<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Default File Type</td>
<td>Select the default file type that the for the scanned document:</td>
</tr>
<tr>
<td></td>
<td>● PDF</td>
</tr>
<tr>
<td></td>
<td>● JPEG</td>
</tr>
<tr>
<td></td>
<td>● TIFF</td>
</tr>
<tr>
<td></td>
<td>● MTIFF</td>
</tr>
<tr>
<td></td>
<td>● XPS</td>
</tr>
<tr>
<td></td>
<td>● PDF/A</td>
</tr>
<tr>
<td></td>
<td>● Text (OCR)</td>
</tr>
<tr>
<td></td>
<td>● Unicode Text (OCR)</td>
</tr>
<tr>
<td></td>
<td>● RTF (OCR)</td>
</tr>
<tr>
<td></td>
<td>● Searchable PDF (OCR)</td>
</tr>
<tr>
<td></td>
<td>● Searchable PDF/A (OCR)</td>
</tr>
<tr>
<td></td>
<td>● HTML (OCR)</td>
</tr>
<tr>
<td></td>
<td>● CSV (OCR)</td>
</tr>
<tr>
<td>Default Color Preferences</td>
<td>Select the default color setting for the scanned document:</td>
</tr>
<tr>
<td></td>
<td>● Color</td>
</tr>
<tr>
<td></td>
<td>● Black</td>
</tr>
<tr>
<td></td>
<td>● Black/Gray</td>
</tr>
<tr>
<td></td>
<td>● Automatically detect</td>
</tr>
<tr>
<td>Default Output Quality</td>
<td>Select the default output quality for the scanned document:</td>
</tr>
<tr>
<td></td>
<td>● Low (small file)</td>
</tr>
<tr>
<td></td>
<td>● Medium</td>
</tr>
<tr>
<td></td>
<td>● High (large file)</td>
</tr>
<tr>
<td>Default Resolution</td>
<td>Select the default scan resolution for the scanned document:</td>
</tr>
<tr>
<td></td>
<td>● 75 dpi</td>
</tr>
<tr>
<td></td>
<td>● 150 dpi</td>
</tr>
<tr>
<td></td>
<td>● 200 dpi</td>
</tr>
<tr>
<td></td>
<td>● 300 dpi</td>
</tr>
<tr>
<td></td>
<td>● 400 dpi</td>
</tr>
<tr>
<td></td>
<td>● 600 dpi</td>
</tr>
</tbody>
</table>
Default file settings for Save to USB Setup

Review the default file settings for Save to USB Setup.

**Table 6-39 File settings for Save to USB Setup:**

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>File Name Prefix</td>
<td>Set the default file name prefix used for files saved to a network folder.</td>
</tr>
<tr>
<td>Default File Name</td>
<td>Default file name for the file to be saved.</td>
</tr>
<tr>
<td></td>
<td>Select the User editable check box to make this setting editable at the product control panel.</td>
</tr>
<tr>
<td>File Name Suffix</td>
<td>Set the default file name suffix used for files saved to a network folder.</td>
</tr>
<tr>
<td></td>
<td>Duplicate filename suffix default [filename]_YYYYMMDDT</td>
</tr>
<tr>
<td>File Number Format</td>
<td>Select a file name format for when the job is divided into multiple files.</td>
</tr>
<tr>
<td>Default File Type</td>
<td>Select the file format for the saved file.</td>
</tr>
<tr>
<td></td>
<td>Select the User editable check box to make this setting editable at the printer control panel.</td>
</tr>
<tr>
<td>File Name Preview</td>
<td>Enter a file name, and then click the Update Preview button.</td>
</tr>
<tr>
<td>Default Color Preference</td>
<td>Select whether the file is in black &amp; white or in color.</td>
</tr>
<tr>
<td>Default Output Quality</td>
<td>Select the quality for the file. Higher-quality images require a larger file size than lower-quality images, and they take more time to send.</td>
</tr>
<tr>
<td>Default Resolution</td>
<td>Set the resolution for the file. Higher resolution images have more dots per inch (dpi), so they show more detail. Lower resolution images have fewer dots per inch and show less detail, but the file size is smaller.</td>
</tr>
<tr>
<td>Compression</td>
<td>Specify if the file uses Normal or High compression when saving a scanned document as a PDF or XPS file. If compression is set to High, the scanned file is smaller, but the scanning process might take longer than Normal compression.</td>
</tr>
<tr>
<td>Black TIFF Compression</td>
<td>Select the black TIFF compression algorithm to be used to compress the generated TIFF file.</td>
</tr>
<tr>
<td>Color/Grayscale TIFF Compression</td>
<td>Select the color/grayscale TIFF compression algorithm to be used to compress the generated TIFF file.</td>
</tr>
<tr>
<td>PDF encryption</td>
<td>If the file type is PDF, then this option encrypts the output PDF file. A password must be specified as part of the encryption. The same password must be used to open the file. The user will be prompted to enter a password prior to scanning their job if one has not been set prior to pressing start.</td>
</tr>
<tr>
<td>Disable OCR file types</td>
<td>Select this setting to prevent OCR file types from being available from the printer control panel.</td>
</tr>
<tr>
<td>Enable Blank Page Suppression</td>
<td>If the Enable Blank Page Suppression option is enabled, blank pages will be ignored.</td>
</tr>
</tbody>
</table>
FutureSmart 4

Use the following steps for FutureSmart 4.

- Step one: Enable Scan to USB Drive
- Step two: Configure the Quick Sets (optional)
- Default scan settings for Scan to USB Drive setup
- Default file settings for Save to USB setup

Step one: Enable Scan to USB Drive

Use the following steps to enable Scan to USB Drive.

1. Select the Security tab.
2. Scroll to Hardware Ports and make sure that Enable Host USB plug and play is enabled.
3. Select the Scan/Digital Send tab.
4. Select the Enable Scan to USB Drive check box.
5. Click Apply at the bottom of the page.

**NOTE:** Most devices ship with Hard disk drives (HDDs) already installed. In some cases, additional storage devices can be added via USB. Verify whether the Scan to USB Drive feature needs to be expanded to USB and Hard drive.

Step two: Configure the Quick Sets (optional)

Quick Sets are short-cut jobs that can be accessed on the printer Home screen or within the Quick Sets application.

1. In the Scan to USB Drive area of the left navigation pane, click Quick Sets.
2. Select one of the following options:
   - Select an existing Quick Set under Quick Sets Application in the table.
   - OR-
   - Click Add to start the Quick Set Wizard.
3. If you selected Add, the Quick Sets Setup page opens. Complete the following information, and then click Next:
   - **Quick Set Name:** Enter a title for the new Quick Set.
   - **Quick Set Description:** Enter a description of the Quick Set.
   - **Quick Set Start Option:** To set how the Quick Set starts, click either Enter application, then user presses Start or Start instantly when selected from the Home Screen.
4. Select a default location where scanned files are saved on USB storage devices inserted into the USB port on the control panel, and then click Next. The default location options are:
• Save at root directory of the USB storage device
• Create or place in this folder on the USB Storage Device — The path to the folder on the USB storage device must be specified when using this file location option. A backslash \ must be used to separate folder\subfolder names in the path.

5. Select an option from the Condition on Which to Notify: drop-down list, and then click Next.
This setting determines if, or how, users are notified when a Scan To USB Drive Quick Set job completes or fails. The options for the Condition on Which to Notify: setting are:
• Do not notify
• Notify when job completes
• Notify only if job fails

6. Choose the Scan Settings for the Quick Set, and then click Next.

7. Choose the File Settings for the Quick Set, and then click Next.

8. Review the summary of settings, and then click Finish to save the Quick Set, or click Previous to edit the settings.

Default scan settings for Scan to USB Drive setup
Review the default settings for Scan to USB Drive setup.

Table 6-40 Scan settings for Scan to USB Drive setup

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Original Size</td>
<td>Select the page size of the original document.</td>
</tr>
<tr>
<td>Original Sides</td>
<td>Select whether the original document is single-sided or double-sided.</td>
</tr>
<tr>
<td>Optimize Text/Picture</td>
<td>Select to optimize for the output of a particular type of content.</td>
</tr>
<tr>
<td>Content Orientation</td>
<td>Select the way the content of the original document is placed on the page: Portrait or Landscape.</td>
</tr>
<tr>
<td>Background Cleanup</td>
<td>Select a value to remove faint images from the background or to remove a light background color.</td>
</tr>
<tr>
<td>Darkness</td>
<td>Select a value to adjust the darkness of the file.</td>
</tr>
<tr>
<td>Contrast</td>
<td>Select a value to adjust the contrast of the file.</td>
</tr>
<tr>
<td>Sharpness</td>
<td>Select a value to adjust the sharpness of the file.</td>
</tr>
<tr>
<td>Image Preview</td>
<td>Select whether to require or make optional a displayed preview of the job or to disable a preview.</td>
</tr>
<tr>
<td>Cropping Options</td>
<td>Select whether or not to allow a job to be cropped and the type of cropping option.</td>
</tr>
<tr>
<td>Erase Edges</td>
<td>Select this setting to specify the width of edge margins to be erased, in either inches or millimeters, for the front side and back side of a job.</td>
</tr>
</tbody>
</table>
### Default file settings for Save to USB setup

Review the options for Save to USB setup.

#### Table 6-41  File settings for Save to USB setup

<table>
<thead>
<tr>
<th>Option name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>File Name Prefix</td>
<td>Set the default file name prefix used for files saved to a network folder.</td>
</tr>
<tr>
<td>File Name</td>
<td>Default file name for the file to be saved. Select the <strong>User editable</strong> check box to make this setting editable at the printer control panel.</td>
</tr>
<tr>
<td>File Name Suffix</td>
<td>Set the default file name suffix used for files saved to a network folder. Duplicate filename suffix default [filename]_YYYYMMDDT</td>
</tr>
<tr>
<td>File Name Preview</td>
<td>Enter a file name, and then click the <strong>Update Preview</strong> button.</td>
</tr>
<tr>
<td>File Numbering Format</td>
<td>Select a file name format for when the job is divided into multiple files.</td>
</tr>
<tr>
<td>Add numbering when job has just one file (ex. _1–1)</td>
<td>Select this setting to add numbering to a file name when the job is only one file instead of multiple files.</td>
</tr>
<tr>
<td>File Type</td>
<td>Select the file format for the saved file. Select the <strong>User editable</strong> check box to make this setting editable at the printer control panel.</td>
</tr>
<tr>
<td>High Compression (smaller file)</td>
<td>Select this setting to compress the scanned file, which reduces the file size. However, the scanning process for a High compression file might take longer than for a Normal compression file.</td>
</tr>
<tr>
<td>PDF encryption</td>
<td>If the file type is PDF, then this option encrypts the output PDF file. A password must be specified as part of the encryption. The same password must be used to open the file. The user will be prompted to enter a password prior to scanning their job if one has not been set prior to starting the scan.</td>
</tr>
<tr>
<td>Resolution</td>
<td>Set the resolution for the file. Higher resolution images have more dots per inch (dpi), so they show more detail. Lower resolution images have fewer dots per inch and show less detail, but the file size is smaller.</td>
</tr>
<tr>
<td>Quality and File Size</td>
<td>Select the quality for the file. Higher-quality images require a larger file size than lower-quality images, and they take more time to send.</td>
</tr>
<tr>
<td>Color/Black</td>
<td>Specify whether copies are to be printed in color, black and gray, or black only.</td>
</tr>
<tr>
<td>Suppress blank pages</td>
<td>If the <strong>Suppress blank pages</strong> option is enabled, blank pages will be ignored.</td>
</tr>
<tr>
<td>Create Multiple Files</td>
<td>Select this setting to scan pages into separate files based on a predetermined maximum number of pages per file.</td>
</tr>
</tbody>
</table>
Set up and configure the Address Book

Learn how to set up and configure the Address Book.

- Introduction
- Step one: Set up the network contacts
- Step two: Set up the contacts stored on the printer

Introduction

An address book is a stored list of frequently-used contacts for quick selection when sending a document from the printer control panel. Use the Address Book page to configure and enable the following printer features:

- Configure search parameters
- Add individual or group contacts
- Edit existing contacts
Step one: Set up the network contacts

Use the **Network Contacts Setup** area of the **Address Book** page to enable network contacts and to specify the search methods for locating network contacts.

- **Set the search method**
- **Enable personal contacts (optional)**
- **Enable network contacts (optional)**

Set the search method

Use the following steps to set the search method for network contacts.

1.  Using the top navigation tabs, click **Scan/Digital Send**.
2.  In the left navigation pane, click **Address Book** or **Contacts**.
3.  Select a search method:
   - Quick Search (Find matches beginning with the search string.)
   - Detailed Search (Find matches containing the search string.)

Enable personal contacts (optional)

Use the following steps to enable personal contacts.

Access individual users’ personal contacts from their Microsoft Exchange Server personal contacts lists. These addresses are available when the user signs in at the printer control panel using Windows, and then selects the Personal Contacts address book view.

NOTE: If any problems are encountered when importing address books from newer Microsoft Exchange servers, contact HP support for help.

1.  Using the top navigation tabs, click **Scan/Digital Send**.
2.  In the left navigation pane, click **Address Book** or **Contacts**.
3.  Select the **Enable Personal Contacts (when users sign in to Windows at the device)** check box.
4.  Click the **Test Exchange Server** button to test the connection with the Microsoft Exchange Server.
   a.  **Windows Domain**: Enter a Windows domain name.
   b.  **User name**: Enter a username
   c.  **Password**: Enter a password
   d.  **Test**: Enter at least three letters of a contact name, and then click the **Test** button
5.  Click **Apply** to save the settings.
Enable network contacts (optional)

Learn how to enable network contacts.

- Introduction
- Before you begin
- Obtain contacts from an LDAP server

Introduction

The Lightweight Directory Access Protocol (LDAP) feature provides access to a network address book. Use the following sections to set up the Network Contacts feature.

NOTE: The printer must have the correct firmware version to be compatible with the LDAP feature.

Before you begin

Administrators need the following information before beginning the configuration process.

Network contacts setup

- Server authentication requirements
- Path to start search (BaseDN, Search Root) (e.g., o=mycompany.com)
- Attributes for matching the name entered (e.g., cn or samAccountName), retrieving the email address (e.g., mail), and how the name will be displayed on the control panel (e.g., displayName)

Default SMTP Configuration

- SMTP server (e.g., smtp.mycompany.com)
- SMTP port (e.g., 25, 587, 465)
- Secure connection requirements (e.g., Always use secure connection (SSL/TLS))
- SMTP server authentication requirements for outgoing email messages, including the user name and password used for authentication, if applicable

Obtain contacts from an LDAP server

Obtain addresses from a LDAP server so they are available to users at the printer control panel. These addresses are available when the user selects the All Contacts address book view.

1. Using the top navigation tabs, click Scan/Digital Send.
2. In the left navigation pane, click Address Book or Contacts.
3. Select the Enable Network Contacts (use LDAP server) check box.
4. Click Add.
5. In the LDAP Server Address field, enter the IP address for the LDAP server, or if the name of a LDAP server to use is unknown, click Auto Find to obtain a list of available LDAP servers. Select the LDAP server to use, and then click OK.
NOTE: If the LDAP server you want to use is not in this list, contact your administrator and obtain the IP address and the attribute codes.

6. To enable a secure (SSL) connection, select the Use a secure connection (SSL) check box.

7. If the LDAP server requires authentication, select the appropriate authentication type for the LDAP server in the Server Authentication Requirements area. Depending on the type of authentication, some of the other fields in this area might not be available, because they are not required. Enter the information for the required fields. Make sure to use the exact names that match the settings for the LDAP server.

NOTE: For individual users who sign in using Windows credentials, select the option to use those credentials for the LDAP server authentication.

Table 6-42 Types of authentication for the printer to communicate with the LDAP server

<table>
<thead>
<tr>
<th>Authentication type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Server does not require authentication</td>
<td>The server does not require user credentials to access the LDAP database. The option to use the MFP user credentials is unavailable.</td>
</tr>
<tr>
<td>Server requires authentication</td>
<td>Use credentials of user to connect after Sign on at the printer control panel. Windows Negotiated (SPNEGO): The server requires user credentials to access the LDAP database, and it encrypts passwords and credentials that are sent across the network. The domain field and the option to use the MFP user credentials are enabled. Simple Credentials: The server requires user credentials to access the LDAP database, but the password is not encrypted when it is sent across the network. The username and password fields are enabled.</td>
</tr>
</tbody>
</table>

8. In the LDAP Database Search Settings area, click Auto Find to browse for the point to begin searching the database.

NOTE: By default, Active Directory attributes are used. If these attributes do not work, try the Use Custom Attributes option, and then click the Auto Find button to find the correct attributes.

9. Select the appropriate Source for Attribute Names option. The attributes fields should be populated automatically.

10. In the Test for LDAP Retrieval area, test the LDAP retrieval by entering part of an attribute value, such as part of the recipient’s name, and then clicking Test. Use at least three characters.
Step two: Set up the contacts stored on the printer

Use the **Import** button to load a large list of frequently-used contacts on to the printer all at once, rather than adding them one at a time.

- Address Book tasks
- Import or export an address book

To add contacts to more than one printer, it is best to add them on one printer, make any edits to the list, and then use the **Import** and **Export All** buttons to transfer the addresses to other printers.
Address Book tasks

Learn how to perform Address Book tasks.

- Add a contact
- Add a group
- Edit a contact or group
- Delete a contact or group

Add a contact or group by clicking Add Contact or Add Group, which opens the Add Contact or Add Group page.

Add a contact

Use the following steps to add a contact.

1. Click Add Contact. The Add Contact page displays.
2. Complete the following fields:
   - Contact Name or Display Name: Enter a contact name (required)
   - First Name: Enter a first name (optional)
   - Last Name: Enter a last name (optional)
   - Phone Number: Enter a phone number (optional)
   - Fax Number: Enter the fax number (may be required)
   - E-mail Address: Enter an e-mail address (may be required)

**NOTE:** An e-mail address, fax number, or network folder must be entered for a contact.

3. If using a network folder for scan/digital send, click the Network Folder check box and set up one of the following folder options: is selected and, add the UNC path to the folder in the UNC Folder Path field using the following form: \host\share.
   - Standard shared folder
   - FTP folder
4. Click the OK button to save the new contact to the printer.

Add a group

Use the following steps to add a group.

1. Click Add Group. The Add Group page displays.
2. Add an e-mail group:
   a. Select Add Email Group.
   b. Enter a name for the new group in the Group Name or Display Name field.
   c. To add a member to the group, either enter their email address in the Add Member field, or add them from an address book.
3. Add a folder group:
   a. Select **Add Folder Group**.
   b. Enter a name for the new group in the **Group Name** field.
   c. Add the folders from an address book.

4. After adding all of the members or groups for the group, click the **OK** button to save the group.

**Edit a contact or group**

Use the following steps to edit a contact or group.

1. Select the contact or group to edit. Enter a name into the search field to find a specific contact.
2. Click the **Edit** button.
3. Make the necessary changes to the contact or group.
4. Click the **OK** button to save your edits.

**Delete a contact or group**

Use the following steps to delete a contact or group.

1. Select the contact or group to delete. Enter a name into the search field to find a specific contact or group.
2. Click the **Delete** button.
3. In the page that displays you are prompted to confirm the deletion of the selected contact or group. There is no way to recover a contact or group once it has been deleted. Click **OK** to confirm your selection. The contact or group is deleted.
Import or export an address book

Use this page to import and export address book and user information to and from the printer.

- Import an address book
- Export an address book

When data is imported to the printer, new contacts, fax speed dials, or user accounts are added, so that this information can be accessed on this printer. This can help make it easy to create initial lists or to keep the HP printer current with changes to the information.

The export of records saves email, fax, or user records from the printer into a file on a computer. Use this file as a data backup, or use it to import the records onto another HP printer.
Import an address book

To import address-book information, first create a file with a comma-separated value (CSV) format. The CSV format is a common data format that is often used to transfer data between database programs or printers.

- Import an address book
- Required data and record limits
- Creating an import file using Microsoft Outlook

This file can be created using either a spreadsheet program such as Microsoft Excel, or a text program such as Microsoft Notepad. After creating the file, be sure to save or export it as a .CSV file type. Another option is to create a data file by exporting contacts from Microsoft Outlook or another email client and saving it as a .CSV file.

**NOTE:** To help with creating or importing a .CSV file, try exporting an existing address book to use as a template.

Import an address book

Use the following steps to import an address book.

1. Create a data file containing a header row with the columns that are required for your data. The following columns can be used:
   - name (or "first name" and "last name")
   - address (or "emailaddress", "email", "email address", "e-mail", or "e-mail address")
   - dname
   - faxnumber (or "business fax", "home fax", or "other fax")
   - speeddial
   - code
   - pin

   The header row is simply the first row of the spreadsheet or file.

2. After the header row, add rows containing each address book or user record. See the Required data and record limits section below to find out which columns are required for each type of record.

   Blank columns are allowed. If creating a text import file, insert a comma for each blank field.

   If the data in the field contains a comma, a carriage return (\r), or line feed (\n) character, the data in that field must be surrounded by quotes, for example,

   "Smith, Joe"

   Fields that contain double-quotes must be surrounded by double-quotes. Any individual double-quotes must be represented by a pair of double-quotes.

   If using Excel to create the import file, do not enter quotes, because Excel inserts them automatically when the file is converted to a .CSV file.
3. Save the import file.

If created in Excel, choose **Save As** from the **File** menu, and then select `.CSV (comma delimited)`(*.csv) in the **Save as type** drop-down box.

If created as a text file, choose **Save As** from the **File** menu, and then enter `.csv` in place of the `.txt` file extension.

4. To import the source file into the printer, click the **Import** button under **Contacts Stored on the Device**, and then click the **Browse...** button to browse to the source data file. If the file was encrypted, enter the encryption key.

5. Click **Import** to import the data file into the printer. The import process will take approximately 1 minute for each 1,000 records, depending on the network speed.

When the import process is complete, a message displays indicating how many records were successfully imported and whether there were any import errors.

**Required data and record limits**

Review the data and record limits for each record type.

**Table 6-43  Required Data and Record Limits**

<table>
<thead>
<tr>
<th>Record type</th>
<th>Required data</th>
<th>Maximum field length</th>
</tr>
</thead>
<tbody>
<tr>
<td>E-mail address</td>
<td>name (or “first name” and “last name”)</td>
<td>64 unicode characters</td>
</tr>
<tr>
<td></td>
<td>address¹</td>
<td>256 unicode characters</td>
</tr>
<tr>
<td>User record</td>
<td>name</td>
<td>245 characters</td>
</tr>
<tr>
<td></td>
<td>pin</td>
<td>4-8 digits</td>
</tr>
<tr>
<td></td>
<td>address¹</td>
<td>255 characters</td>
</tr>
<tr>
<td>E-mail distribution list</td>
<td>name</td>
<td>64 unicode characters</td>
</tr>
<tr>
<td></td>
<td>address¹</td>
<td>256 unicode characters</td>
</tr>
<tr>
<td></td>
<td>dname</td>
<td>64 unicode characters²</td>
</tr>
<tr>
<td>Fax number</td>
<td>name</td>
<td>64 unicode characters</td>
</tr>
<tr>
<td></td>
<td>faxnumber¹</td>
<td>80 unicode characters</td>
</tr>
<tr>
<td>Fax speed-dial</td>
<td>faxnumber¹</td>
<td>80 unicode characters</td>
</tr>
<tr>
<td></td>
<td>speeddial¹</td>
<td>64 unicode characters</td>
</tr>
<tr>
<td></td>
<td>code¹</td>
<td>2 digits</td>
</tr>
<tr>
<td></td>
<td></td>
<td>A maximum of 100 speed-dials, each with a maximum of 100 entries</td>
</tr>
</tbody>
</table>

¹ The “address” field can also be called “emailaddress”, “email”, “email address”, “e-mail”, or “e-mail address”. The “faxnumber” field can also be called “business fax”, “home fax”, or “other fax”.

² The “speeddial” field contains the name of the speed-dial, for example “Johnson Janitorial”, and the “code” field contains the speed dial code (a number between 0 and 99), for example 08. Either one- or two-digit numbers are accepted; for example, either 06 or 6 can be used.
Creating an import file using Microsoft Outlook

If contacts are saved in Microsoft Outlook, export them into a .CSV file, and then use that file to import them into the printer.

1. From the Outlook File menu, choose Import and Export....
2. In the Import and Export Wizard, choose Export to a file, and then click Next.
3. Select Comma Separated Values (DOS), and then click Next.
4. Select the Contacts folder, and then click Next.
5. Enter in a name for the file, with a .CSV extension. Click Browse to choose a location on the computer to save the file. Click Next.
6. Click Finish to finish the wizard and export the file.
7. To import the .CSV file into the printer, follow Steps 4 and 5 of Importing an address book.

Export an address book

The address book or user information saved in the printer can be exported into a .CSV file with the format of one header row followed by a row for each user or address book record.

Open the export file in either a spreadsheet program like Microsoft Excel or in a text program like Notepad.

1. Click the Export All... button.
2. Select the check boxes next to the objects you want to export. If the file was encrypted, enter the encryption key. The following choices are available:
   - Address Books
   - Fax Speed Dials
   - User Access Code List
3. Click the Export button.
4. Click the Save File button.
5. In the dialog box that displays, click Save, and then select the location to save the file.
Configure scanner job shortcuts using Quick Sets

Use the following information to configure scanner job shortcuts using Quick Sets.

- **Introduction**
- **Add and manage Quick Sets**
- **Example Quick Sets**

**Introduction**

To use a Quick Set on the printer control panel, enable the base application. Create Quick Sets for the following base applications to improve job accuracy and the time to complete a job:

- **E-mail** — Use email Quick Sets to configure and save commonly used settings for sending jobs from the printer via email as email attachments.
- **Fax** — Use fax Quick Sets to configure and save commonly used settings for fax jobs.
- **Save to Network Folder** — Use Save to Network Folder Quick Sets to configure and save commonly used settings for saving jobs to a network folder.
- **Save to USB** — Use Save to USB Quick Sets to configure and save commonly used settings for saving jobs to a USB device.
- **Copy (MFPs only)** — Use Copy Quick Sets to configure and save commonly used settings for copy jobs.
- **Save to SharePoint®** — Use Save to SharePoint Quick Sets to configure and save commonly used settings for saving jobs to a SharePoint site.

Select from various job settings, such as starting a job immediately upon selection of a quick set or requiring an image preview before starting a job.
Add and manage Quick Sets

Learn how to add and manage Quick Sets.

- Add a Quick Set
- Edit a Quick Set
- Copy a Quick Set
- Remove a Quick Set
- Quick Set settings and options

Add a Quick Set

Use the following steps to add a new Quick Set.

1. Using the top navigation tabs, click General.
2. In the left navigation pane, click Quick Sets Setup.
3. Click Add to begin the Quick Set Wizard.

**NOTE:** Click Cancel on any page of the Quick Set Wizard to cancel the current changes, exit the Quick Set Wizard, and return to the Quick Sets Setup page.

4. Select a Quick Set Type, and then click Next. The following Quick Set types are available for selection, depending on your printer:

   **NOTE:** A Quick Set Type only needs to be determined when a quick set is created by using the General EWS tab.

   - E-mail
   - Fax
   - Save to Network Folder
   - Save to USB
   - Copy (MFPs only)
   - Scan to SharePoint®

5. Enter a title for the Quick Set in the Quick Set Title (required) field.
6. Select the location for the quick set to appear on the printer from the Button Location drop-down list. This setting determines whether the Quick Set displays on the Home screen or within the Quick Sets area on the printer control panel.
7. Enter a description of the Quick Set in the Quick Set Description (required) field.
8. Select a Quick Set Start Option to determine what occurs after selecting a Quick Set on the printer control panel, and then click Next.
9. Select settings and complete tasks in the wizard. Click Next to proceed to the next page of available options until reaching the Summary page.
NOTE: The settings available in the Quick Set Wizard vary by the type of Quick Set being added. Refer to the tables in Quick Set settings and options on page 105 to see the available settings and options for each type of Quick Set.

10. Review the summary of settings, and then click Finish to save the Quick Set, or click Previous to edit the settings.

Edit a Quick Set

Use the following steps to edit the settings of an existing Quick Set.

1. Using the top navigation tabs, click General.
2. In the left navigation pane, click Quick Sets Setup.
3. In the Quick Sets area, click the check box next to the appropriate Quick Set, and then click Edit. The Quick Set Wizard opens.

NOTE: Click Cancel on any page of the Quick Set Wizard to cancel the current changes, exit the Quick Set Wizard, and return to the Quick Sets Setup page.

4. If necessary, modify the following settings, and then click Next:
   - Quick Set Title
   - Button Location
   - Control Panel location
   - Quick Set Description
   - Quick Set Start Option
5. Select settings and complete tasks in the wizard. Click Next to proceed to the next page of available options until reaching the Summary page.

NOTE: The settings available in the Quick Set Wizard vary by the type of Quick Set being edited. Refer to the tables in Quick Set settings and options on page 105 to see the available settings and options for each type of Quick Set.

6. Review the Summary page, and then click Finish to save changes made to the Quick Set.

Following is an example of a Scan to USB Drive icon, which displays after that quick set has been created.
Copy a Quick Set

Use the following steps to copy a Quick Set.

1. Using the top navigation tabs, click General.
2. In the left navigation pane, click Quick Sets Setup.
3. In the Quick Sets area, click the check box next to the appropriate Quick Set, and then click Copy. The Quick Set Wizard opens.

**NOTE:** Click Cancel on any page of the Quick Set Wizard to cancel the current changes, exit the Quick Set Wizard, and return to the Quick Sets Setup page.

4. If necessary, modify the following settings, and then click Next:
   - Quick Set Title
   - Button Location
   - Control Panel location
   - Quick Set Description
   - Quick Set Start Option

5. Select settings and complete tasks in the wizard. Click Next to proceed to the next page of available options until reaching the Summary page.

**NOTE:** The settings available in the Quick Set Wizard vary by the type of Quick Set being copied. Refer to the tables in Quick Set settings and options on page 105 to see the available settings and options for each type of Quick Set.

6. Review the Summary page, and then click Finish to save the Quick Set.

Remove a Quick Set

Use the following steps to remove a Quick Set.

1. Using the top navigation tabs, click General.
2. In the left navigation pane, click Quick Sets Setup.
3. In the Quick Sets area, click the check box next to the appropriate Quick Set, and then click Remove....
4. When the Confirmation Page opens, click Remove to finish removing the Quick Set.

Quick Set settings and options

The following tables list the settings and options available in the Quick Set Wizard when adding, editing, or copying a Quick Set.

| Table 6-44 Address and Message Field Control — Email Quick Sets |
|---|---|
| Option | Description |
| Address Field Restrictions | Use the Address Field Restrictions drop-down list to specify whether users can type an email address or select an email address from an address book. |
### Table 6-44  Address and Message Field Control — Email Quick Sets (continued)

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
</table>
| **From:**    | Use the From: drop-down list to set the email address that displays in the From: field of the email.  
If Default From: is selected, the email address listed in the Default From: field is used.  
If User's address (sign-in required) is selected, the user is required to sign in to the printer with their email address when using the Quick Set.  
This field can be set to be user-editable. |
| **Default From:** | The Default From: field is used to define the email address used when Default From: is selected in the From: drop-down list. |
| **Default Display Name:** | Use this field to set the name displayed on the printer's control panel. If this field is not set, the value in the Default From: displays on the printer's control panel.  
This field is optional. |
| **To:**      | Use these drop-down lists to set the email recipient, CC (carbon copy) and BCC (blind carbon copy) values.  
The options for each of these fields are:  
- User's address (sign-in required)  
- Blank  
- Specify address  
These fields can be set to be user-editable. |
| **CC:**      |                                                                                                                                               |
| **BCC:**     |                                                                                                                                               |
| **Subject:** | Use this field to set the value that appears in the subject line of the email.  
This field can be set to be user-editable. |
| **Message:** | Use this field to set the value for the body of the email.  
This field can be set to be user-editable. |

### Table 6-45  Signing and Encryption — Email Quick Sets

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
</table>
| **Signing**    | Use the Signing drop-down list to specify whether the email sent using the Quick Set is digitally signed.  
This field can be set to be user-editable. |
| **Hashing Algorithm** | Use the Hashing Algorithm drop-down list to set the type hashing algorithm used with signed emails. The following hashing algorithms are available:  
- SHA-1  
- SHA-256 (recommended)  
- SHA-384  
- SHA-512 |
| **Encryption** | Use the Encryption drop-down list to specify whether the email sent using the Quick Set is encrypted.  
This field can be set to be user-editable. |
### Table 6-45  Signing and Encryption — Email Quick Sets (continued)

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Encryption Algorithm</td>
<td>Use the Encryption Algorithm drop-down list to set the encryption algorithm used for encrypted emails sent using the Quick Set.</td>
</tr>
<tr>
<td>Attribute for Recipient Public Key</td>
<td>The Attribute for Recipient Public Key field is used to set the attribute used for retrieving the email recipient's public key from LDAP for signed or encrypted emails.</td>
</tr>
</tbody>
</table>

### Table 6-46  Scan settings — Email, Fax, Save to Network Folder, and Save to USB Quick Sets

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Default File Type</td>
<td>Select the default file type for the scanned document:</td>
</tr>
<tr>
<td></td>
<td>● PDF</td>
</tr>
<tr>
<td></td>
<td>● JPEG</td>
</tr>
<tr>
<td></td>
<td>● TIFF</td>
</tr>
<tr>
<td></td>
<td>● MTIFF</td>
</tr>
<tr>
<td></td>
<td>● XPS</td>
</tr>
<tr>
<td></td>
<td>● PDF/A</td>
</tr>
<tr>
<td></td>
<td>● Text (OCR)</td>
</tr>
<tr>
<td></td>
<td>● Unicode Text (OCR)</td>
</tr>
<tr>
<td></td>
<td>● RTF (OCR)</td>
</tr>
<tr>
<td></td>
<td>● Searchable PDF (OCR)</td>
</tr>
<tr>
<td></td>
<td>● Searchable PDF/A (OCR)</td>
</tr>
<tr>
<td></td>
<td>● HTML (OCR)</td>
</tr>
<tr>
<td></td>
<td>● CSV (OCR)</td>
</tr>
<tr>
<td>Default Color Preferences</td>
<td>Select the default color setting for the scanned document:</td>
</tr>
<tr>
<td></td>
<td>● Color</td>
</tr>
<tr>
<td></td>
<td>● Black</td>
</tr>
<tr>
<td></td>
<td>● Black/Gray</td>
</tr>
<tr>
<td></td>
<td>● Automatically detect</td>
</tr>
</tbody>
</table>
### Table 6-46  Scan settings — Email, Fax, Save to Network Folder, and Save to USB Quick Sets (continued)

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Default Output Quality</strong></td>
<td>Select the default output quality for the scanned document:</td>
</tr>
<tr>
<td></td>
<td>- Low (small file)</td>
</tr>
<tr>
<td></td>
<td>- Medium</td>
</tr>
<tr>
<td></td>
<td>- High (large file)</td>
</tr>
<tr>
<td><strong>Default Resolution</strong></td>
<td>Select the default scan resolution for the scanned document:</td>
</tr>
<tr>
<td></td>
<td>- 75 dpi</td>
</tr>
<tr>
<td></td>
<td>- 150 dpi</td>
</tr>
<tr>
<td></td>
<td>- 200 dpi</td>
</tr>
<tr>
<td></td>
<td>- 300 dpi</td>
</tr>
<tr>
<td></td>
<td>- 400 dpi</td>
</tr>
<tr>
<td></td>
<td>- 600 dpi</td>
</tr>
</tbody>
</table>

### Table 6-47  File settings — Email, Save to Network Folder, and Save to USB Quick Sets

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>File Name Prefix</strong></td>
<td>Set the default file name prefix used for files saved to a network folder.</td>
</tr>
<tr>
<td><strong>Default File Name</strong></td>
<td>Default file name for the file to be saved.</td>
</tr>
<tr>
<td></td>
<td>Select the <strong>User editable</strong> check box to make this setting editable at the product control panel.</td>
</tr>
<tr>
<td><strong>File Name Suffix</strong></td>
<td>Set the default file name suffix used for files saved to a network folder.</td>
</tr>
<tr>
<td></td>
<td>Duplicate filename suffix default [[filename]_YYYYMMDDT]</td>
</tr>
<tr>
<td><strong>File Number Format</strong></td>
<td>Select a file name format for when the job is divided into multiple files.</td>
</tr>
<tr>
<td><strong>Default File Type</strong></td>
<td>Select the file format for the saved file.</td>
</tr>
<tr>
<td></td>
<td>Select the <strong>User editable</strong> check box to make this setting editable at the product control panel.</td>
</tr>
<tr>
<td><strong>File Name Preview</strong></td>
<td>Enter a file name, and then click the <strong>Update Preview</strong> button.</td>
</tr>
<tr>
<td><strong>Default Color Preference</strong></td>
<td>Select whether the file is in black &amp; white or in color.</td>
</tr>
<tr>
<td><strong>Default Output Quality</strong></td>
<td>Select the quality for the file. Higher-quality images require a larger file size than lower-quality images, and they take more time to send.</td>
</tr>
<tr>
<td><strong>Default Resolution</strong></td>
<td>Set the resolution for the file. Higher resolution images have more dots per inch (dpi), so they show more detail. Lower resolution images have fewer dots per inch and show less detail, but the file size is smaller.</td>
</tr>
<tr>
<td><strong>Compression</strong></td>
<td>Specify if the file uses Normal or High compression when saving a scanned document as a PDF or XPS file. If compression is set to High, the scanned file is smaller, but the scanning process might take longer than Normal compression.</td>
</tr>
<tr>
<td><strong>Black TIFF Compression</strong></td>
<td>Select the black TIFF compression algorithm to be used to compress the generated TIFF file.</td>
</tr>
<tr>
<td><strong>Color/Grayscale TIFF Compression</strong></td>
<td>Select the color/grayscale TIFF compression algorithm to be used to compress the generated TIFF file.</td>
</tr>
</tbody>
</table>
### Table 6-47  File settings — Email, Save to Network Folder, and Save to USB Quick Sets (continued)

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PDF encryption</td>
<td>If the file type is PDF, then this option encrypts the output PDF file. A password must be specified as part of the encryption. The same password must be used to open the file. The user will be prompted to enter a password prior to scanning their job if one has not been set prior to pressing start.</td>
</tr>
<tr>
<td>Disable OCR file types</td>
<td>Select this setting to prevent OCR file types from being available from the product control panel.</td>
</tr>
<tr>
<td>Enable Blank Page Suppression</td>
<td>If the Enable Blank Page Suppression option is enabled, blank pages will be ignored.</td>
</tr>
</tbody>
</table>

### Table 6-48  Copy settings — Copy Quick Sets

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Copies</td>
<td>Set the default number of copies.</td>
</tr>
<tr>
<td>Sides</td>
<td>Select a Copy Sides option:</td>
</tr>
<tr>
<td></td>
<td>- 1-sided original, 1-sided output</td>
</tr>
<tr>
<td></td>
<td>- 2-sided original, 2-sided output</td>
</tr>
<tr>
<td></td>
<td>- 1-sided original, 2-sided output</td>
</tr>
<tr>
<td></td>
<td>- 2-sided original, 1-sided output</td>
</tr>
<tr>
<td>Color/Black</td>
<td>Specify whether copies are printed in color or in black and white:</td>
</tr>
<tr>
<td></td>
<td>- Auto Detect: Prints color documents in color (for printers that support color copying), and black and white documents in black and white. For mixed documents, the printer will determine whether to print in color or black and white.</td>
</tr>
<tr>
<td></td>
<td>- Color: Prints documents in color (for printers that support color copying).</td>
</tr>
<tr>
<td></td>
<td>- Black: Prints documents in black and white.</td>
</tr>
<tr>
<td>Collate</td>
<td>For printers that support print-job finishing, each set of copied pages are assembled in the same order as the original document.</td>
</tr>
<tr>
<td></td>
<td><strong>NOTE:</strong> If the printer has a stapler installed, select a staple option. To not staple the copies, select None.</td>
</tr>
<tr>
<td></td>
<td>Select a Collate option.</td>
</tr>
<tr>
<td></td>
<td>- Collate on (Sets in page order): If making more than one copy, select to assemble pages in the correct order for each set of copies.</td>
</tr>
<tr>
<td></td>
<td>- Collate off (Pages grouped): Select to group the same pages together. For example, if making five copies of an original document that has two pages, all five first pages are grouped together and all five second pages are grouped together.</td>
</tr>
<tr>
<td>Reduce/Enlarge</td>
<td>Use the Reduce/Enlarge feature to scale the size of the document up or down.</td>
</tr>
<tr>
<td></td>
<td>Select one of the predefined percentages, or touch the Scaling field, and enter a percentage between 25 and 400 for the flatbed scanner and between 25 and 200 for the document feeder. You can also select these options:</td>
</tr>
<tr>
<td></td>
<td>- Auto: The printer automatically scales the image to fit the paper size in the tray.</td>
</tr>
<tr>
<td></td>
<td>- Auto Include Margins: The printer reduces the image slightly to fit the entire scanned image within the printable area on the page.</td>
</tr>
<tr>
<td></td>
<td><strong>NOTE:</strong> To reduce the image, select a scaling percentage that is less than 100. To enlarge the image, select a scaling percentage that is greater than 100.</td>
</tr>
<tr>
<td>Option</td>
<td>Description</td>
</tr>
<tr>
<td>---------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Paper Selection</td>
<td>Select which tray to use when printing or making copies:</td>
</tr>
<tr>
<td></td>
<td>- Manually feed: The Paper Selection option is automatically set to Tray 1: Any Type, Any Size</td>
</tr>
<tr>
<td></td>
<td>- Automatically Detect: Automatically matches the paper size of the original to a paper size in one of the trays</td>
</tr>
<tr>
<td></td>
<td>- Tray 1: Any Type, Any Size</td>
</tr>
<tr>
<td></td>
<td>- Tray 2: Plain, Letter (8.5x11)</td>
</tr>
<tr>
<td>Image Adjustment</td>
<td>Use the settings to improve the overall quality of the copy. For example, adjust the Darkness and Sharpness, and use the Background Cleanup setting to remove faint images from the background or to remove a light background color.</td>
</tr>
<tr>
<td></td>
<td>- Darkness: Adjust to increase or decrease the amount of white and black in the colors</td>
</tr>
<tr>
<td></td>
<td>- Contrast: Adjust to increase or decrease the difference between the lightest and darkest color on the page</td>
</tr>
<tr>
<td></td>
<td>- Background Cleanup: Adjust if you are having trouble copying a faint image</td>
</tr>
<tr>
<td></td>
<td>- Sharpness: Adjust to sharpen or soften the image. For example, increasing the sharpness could make text look clearer, but decreasing it could make photographs look smoother.</td>
</tr>
<tr>
<td>Content Orientation</td>
<td>For some features to work correctly, specify the way the content of the original document is placed on the page.</td>
</tr>
<tr>
<td></td>
<td>If you are making two-sided copies, select a 2-sided format option.</td>
</tr>
<tr>
<td></td>
<td><strong>Orientation:</strong></td>
</tr>
<tr>
<td></td>
<td>- Portrait: The short edge of the page is along the top.</td>
</tr>
<tr>
<td></td>
<td>- Landscape: The long edge of the page is along the top.</td>
</tr>
<tr>
<td></td>
<td><strong>2-Sided Format:</strong></td>
</tr>
<tr>
<td></td>
<td>- Book-style: The back side of the original is printed right-side-up, and the back side of the copy is printed the same way. Use this option for originals and copies that are bound along the left edge.</td>
</tr>
<tr>
<td></td>
<td>- Flip-style: The back side of the original is printed upside-down, and the back side of the copy is printed the same way. Use this option for originals and copies that are to be bound along the top edge.</td>
</tr>
<tr>
<td></td>
<td>- Book-style original; Flip-style copy: The back side of the original is printed right-side-up, but the back side of the copy is printed upside-down. Use this option when the original is bound along the left edge, but the copies need to be bound along the top edge.</td>
</tr>
<tr>
<td></td>
<td>- Flip-style original; Book-style copy: The back side of the original is printed upside-down, but the back side of the copy is printed right-side-up. Use this option when the original is bound along the top edge, but the copies need to be bound along the left edge.</td>
</tr>
<tr>
<td>Optimize Text/Picture</td>
<td>Select the option for how to handle output of a particular type content being printed:</td>
</tr>
<tr>
<td></td>
<td>- Manually adjust: Manually optimize the setting for each document</td>
</tr>
<tr>
<td></td>
<td>- Text: Use for documents that contain mostly text</td>
</tr>
<tr>
<td></td>
<td>- Printed picture: Use for line drawings and preprinted images, such as magazine clippings or pages from books</td>
</tr>
<tr>
<td></td>
<td><strong>NOTE:</strong> If bands of irregular intensity print on the copies, try selecting Printed picture to improve the quality.</td>
</tr>
<tr>
<td></td>
<td>- Photograph: Use for photographic prints</td>
</tr>
<tr>
<td></td>
<td>Select an Optimize For value for the manual adjustment.</td>
</tr>
</tbody>
</table>
### Table 6-48  Copy settings — Copy Quick Sets (continued)

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pages per Sheet</strong></td>
<td>Select how many pages to print on one sheet and the page order: to copy to one, two, or four Pages per Sheet and select whether to Add page borders.</td>
</tr>
<tr>
<td>Pages per Sheet</td>
<td>● One (1)</td>
</tr>
<tr>
<td></td>
<td>● Two (2)</td>
</tr>
<tr>
<td></td>
<td>● Four (4)</td>
</tr>
<tr>
<td>Page Order</td>
<td></td>
</tr>
<tr>
<td></td>
<td>● Right, then down: Prints the pages in rows</td>
</tr>
<tr>
<td></td>
<td>● Down, then right: Prints the pages in columns</td>
</tr>
<tr>
<td></td>
<td>Click the Add page borders check box to add borders on the pages.</td>
</tr>
<tr>
<td>Original Size</td>
<td>Specify the size of the original document:</td>
</tr>
<tr>
<td></td>
<td>● Automatically detect</td>
</tr>
<tr>
<td></td>
<td>● Letter (8.5x11)</td>
</tr>
<tr>
<td></td>
<td>● Mixed Letter/Legal</td>
</tr>
<tr>
<td></td>
<td>● Legal (8.5x14)</td>
</tr>
<tr>
<td></td>
<td>● Executive (7.25x10.5)</td>
</tr>
<tr>
<td></td>
<td>● Statement (5.5x8.5)</td>
</tr>
<tr>
<td></td>
<td>● Oficio (8.5x13)</td>
</tr>
<tr>
<td></td>
<td>● A4 (210x297 mm)</td>
</tr>
<tr>
<td></td>
<td>● A5 (148x210 mm)</td>
</tr>
<tr>
<td></td>
<td>● B5 (182x257 mm)</td>
</tr>
<tr>
<td></td>
<td>● 16k (195x270 mm)</td>
</tr>
<tr>
<td></td>
<td>● DPostcard JIS (148x200 mm)</td>
</tr>
<tr>
<td></td>
<td>● Oficio (216x340 mm)</td>
</tr>
<tr>
<td>Booklet</td>
<td>Select to have Booklet Format off or on. If on, select either a 1-sided or 2-sided booklets and whether to enable Borders on each page.</td>
</tr>
<tr>
<td>Edge-to-Edge</td>
<td>Use to avoid shadows that can display along the edges of copies when the original document is printed close to the edges. Combine this feature with the Reduce/Enlarge feature to ensure that the entire page is printed on the copies. When the Edge-to-Edge feature is turned on, the printer minimizes margins and prints as close to the edge of the paper as possible.</td>
</tr>
<tr>
<td>Multi-feed Detection</td>
<td>Use this feature to detect when multiple pages are fed simultaneously into the ADF (automatic document feeder) or sheet-feed scanner, alert the user, and stop the scanning job so the proper action can be taken. By default this feature is Enabled so that it automatically improves the scanning experience and results.</td>
</tr>
</tbody>
</table>
Table 6-48  Copy settings — Copy Quick Sets (continued)

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-sided ID Scan</td>
<td>Select to have 2-sided ID Scan on or off to scan both sides of a card, such as an identification card or business card.</td>
</tr>
<tr>
<td>Book Mode</td>
<td>Select to have Book Mode off or on.</td>
</tr>
</tbody>
</table>

Example Quick Sets

Below is an example of what the Quick Sets area looks like after quick sets have been created.

![Example Quick Sets](image)

Manage multiple devices with Digital Sending Software

The HP Digital Sending Software (DSS) is a remote management tool available for purchase. DSS allows many multi-function printers, or similar devices, to be managed from a single point of contact.

When bound to DSS, all digital send and fax setup for the device is managed through the DSS configuration utility on the server. As a result, many setup pages will be disabled within this website. Allow the DSS connection if DSS is used for this device. After the device has been bound to a DSS server, prevent other DSS servers from binding to the device by disabling Allow transfer to a new server.

For more information, visit the Digital Sending Software website.
Set volume limits on scanned pages

Use the following information to set limits on the number of scanned pages.

- **Introduction**
- **Before you begin**
- **Step one: Configure statistics and quota services**
- **Step two: Complete the setup**

**Introduction**

Use the Quota and Statistics Services feature in the Embedded Web Server (EWS) to control the volume of printed or scanned pages on a per-user basis.

**Before you begin**

Connecting to a quota server ensures that each user stays within an acceptable range of printed or scanned pages. When connected, the printer will query the server each time a job is started to ensure that the user has pages available. If the server is unavailable, the user account is not known by the server, or pages are not available for the user, then the user may not be able to complete his or her job. Please refer to documentation from the company providing the quota server software for more information.

**NOTE:** If the printer is connected to an external Job Statistics Service, network-connection problems with that service could prevent users from completing jobs with the printer. Consider disconnecting the Job Statistics Service to prevent conflicts.

**Disconnect a Job Statistics Service:**

1. In the EWS, click the General tab.
2. In the left navigation pane, click Job Statistics Settings.
3. If one or more Job Statistics Services are listed on this page, select them, and then click the Remove button, or click the Remove All button to disconnect all services.
4. Click the Apply button to save the settings.

**Step one: Configure statistics and quota services**

Use the following steps to configure statistics and quota services.

Connecting to a quota service ensures that each user stays within a pre-defined range of printed or scanned pages.

When connected, the printer queries the server each time a job is started to ensure that the user has pages available. Any of the following quota-server conditions might prevent the user from completing their job.

- The quota server is unavailable.
- The user account is not known by the server.
- The user has exceeded their page quota.
If your business uses a quota server, please refer to documentation from the company providing the quota server software for more information.

For smaller businesses, printing or scanning can also be limited for users or groups with local Device User Accounts (Server-less Job Accounting). For more information, refer to the steps below on how to enable and configure the local quota service.

1. In the EWS, click the **General** tab.

2. In the left navigation pane, click **Job Statistics Settings**. Configure the job statistics settings as follows:
   a. If the printer is connected to a job statistics service, and the service is available, this connection is listed under **Job Statistics Service**.
   b. To capture user data in a statistics log, select **Enable Device User Statistics Log**, and then click **Apply**.

   ![Figure 6-17 Job Statistics Settings page](image)

3. In the left navigation pane, click **Quota Settings**. Configure the quota settings as follows:
   a. If the printer is connected to a remote quota service, and the service is available, this connection is listed under **Remote Quota Service**.
   b. To connect to a legacy quota service installed on a network server, select **Connect this device to a Legacy Quota Server**, and complete the following:
      - Enter the URL for the quota server in the **Quota Server URL** field.
      - Enter a **Username** and **Password** for accessing the quota server.
      - Set a **Connection Timeout** value from 10–300 seconds, or accept the default setting of 60 seconds. The **Connection Timeout** is the time after which the connection to the Quota Server is closed after the user completes the job.
      - Set a **Response Timeout** value from 10–300 seconds, or accept the default setting of 60 seconds. The **Response Timeout** is the time after which the printer stops attempting to connect to the Quota Server if there is no response from the server.
c. To enable local quotas for users or groups with local Device User Accounts, select **Enable local quota service** and then click **Apply**.

Once the local quota service is enabled, click **Local Quota Configuration** in the left navigation pane to configure the quotas for local Device User Accounts.

For more information, see the white paper **Server-less Job Accounting (SJA) with Local Quotas**.

When a print or scan job is started from the printer control panel, the printer connects to the specified quota server and retrieves quota transaction data, or utilizes the local quota service.

**Step two: Complete the setup**

On the **General** tab in the EWS, do the following:
● Select **Job Statistics Settings**, review the selected settings, and then click **Apply** to complete the setup.

● Select **Quota Settings**, review the selected settings, and then click **Apply** to complete the setup.

For more information about using the local quota service, see the white paper *Server-less Job Accounting (SJA) with Local Quotas*. 
Configure faxing

Use the following information to configure the fax features for a printer.

- Set up fax send
- Set up fax receive
- Create and manage fax speed dials
- Set up and configure fax archive

NOTE: All features might not be available on every device.
Set up fax send

Use the following information to set up fax send using the EWS.

- **Introduction**
- **Before you begin**
- **Step one: Select the fax send method**
- **Step two: Set up the Common Job Settings**
- **Step three: Configure a fax send method**
- **Step four: Complete the setup**

**Introduction**

Set up faxing from the internal modem, or set up the LAN fax service or an Internet fax service. Also, configure fax-send settings that are common for all fax jobs that are sent from the printer.

View a video demonstration of how to set up the Fax Send feature

**Before you begin**

Connect the fax cable to the fax port on the printer and to the phone port on the wall.

Administrators need the following information before beginning the configuration process for **Internet Fax Setup**:

- Administrative access to the printer
- DNS suffix (e.g., companyname.com)
- SMTP server (e.g., smtp.mycompany.com)

**NOTE:** If you do not know the SMTP server name, SMTP port number, or authentication information, contact the e-mail/Internet service provider or system administrator for the information. SMTP server names and port names are typically found by doing an Internet search. For example, use terms like "Gmail SMTP server name" or "yahoo SMTP server name" to search.

- SMTP server authentication requirements for outgoing e-mail messages, including the user name and password used for authentication, if applicable.
Step one: Select the fax send method

Select the fax send method for either FutureSmart 3 or 4.

- FutureSmart 3
- FutureSmart 4

FutureSmart 3

Use the following steps to select the fax send method (FutureSmart 3).

1. Using the EWS top navigation tabs, click Fax.
2. In the left navigation pane, click Fax Send Setup.
3. In the Fax Send Setup area, select the Enable Fax Send check box.
4. From the Fax Send Method drop-down list, select a fax send method:
   - Internal Modem
   - LAN Fax Setup
   - Internet Fax Setup

FutureSmart 4

Use the following steps to select the fax send method (FutureSmart 4).

1. Using the EWS top navigation tabs, click Fax.
2. In the left navigation pane, click Fax Send Setup and then click Default Job Options.
3. Select the Enable Fax Send check box.
4. From the Fax Send Method drop-down list, select a fax send method:
   - Internal Modem
   - LAN Fax Setup
   - Internet Fax Setup
Step two: Set up the Common Job Settings

Set up the common job settings for either FutureSmart 3 or 4.

- FutureSmart 3
- FutureSmart 4

**FutureSmart 3**

Use the following information to set up common fax job settings (FutureSmart 4).

- **Quick Sets** area: Use the controls in the Quick Sets area to create and save frequently-used settings for future use.
  
  Quick Sets are short-cut jobs that are available from the Home screen or within the Quick Sets feature on the printer control panel.

- **Notification Settings** area: Select a Condition on Which to Notify option
  
  - If a notify option is selected and a user is signed in, an email notification about the job status is sent to the address associated with the signed-in user.
  
  - If a notify option is selected and a user is not signed in, a prompt to enter an email address at the printer control panel is displayed and must be entered before the notification can be sent.

- **General Fax Send Settings** area: Use to select options to require a fax number confirmation and speed dial matching.

- **Scan Settings** area: Configure the default settings that describe the original documents. Users can override these settings for individual jobs.

**FutureSmart 4**

Use the following information to set up common fax job settings (FutureSmart 4).

**Common Job Settings**

- **Notification Settings** area: Select a Condition on Which to Notify option
  
  - If a notify option is selected and a user is signed in, an email notification about the job status is sent to the address associated with the signed-in user.
  
  - If a notify option is selected and a user is not signed in, a prompt to enter an email address at the printer control panel is displayed and must be entered before the notification can be sent.

- **General Fax Send Settings** area: Use to select options to require a fax number confirmation and speed dial matching.

- **Scan Settings** area: Configure the default settings that describe the original documents. Users can override these settings for individual jobs.
Quick Sets

- In the left navigation menu, click **Quick Sets** under **Fax Send Setup**. Use the controls in the **Quick Sets** area to create and save frequently-used settings for future use.

Quick Sets are short-cut jobs that are available from the Home screen or within the **Quick Sets** feature on the printer control panel.
Step three: Configure a fax send method

Use one of the following methods, based on your needs, to configure a fax-send method:

- Option one: Configure the internal modem
- Option two: Configure LAN Fax Setup
- Option three: Configure Internet Fax Setup

Option one: Configure the internal modem

Use the settings on the Internal Modem tab to configure the printer to send and receive faxes using its internal modem.

1. In the Fax Send Setup area, click the Internal Modem tab.
2. Select the Country/Region, and then enter the Company Name and Phone Number in the Device Modem Settings area. The country/region, company name, and phone number are displayed in the fax header of sent faxes.
3. Set the general fax send settings in the General Fax Send Settings area. The following general fax send settings are available:
   - Fax Header (default is Prepend)
   - Enable PC Fax Send (selected by default)
   - Enable Error Correction Mode (selected by default)
   - Enable JBIG Compression (selected by default)
4. Set the dialing settings in the Fax Dialing Settings area. The following dialing settings are available:
   - Fax Dial Volume (default setting is Low)
   - Dialing Mode (default setting is Tone)
   - Dialing Prefix
   - Fax Send Speed (default setting is Fast)
   - Redial Interval (default setting is 5)
   - Redial on Error (default setting is 2)
   - Redial on No Answer (default setting is 0)
   - Redial on Busy (default setting is 3)
   - Detect Dial Tone (not selected by default)
5. Select the Enable Billing Codes check box in the Billing Code Settings area to enable the use of billing codes on the printer. Enter a default billing code value in the Default Billing Code field. Enter a minimum length for the billing code in the Minimum Length field. Select the Allow users to edit billing code check box if necessary.
Option two: Configure LAN Fax Setup

When signing up for LAN fax service, the service provider should have given the information needed to set up the service. Use that information to configure the service, and then follow these instructions to use the service with the printer. Depending on the service provider, some of these settings might not be available.

1. In the Fax Send Setup area, click the LAN Fax Setup tab.
2. In the LAN Fax Service Settings area, select the name of the LAN fax service. Select the file format that the service uses.
3. In the Folder Settings area, select one of the following options:
   
   **Option one: Save to a standard shared network folder**
   a. Select Save to a standard shared network folder.
   b. Enter the network folder information in the fields, and then click the Verify Folder Access button. The UNC path uses this format: `\servername\sharename\foldername`.

   **Option two: Save to an FTP Server**
   a. Select Save to an FTP Server.
   b. Enter the FTP server information in the fields, and then click Verify Folder Access.

4. In the Dialing Settings area, enter the maximum number of times the printer should attempt to try sending the fax if the first attempt is unsuccessful. Also enter the number of minutes to wait between attempts.
5. In the Input Settings area, select whether to receive notification if there are errors sending the file to the network folder. If Error Correction Mode is enabled, unsuccessfully sent portions of a fax are sent again.
6. In the Output Settings area, select the appropriate transmission speed, and select whether to include a cover page that the LAN fax service provides.
7. In the Billing Code Settings area, choose whether to enable billing codes. Select Enable Billing Codes to enable this feature, and then enter a Default Billing Code and a Minimum Length for the code. There is an option to Allow users to edit billing code.

Option three: Configure Internet Fax Setup

When signing up for the Internet fax service, the service provider should have given you the information needed to set up the service. Use that information to configure the service, and then follow these instructions to use the service with the printer.

1. In the Fax Send Setup area, click the Internet Fax Setup tab.
2. In the Internet Fax Service Settings area, enter the information from your service provider in the Internet Fax Provider Domain and the T37 Prefix fields.
3. Enter the Default Fax Account E-mail Address. If you want to use the email address for the user who is signed in to the printer, select the appropriate box.
4. Select a File Format.
5. Choose whether to enable the **If available, use the signed in user’s e-mail address as the Fax Account address** option.

6. If you are using a service in North America, choose whether to enable the **Auto complete to North American Numbering Plan (NANP) format using area code** option. If selected, enter the area code in the field provided.

**Step four: Complete the setup**

On the **Fax Send Setup** page, review the selected settings, and then click **Apply** to complete the setup.
Set up fax receive

Use the following information to set up fax receive using the EWS.

- Introduction
- Before you begin
- Step one: Set up the Fax Job Options
- Step two: Set up the Fax Receive Settings
- Step three: Set up the Notification Settings
- Step four: Set up the Fax Printing Schedule
- Step five: Complete the setup

Introduction

Use the Fax Receive Setup page to configure settings for the following groups of features:

- Device Modem Settings
- Fax Job Options
- Fax Receive Settings
- Notification Settings
- Fax Printing Schedule
- Blocked Fax Numbers

Before you begin

Connect the fax cable to the fax port on the printer and to the phone port on the wall.
Step one: Set up the Fax Job Options

Learn how to set up the fax job options for either FutureSmart 3 or 4.

- FutureSmart 3
- FutureSmart 4

FutureSmart 3

Use the following steps to select the fax job options (FutureSmart 3).

1. Using the top navigation tabs, click Fax.
2. In the left navigation pane, click Fax Receive Setup.
3. In the Fax Receive Setup area, select the Enable Fax Receive check box. If this check box is not selected, the feature is unavailable at the printer control panel.
4. Set the following features in the Fax Job Options area:
   - Paper Selection: If you select a tray, the fax prints on whatever size paper is in the tray
   - Output Bin
   - Sides: Set this option to specify whether incoming faxes are printed on one side or two sides
   
   ![NOTE:](image) You must be an administrative user to access this setting.

   - Fit to Page: Scale the incoming page to print on the size of paper in one of the trays
   - Stamp Received Faxes: Select this setting to print the date, time, phone number, and page number on every incoming fax page

FutureSmart 4

Use the following steps to select the fax job options (FutureSmart 4).

1. Using the top navigation tabs, click Fax.
2. In the left navigation pane, click Fax Receive Setup.
3. In the Fax Receive Setup area, select the Enable Fax Receive check box. If this check box is not selected, the feature is unavailable at the printer control panel.
4. Set the following features in the Default Job Options area:
   - Paper Selection: If you select a tray, the fax prints on whatever size paper is in the tray
   - Output Bin
   - Output Sides: Set this option to specify whether incoming faxes are printed on one side or two sides

   ![NOTE:](image) You must be an administrative user to access this setting.
- **Fit to Page**: Scale the incoming page to print on the size of paper in one of the trays
- **Stamp Received Faxes**: Select this setting to print the date, time, phone number, and page number on every incoming fax page

**Step two: Set up the Fax Receive Settings**

Set the following features in the **Fax Receive Settings** area:

**FutureSmart 3**
- **Ringer Volume**
- **Rings To Answer**: Select the number of rings to allow before the fax answers
- **Fax Receive Speed**
- **Ring Interval**: Select a ring interval between 220 and 600 ms
- **Ring Frequency**: The default ring frequency is 68 Hz. You can set a custom frequency between 1 and 200 Hz

**FutureSmart 4**
- **Ring Volume**
- **Rings To Answer**: Select the number of rings to allow before the fax answers
- **Fax Receive Speed**
- **Ring Interval**: Enter a ring interval between 0 and 600 ms
- **Ring Frequency High Limit**: The default ring frequency is 68 Hz. You can set a custom frequency between 0 and 100 Hz
**Step three: Set up the Notification Settings**

Set up the notification settings for either FutureSmart 3 or 4.

- **FutureSmart 3**
- **FutureSmart 4**

**FutureSmart 3**

Use the settings in the Notification Settings area to specify when you, or the person who is sending the email, should be notified of the status of sent emails. The default setting is that the signed in user’s email address will be used. If the recipient email address is blank, no notification is sent.

Set the following features in the Notification Settings area:

- **Condition on Which to Notify**: Select one of the following conditions on which to notify:
  - Notify when job completes
  - Notify only if job fails
- **Method Used to Deliver Notification**: Select the notification method, E-mail or Print. For E-mail, provide an email address
- **Include Thumbnail**: A thumbnail image of the first page of the fax is sent with the notification
- **Consolidate printed reports**: Consolidate multiple fax destinations into the same fax call report

**FutureSmart 4**

To select notification settings, navigate to the Notification area of the Fax Receive Setup area, or navigate to Default Job Options in the Fax Send Setup area. Set notification settings to specify when you, or the person who is sending the email, should be notified of the status of sent emails. The default setting is that the signed in user’s email address will be used. If the recipient email address is blank, no notification is sent.

Set the following features in the Notification area:

- **Condition on Which to Notify**: Select one of the following conditions on which to notify:
  - Do not notify
  - Notify when job completes
  - Notify only if job fails
Step four: Set up the Fax Printing Schedule

Set up the fax printing schedule for either FutureSmart 3 or 4.

- **FutureSmart 3**
- **FutureSmart 4**

**FutureSmart 3**

Faxes print by default, but they can also be stored and printed on a schedule that you determine. Use the **Fax Printing Schedule** setting to specify when to print and when to store faxes.

Select one of the following options for the **Fax Printing Schedule**:

- Always store faxes
- Always print faxes (default)
- **Use Fax Printing Schedule**

Use the **Use Fax Printing Schedule** setting to set fax schedule events (the printing or storing of faxes). The setting can be turned on and off manually or scheduled to go on and off automatically for days of the week. The schedule can be set to lock out an entire day (24 hours) or to lock out a time period during the day. Only one lockout period can be set, but it can be applied to any number of days.

1. Select the **Use Fax Printing Schedule** option.
2. Choose whether to select to enable the **Use Holiday Sleep Schedule** check box.
3. Select a **Fax Schedule Event**, or click **Add** to create a new fax schedule event:
   a. Select an **Event Type**.
   b. Click in the **Time** field and then select a time for the fax schedule event.
   c. Select one or more **Event Days**.
   d. Click **Apply**.

**FutureSmart 4**

Faxes print by default, but they can also be stored and printed on a schedule that you determine. Use the **Fax Printing Schedule** setting to specify when to print and when to store faxes.

Select one of the following options for the **Fax Printing Schedule**:

- Always store
- Always print (default)
- **Use schedule**

Use the **Use schedule** setting to set fax schedule events (the printing or storing of faxes). The setting can be turned on and off manually or scheduled to go on and off automatically for days of the week. The schedule can be set to lock out an entire day (24 hours) or to lock out a time period during the day. Only one lockout period can be set, but it can be applied to any number of days.
Use a fax printing schedule:

1. Select the **Use schedule** option.

2. Choose whether to select to enable the **Use Holiday Sleep Schedule** check box.

3. Select an **Event Type**. or click **Add** to create a new fax schedule event:
   a. Select an **Event Type**.
   b. Click in the **Time** field and then select a time for the fax schedule event.
   c. Select one or more **Event Days**.
   d. Click **Apply**.

4. To edit a fax scheduled event, select the event and click **Edit**.

**Step five: Complete the setup**

On the **Fax Receive Setup** page, review the selected settings, and then click **Apply** to complete the setup.
Create and manage fax speed dials

Learn how to create and manage fax speed dials.

- Introduction
- Before you begin
- Method one: Manage speed dials in the HP Embedded Web Server (EWS)
- Method two: Manage speed dials using the control panel

Introduction

Use the control panel or HP Embedded Web Server (EWS) to manage the speed dials for the printer.

There are 1000 speed dials (numbered 000–999) available on the printer control panel using the fax job screen. Speed dials are listed on the fax screen by speed dial number, and the speed dial name is also displayed. Speed dials can have multiple destination numbers, and use ( - ), ( * ), and ( # ) characters.

Before you begin

Connect the fax cable to the fax port on the printer and to the phone port on the wall.

Method one: Manage speed dials in the HP Embedded Web Server (EWS)

Use the following steps to manage speed dials in the EWS.

1. In the address line of your web browser, type the IP address or host name of the printer to open the EWS. For more information, see Open the HP Embedded Web Server (EWS) on page 13.

2. Using the top navigation tabs, click Fax.

3. In the left navigation pane, click Speed Dials.

4. To add a new speed dial, use the following steps:
   a. Select the checkbox next to the Speed Dial Code you want to assign the fax number to.
   b. Click Edit....
   c. In the Edit Speed Dial area, type a name for the speed dial in the Speed Dial Name: field.
   d. Type the fax number for the speed dial in the Fax Number: field, and then click Add.
   e. Click the OK button to save the speed dial.

   NOTE: Multiple fax numbers can be associated with a single speed dial.

5. To edit a speed dial, use the following steps:
   a. Select the checkbox next to the Speed Dial Code to edit, and then click Edit....
   b. Edit the Speed Dial Name: or Fax Number:, and then click OK to save the changes to the speed dial.

6. To delete a speed dial, select the checkbox next to the Speed Dial Code and then click Delete....
7. Use the **Import**... button to import comma-separated value (.csv) files containing lists of contacts, speed dials, or user access codes. The import feature allows you to load multiple contacts, speed dials, or user access codes all at once instead of one at a time.

8. Use the **Export All**... button to save a list of the printer’s address book contacts, speed dials, and/or user access codes to a single .csv file. The resulting .csv file can then be saved to a location of your choice.
Method two: Manage speed dials using the control panel

Use the following steps to manage speed dials using the control panel.

- Create a speed dial list (FutureSmart 3)
- Create a speed dial list or new speed dial contact (FutureSmart 4)
- Add a number to an existing speed dial list
- Delete a speed dial list
- Delete a single number from a speed dial list
- Search a speed-dial list by name

**NOTE:** The steps vary according to the type of control panel.

Create a speed dial list (FutureSmart 3)

Use the following steps to create a speed dial list (FutureSmart 3).

1. From the Home screen on the printer control panel, touch the **Fax** button.
2. Touch the **Speed Dials** button to display the **Speed Dials** screen.
3. Touch one of the unassigned **One Touch Speed Dials** numbers.
4. Touch the **Speed Dial Name** field to display the keyboard.
5. Type a name for the speed dial.
6. Type a fax number for the speed dial.

**NOTE:** To enter additional fax numbers for a speed dial, touch the screen to the right of the last digit of the previously entered fax number. When the cursor appears, touch the enter key to move the cursor to the next line. Repeat this step to enter all the numbers for the speed dial.

7. Touch the **OK** button.

The name and fax number (or numbers) display next to the selected **One Touch Speed Dials** number. Touch the **OK** button to return to the Fax screen.

Create a speed dial list or new speed dial contact (FutureSmart 4)

Use the following steps to create a speed dial list or new speed dial contact.

1. From the Home screen on the printer control panel, swipe until the **Contacts** app tile displays. Touch the **Contacts** tile to open the app.
2. Touch the arrow in the upper left corner and select **Fax Speed Dials**.
3. Touch the **Add Contact** icon.
4. Type a name for the speed dial list or speed dial contact in the **Display Name** field.
5. Type a **Fax Speed Dial** number, or select **Next Available**.
6. Type a Fax Number for the contact, or, if creating a list, type numbers for all contacts in the list.
7. Touch Save.
Add a number to an existing speed dial list

Add a number to an existing speed dial list as follows.

- FutureSmart 3
- FutureSmart 4

**FutureSmart 3**

Use the following steps to add a number to an existing speed dial list.

1. From the Home screen on the product control panel, scroll to and touch the Fax button.
2. Touch the Speed Dials button to display the Speed Dials screen.
3. Touch the One Touch Speed Dials number of the list to be edited.
4. Touch the down arrow on the Speed Dial Name box to open the drop-down menu.
5. Touch the Fax Numbers item.
6. To add a fax number for a speed dial name, touch the screen to the right of the last digit of the last fax number in the list. When the cursor appears, touch the enter key to move the cursor to the next line and then type the fax number.
7. Touch the OK button to return to the Speed Dials screen.
8. Touch the OK button to return to the Fax screen.

**FutureSmart 4**

Use the following steps to add a number to an existing speed dial list.

1. From the Home screen on the printer control panel, swipe until the Contacts app tile displays. Touch the Contacts tile to open the app.
2. Touch the arrow in the upper left corner and select Fax Speed Dials.
3. Select a speed dial list.
4. Touch the Edit icon.
5. Type the number for the contact you want to add in the Fax Number field.
6. Touch Save.
Delete a speed dial list

Delete a speed dial list for either FutureSmart 3 or 4.

- FutureSmart 3
- FutureSmart 4

**FutureSmart 3**

Use the following steps to delete a speed dial list.

1. From the Home screen on the product control panel, scroll to and touch the Fax button.
2. Touch the Speed Dials button to display the Speed Dials screen.
3. Touch the One Touch Speed Dials number of the list to be deleted.
4. Touch the Delete button.
5. Touch the Yes button to confirm the deletion of the speed dial list and to return to the Fax screen.

**FutureSmart 4**

Use the following steps to delete a speed dial list.

1. From the Home screen on the printer control panel, swipe until the Contacts app tile displays. Touch the Contacts tile to open the app.
2. Touch the arrow in the upper left corner and select Fax Speed Dials.
3. Select a speed dial list.
4. Touch the Delete icon.
5. Touch Delete to confirm.
Delete a single number from a speed dial list

Delete a single number from a speed dial list for either FutureSmart 3 or 4.

- **FutureSmart 3**
- **FutureSmart 4**

**FutureSmart 3**

Use the following steps to delete a single number from a speed dial list.

1. From the Home screen on the product control panel, scroll to and touch the Fax button.
2. Touch the Speed Dials button to display the Speed Dials screen.
3. Touch the One Touch Speed Dials number of the list to open the keyboard.
4. Touch the down arrow on the Speed Dial Name box to open the drop-down menu and then touch the Fax Numbers option.
5. Scroll through the list of fax numbers and touch the screen to the right of last digit of the fax number to be deleted. Use the backspace key to delete the fax number.
6. Touch the OK button to return to the Speed Dials screen.
7. Touch the OK button to return to the Fax screen.

**FutureSmart 4**

Use the following steps to delete a single number from a speed dial list.

1. From the Home screen on the printer control panel, swipe until the Contacts app tile displays. Touch the Contacts tile to open the app.
2. Touch the arrow in the upper left corner and select Fax Speed Dials.
3. Select a speed dial list.
4. Touch the Edit icon.
5. Scroll through the list of fax numbers and touch the screen to the right of last digit of the fax number to be deleted. Use the backspace key to delete the fax number.
6. Touch Save.
Search a speed-dial list by name

Search a speed-dial list by name for either FutureSmart 3 or 4.

- FutureSmart 3
- FutureSmart 4

**NOTE:** If you do not know the unique name of the speed dial, type a letter to select any portion of the list. For example, to view speed-dial names that begin with the letter N, type the letter N. If no matching entries exist, a message appears before the search shows the entry that is closest to the letter N.

**FutureSmart 3**

Use the following steps to search a speed-dial list by name.

1. From the Home screen on the product control panel, scroll to and touch the Fax button.
2. Touch the search button. This button looks like a magnifying glass and is located to the right of the Speed Dials button.
3. Type the first letters of the speed dial name to search for. As matches are found, the list at the top of the search screen is populated. If necessary, scroll to see all the entries, or type more letters to narrow the search.
4. Select the appropriate name from the list and touch the OK button. The speed-dial list on the main fax screen shows the selected entry within the list of numbers.
5. Touch a speed dial number to add it to the recipients list.
6. Select or search for additional names as needed.

**FutureSmart 4**

Use the following steps to search a speed-dial list by name.

1. From the Home screen on the printer control panel, swipe until the Contacts app tile displays. Touch the Contacts tile to open the app.
2. Touch the arrow in the upper left corner and select Fax Speed Dials.
3. Touch the Search icon.
4. Type the first letters of the speed dial name to search for. As matches are found, the list at the top of the search screen is populated. If necessary, scroll to see all the entries, or type more letters to narrow the search.
Set up and configure fax archive

Learn how to configure settings for archiving and forwarding faxes.

- **Introduction**
- **Before you begin**
- **Step one: Set up Fax Archive**
- **Step two: Set up Fax Forwarding**
- **Step three: Complete the setup**

**Introduction**

Use the Fax Archive and Forwarding page to configure settings for archiving and forwarding faxes on the printer control panel.

Use the Fax Archive settings to send a copy of all incoming and outgoing faxes to an email address, a network folder, or an FTP server.

Use the Fax Forwarding settings to send a copy of all incoming and outgoing faxes to another fax number.

**Before you begin**

The fax feature must be configured on the printer to archive and forward faxes.

Connect the fax cable to the fax port on the printer and to the phone port on the wall.

Administrators need the following information before beginning the configuration process:

- Administrative access to the printer
- DNS suffix (e.g., companyname.com)
- SMTP server (e.g., smtp.mycompany.com)

**NOTE:** If you do not know the SMTP server name, SMTP port number, or authentication information, contact the e-mail/Internet service provider or system administrator for the information. SMTP server names and port names are typically found by doing an Internet search. For example, use terms like "Gmail SMTP server name" or "yahoo SMTP server name" to search.

- SMTP server authentication requirements for outgoing e-mail messages, including the user name and password used for authentication, if applicable.

**Step one: Set up Fax Archive**

Use the Fax Archive settings to send a copy of all incoming and outgoing faxes to an email address, a network folder, or an FTP server.

1. Using the top navigation tabs, click Fax.
2. In the left navigation pane, click Fax Archive and Forwarding.
3. From the Fax Archiving drop-down list, select one of the following options:
   - Do not archive (print only)
   - Archive and print
   - Archive only

4. Configure the settings.

Select the Type of Fax Job to Archive.

Choose whether to select to enable the Print archive failure notice check box.

Select the Archive Destination:

- **E-mail**: Select an outgoing SMTP server in the Outgoing E-mail Servers (SMTP) area, or click Add... to start the Outgoing E-mail Servers (SMTP) wizard, and add a new outgoing SMTP server.

  In the SMTP wizard, select one of the following options:
  - Enter the address of an SMTP server, and then click Next
  - Search network for outgoing e-mail server, and then click Next. Select the server, and then click Next.

**NOTE:** If an SMTP server was already created for another product function, the Use a server already in use by another function option displays. Select this option, and then configure it to be used for the email function.

On the Set the basic information necessary to connect to the server dialog, set the options to use, and then click Next.

**NOTE:** Some servers have problems sending or receiving emails that are larger than 5 megabytes (MB). These problems can be prevented by entering a number in Split e-mails if larger than (MB).

**NOTE:** In most cases, the default port number does not need to be changed.

**NOTE:** If you are using Google™ Gmail for email service, select the Enable SMTP SSL Protocol check box. Typically, for gmail, the SMTP address is smtp.gmail.com, port number 465, and the SSL should be enabled.

Please refer to online sources to confirm these server settings are current and valid at the time of configuration.

On the Server Authentication Requirements dialog, select the option that describes the server's authentication requirements:

- Server does not require authentication, and then click Next.
- Server requires authentication
  - From the drop-down box, select Use credentials of user to connect after Sign In at the control panel, and then click Next.
  - From the drop-down box, select Always use these credentials, enter the Username and Password, and then click Next.
**NOTE:** If using a signed-in user’s credentials, set email to require sign in by the user on the product control panel. Deny device guest access to email by clearing the check box for email in the Device Guest column in the Sign in and Permission Policies area on the Access Control dialog of the Security tab. The icon in the check box changes from a check mark to a lock.

On the Server Usage dialog, choose the product functions that will send email through this SMTP server, and then click the Next button.

**NOTE:** If the server requires authentication, a user name and password for sending automatic alerts and reports from the product will be required.

On the Summary and Test dialog, enter a valid email address in the Send a test e-mail to: field, and then click Test.

Verify that all of the settings are correct, and then click Finish to complete the outgoing email server set up.

- **Network folder**: Enter the settings in the Folder Settings area.
- **FTP server**: Enter the settings in the FTP Server area.

Select the Type of Fax Job to Archive.

Select an On Archive Failure option.

Choose whether to select to enable the Print archive failure notice check box.

Select the Archive Destination:

- **E-mail**: Select an outgoing SMTP server in the Outgoing E-mail Servers (SMTP) area, or click Add... to start the Outgoing E-mail Servers (SMTP) wizard, and add a new outgoing SMTP server
- **Network folder**: Enter the settings in the Folder Settings area
- **FTP server**: Enter the settings in the FTP Server area

---

**Step two: Set up Fax Forwarding**

Use the Fax Forwarding settings to send a copy of all incoming and outgoing faxes to another fax number.

1. Select the Enable Fax Forwarding check box.
2. Select the Type of Fax Job to Forward.
3. Enter a fax number in the Fax Forwarding Number field.

**Step three: Complete the setup**

On the Fax Archive and Forwarding page, review the selected settings, and then click Apply to complete the setup.
7 Manage printers

Use the EWS to manage printers, including the following tasks:

- Manage security
- Troubleshoot printers
- Back up and restore printer data
- Print tasks and printable reports
- View printer information
- Update the firmware
- Set up and use HP Web Services
Manage security

Use the following information to manage the security features for printers using the EWS.

- Use the Self Test page
- Manage security certificates

Use the Self Test page

Use the Self Test page, located in the Security tab, to perform the following tests on the printer:

- **Function Integrity Test**: Verify the correct operation of the selected security functions and verify that they are running according to expected system parameters.
- **Data Integrity Test**: Test the user access codes, passwords, server connection settings, and other security-relevant data.
- **Code Integrity Test**: Verify that no executable code has been added, removed, or changed in the printer since the last reference point.
Manage security certificates

Use the following information to manage security certificates using the EWS.

- **Introduction**
- **Manage the installed security certificates**
- **Manage the installed remote app certificates**

**Introduction**

Use the [Certificate Management](#) page to manage certificates for identification of the printer on a network and to encrypt data used by the printer.

The printer comes with a self-signed identity certificate and a self-signed Certificate Authority (CA) certificate. The printer also comes with three Root CA Certificates from popular Certificate Authorities. These Root CA Certificates can be used to authenticate popular email services including Gmail, Yahoo, and MS Office 365.

Certificates are managed from the **Security** tab > [Certificate Management](#) page of the EWS. The **Certificate Management** page contains the following tabs:

- **Certificate** tab – Use to import, view details, remove, export, and use for e-mailing signing with certificates
- **Certificate Validation** tab – Use to disable or enable validation of Kerberos server certificates with either the OCSP or CDP validation

The printer supports the following import formats for certificates:

- .DER (binary)
- .CER (binary or Base64)
- .PEM (Base64, installs single certificate)
- .PFX (identity certificate)
- .P7B (CA certificates only)
Manage the installed security certificates

Refer to the following information to manage the installed security certificates using the EWS.

- View the details of a certificate
- Remove a certificate
- Export a certificate
- Use a certificate for email and network identity

**NOTE:** The following procedures may also be performed from the Authorization page of the Networking tab.

View the details of a certificate

Use the following steps to view the details of a certificate.

1. Using the top navigation tabs, click Security.
2. In the left navigation pane, click Certificate Management.
3. Select a certificate from the Certificates area.
4. Click View Details.

Remove a certificate

Use the following steps to remove a certificate.

1. Using the top navigation tabs, click Security.
2. In the left navigation pane, click Certificate Management.
3. Select a certificate from the Certificates area.
4. Click Remove....
5. Confirm the removal operation in the warning dialog box that displays.

Export a certificate

Use the following steps to export an identity certificate.

1. Using the top navigation tabs, click Security.
2. In the left navigation pane, click Certificate Management.
3. Select a certificate from the Certificates area.
4. Click Export....

When exporting an identity certificate on printers with firmware earlier than v23.4 using the Security > Certificate Management area, only the public key is exported. A private key can be exported with a certificate on printers with firmware earlier than v23.4 from the Networking > Authorization area.

When exporting an identity certificate on printers with firmware v23.4 or later, note the following:
Only the public key can be exported for TPM-protected private keys.

Private keys (for identity certificates) marked as exportable during import or generation require a password to be set when exporting.

Use a certificate for email and network identity

Use the following steps to use a certificate for email signing.

1. Using the top navigation tabs, click Security.
2. In the left navigation pane, click Certificate Management.
3. Select the certificate from the Certificates area.
4. Click Use for E-mail Signing.

**NOTE:** If Use for E-mail Signing is grayed out, the selected certificate cannot be used for email signing or is already selected for email signing.
Manage the installed remote app certificates

Learn how to manage the installed remote app certificates.

- View the details of a remote app certificate
- Remove a certificate
- Export a certificate

The Manage Remote Apps page is available only for printers that have FutureSmart 4 with firmware version 4.5 or later. Use the Manage Remote Apps page to install and manage the certificates for the remote apps that are available on mobile devices. When a certificate is installed, the remote app is added to a whitelist that allows it to be used on the printer.

The printer supports the following import formats for certificates:

- .DER (binary)
- .CER (binary or Base64)
- .PEM (Base64, installs single certificate)

View the details of a remote app certificate

Use the following steps to view the details of a remote app certificate.

1. Using the top navigation tabs, click Security.
2. In the left navigation pane, click Manage Remote Apps.
3. Select a certificate from the Registered Remote App Certificates area.
4. Click View Details.

Remove a certificate

Use the following steps to remove a certificate.

1. Using the top navigation tabs, click Security.
2. In the left navigation pane, click Manage Remote Apps.
3. Select a certificate from the Registered Remote App Certificates area.
4. Click Remove....
5. Confirm the removal operation in the Confirmation Page that appears by clicking the Delete button.

Export a certificate

Use the following steps to export a certificate.

1. Using the top navigation tabs, click Security.
2. In the left navigation pane, click Certificate Management.
3. Select a certificate from the Registered Remote App Certificates area.
4. Click Export....
Troubleshoot printers

Use the following information to troubleshoot printer issues using the EWS.

- **Begin troubleshooting**
- **Retrieve diagnostic information**
- **Access the remote control panel**
- **Set up AutoSend of printer details to HP**
- **Reset printer settings**

**Begin troubleshooting**

The **General Troubleshooting** page in the EWS can be used to begin the troubleshooting process and to gather information for HP technical support or your help desk.

1. Using the top navigation tabs, click **Troubleshooting**.
2. In the left navigation pane, click **General Troubleshooting**.

**Figure 7-1  General Troubleshooting page**

3. Use the following options as appropriate:
   - **Reports and Tests** area: Select and print several types of reports and tests. Some reports can be viewed in the EWS by clicking the **View** button.
   - **Fax Tools** area: Configure settings for fax troubleshooting (MFP and Digital Sender products only).
- **OXPd Troubleshooting** area: Select whether to enable the *Allow a Non-Secure Connection for Web Services* option (MFP and Digital Sender products only).

- **Auto Recovery** area: Select whether to enable the *Enable Auto Recovery* option.

**Retrieve diagnostic information**

Use the **Diagnostics Page**, located in the **Troubleshooting** tab, to retrieve diagnostic data from the printer that will help HP technical support troubleshoot printer problems.

To view or print the Diagnostics Page:

1. In the EWS, click the **Troubleshooting** tab.
2. On the **General Troubleshooting** page, under the Reports and Tests section, select **Diagnostics Page**.
3. Click **Print** or **View**.
Access the remote control panel

Learn how to use the HP Remote Control-Panel feature in the EWS.

- Introduction
- Video overview
- Before you begin
- Use the Remote Control-Panel
- Remote Control-Panel FAQs (FutureSmart 4)

Introduction

HP Enterprise printers have a Web-based solution to help remotely troubleshoot printing issues, such as paper jams. Users, IT departments, or help desk agents can use the Remote Control-Panel provided in the printer’s Embedded Web Server (EWS).

This feature is available for HP Enterprise printers running FutureSmart firmware version 3.4 or later. To troubleshoot or manage the printer from a browser window on a desktop or laptop, log in to the EWS using an administrator password, and then launch the Remote Control-Panel. Use the Remote Control-Panel to perform the following tasks:

- Resolve printer errors or manage the printer remotely when there is no user at the control panel
- Remotely guide a user at the control panel in resolving an issue or show them how to use specific features

Video overview

Click the link to view the video.

View a video demonstration on how to remotely manage printers

Before you begin

Review the following items before using the HP Remote Control-Panel.

- Make sure you have the printer’s IP address or host name.
  - **FutureSmart 3**: From the Home screen on the printer control panel, touch the Network icon to display the IP address or host name.
  - **FutureSmart 4**: From the Home screen on the printer control panel, touch the Information icon and then touch the Ethernet icon to display the IP address or host name.

**NOTE:** This feature must be manually enabled for printers with FutureSmart 4. Navigate to the Security tab, and then select Access Control. Scroll down to the EWS area, and then select the Remote Control-Panel check box under Device User. Once enabled, Remote Control-Panel will be available on the Information tab.

- Make sure you have a supported printer running FutureSmart firmware version 3.4 or later.
• Make sure you have Administrator password credentials for the Embedded Web Server (EWS).

**NOTE:** The Remote Control-Panel button on the Information tab will not be available until after an Administrator password is set in the EWS and the user is logged in using the administrator credentials. To set a password, if needed, click the Security tab, type credentials in the Set the Local Administrator Password box, scroll to the bottom of the page, and then click Apply. This provides security to prevent malicious use of the Remote Control-Panel.

The left navigation pane for the Information tab will look like the following when the Remote Control-Panel is available:

![Remote Control-Panel Image]

• Make sure JavaScript is enabled in your web browser in order to use the Remote Control-Panel.

**Use the Remote Control-Panel**

The Remote Control-Panel allows you to access the printer’s control-panel interface from the EWS.

1. In the EWS, click the Information tab on the top navigation pane.
2. In the left navigation pane, click **Remote Control-Panel**.

   **Figure 7-2** Remote Control-Panel page

3. Choose the type of Remote Control-Panel to launch:
   - Click **Launch Remote Control-Panel** to launch a remote control panel where the active control panel session is still visible at the printer. In this case, the password will not be visible, however, key presses will be visible at the printer.
   - Click **Launch Private Remote Control-Panel** to launch a remote control panel where the remote session is hidden on the printer’s display. The person at the printer will only see a black screen with a message that the device is being controlled by an administrator.

4. Gain remote access to the control panel:
   - To manage the printer remotely when there is no user at the control panel, you should be able to gain remote access immediately.
   - To manage the printer when an unknown user is at the control panel, wait for the printer’s activity timer to time out (when no longer in use).

   **NOTE:** When the **Requesting access** prompt displays on the control panel, the user can deny access to the remote user. This prevents a remote administrator from interrupting a local user’s work inadvertently. If this happens, wait until the control panel is no longer in use.

   - To help a known user at the control panel, ask the user to grant access by selecting **Allow** in the dialog prompt that displays on the printer’s control panel.

   **NOTE:** The user will also be able to interact with the control panel at the same time but will require confirmation from the administrator to return to the Home screen and will not be able to see administrator passwords entered during the session.
5. From the Remote Control-Panel window (EWS), select any of the options normally available to the user interacting directly with the control panel. If a user is at the control panel, they can follow along during the remote session.

6. When finished, select **End Remote Session**, or select **Restart Product** to reboot the printer.

   **NOTE:** If you do not end the session, the printer will warn the user at the control panel when the remote session has been inactive for 5 minutes, and then automatically disconnect the remote session 1 minute later.

Remote Control-Panel FAQs (FutureSmart 4)

Review the frequently-asked questions about the Remote Control-Panel.

<table>
<thead>
<tr>
<th>Table 7-1 Remote Control-Panel FAQs</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Question</strong></td>
</tr>
<tr>
<td>Is the communication between Client and Device encrypted (SSL)?</td>
</tr>
<tr>
<td>What kind of encryption is used for the communication?</td>
</tr>
<tr>
<td>How does HP ensure that an entered password in the remote panel is not viewable at the control panel?</td>
</tr>
<tr>
<td></td>
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<td></td>
</tr>
</tbody>
</table>
### Table 7-1  Remote Control-Panel FAQs (continued)

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Which feature is used to hide typing passwords for the Remote Control Panel?</td>
<td>HP recommends using a Private Remote Control-Panel session so that key presses are not visible on the local device screen.</td>
</tr>
<tr>
<td>Which programming language is used for the Web Application?</td>
<td>The remote control panel application is written in JavaScript. It communicates button clicks and mouse movements from the application running in the browser to the device.</td>
</tr>
<tr>
<td>What technology is used for streaming of the contents of the control panel?</td>
<td>The application polls for changes to the full-screen image on the device and receives PNG images to display to the user when the control panel image changes.</td>
</tr>
</tbody>
</table>
| What happens with a logged-in Admin if the device loses its network connection? | For a regular remote control panel session: The state of the device will not be affected. The current user will still be logged in.  
For a private remote control panel session: The current session will be reset (including logging out the current user) and the local device control panel will show the home screen. |
| What happens if a private remote session loses the connection? Will the device stay in black-screen-mode? | No. The current user will be logged out and the device control panel will be reset to the home screen. |
Set up AutoSend of printer details to HP

Learn how to set up the AutoSend feature in the EWS.

- Introduction
- Before you begin
- Step one: Set up the AutoSend feature
- Step two: Set up the product email address
- Step three: Complete the setup

Introduction

The AutoSend feature enables your printer to periodically send printer configuration information including serial number, event logs, page usage counts, and supplies status information to HP web addresses (URLs), or e-mail addresses.

This feature is disabled by default.

Figure 7-4 AutoSend page

Before you begin

Administrators need the following information before beginning the configuration process:

- Administrative access to the printer
- DNS suffix (e.g., companyname.com)
- SMTP server (e.g., smtp.mycompany.com)
NOTE: If you do not know the SMTP server name, SMTP port number, or authentication information, contact the e-mail/Internet service provider or system administrator for the information. SMTP server names and port names are typically found by doing an Internet search. For example, use terms like "Gmail SMTP server name" or "yahoo SMTP server name" to search.

- SMTP server authentication requirements for outgoing e-mail messages, including the user name and password used for authentication, if applicable.

NOTE: Consult your e-mail service provider’s documentation for information on digital sending limits for your e-mail account. Some providers may temporarily lock your account if you exceed your sending limit.
Step one: Set up the AutoSend feature

Set up the AutoSend feature as follows.

- Enable AutoSend and choose settings
- Configure an SMTP server for the Send to E-mail option

Enable AutoSend and choose settings

Use the following procedure to enable AutoSend and select the settings for how it will function.

1. Using the top navigation tabs, click General.
2. In the left navigation pane, click AutoSend.
3. Click the Enable AutoSend check box.
4. In the Send every field, enter the frequency to send the information. Send information after a set number of days, weeks, or months, or after a set number of pages printed.
5. Select the method for sending the information. Select one or all of the following options:
   - Send on failure: Automatically send an AutoSend report when critical events occur
   - Include detailed error information
   - Send to HP: Upload the information directly to HP by using an Internet connection
   - Post to web addresses (URLs): Specify up to five URLs to post the information to
   - Send to E-mail: Send AutoSend information by email for up to five recipients, such as your reseller, local support person, or on-site IT support
6. Click Test to test your selections.
7. Click Apply to save the settings.
Configure an SMTP server for the Send to E-mail option

Learn how to configure an SMTP server for the AutoSend feature in the EWS.

- Add an outgoing server
- Option one: Use a server already in use by another function
- Option two: I know my SMTP server address or host name
- Option three: Search network for outgoing e-mail server

Add an outgoing server

Use the following procedure to add and configure an outgoing SMTP server.

1. Click the Add button in the Outgoing E-mail Servers (SMTP) area.
2. On the Outgoing E-mail Servers (SMTP) page, select one of the following options and complete the steps:

Option one: Use a server already in use by another function

Use this option when SMTP is already configured by another app and does not include the Automated e-mail option.

1. Select Use a server already in use by another function, and then click Next.
2. Verify the information, and then click Finish.

Option two: I know my SMTP server address or host name

Use this option when you know the SMTP server address or host name.

1. Select I know my SMTP server address or host name, enter the SMTP server address in the field, and click Next.
2. Enter the Server Name and Port Number, and then click Next.

**NOTE:** In most cases, the default port number does not need to be changed.

**NOTE:** If you are using a hosted SMTP service such as gmail, verify the SMTP address, port number, and SSL settings from the service provider’s Web site or other sources. Typically, for gmail, the SMTP address is smtp.gmail.com, port number 465, and the SSL should be enabled. Please refer to online sources to confirm these server settings are current and valid at the time of configuration.

3. On the Server Authentication Requirements page, select one of the following from the drop-down list:
   - Select Use credentials of user to connect after Sign in at the control panel, and click Next (MFP and network scanner printers only).
   - OR-
   - Select Always use these credentials, and enter a Username and Password in the fields. Click Next.

4. On the Server Usage page, select which of the following functions will send e-mail through the server:
   - E-mail: Send scanned documents and job status notifications
   - Fax: send faxes when the fax send method is set to Internet Fax
• Automated E-mails: device alerts sent to an administrator or archived faxes are examples of automated e-mails sent by this device
• AutoSend: send device information to HP or other recipients

5. On the Summary and Test page, review the settings. Enter an e-mail address into the Send a test e-mail to field, and click Test to test the configuration. Click Finish when done.

Option three: Search network for outgoing e-mail server

Use this option to search for outgoing SMTP servers.

NOTE: This option finds outgoing SMTP servers inside your firewall only.

1. Select Search network for outgoing e-mail server, and then click Next
2. Select the appropriate server from the Finding SMTP servers list, and then click Next.
3. Set the basic information necessary to connect to the server, and then click Next.
4. On the Server Authentication Requirements page, select one of the following from the drop-down list:
   • Select Use credentials of user to connect after Sign In at the control panel, and click Next (MFP and network scanner printers only).
   -OR-
   • Select Always use these credentials, and enter a Username and Password in the fields. Click Next.
5. On the Server Usage page, select which of the following functions will send e-mail through the server:
   • E-mail: Send scanned documents and job status notifications
   • Fax: send faxes when the fax send method is set to Internet Fax
   • Automated E-mails: device alerts sent to an administrator or archived faxes are examples of automated e-mails sent by this device
   • AutoSend: send device information to HP or other recipients
6. On the Summary and Test page, review the settings. Enter an e-mail address into the Send a test e-mail to field, and click Test to test the configuration. Click Finish when done.

Step two: Set up the product email address

Set the e-mail address "From" for the E-mail Alerts sent from the printer.

Select Use default address, or select Specify address to add a specific e-mail address in the field that appears.

Step three: Complete the setup

On the Alerts page, review the selected settings, and then click Apply to complete the setup.

Reset printer settings

Use the Reset Factory Settings page, located in the General tab, to reset all of the printer settings back to the original defaults.
The **Reset Firmware** option erases all partitions, settings, installed solutions, job data, and logs on the disk drive. The firmware will not be erased. This allows the disk drive to be reformatted without having to download a firmware upgrade file to return the product to a bootable state.

**NOTE:** The **Reset Firmware** option is not available for all printer models.

The administrator password must be set for the **Reset Firmware** option to display on supported models.
Back up and restore printer data

Use the Back up and Restore feature in the HP Embedded Web Server (EWS) to back up data on the printer or to restore data files from a previous backup.

- Introduction
- Step one: Backup and restore data
- Step two: Set up the Authentication Settings

Introduction

The Back up creates a backup file of the current printer settings which allow the users to restore them later. This feature is useful if there are any issues with the printer after a firmware upgrade, or if the administrator wants to go back to the version of firmware the backup was created from (and to accomplish this with limited reconfiguration efforts).

NOTE: The backup can only be used on the same family or model of printer from which it was taken.

Step one: Backup and restore data

Use the following steps to backup and restore data.

1. Using the top navigation tabs, click General.
2. In the left navigation pane, click Back up and Restore.
3. To perform a backup, select Backup, and then enter a path in the UNC Folder Path field to store the backup file. Do not include the file name in the UNC Folder Path field.
4. To perform a restore, select Restore, and then enter the path in the Backup file to restore field to point to the file to restore. Include the file name in the Backup file to restore field.

NOTE: Clicking OK will perform the backup or restore. A progress bar displays, and then a message displays stating that the process is complete.

Step two: Set up the Authentication Settings

The backup/restore files are saved as encrypted, .ZIP archives. The Encryption Key setting in the Authentication Settings area is used to encrypt the .ZIP archive.

Enter the following authentication credentials in the Authentication Settings area:

- Encryption Key
- Windows Domain
- Username
- Password

NOTE: Clicking OK will perform the backup or restore. A progress bar displays, and then a message displays stating that the process is complete.
Print tasks and printable reports

Learn about print tasks and printable reports in the EWS.

- Print files
- Print from a USB flash drive
- Print reports

Print files

Use the Print page, located in the Information tab, to upload a file from your hard drive and send it to the printer to be printed. The following file types are supported: .txt, .ps, .pdf, .pcl, .cht, .prn, .tiff, and .tif.

FutureSmart 4:

This feature must be manually enabled for printers with FutureSmart 4. Navigate to the Security tab, and then select Access Control. Scroll down to the EWS area, and then select the Print check box under Device User. Once enabled, Print will be available on the Information tab.
Print from a USB flash drive

Learn how to print from a USB flash drive for either FutureSmart 3 or 4.

- Introduction
- Print USB documents from the printer control panel

Introduction

This printer features easy-access USB printing, for quickly printing files without sending them from a computer. The printer accepts standard USB flash drives in the USB port near the control panel. It supports the following types of files:
Print USB documents from the printer control panel

Learn how to print USB documents from the control panel for either FutureSmart 3 or 4.

- FutureSmart 3
- FutureSmart 4

FutureSmart 3

Use the following steps to print to USB (FutureSmart 3).

1. Insert the USB flash drive into the easy-access USB port.

   **NOTE:** The port might be covered. For some printers, the cover flips open. For other printers, pull the cover straight out to remove it.

2. The printer detects the USB flash drive. Select the OK button to access the drive, or, if prompted, select the Retrieve from USB option from the list of available applications. The Retrieve from USB screen opens.

3. Select the name of the document to print.

   **NOTE:** The document might be in a folder. Open folders as necessary.

4. To adjust the number of copies, select Copies, and then use the keypad to change the number of copies.

5. Select the Start button or press the OK button to print the document.

FutureSmart 4

Use the following steps to print to USB (FutureSmart 4).

1. Insert the USB flash drive into the easy-access USB port.

   **NOTE:** The port might be covered. For some printers, the cover flips open. For other printers, pull the cover straight out to remove it.

2. From the Home screen on the printer control panel, select Print, and then select Print from USB drive.

3. Select Choose, and then select the document to print.

   **NOTE:** The document might be in a folder. Open folders as necessary.

4. To adjust the number of copies, select the field for the number of copies. Use the keypad to enter the number of copies to print.

5. Select Print to print the document.

Print reports

The Printable Reports and Pages page, located in the Information tab, provides a list of reports that can be printed. Select one or more reports, and then select Print to send these reports to be printed on the printer.
Figure 7-5  List of printable reports
View printer information

Learn how to view information about the printer and the status of supplies in the EWS.

- View supplies status
- View recent activities
- Look up the printer IP address and firmware version
- Look up the list of open source programs used in the firmware
- View a snapshot of the control panel
- Use the remote view of Settings apps on the control panel
- View other printer information
View supplies status

Use one of the following views in the EWS to monitor printer supplies status.

- Quick view of supplies and trays
- Detailed view of supplies

Quick view of supplies and trays

The Device Status page is the first page that displays in the EWS. This page provides a quick view of the status of all of the print cartridges and other supplies. This page also displays how much paper remains in the paper trays and how each tray is configured.

To modify the tray settings, click Change settings. Change the settings as needed in the Manage Trays dialog.

Figure 7-6 Change Settings from the Trays area

Detailed view of supplies

The Supplies Status Page page, located in the Information tab, contains detailed information about all of the printer supplies.

This page includes a link to the HP supply website and information on where you can recycle your supplies (www.hp.com/go/recycle).
Figure 7-7  Supplies Status page
View recent activities

Learn how to view the recent activities for a printer using the EWS.

- View print jobs
- View printer activities and errors
- View print/copy/scan/fax counts
- View fax activities
View print jobs

The Job Log page, located in the Information tab, provides a list of the jobs that have been printed.

- View additional information about a job
- Export the job list

View additional information about a job

Use the following steps to view details about a job.

1. Select the job.
2. Click View Details at the bottom of the page.
3. To return to the Job Log page, click Back.

Export the job list

Use the following steps to export the job list.

1. Click Export at the bottom of the page.
2. Select the All jobs or Select a Job Type option.
3. Select the Text (tab delimited)(*.txt) or CSV (comma delimited)(*.csv) option.
4. Click Export.
5. When the export is completed, click Back to return to the Job Log page.

View printer activities and errors

The Event Log Page page, located in the Information tab, displays a list of all the printer activities and errors. Use this page to help troubleshoot printer problems. Each event has a link that takes you to the HP website for detailed troubleshooting help.

View print/copy/scan/fax counts

The Usage Page page, located in the Information tab, provides a report on how many pages have been printed and how many copies, scans, and faxes have been created.

View fax activities

Use the Fax Activity Log page, located in the Fax tab, to view statistics about the faxes received and sent from this printer.

Look up the printer IP address and firmware version

The Configuration Page page, located in the Information tab, displays the contents of the Configuration Page report. This report includes useful information about the printer, such as the IP address and firmware version.
Look up the list of open source programs used in the firmware

The Open Source Licenses page, located in the Information tab, provides a complete list of all of the open source programs that are used in the printer’s firmware. Click on each program to see the full text of the license.

View a snapshot of the control panel

The Control Panel Snapshot page, located in the Information tab, provides an image of what is currently displayed on the control panel.

Use the remote view of Settings apps on the control panel

The Control Panel Settings App page, located in the General tab, displays a remote view of the Settings app options that are available on the product control-panel.
Figure 7-9  Control Panel Settings App page

View other printer information

The **Device Information** page, located in the **Information** tab, displays unique information about the product. For more information about changing what displays on this page, see the **Device Information** page on the **General** tab.
Update the firmware

Learn how to update the printer firmware using a USB flash drive or the EWS.

- Introduction
- Before you begin
- Update the firmware
- About firmware downgrades
- Applicable printers
- Print a configuration page

Introduction

Similar to service packs for operating systems, HP provides firmware updates for printers to help address any known issues and add new features throughout the support life of the printer.

To make sure the printer is up to date, HP recommends updating the firmware for HP Enterprise and HP Managed printers. See Applicable printers on page 296.

Before you begin

Before upgrading firmware, make sure that any solutions used with the HP printer(s) will support the new firmware version and review these requirements:

- A firmware update requires a network connection or USB flash drive, and internet access.
- This printer cannot be updated using FTP, LPR, or Port 9100 methods.
- If you have a third-party solution, contact the vendor to make sure that the latest firmware version is compatible with the solution.

- **NOTE:** Enhanced security features and settings implemented in recent firmware releases coupled with device resets might block the installation of some solutions. For more information, see the white paper Overview of Secure by Default Settings for Solutions.

- If a solution also needs to be updated to support the new firmware, HP recommends updating the solution first before updating the printer.

- A firmware update can require 10 to 30 minutes or more depending on the computer speed and connection type.

- Remote firmware downgrades are not supported. For more information, see About firmware downgrades on page 296.

- The steps in this document apply to only to HP Enterprise and HP Managed printers. See Applicable printers on page 296.
You might need administrator privileges or a passcode to perform these steps.
Update the firmware

There are four supported methods to perform a firmware update on this printer depending on whether the printer is in a ready state or an error state.

- **Method one: Embedded Web Server (ready state, remotely)**
- **Method two: USB flash drive - Maintenance menu (ready state, locally)**
- **Method three: USB flash drive - Preboot menu (error state, locally)**
- **Method four: Web Jetadmin (ready state, multiple printers at one time)**

If the printer is in an error state, use **Method three: USB flash drive — Preboot menu** to update the firmware.

**Method one: Embedded Web Server (ready state, remotely)**

Learn how to perform a firmware update using the Embedded Web Server (EWS).

Watch the video or follow these steps to update the firmware remotely on a single printer connected to a network:

1. Go to the Latest Firmware Versions document, determine the latest version of firmware available for the printer, and compare it with the version installed on the printer. To view the installed version, see [Print a configuration page on page 297](#).
2. Use the links in the Latest Firmware Versions document to go directly to the printer download page, download the firmware, and then extract all files.
3. Make sure the printer is On and in a ready state.
4. Open the Embedded Web Server (EWS).
   a. Open an internet Web browser.
   b. Type the hostname or IP address of the printer in the URL address field.
      To obtain the printer’s IP address, click the information icon on the control panel or print a Configuration page. For instructions, see [Print a configuration page on page 297](#).
   c. Press Enter.
5. Select the General tab.
6. In the left pane, select **Firmware Upgrade**.
7. Select **Choose File**.
NOTE: If an Administrator password must be set warning message displays, select the Security tab, select the General Security option in the left pane, and then under the Set the Local Administrator password section, reset the password.

8. Browse to the location where the firmware files were extracted and select the .bdl file.

   If there is more than one .bdl file on the storage device, make sure to scroll and select the correct file for the printer and firmware version.

9. Select Install, and then wait for the update process to complete.

   NOTE: Do not close the browser window or interrupt communication until the EWS displays the confirmation page. An update could take up to 30 minutes or more to complete.

10. On the EWS confirmation page, select Restart Now, or wait for the printer to reboot automatically (varies depending on the firmware version). If the printer does not reboot automatically, turn the printer Off and then On again.

   The printer will automatically reboot unless the firmware is being downgraded. If downgrading firmware, select the Rollback option.

11. After the printer is back online, check the Configuration Page in the EWS or print a Configuration Page and make sure that the new firmware has been installed.

   If when updating the firmware using the EWS, the update process hangs or you receive an incorrect/corrupt file error, the printer should still function but the firmware update is not complete. Use the USB flash drive - Maintenance menu method to try again to update the firmware.

Method two: USB flash drive - Maintenance menu (ready state, locally)

Learn how to perform a firmware update from the control panel Maintenance menu.

Watch the video or follow these steps to update the firmware directly at the control panel on a single printer using a portable USB flash drive.

NOTE: These steps should only be used if the printer is able to boot to a ‘Ready’ state.

- View a video of how to update from FutureSmart 3 to 4 using the control panel
- View a video of how to update from FutureSmart 4 to 4.x using the control panel

1. Go to the Latest Firmware Versions document, determine the latest version of firmware available for the printer, and compare it with the version installed on the printer. To view the installed version, see Print a configuration page on page 297.

2. Use the links in the Latest Firmware Versions document to go directly to the printer download page, download the firmware, and then extract all files.

   NOTE: The firmware file for HP FutureSmart is in the format "xxxxxxxx.bdl" where "xxxxxxxx" indicates the firmware file name and ".bdl" is the file extension.

3. After extracting all files, find the .bdl file.

4. Copy the .bdl file to a portable USB flash drive.
NOTE: USB flash drives in a format other than Fat32, or with a CD formatted partition, might not be recognized by the printer. You might need to try a different USB flash drive.

5. Make sure the printer is On and in a ready state.

6. On the printer control panel, navigate to the USB Firmware Upgrade option using the following steps:
   - **FutureSmart 3**: From the Home screen on the printer control panel, scroll to and select the Device Maintenance menu.
   - **FutureSmart 4**: From the Home screen on the printer control panel, select the Support Tools menu.

7. Open the Maintenance menu.

8. Open the USB Firmware Upgrade menu.

9. Insert the USB flash drive with the .bdl file on it into the USB port on the front of the control panel.

   ![NOTE: If the message No USB Thumbdrive Files Found displays on the control panel, make sure that the .bdl file is saved to the main directory and is not inside a folder. If the message persists, try using a different USB flash drive.]

10. Select the .bdl file, and then select OK or Upgrade.

   ![NOTE: If there is more than one .bdl file on the storage device, make sure to select the correct file for the printer and firmware version.]

11. Select OK or Install (depending on the firmware version).

12. Select Upgrade, Reinstall, or Downgrade depending on the task you are performing.

13. Wait for the upload to complete. When the upload is complete, the printer will reboot automatically and start the update process.

   ![NOTE: Do not interrupt the firmware update process. An update could take up to 30 minutes or more to complete.]

14. Wait for the update to complete and when the printer returns to a Ready state, print a Configuration Page.

15. On the Configuration Page, make sure that the new firmware version is installed.

**Method three: USB flash drive - Preboot menu (error state, locally)**

Learn how to perform a firmware update from the control panel Preboot menu.

Follow these steps to update the firmware directly at the control panel on a single printer when the printer is in an error state.

![NOTE: Only use these steps if the printer will not boot to a ‘Ready’ state unless otherwise recommended.]
1. Go to the Latest Firmware Versions document, determine the latest version of firmware available for the printer, and compare it with the version installed on the printer. To view the installed version, see Print a configuration page on page 297.

2. Use the links in the Latest Firmware Versions document to go directly to the printer download page, download the firmware, and then extract all files.

   **NOTE:** The firmware file for HP FutureSmart is in the format "xxxxxxxx.bdl" where "xxxxxxxxx" indicates the firmware file name and ".bdl" is the file extension.

3. After extracting all files, find the .bdl file.

4. Copy the .bdl file to a portable USB flash drive.

   **NOTE:** USB flash drives in a format other than Fat32, or with a CD formatted partition, might not be recognized by the printer. You might need to try a different USB flash drive.

5. Turn the printer Off and then On. If the error persists, continue to the next step.

6. Turn the printer Off.

7. On the control panel, open the Preboot menu.
   - Turn the printer On, and when the HP logo displays on the control panel and all three Ready, Data, and Attention LEDs illuminate solid, press ✗.
   - OR
   - Turn the printer On, and when 1/8 displays under the logo, press the HP logo in the middle of the screen.

8. Scroll to and select Administrator.

   **NOTE:** If the Administrator menu is locked, login using administrator credentials.

9. Scroll to and select Download.

10. Insert the USB flash drive with the .bdl file on it into the USB port on the front of the control panel (remove the seal if necessary).

   **NOTE:** If the message No USB Thumbdrive Files Found displays on the control panel, make sure the .bdl file is saved to the main directory and is not inside a folder. If the message persists, try using a different USB flash drive.

11. Scroll to and select USB Thumbdrive.

12. Scroll to and select the .bdl file.

   **NOTE:** If there is more than one .bdl file on the storage device, make sure to scroll to and select the correct file for the printer and firmware version.

13. Select OK and wait for the upload to complete.

14. When Complete displays on the control panel, select the back arrow until Continue displays.

15. Select Continue. The printer will automatically reboot and start the update process.
NOTE: Do not interrupt the firmware update process. An update could take up to 30 minutes or more to complete.

16. Wait for the update to complete and when the printer returns to a Ready state, print a Configuration Page.

17. On the Configuration Page, make sure that the new firmware version is installed.

If a Disk Full message displays when using this method, contact the HP support center in your country/region to help troubleshoot the issue.
Method four: Web Jetadmin (ready state, multiple printers at one time)

Follow these steps to update the firmware remotely for a single printer or multiple printers at one time using HP Web Jetadmin 10.4 SR2 or newer.

- Manually import firmware files into WJA
- Set up automated firmware updates for WJA (optional)

The duration of these steps varies depending on the printer firmware file size and server capacity. Even if HP Web Jetadmin is installed on a high-end server, HP recommends that you keep other HP Web Jetadmin tasks to a minimum while any firmware upgrades are running because it is a resource-intensive operation.

**NOTE:** These steps should only be used if the printer is able to boot to Ready.

1. Make sure you have administrator privileges or a passcode available.
2. Connect the client machine to the internet and to the network.

**NOTE:** Only the client machine needs web access through a browser.

4. Click Device Management.
5. Click Firmware and click Repository.
6. Download the new firmware files.

**NOTE:** If the client PC does not have internet access, the firmware files can also be downloaded from HP.com to a local PC and then transferred to the client machine. After transferring the files to the client machine, see Manually import firmware files into WJA on page 295.

1. In the upper right side of the screen, click Get images.
2. If prompted to check HP.com, click OK. The Get Firmware Images wizard opens.
3. Use the Quick Device Discovery section in the lower-left of the screen to search for printers by IP address. This will highlight the printer in the device list. You can also sort the device list by clicking on a column name at the top such as Models.
4. Press Ctrl + Click to select each printer until all printers are selected and click Next.

**NOTE:** Make sure to select specific printers in this step otherwise all firmware image files for all HP printers will be retrieved which will take a long time and impact server space.

5. Browse to the location on the client machine where you want to temporarily download the firmware and click Next.
6. Make sure the firmware version is correct and click Get images to automatically locate the latest firmware versions on the Web.
7. Wait for the firmware images for the selected printers to download from the Web.
8. Make sure the Import firmware images checkbox is selected in the Get Firmware Images wizard and click Done.

The Import Firmware Images wizard opens.
7. Import the new firmware files into WJA.

**NOTE:** If the client PC does not have internet access, see [Manually import firmware files into WJA](#) on page 295.

1. Select the images to import (indicated by a No value in the Repository column) and click Next.
2. Confirm the selected images and click Import.
3. Wait for the firmware to import into the Web Jetadmin repository.
4. After the import completes, click Done to close the Import Firmware Images wizard.
5. To check the current version of firmware installed against newer versions available, click All Devices, and then check the Printer Firmware - Severity column. A red 'X' indicates that the firmware needs to be updated.

8. Update the firmware from Web Jetadmin for multiple printers at one time.

**NOTE:** You can also schedule a firmware update for a later time or setup automated firmware updates. for instructions, see [Set up automated firmware updates for WJA (optional)](#) on page 295.

1. In the Repository, click Upgrade Firmware. The Upgrade Firmware wizard opens.
2. Select the Device Firmware option and click Next.

**NOTE:** To schedule the update for a later time, click the Schedule firmware upgrade check box.

3. Click the Device Model header to sort the printer list alphabetically and then use the arrow button to add the printer(s) you want to update to the right pane. When all printers are selected, click Next.
4. Select the firmware version from the New Version drop-down list and click Next.
5. Click Upgrade.

9. Wait for the updates to complete and the printer(s) to reboot.

**NOTE:** Do NOT interrupt or turn the printer off during the update process. When the update is complete, the printer will automatically reboot. If the firmware update process fails or is interrupted for reasons such as a power outage, it can be completely recovered by running the firmware download again and reinitiating the download. Web JetAdmin will display a notification with information about the failure and a link to retry the process.

10. When the printer returns to a Ready state, make sure that the new firmware version is installed.

1. Click All Devices.
2. Under the Printer Firmware - Severity column, a green checkmark indicates that the firmware is up to date.

**NOTE:** If you did not retrieve and import images or forgot to check the Import firmware images check box, this might not be the latest version available. Click the Import button to import files already on the client machine.

**NOTE:** Item count listed under the Printer Firmware - Available in repository column only indicates whether or not firmware has been downloaded for that printer. It might still need to be imported into the repository.
For more information on how to certify images, go to the HP Web Jetadmin 10.4 User Guide or use the HP Web Jetadmin help (http://WJA_IP:8000/WebJetadmin/Help/en/Common/dm_fwupgrade_available_editproperties.html where WJA_IP is the IP address of the WJA server).

For information on how to determine newer qualified firmware files, or for other detailed ways to update the firmware using Web Jetadmin, go to the HP Web Jetadmin White Paper Upgrading firmware.

For new releases of WJA and release notes, go to www.hp.com/go/wja.

Manually import firmware files into WJA

To manually import firmware files into WJA, follow these steps:

NOTE: The following steps are typically used to import firmware files in WJA when the client PC does not have internet access (for example).

1. Start Web Jetadmin.
2. Click Device Management.
3. Click Firmware and click Repository.
4. Click Import.
5. Browse to the location where you saved the firmware, select the images to add to the repository, and then click Next.

NOTE: The firmware file for HP FutureSmart is in the format "xxxxxxx.bdl" where "xxxxxxx" indicates the firmware file name and ".bdl" is the file extension.

6. Select the images to import (indicated by a No value in the Repository column) and click Next.
7. Confirm the selected images and click Import.
8. After the import completes, click Done.
9. Wait for the firmware to import into the Web Jetadmin repository and click Done.

Set up automated firmware updates for WJA (optional)

To set up automated firmware updates from WJA, follow these steps:

To set up automated firmware updates, set a tag for either the qualified version or the latest version of firmware, and then assign a policy to a group of printers for which you want to automatically update firmware.

1. Select Edit properties, type a Description such as FutureSmart FW version 3.

NOTE: If you do not want to use the latest version of firmware and only want to use a known version that has been tested with the fleet, select the Qualify image check box and click OK.

2. Click All Devices.
3. Use Ctrl + Click to select a group of printers, right-click and select Add devices to new group.
4. Type a group name and click Next.
5. Right-click the group name and select Edit group policies.
6. Click Add.
7. Select the policy option **Upgrade Printer firmware**, select the trigger option **Devices added to group**, select the policy action **Update to latest version** or **Update to qualified version**, and then click **Close**.

8. Click **Next** and click **Save Policies**.

**About firmware downgrades**

If you attempt to downgrade the firmware from a remote location to a version older than FutureSmart Version 4, the downgrade will fail and you will receive a 99.02.32 control panel error and a 33.05.09 event log.

This is due to a new security feature that requires someone to be present at the printer in order to perform a firmware downgrade and prevents HP SureStart printers from being downgraded remotely. For more information about this feature, go to [Embedded Security features](#).

HP recommends using the latest firmware available but if a downgrade from *HP FutureSmart 4* to *HP FutureSmart 3* is absolutely necessary, then use the **Preboot** menu and avoid any errors.

**NOTE:** If you downgrade the printer firmware, all solutions, stored jobs, and current settings will be lost. The machine will be reset back to factory settings.

**Applicable printers**

This firmware update information applies to the following printer models:

- **HP LaserJet Enterprise**
- **HP LaserJet Managed**
- **HP Officejet Enterprise**
- **HP PageWide Enterprise**
- **HP PageWide Managed**

For an older small business HP LaserJet printer, use the WJA method or go to [HP Laserjet - Update the firmware](#).

For an HP LaserJet Pro printer, use the WJA method or go to [HP Laserjet Pro - Update the firmware](#).
Print a configuration page

To determine the current firmware version that is installed on the printer, print a configuration page using one of the methods below.

- Method one: Printer control panel
- Method two: Embedded Web Server (EWS)

**NOTE:** If the printer is in an error state, use Method three: USB flash drive — Preboot menu to update the firmware.
Method one: Printer control panel

Follow the steps below to print a configuration page from the printer control panel.

- FutureSmart 3
- FutureSmart 4

**NOTE:** The steps vary according to the control panel.

### Table 7-2  Control panels

<table>
<thead>
<tr>
<th>Firmware Version</th>
<th>Control panels</th>
</tr>
</thead>
<tbody>
<tr>
<td>FutureSmart 3</td>
<td>![FutureSmart 3 control panel image]</td>
</tr>
<tr>
<td>FutureSmart 4</td>
<td>![FutureSmart 4 control panel image]</td>
</tr>
</tbody>
</table>

**FutureSmart 3**

Use the following steps to locate the firmware version and date (FutureSmart 3).

1. From the Home screen on the printer control panel, scroll to and select the Administration button.
2. Open the following menus:
   a. Reports
   b. Configuration/Status Pages
3. Select the Configuration Page option.
4. Select Print to print the configuration page.
5. On the Configuration Page, look in the **Device Information** section for the Firmware Revision and Firmware Datecode similar to the following example:
   - **Firmware Revision:** 2131029_189663 (version installed)
   - **Firmware Datecode:** 20110811 (version date)

**FutureSmart 4**

Use the following steps to locate the firmware version and date (FutureSmart 4).
1. From the Home screen on the printer control panel, scroll to and select Reports.

2. Select Configuration/Status Pages.


4. Select Print to print the configuration page.

5. On the Configuration Page, look in the Device Information section for the Firmware Revision and Firmware Datecode similar to the following example:
   - Firmware Revision: 2131029_189663 (version installed)
   - Firmware Datecode: 20110811 (version date)

**Method two: Embedded Web Server (EWS)**

Follow the steps below to print a configuration page from the Embedded Web Server (EWS).

1. From the EWS home page, select the Information tab.

2. Select Printable Reports and Pages from the left navigation pane.

   **NOTE:** If the Printable Reports and Pages menu is locked, login using administrator credentials.

3. Select Configuration page and select Print.

4. On the Configuration Page in the Device Information section, locate the Firmware Revision and Firmware Datecode similar to the following example:
   - Firmware Revision: 2131029_189663 (version installed)
   - Firmware Datecode: 20110811 (version date)

**Set up and use HP Web Services**

The HP Web Services tab provides access to the HP Web Services setup parameters and Web proxy settings on the HP Jetdirect print server. For more information, click the Help link located in the upper-right corner of the page.
The EWS Help feature provides links to web-based help pages.

For more information about a specific page in the EWS, click the Help link located in the upper-right corner of the page.

**NOTE:** Some pages in the EWS do not have a Help link.

When you click Help, you might see a notice that information will be sent to HP to connect to the correct help page. Click Continue to connect to the requested help page. Click Cancel if you do not wish to send information to HP.

For users signed in as an administrator, Help links can also be configured to show in control panel event details and the EWS Event Log. For more information, see Configure the EWS Help options on page 24.