



HP Enterprise Embedded Web Server (EWS)

User Guide

Copyright and License

© Copyright 2018 HP Development Company, L.P.

Reproduction, adaptation, or translation without prior written permission is prohibited, except as allowed under the copyright laws.

The information contained herein is subject to change without notice.

The only warranties for HP products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. HP shall not be liable for technical or editorial errors or omissions contained herein.

Edition 1, 8/2018

Trademark Credits

Adobe®, Acrobat®, and PostScript® are trademarks of Adobe Systems Incorporated.

AirPrint is a trademark of Apple Inc., registered in the U.S. and other countries.

Apple and the Apple logo are trademarks of Apple Inc., registered in the U.S. and other countries.

Google™ is a trademark of Google Inc.

Microsoft®, Windows®, Windows® XP, and Windows Vista® are U.S. registered trademarks of Microsoft Corporation.

Table of contents

1 Introduction to the HP Embedded Web Server (EWS)	1
Overview of the HP Embedded Web Server (EWS)	2
Access and open the HP Embedded Web Server (EWS)	3
2 Information tab	5
Use the Device Status page	6
Use the Job Log page	7
View the Configuration Page report	8
View the Supplies Status Page	9
Use the Event Log Page	10
Use the Usage Page	11
Use the Device Information page	12
Use the Control Panel Snapshot page	13
Use the HP Remote Control-Panel to Manage or Troubleshoot Printers	14
Introduction	14
Video overview	14
Before you begin	14
Use the Remote Control-Panel	15
Print files using the Print page	17
Print reports using Printable Reports and Pages	18
Use the Open Source Licenses page	19
3 General tab	21
Customize the Home Screen, Display Settings or Language	22
Introduction	22
Customize the Control-Panel Home screen	22
Customize printer job short-cuts using Quick Sets	24
Introduction	24
Add and manage Quick Sets	24
Example Quick Sets	33
Configure the printer to automatically send notifications for cartridge or paper events	34

Introduction	34
Before you begin	34
Step one: Set up the outgoing email servers (SMTP)	34
Step two: Set up the alert subscriptions	36
Step three: Set up the Product E-mail Address	37
Step four: Complete the setup	37
Order supplies	37
Use the Control Panel Settings App page	38
Use the General Settings page	39
Setup and configure AutoSend in the HP Embedded Web Server (EWS)	40
Introduction	40
Before you begin	40
Step one: Set up the AutoSend feature	40
Step two: Set up the product email address	42
Step three: Complete the setup	42
Use the Edit Other Links page	43
Use the Ordering Information page	44
Use the Device Information page	45
Use the Language page	46
Use the Firmware Upgrade page	47
Energy-conservation settings	48
Introduction	48
Print with EconoMode (mono models only)	48
Set the idle settings (FutureSmart 4 only)	49
Set the sleep timer and configure the printer to use 1 watt or less of power	49
Configure the date and time settings	51
Set the sleep schedule	52
Configure the Back up and Restore Feature to Save or Restore Data	55
Introduction	55
Step one: Backup and restore data	55
Step two: Set up the Authentication Settings	55
Use the Reset Factory Settings page	56
Install Third-party Solutions Using the Solution Installer	57
Introduction	57
Before you begin	57
Step one: Install a solution	57
Step two: Remove a solution	58
Use the Quota Statistics page to set a predefined volume of printed or scanned pages	59
Introduction	59
Before you begin	59
Step one: Configure the Quota and Statistics Services	59

Step two: Complete the setup	60
4 Copy/Print tab	61
Print from a USB flash drive	62
Introduction	62
Enable the USB port for printing	62
Print USB documents from the printer control panel	64
Advanced configuration with the HP Embedded Web Server (EWS)	65
Introduction	65
Before you begin	65
HP Embedded Web Server features	66
Use the Default Print Options page	74
Restrict or Configure the Number of Colored Pages Printed	75
Introduction	75
Step one: Configure the color settings using the Restrict Color feature	75
Step two: Complete the setup	77
Use the PCL and PostScript Settings page	78
Configure the Print Quality settings	79
Configure the Manage Supplies settings	80
Configure Default Copy Settings	81
Introduction	81
Step one: Set up Copy Settings	81
Step two: Complete the setup	84
Configure the Manage Trays settings	85
Introduction	85
Step one: Configure the tray settings	85
Step two: Load the trays	85
5 Scan/Digital Send tab	87
Set up Scan to Email	88
FutureSmart 3	88
FutureSmart 4	100
Use the Quick Sets page	113
Set up Scan to Network Folder	114
FutureSmart 3	114
FutureSmart 4	124
Set up Scan to SharePoint	134
Video overview	134
FutureSmart 3	134
FutureSmart 4	138
Set up Scan to USB Drive	142

FutureSmart 3	142
FutureSmart 4	145
Set up and Configure the Address Book	149
Introduction	149
Step one: Setup the Network Contacts Setup	149
Step two: Setup the Contacts Stored on the Device	152
Use the Digital Sending Software Setup page	157

6 Fax tab 159

Set up Fax Send in the Embedded Web Server (EWS)	160
Introduction	160
Before you begin	160
Step one: Select the fax send method	160
Step two: Set up the Common Job Settings	161
Step three: Configure a fax send method	162
Step four: Complete the setup	164
Create and manage fax speed dials	165
Introduction	165
Before you begin	165
Method one: Manage speed dials in the HP Embedded Web Server (EWS)	165
Method two: Manage speed dials using the control panel	166
Set up Fax Receive in the Embedded Web Server (EWS)	170
Introduction	170
Before you begin	170
Step one: Set up the Fax Job Options	170
Step two: Set up the Fax Receive Settings	171
Step three: Set up the Notification Settings	172
Step four: Set up the Fax Printing Schedule	172
Step five: Complete the setup	174
Set up and Configure Fax Archive	175
Introduction	175
Before you begin	175
Step one: Set up Fax Archive	175
Step two: Set up Fax Forwarding	177
Step three: Complete the setup	178
Use the Fax Activity Log	179

7 Troubleshooting tab 181

Use the General Troubleshooting page	182
Configure the EWS Online Help options	183
Use the Diagnostic Data page	184

Color Calibration and Cleaning Cycles	185
Introduction	185
Calibration Timing and Duration	185
Worst Case Delays	186
Steps to Minimize Interruptions	186
Background – Explanation of Calibration and Cleaning	187
Calibration Controls	187
Cleaning Cycles	188
Update firmware using a USB flash drive or the Embedded Web Server (EWS)	189
Introduction	189
What you need to know	189
About firmware downgrades	189
Step one: Determine the current firmware version installed on the printer	190
Step two: Download the latest firmware	191
Step three: Update the firmware	192
Applicable printers	195
Reset Factory Settings page	196
8 Security tab	197
Printer security features	198
Introduction	198
Video overview	198
Security statements	198
Assign an administrator password	199
IP Security	200
Lock the formatter	200
Encryption support: HP High Performance Secure Hard Disks	200
Configure the Account Policy settings	202
Introduction	202
Configure the Account Policy settings	202
Configuring Access Control settings for walk-up features in the HP Embedded Web Server (EWS)	204
Introduction	204
Step one: Set up the sign-in methods	204
Step two: Set up print feature permissions	206
Step three: Set up the Job Status and Screen Behavior settings	207
Step four: Set up the default permissions for each sign-in method	207
Step five: Set up Device User Accounts	207
Step six: Complete the setup	208
Protect Stored Data on the Printer's Hard Drive	209
Introduction	209
Step one: Set up Protect Stored Data	209

Step two: Complete the setup	211
Install, view, and manage certificates to ensure data security in the HP Embedded Web Server (EWS)	212
Introduction	212
Step one: Create or install certificates	212
Step two: Manage the installed certificates	214
Step three: Configure the Certificate Validation settings	215
Install, view, and manage certificates for whitelisting remote apps on the printer	217
Introduction	217
Step one: Install Remote App Certificates	217
Step two: Manage the installed Remote App Certificates	217
Use the Web Service Security page	219
Use the Self Test page	220

9 HP Web Services tab 221

10 Networking tab 223

Introduction	224
Home Tab	225
Networking Tab	226
CONFIGURATION	226
Google Cloud Print	229
SECURITY	230
DIAGNOSTICS	233
Other Links	234
Support	234

1 Introduction to the HP Embedded Web Server (EWS)


- [Overview of the HP Embedded Web Server \(EWS\)](#)
- [Access and open the HP Embedded Web Server \(EWS\)](#)

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.

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.

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.

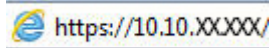
The tabs for the EWS are available across the top of the page. On small, narrow devices, the tabs are collapsed and available from the menu  icon.

Access and open the HP Embedded Web Server (EWS)

1. **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 , and then touch the Ethernet  icon to display the IP address or host name.

2. Open a web browser. In the address line, enter the IP address or host name of the printer exactly as it displays on the printer control panel. Press the **Enter** key on the computer keyboard. The EWS opens.



 **NOTE:** If the web browser displays a message indicating that accessing the website might not be safe, select the option to continue to the website. 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. Click the **Networking** tab, and then select **Mgmt. Protocols** in the left navigation pane. On the **Web Mgmt.** tab, clear the **Encrypt All Web Communication (not including IPP)** check box, and then click **Apply**.

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.

2 Information tab

- [Use the Device Status page](#)
- [Use the Job Log page](#)
- [View the Configuration Page report](#)
- [View the Supplies Status Page](#)
- [Use the Event Log Page](#)
- [Use the Usage Page](#)
- [Use the Device Information page](#)
- [Use the Control Panel Snapshot page](#)
- [Use the HP Remote Control-Panel to Manage or Troubleshoot Printers](#)
- [Print files using the Print page](#)
- [Print reports using Printable Reports and Pages](#)
- [Use the Open Source Licenses page](#)

Use the Device Status page

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.

For more information about changing these settings, see the **Manage Trays** page on the **Copy/Print** tab.

Use the Job Log page

The **Job Log** page provides a list of the jobs that have been printed.

View additional information 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

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 the Configuration Page report

The **Configuration Page** page displays the contents of the Configuration Page report. This report includes useful information about the printer, such as the firmware version and IP address.

View the Supplies Status Page

The **Supplies Status Page** page contains detailed information about all of the printer supplies. This page includes a link to the [HP supply website](#).

Use the Event Log Page

The **Event Log Page** 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.

Use the Usage Page

The **Usage Page** provides a report on how many pages have been printed and how many copies, scans, and faxes have been created.

Use the Device Information page

The **Device Information** page displays unique information about the product. For more information about changing this information, see the **Device Information** page on the **General** tab.

Use the Control Panel Snapshot page

The **Control Panel Snapshot** page provides an image of what is currently displayed on the control panel.

Use the HP Remote Control-Panel to Manage or Troubleshoot Printers

- [Introduction](#)
- [Video overview](#)
- [Before you begin](#)
- [Use the Remote Control-Panel](#)

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

[View a video demonstration on how to remotely manage printers](#)

Before you begin

- 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.
- 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.

- Make sure JavaScript is enabled in your web browser in order to use the Remote Control Panel.

Use the Remote Control-Panel

 **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.

1. In the EWS, click the **Information** tab on the top navigation pane.
2. In the left navigation pane, click **Remote Control-Panel**.
3. Click the **Launch Remote Control-Panel** button on the **Remote Control-Panel** page to launch the remote session.
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.

Table 2-1 Remote Control-Panel in the EWS


FutureSmart 3	FutureSmart 4
	

 **NOTE:** The green frame at the control panel (as shown in the images above) indicates that the printer is being remotely controlled.

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.

Print files using the Print page

 **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 **Print** check box under **Device User**. Once enabled, **Print** will be available on the **Information** tab.

Use the **Print** page 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.

Print reports using Printable Reports and Pages

The **Printable Reports and Pages** page 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.

Use the Open Source Licenses page

The **Open Source Licenses** page 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.

3 General tab

- [Customize the Home Screen, Display Settings or Language](#)
- [Customize printer job short-cuts using Quick Sets](#)
- [Configure the printer to automatically send notifications for cartridge or paper events](#)
- [Use the Control Panel Settings App page](#)
- [Use the General Settings page](#)
- [Setup and configure AutoSend in the HP Embedded Web Server \(EWS\)](#)
- [Use the Edit Other Links page](#)
- [Use the Ordering Information page](#)
- [Use the Device Information page](#)
- [Use the Language page](#)
- [Use the Firmware Upgrade page](#)
- [Energy-conservation settings](#)
- [Configure the Back up and Restore Feature to Save or Restore Data](#)
- [Use the Reset Factory Settings page](#)
- [Install Third-party Solutions Using the Solution Installer](#)
- [Use the Quota Statistics page to set a predefined volume of printed or scanned pages](#)

Customize the Home Screen, Display Settings or Language

- [Introduction](#)
- [Customize the Control-Panel Home screen](#)


Introduction

Use the HP Embedded Web Server (EWS) to customize the control-panel display. Drag and drop applications to show, hide or reorder desired applications.

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

- Which menu options display
- The order in which the menu options display
- 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.

Customize the Control-Panel Home screen

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 following procedures:
 - [Change the menus that display on the Home screen](#)
 - [Change the order in which the menus appear on the Home Screen](#)
 - [Change the display settings](#)
 - [Change the control-Panel language and keyboard layouts](#)
 - [Create a custom welcome screen](#)

Change the menus that display on the Home screen

[View a video demonstration on how to change the menus that display on the Home screen](#)

The **Home Screen** section of the **Control Panel Customization** menu shows the menu items that are visible on the Home screen. Drag and drop applications to show, hide or reorder desired applications. Click **Configure** to go to the setup page for the application.

The **Available Applications (Not showing on home screen)** section of the **Control Panel Customization** menu shows the menu items that are available but not currently displayed on the Home screen.

1. Click and hold the cursor over the menu item to be hidden.
2. Drag the menu item to the **Available Applications (Not showing on home screen)** section, and then release the mouse button.

Reverse the procedure to view a hidden 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.



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

Change the order in which the menus appear on the Home Screen

[View a video demonstration on how to change the order of the menus on the Home screen](#)

1. 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.
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 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. Scroll to the **Display Settings** area, and select or deselect the individual options.
2. Click the **Apply** button at the bottom of the EWS window to save the changes.

Change the control-Panel language and keyboard layouts

[View a video demonstration on how to change the language and keyboard layouts](#)

1. Select the radio button next to the preferred default language from the **Language** column.
2. Select the preferred keyboard layout from the **Keyboard Layout** drop-down menu.
3. Enable or disable the **Allow users to choose another language for their session** option.
4. 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. Scroll to the **Display Settings** area, and select **Show Welcome Message**.
2. Enter a title in the **Title:** field, enter the message into the **Text:** field, and then select a color from the **Border Color:** drop-down menu.

Customize printer job short-cuts using Quick Sets

- [Introduction](#)
- [Add and manage Quick Sets](#)
- [Example Quick Sets](#)

Introduction

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. 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

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)
 - Save 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 27](#) 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 27](#) 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

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 27](#) 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 3-1 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.
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: CC: BCC:	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: <ul style="list-style-type: none">• User's address (sign-in required)• Blank• Specify address These fields can be set to be user-editable.
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 3-2 Signing and Encryption — Email Quick Sets

Option	Description
Signing	<p>Use the Signing drop-down list to specify whether the email sent using the Quick Set is digitally signed.</p> <p>This field can be set to be user-editable.</p>
Hashing Algorithm	<p>Use the Hashing Algorithm drop-down list to set the type hashing algorithm used with signed emails. The following hashing algorithms are available:</p> <ul style="list-style-type: none">• SHA-1• SHA-256 (recommended)• SHA-384• SHA-512
Encryption	<p>Use the Encryption drop-down list to specify whether the email sent using the Quick Set is encrypted.</p> <p>This field can be set to be user-editable.</p>
Encryption Algorithm	<p>Use the Encryption Algorithm drop-down list to set the encryption algorithm used for encrypted emails sent using the Quick Set.</p>
Attribute for Recipient Public Key	<p>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.</p>

Table 3-3 Scan settings — Email, Fax, Save to Network Folder, and Save to USB Quick Sets

Option	Description
Default File Type	<p>Select the default file type for the scanned document:</p> <ul style="list-style-type: none">• PDF• JPEG• TIFF• MTIFF• XPS• PDF/A• Text (OCR)• Unicode Text (OCR)• RTF (OCR)• Searchable PDF (OCR)• Searchable PDF/A (OCR)• HTML (OCR)• CSV (OCR) <p>NOTE: The OCR file types are available only for Flow models.</p>

Table 3-3 Scan settings — Email, Fax, Save to Network Folder, and Save to USB Quick Sets (continued)

Option	Description
Default Color Preferences	Select the default color setting for the scanned document: <ul style="list-style-type: none"> • Color • Black • Black/Gray • Automatically detect
Default Output Quality	Select the default output quality for the scanned document: <ul style="list-style-type: none"> • Low (small file) • Medium • High (large file)
Default Resolution	Select the default scan resolution for the scanned document: <ul style="list-style-type: none"> • 75 dpi • 150 dpi • 200 dpi • 300 dpi • 400 dpi • 600 dpi

Table 3-4 File settings — Email, Save to Network Folder, and Save to USB Quick Sets

Feature	Description
File Name Prefix	Set the default file name prefix used for files saved to a network folder.
Default File Name	Default file name for the file to be saved. Select the User editable check box to make this setting editable at the product control panel.
File Name Suffix	Set the default file name suffix used for files saved to a network folder. Duplicate filename suffix default [filename]_YYYYMMDDT
File Number Format	Select a file name format for when the job is divided into multiple files.
Default File Type	Select the file format for the saved file. Select the User editable check box to make this setting editable at the product control panel.
File Name Preview	Enter a file name, and then click the Update Preview button.
Default Color Preference	Select whether the file is in black & white or in color.
Default Output Quality	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.
Default Resolution	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.

Table 3-4 File settings — Email, Save to Network Folder, and Save to USB Quick Sets (continued)

Feature	Description
Compression	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.
Black TIFF Compression	Select the black TIFF compression algorithm to be used to compress the generated TIFF file.
Color/Grayscale TIFF Compression	Select the color/grayscale TIFF compression algorithm to be used to compress the generated TIFF file.
PDF encryption	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.
Disable OCR file types	Select this setting to prevent OCR file types from being available from the product control panel.
Enable Blank Page Suppression	If the Enable Blank Page Suppression option is enabled, blank pages will be ignored.

Table 3-5 Copy settings — Copy Quick Sets

Option	Description
Copies	Set the default number of copies.
Sides	Select a Copy Sides option: <ul style="list-style-type: none"> • 1-sided original, 1-sided output • 2-sided original, 2-sided output • 1-sided original, 2-sided output • 2-sided original, 1-sided output
Color/Black	Specify whether copies are printed in color or in black and white: <ul style="list-style-type: none"> • 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. • Color: Prints documents in color (for printers that support color copying). • Black: Prints documents in black and white.
Collate	For printers that support print-job finishing, each set of copied pages are assembled in the same order as the original document. <p>NOTE: If the printer has a stapler installed, select a staple option. To not staple the copies, select None.</p> <p>Select a Collate option.</p> <ul style="list-style-type: none"> • 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. • 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.

Table 3-5 Copy settings — Copy Quick Sets (continued)

Option	Description
Reduce/Enlarge	<p>Use the Reduce/Enlarge feature to scale the size of the document up or down.</p> <p>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:</p> <ul style="list-style-type: none"> • Auto: The printer automatically scales the image to fit the paper size in the tray. • Auto Include Margins: The printer reduces the image slightly to fit the entire scanned image within the printable area on the page. <p>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.</p>
Paper Selection	<p>Select which tray to use when printing or making copies:</p> <ul style="list-style-type: none"> • Manually feed: The Paper Selection option is automatically set to Tray 1: Any Type, Any Size • Automatically Detect: Automatically matches the paper size of the original to a paper size in one of the trays • Tray 1: Any Type, Any Size • Tray 2: Plain, Letter (8.5x11)
Image Adjustment	<p>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.</p> <ul style="list-style-type: none"> • 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.
Content Orientation	<p>For some features to work correctly, specify the way the content of the original document is placed on the page.</p> <p>If you are making two-sided copies, select a 2-sided format option.</p> <p>Orientation:</p> <ul style="list-style-type: none"> • Portrait: The short edge of the page is along the top. • Landscape: The long edge of the page is along the top. <p>2-Sided Format:</p> <ul style="list-style-type: none"> • 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 to be 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.

Table 3-5 Copy settings — Copy Quick Sets (continued)

Option	Description
Optimize Text/ Picture	<p>Select the option for how to handle output of a particular type content being printed:</p> <ul style="list-style-type: none"> • Manually adjust: Manually optimize the setting for each document • Text: Use for documents that contain mostly text • Printed picture: Use for line drawings and preprinted images, such as magazine clippings or pages from books <p>NOTE: If bands of irregular intensity print on the copies, try selecting Printed picture to improve the quality.</p> <ul style="list-style-type: none"> • Photograph: Use for photographic prints <p>Select an Optimize For value for the manual adjustment.</p>
Pages per Sheet	<p>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.</p> <p>Pages per Sheet</p> <ul style="list-style-type: none"> • One (1) • Two (2) • Four (4) <p>Page Order</p> <ul style="list-style-type: none"> • Right, then down: Prints the pages in rows • Down, then right: Prints the pages in columns <p>Click the Add page borders check box to add borders on the pages.</p>
Original Size	<p>Specify the size of the original document:</p> <ul style="list-style-type: none"> • Automatically detect • Letter (8.5x11) • Mixed Letter/Legal • Legal (8.5x14) • Executive (7.25x10.5) • Statement (5.5x8.5) • Oficio (8.5x13) • A4 (210x297 mm) • A5 (148x210 mm) • B5 (182x257 mm) • 16k (195x270 mm) • DPostcard JIS (148x200 mm) • Oficio (216x340 mm)
Booklet	<p>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.</p>

Table 3-5 Copy settings — Copy Quick Sets (continued)

Option	Description
Edge-to-Edge	<p>Use to avoid shadows that can display along the edges of copies when the original document is printed close to the edges.</p> <p>Combine this feature with the Reduce/Enlarge feature to ensure that the entire page is printed on the copies.</p> <p>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.</p>
Multi-feed Detection	<p>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.</p> <p>Flow models only</p>
2-sided ID Scan	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.
Book Mode	Select to have Book Mode off or on.

Example Quick Sets

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

Quick Sets Help

Quick Sets List

Quick Sets are pre-configured sets of options that allow users to easily start a job without having to manually configure frequently used job settings. A Quick Set can be accessed from the Home screen or from the app associated with the Quick Set. Quick Sets are saved as unique jobs that do not impact the default options of the apps.

Show all v

Quick Set Name	Status	Quick Set Type
<input type="checkbox"/> Home Screen		
<input type="checkbox"/> Quick Sets		
<input type="checkbox"/> Photo Quick Set	✔	Copy
<input type="checkbox"/> Save to USB	✔	Scan to USB Drive
<input type="checkbox"/> Test Network Folder	✔	Scan to Network Folder

Quick Sets that are displayed on the control panel can only be moved using the [Control Panel Customization](#) page.

Configure the printer to automatically send 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)

Start the Outgoing E-mail Servers (SMTP) 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.
4. 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


 **NOTE:** 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

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

 **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 messages 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

Order supplies and paper	www.hp.com/go/suresupply
Order through service or support providers	Contact an HP-authorized service or support provider.
Order using the HP Embedded Web Server (EWS)	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.

Use the Control Panel Settings App page

The **Control Panel Settings App** page displays a remote view of the Settings app options that are available on the product control-panel.

Use the General Settings page

The **General Settings** page provides access to the **Jam Recovery** and **Hold Off Print Job** settings. Use this page for the following tasks:

- Specify when jammed pages are printed.
- 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.

Setup and configure AutoSend in the HP Embedded Web Server (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.


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

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 **Apply** to save the settings.

For the **Send to E-mail** option, configure an 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:


 **NOTE:** 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

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



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.

Use the Edit Other Links page

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 to add up to five additional links to the footer of the EWS page.

Use the Ordering Information page

Use the **Ordering Information** page 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.

Use 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.

Use the Language page

Use the **Language** page 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.

Use the Firmware Upgrade page

For more information about the **Firmware Upgrade** page, see the **Firmware Upgrade** page on the **Troubleshooting** tab.

Energy-conservation settings

- [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)

This printer has an EconoMode option for printing drafts of documents. Using EconoMode can use less toner. However, using EconoMode can also reduce print quality.

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

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)

1. Press the Home  button on the printer control panel.
2. Open the following menus:
 - Administration
 - General Settings
 - 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)

1. From the Home screen on the printer control panel, open the Settings menu.
2. Open the following menus:
 - Copy/Print or Print
 - Default Print Options
 - Economode
3. Select On or Off to enable or disable the feature.

Set the idle settings (FutureSmart 4 only)

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:
 - General
 - Energy Settings
 - 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.

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




FutureSmart 3

1. Press the Home  button on the printer control panel.
2. Open the following menus:
 - Administration
 - General Settings
 - Energy Settings
 - 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

[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:
 - General Settings
 - Energy Settings
 - 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.



1. Open the HP Embedded Web Server (EWS):
 - **FutureSmart 3:**
 - **4-line control panels:** View the control-panel display to see the IP address.
 - **Touchscreen control panels:** From the Home screen on the printer control panel, touch the Network  button 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. In the address line, type the IP address or host name of the printer exactly as it displays on the printer control panel. Press the **Enter** key on the computer keyboard. The EWS opens.

 <https://10.10.XX.XXX/>


 **NOTE:** If the web browser displays a message indicating that accessing the website might not be safe, select the option to continue to the website. 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. Click the **Networking** tab, and then select **Mgmt. Protocols** in the left navigation pane. On the **Web Mgmt.** tab, clear the **Encrypt All Web Communication (not including IPP)** check box, and then click **Apply**.

3. Click the **General** tab.
4. Open the **Date/Time Settings** menu.
5. In the area labeled **Device Time**, configure the date and time.
6. In the area labeled **Date/Time Format**, select the preferred date and time formats.
7. 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.
8. 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.

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


Set the sleep schedule from the printer control panel

1. From the Home screen on the printer control panel, scroll to and touch the Administration button.
2. Open the following menus:
 - General Settings
 - 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:
 - General Settings
 - Energy Settings
 - 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)

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



1. Open the HP Embedded Web Server (EWS):
 - **FutureSmart 3:**
 - **4-line control panels:** View the control-panel display to see the IP address.
 - **Touchscreen control panels:** From the Home screen on the printer control panel, touch the Network  button 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.

- Open a web browser. In the address line, type the IP address or host name of the printer exactly as it displays on the printer control panel. Press the **Enter** key on the computer keyboard. The EWS opens.



 **NOTE:** If the web browser displays a message indicating that accessing the website might not be safe, select the option to continue to the website. 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. Click the **Networking** tab, and then select **Mgmt. Protocols** in the left navigation pane. On the **Web Mgmt.** tab, clear the **Encrypt All Web Communication (not including IPP)** check box, and then click **Apply**.

- Click the **General** tab.
- Open the **Date/Time Settings** menu.
- In the area labeled **Device Time**, configure the date and time.
- In the area labeled **Date/Time Format**, select the preferred date and time formats.
- 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.
- Click the **Apply** button.

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

Control-panel status	Power-button status	Printer status
Black or Blank	Blinking in one second intervals	The printer is in Sleep/Auto Off mode The Wake/Auto On Event is set to All events
Black or Blank	Blinking in 0.25 second intervals	The printer is in Sleep/Auto Off mode The Wake/Auto On Event is set to Network port
Active	Blinking	The printer is in one of the following transitional states: <ul style="list-style-type: none"> • Entering Sleep/Auto Off mode • Exiting Sleep/Auto Off mode • Entering Auto On mode • Entering Auto Off mode

Configure the Back up and Restore Feature to Save or Restore Data

- [Introduction](#)
- [Step one: Backup and restore data](#)
- [Step two: Set up the Authentication Settings](#)


Introduction

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.

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).

Step one: 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.

Use the Reset Factory Settings page

Use the **Reset Factory Settings** page 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.

Install Third-party Solutions Using the Solution Installer

- [Introduction](#)
- [Before you begin](#)
- [Step one: Install a solution](#)
- [Step two: Remove a solution](#)

Introduction

Use the HP Embedded Web Server (EWS) to install third-party software packages that extend or modify the functionality of the printer.

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

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

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.

Use the Quota Statistics page to set a predefined volume of printed or scanned pages

- [Introduction](#)
- [Before you begin](#)
- [Step one: Configure the Quota and Statistics 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.

Step one: Configure the Quota and Statistics Services

 **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. Navigate to **General**, then **Quota and Statistics Services**.
2. 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.
3. Click the **Apply** button to save the settings.

Connecting to a quota server 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.

Please refer to documentation from the company providing the quota server software for more information.

Set up a connection to a quota server:

1. Navigate to **General**, then **Quota and Statistics Services**.
2. Select the **Connect this device to a Quota Server** check box to enable this feature.
3. Enter the URL for the quota server in the **Quota Server URL** field.
4. Enter a **Username** and **Password** for accessing the quota server.
5. 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.
6. 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.

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.

Step two: Complete the setup

Navigate to **General**, then **Quota and Statistics Services**.

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

4 Copy/Print tab

- [Print from a USB flash drive](#)
- [Advanced configuration with the HP Embedded Web Server \(EWS\)](#)
- [Use the Default Print Options page](#)
- [Restrict or Configure the Number of Colored Pages Printed](#)
- [Use the PCL and PostScript Settings page](#)
- [Configure the Print Quality settings](#)
- [Configure the Manage Supplies settings](#)
- [Configure Default Copy Settings](#)
- [Configure the Manage Trays settings](#)

Print from a USB flash drive

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:

- .pdf
- .prn
- .pcl
- .ps
- .cht

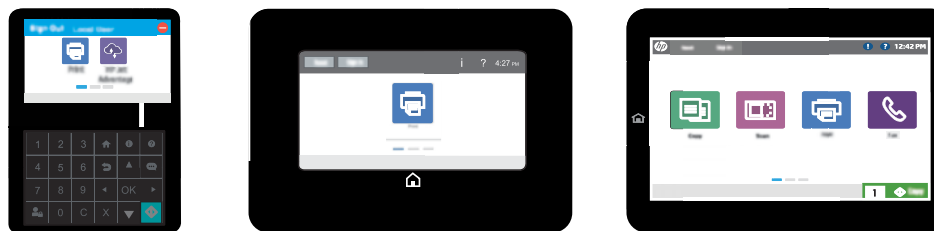
Use the following steps to enable the USB port on the printer, and then print documents from a USB flash drive.

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

FutureSmart 3



FutureSmart 4



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

FutureSmart 3

1. From the Home screen on the printer control panel, select the [Administration](#) button.
2. Open the following menus:


- [General Settings](#)
 - [Enable Retrieve from USB](#)
3. Select the [Enabled](#) option, and then select the [Save](#) button or press the [OK](#) button.

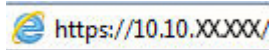
FutureSmart 4

1. From the Home screen on the printer control panel, select [Settings](#).
2. Open the following menus:
 - [Copy/Print](#)
 - [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)

FutureSmart 3

1. Find the printer's IP address on the printer control panel:
 - **Keypad control panels:** View the control-panel display to see the IP address.
 - **Touchscreen control panels:** From the Home screen on the printer control panel, select the Network  button to display the IP address or host name.
2. Open a Web browser, and in the address line, type the IP address or host name exactly as it displays on the printer control panel. Press the [Enter](#) key on the computer keyboard. The EWS opens.





 **NOTE:** If the web browser displays a message indicating that accessing the website might not be safe, select the option to continue to the website. 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. Click the **Networking** tab, and then select **Mgmt. Protocols** in the left navigation pane. On the **Web Mgmt.** tab, clear the **Encrypt All Web Communication (not including IPP)** check box, and then click **Apply**.

3. On the EWS Home page, open the **Print** tab.
4. On the left side of the screen, click **Retrieve from USB Setup**.
5. Select the **Enable Retrieve from USB** check box.
6. Click **Apply**.

FutureSmart 4

1. Find the printer's IP address on the printer control panel:

- **Keypad control panels:** On the printer control panel, press the Information  button, and then use the arrow keys to select the [Ethernet](#) menu. Press the **OK** button to open the menu and display the IP address or host name. Take note of the IP address.
 - **Touchscreen control panels:** From the Home screen on the printer control panel, touch the Information  icon, and then select [Ethernet](#). Take note of the [IPv4 Address](#).
2. Open a Web browser, and in the address line, type the IP address exactly as it displays on the printer control panel. Press the [Enter](#) key on the computer keyboard. The EWS opens.

 16.87.243.xx

 **NOTE:** If the web browser displays a message indicating that accessing the website might not be safe, select the option to continue to the website. 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. Click the **Networking** tab, and then select **Mgmt. Protocols** in the left navigation pane. On the **Web Mgmt.** tab, clear the **Encrypt All Web Communication (not including IPP)** check box, and then click **Apply**.

3. On the top menu bar in the EWS, select **Copy/Print**.
4. In the left navigation pane, select **Print from USB Drive Settings**.
5. Select **Enable Print from USB Drive**, and then click **Apply**.


Print USB documents from the printer control panel


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

1. From the Home screen on the printer control panel, select [Print](#), and then select [Print from USB drive](#).
2. Touch [Choose](#), and then select the document to print.

 **NOTE:** The document might be in a folder. Open folders as necessary.

3. To adjust the number of copies, touch the Copy Count field to the left of the [Print](#) button. When the keypad displays, select the number of copies, and then touch [Print](#) to print the document.

Advanced configuration with the HP Embedded Web Server (EWS)

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

Information tab

Table 4-1 HP Embedded Web Server Information tab

Menu	Description
Device Status	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.
Job Log	Shows a summary of all jobs the printer has processed.
Configuration Page	Shows the information found on the configuration page.
Supplies Status Page	Shows the status of the supplies for the printer.
Event Log Page	Shows a list of all printer events and errors. Use the HP Instant Support link (in the page footer 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.
Usage Page	Shows a summary of the number of pages the printer has printed, grouped by size, type, and paper print path.
Device Information	Shows the printer network name, address, and model information. To customize these entries, click the Device Information menu on the General tab.
Control Panel Snapshot	Shows an image of the current screen on the control panel display.
Print	Upload a print-ready file from the computer to print. The printer uses the default print settings to print the file.
Printable Reports and Pages	Lists the internal reports and pages for the printer. Select one or more items to print or view.
Open Source Licenses	Shows a summary of the licenses for open source software programs that can be used with the printer.

General tab

Table 4-2 HP Embedded Web Server General tab

Menu	Description
Control Panel Customization	Reorder, show, or hide features on the control-panel display. Change the default display language and keyboard layouts.
Quick Sets	Configure jobs that are available in the Quick Sets area of the Home screen on the printer control panel.
Alerts	Setup email alerts for various printer and supplies events.
Control Panel Settings App	Shows the Settings app options that are available on the printer control panel.

Table 4-2 HP Embedded Web Server General tab (continued)

Menu	Description
General Settings	Configure how the printer recovers from jams and whether copy jobs initiated at the printer control panel take priority over print jobs.
AutoSend	Configure the printer to send automated emails regarding printer configuration and supplies to specific email addresses.
Edit Other Links	Add or customize a link to another website. This link displays in the footer area on all HP Embedded Web Server pages.
Ordering Information	Enter information about ordering replacement cartridges. This information displays on the supplies status page.
Device Information	Name the printer and assign an asset number to it. Enter the name of the primary contact who will receive information about the printer.
Language	Set the language in which to display the HP Embedded Web Server information.
Date/Time Settings	Set the date and time or synchronize with a network time server.
Energy Settings	Set or edit sleep settings for business and non-business hours and wake, sleep, and holiday events for the printer. Set which interactions with the printer cause it to wake from sleep mode.
Backup and Restore	Create a backup file that contains printer and user data. If necessary, use this file to restore data to the printer.
Reset Factory Settings	Restore printer settings to the factory defaults.
Solution Installer	Install third-party software packages that extend or modify the functionality of the printer.
Firmware Upgrade	Download and install printer firmware upgrade files.
Quota and Statistics Services	Provides connection information about third-party job-statistics services.

Copy/Print tab

Table 4-3 HP Embedded Web Server Copy/Print tab

Menu	Description
Print from USB Drive Settings	Enable or disable the Print from USB Drive menu on the control panel.
Manage Stored Jobs	Enable or disable the ability to store jobs in the printer memory. Configure job-storage options.
Default Print Options	Configure the default options for print jobs.
Restrict Color (Color printers only)	Permit or restrict color printing and copying. Specify permissions for individual users or for jobs that are sent from specific software programs.
PCL and PostScript Settings	Adjust the PCL and PostScript settings for all print jobs, including copy jobs and received faxes.
Print Quality	Configure the print quality settings, including color adjustment, image registration, and allowed paper types.
Manage Supplies	Configure how the printer reacts when supplies reach a Very Low state.

Table 4-3 HP Embedded Web Server Copy/Print tab (continued)

Menu	Description
Copy Settings	Configure the default options and Quick Sets for copy jobs. NOTE: 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.
Manage Trays	Configure settings for paper trays.

Scan/Digital Send tab

Table 4-4 HP Embedded Web Server Scan/Digital Send tab

Menu	Description
Email Setup	Configure the default email settings for digital sending, including the following: <ul style="list-style-type: none"> • Settings for the outgoing mail (SMTP) server • Settings for Email Quick Sets jobs • Default message settings, such as the "From" address and the subject line • Settings for digital signatures and encryption • Settings for email notifications • Default scan settings for email jobs • Default file settings for email jobs
Scan to Network Folder	Configure the network folder settings for digital sending, including the following: <ul style="list-style-type: none"> • Settings for Quick Sets jobs saved in a network folder • Settings for notifications • Default scan settings for jobs saved in a network folder • Default file settings for jobs saved in a network folder
Scan to SharePoint® (Flow models only)	Configure the Microsoft SharePoint® settings for digital sending, including the following: <ul style="list-style-type: none"> • Settings for Quick Sets jobs saved in a document library on the SharePoint® site • Default settings for jobs saved in a document library on the SharePoint® site
Scan to USB Drive	Configure the USB settings for digital sending, including the following: <ul style="list-style-type: none"> • Settings for Quick Sets jobs saved on a USB flash drive • Settings for notifications • Default scan settings for jobs saved on a USB flash drive • Default file settings for jobs saved on a USB flash drive

Table 4-4 HP Embedded Web Server Scan/Digital Send tab (continued)

Menu	Description
Contacts	Manage contacts, including the following: <ul style="list-style-type: none">• Add email addresses into the printer one at a time.• Import a large list of frequently-used email addresses on to the printer all at once, rather than adding them one at a time.• 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.• Edit email addresses that have already been saved in the printer.
Preferences	Configure size detection from the scanner glass.
Email and Scan to Network Folder Quick Setup Wizards	Configure the printer to send scanned images as email attachments. Configure the printer to save scanned images to network-folder Quick Sets. Quick Sets provide easy access to files saved on the network.
Digital Sending Software Setup	Configure settings related to using optional Digital Sending software.

Fax tab

Table 4-5 HP Embedded Web Server Fax tab

Menu	Description
Fax Send Setup	Configure settings for sending faxes, including the following: <ul style="list-style-type: none">• Default settings for outgoing faxes• Settings for fax Quick Sets jobs• Settings for notifications• Default setting for sending faxes using the internal fax modem• Settings for using a LAN fax service• Settings for using an Internet fax service
Fax Speed Dials	Manage speed dials, including the following: <ul style="list-style-type: none">• Import .CSV files containing email addresses, fax numbers, or user records, so that they can be accessed on this printer.• 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.
Fax Receive Setup	Configure default print options for incoming faxes, and set up a fax printing schedule.
Fax Archive and Forwarding	Enable or disable fax archiving and fax forwarding, and configure basic settings for each: <ul style="list-style-type: none">• 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.• Fax forwarding is a method to forward incoming faxes to a different fax device.
Fax Activity Log	Contains a list of the faxes that have been sent from or received by this printer.

Troubleshooting tab

Table 4-6 HP Embedded Web Server Troubleshooting tab

Menu	Description
General Troubleshooting	Select from a variety of reports and tests to help solve problems with the printer. Configure settings for Fax, OXPd, and Auto Recovery.
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 detailed problem analysis. NOTE: This item is available only if an administrator password is set from the Security tab.
Firmware Upgrade	Download and install printer firmware upgrade files.
Reset Factory Settings	Reset printer settings to factory defaults.

Security tab

Table 4-7 HP Embedded Web Server Security tab

Menu	Description
General Security	Settings for general security, including the following: <ul style="list-style-type: none">• Configure an administrator password to restrict access to certain features on the printer.• Set PjL password for processing PjL commands.• Set file system access and firmware upgrade security.• 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.• View the status of all security settings.
Account Policy	Enable administrator account settings.
Access Control	Configure access to printer functions for specific individuals or groups, and select the method individuals use to sign in to the printer.
Protect Stored Data	Configure and manage the internal hard drive for the printer. This printer includes an encrypted hard drive for maximum security. Configure settings for jobs that are stored on the printer hard drive.
Certificate Management	Install and manage security certificates for access to the printer and the network.
Web Service Security	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.
Self Test	Verify that the security functions are running according to expected system parameters.

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 4-8 HP Embedded Web Server HP Web Services tab

Menu	Description
Web Services Setup	Connect this printer to HP's ePrintCenter on the web by enabling HP Web Services.
Web Proxy	Configure a proxy server if there are issues enabling HP Web Services or connecting the printer to the Internet.
HP JetAdvantage	Access solutions that extend the capabilities of the printer.

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 4-9 HP Embedded Web Server Networking tab

Menu	Description
Configuration	
Wi-Fi Direct	Configure Wi-Fi Direct settings for printers that include embedded Wi-Fi Direct Print and NFC printing or that have a wireless accessory installed. NOTE: The configuration options available depend on the print server model.
TCP/IP Setting	Configure TCP/IP settings for IPv4 and IPv6 networks. NOTE: The configuration options available depend on the print server model.
Network Settings	Configure IPX/SPX, AppleTalk, DLC/LLC, and SNMP settings, depending on the print server model.
Other Settings	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.
AirPrint	Enable, set up, or disable network printing from Apple supported printers.
Select Language	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.
Select Location	Select a country/region for the printer
Google Cloud Print	
Setup	Set up Google Cloud Print options.
Web Proxy	Configure proxy settings.
Security	
Settings	View and restore current security settings to factory-default values. Configure security settings using the Security Configuration Wizard. NOTE: Do not use the Security Configuration Wizard to configure security settings using network-management applications, such as HP Web Jetadmin.

Authorization	Control configuration management and use of this printer, including the following: <ul style="list-style-type: none"> • Set or change the administrator password to control access to configuration parameters. • Request, install, and manage digital certificates on the HP Jetdirect print server. • Limit host access to this printer through an Access Control List (ACL) (for selected print servers on IPv4 networks only).
Secure Communication	Configure security settings.
Mgmt. Protocols	Configure and manage security protocols for this printer, including the following: <ul style="list-style-type: none"> • 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. <p>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.</p>
IPsec/Firewall	View or configure a Firewall policy or an IPsec/Firewall policy (for selected HP Jetdirect models only).
Announcement Agent	Enable or disable the HP Device Announcement Agent, set the configuration server, and configure mutual authentication using certificates.
Diagnostics	
Network Statistics	Display network statistics that are collected and stored on the HP Jetdirect print server.
Protocol Info	View a list of network-configuration settings on the HP Jetdirect print server for each protocol.
Configuration Page	View the HP Jetdirect configuration page, which contains status and configuration information.

Other Links list


 **NOTE:** Configure which links display in the footer of the HP Embedded Web Server by using the **Edit Other Links** menu on the **General** tab. The following are the default links.

Table 4-10 HP Embedded Web Server Other Links list

Menu	Description
Product Support	Connect to the support site for the printer to search for help on various topics.

Table 4-10 HP Embedded Web Server Other Links list (continued)

Menu	Description
Shop for Supplies	Connect to the HP SureSupply website for information on purchasing original HP supplies, such as cartridges and paper.
HP Instant Support	Connect to the HP website to find solutions to printer problems.

Use the Default Print Options page

Use the **Default Print Options** page 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.

Restrict or Configure the Number of Colored Pages Printed

- [Introduction](#)
- [Step one: Configure the color settings using the Restrict Color feature](#)
- [Step two: Complete the setup](#)

Introduction

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

Access the Restrict Color feature using the following steps:

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

Main Color Setting

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

- 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:

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

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.
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.

Use the PCL and PostScript Settings page

Use the **PCL and PostScript Settings** page to set the default PCL, PostScript, and font settings for print jobs on this printer.

Configure the Print Quality settings

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.

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.

Configure the Manage Supplies settings

Use the **Manage Settings** page to apply settings for the product supplies.

Configure Default Copy Settings

- [Introduction](#)
- [Step one: Set up Copy Settings](#)
- [Step two: Complete the setup](#)

Introduction

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

Step one: Set up Copy Settings

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:

Option	Description
Copies	Set the default number of copies.
Sides	Select a Copy Sides option: <ul style="list-style-type: none">• 1-sided original, 1-sided output• 2-sided original, 2-sided output• 1-sided original, 2-sided output• 2-sided original, 1-sided output
Color/Black	Specify whether copies are printed in color or in black and white: <ul style="list-style-type: none">• 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.• Color: Prints documents in color (for printers that support color copying).• Black: Prints documents in black and white.
Collate	For printers that support print-job finishing, each set of copied pages are assembled in the same order as the original document. <p>NOTE: If the printer has a stapler installed, select a staple option. To not staple the copies, select None.</p> Select a Collate option. <ul style="list-style-type: none">• 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.• 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.

Option	Description
Reduce/Enlarge	<p>Use the Reduce/Enlarge feature to scale the size of the document up or down.</p> <p>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:</p> <ul style="list-style-type: none"> • Auto: The printer automatically scales the image to fit the paper size in the tray. • Auto Include Margins: The printer reduces the image slightly to fit the entire scanned image within the printable area on the page. <p>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.</p>
Paper Selection	<p>Select which tray to use when printing or making copies:</p> <ul style="list-style-type: none"> • Manually feed: The Paper Selection option is automatically set to Tray 1: Any Type, Any Size • Automatically Detect: Automatically matches the paper size of the original to a paper size in one of the trays • Tray 1: Any Type, Any Size • Tray 2: Plain, Letter (8.5x11)
Image Adjustment	<p>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.</p> <ul style="list-style-type: none"> • 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.
Content Orientation	<p>For some features to work correctly, specify the way the content of the original document is placed on the page.</p> <p>If you are making two-sided copies, select a 2-sided format option.</p> <p>Orientation:</p> <ul style="list-style-type: none"> • Portrait: The short edge of the page is along the top. • Landscape: The long edge of the page is along the top. <p>2-Sided Format:</p> <ul style="list-style-type: none"> • 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 to be 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.

Option	Description
Optimize Text/ Picture	<p>Select an option for how to handle output of a particular type content being printed:</p> <ul style="list-style-type: none"> • Manually adjust: Manually optimize the setting for each document • Text: Use for documents that contain mostly text • Printed picture: Use for line drawings and preprinted images, such as magazine clippings or pages from books <p>NOTE: If bands of irregular intensity print on the copies, try selecting Printed picture to improve the quality.</p> <ul style="list-style-type: none"> • Photograph: Use for photographic prints <p>Select an Optimize For value for the manual adjustment.</p>
Pages per Sheet	<p>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.</p> <p>Pages per Sheet</p> <ul style="list-style-type: none"> • One (1) • Two (2) • Four (4) <p>Page Order</p> <ul style="list-style-type: none"> • Right, then down: Prints the pages in rows • Down, then right: Prints the pages in columns <p>Click the Add page borders check box to add borders on the pages.</p>
Original Size	<p>Specify the size of the original document:</p> <ul style="list-style-type: none"> • Automatically detect • Letter (8.5x11) • Mixed Letter/Legal • Legal (8.5x14) • Executive (7.25x10.5) • Statement (5.5x8.5) • Oficio (8.5x13) • A4 (210x297 mm) • A5 (148x210 mm) • B5 (182x257 mm) • 16k (195x270 mm) • DPostcard JIS (148x200 mm) • Oficio (216x340 mm)
Booklet	<p>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.</p>

Option	Description
Edge-to-Edge	<p>Use to avoid shadows that can display along the edges of copies when the original document is printed close to the edges.</p> <p>Combine this feature with the Reduce/Enlarge feature to ensure that the entire page is printed on the copies.</p> <p>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.</p>
Job Build	<p>Enable Job Build to divide a complex job into smaller segments. This is useful when copying or scanning an original document that has more pages than the document feeder can hold, or when needing to combine pages that have different sizes into one job. Use either the glass or the document feeder to scan the original documents.</p>
Multi-feed Detection	<p>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.</p> <p>Flow models only</p>
2-sided ID Scan	<p>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.</p>
Book Mode	<p>Select to have Book Mode off or on.</p>

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 the Manage Trays settings


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

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

 **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


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

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.

5 Scan/Digital Send tab

- [Set up Scan to Email](#)
- [Use the Quick Sets page](#)
- [Set up Scan to Network Folder](#)
- [Set up Scan to SharePoint](#)
- [Set up Scan to USB Drive](#)
- [Set up and Configure the Address Book](#)
- [Use the Digital Sending Software Setup page](#)

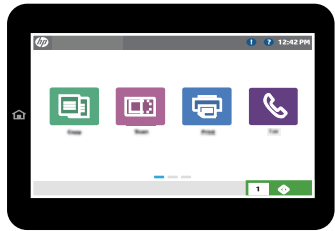
Set up Scan to Email

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

FutureSmart 3



FutureSmart 4



FutureSmart 3

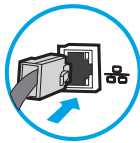
Introduction

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.

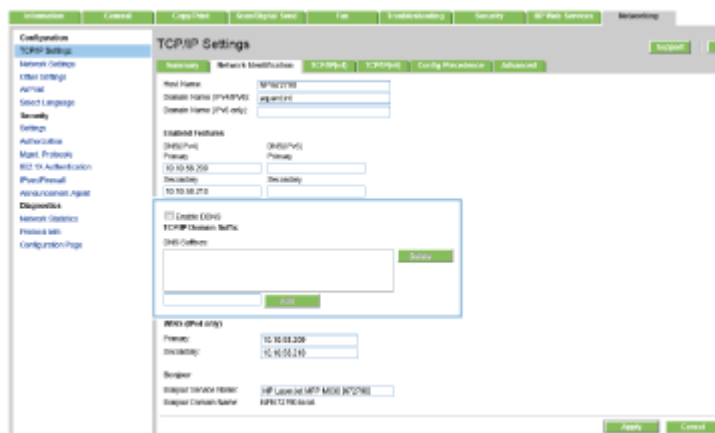
Step one: Configure the Network Identification settings

 **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 98](#)

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**.

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**.
 - OR–
 - **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** drop-down 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.

Option	Description
From (Required)	Select one of the following options from the From drop-down list: <ul style="list-style-type: none">● User's address (sign-in required)● Default From: Enter a default email address and display name in the Default From E-mail Address and Default Display Name fields <p>NOTE: Create an e-mail account for the printer, and use this address for the default e-mail address.</p> <p>NOTE: 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.</p>

Option	Description
Subject (Optional)	Provide a default subject line for the e-mail messages.
Message (Optional)	Create a custom message. To use this message for all e-mails 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**.

Option	Description
Default File Type	Select the default file type that the for the scanned document: <ul style="list-style-type: none"> • PDF • JPEG • TIFF • MTIFF • XPS • PDF/A • Text (OCR) • Unicode Text (OCR) • RTF (OCR) • Searchable PDF (OCR) • Searchable PDF/A (OCR) • HTML (OCR) • CSV (OCR)
Default Color Preferences	Select the default color setting for the scanned document: <ul style="list-style-type: none"> • Color • Black • Black/Gray • Automatically detect

Option	Description
Default Output Quality	Select the default output quality for the scanned document: <ul style="list-style-type: none"> • Low (small file) • Medium • High (large file)
Default Resolution	Select the default scan resolution for the scanned document: <ul style="list-style-type: none"> • 75 dpi • 150 dpi • 200 dpi • 300 dpi • 400 dpi • 600 dpi

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

Method two: Advanced configuration using the E-mail Setup


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.

-OR-

- 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.

Address and Message Field Control settings:

Feature	Description
Address Field Restrictions	<p>Specify whether users must select an email address from an address book or whether users are allowed to enter in an email address manually.</p> <p>CAUTION: 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.</p> <p>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.</p>
Allow invalid e-mail address formats	Select to allow an invalid email address format.
User editable	<p>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.</p> <p>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.</p>
Default From: and Default Display Name:	<p>Provide an email address and name to use for the From: address for the email message.</p> <p>NOTE: Create an email account for the printer, and use this address for the default email address.</p> <p>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.</p>
To:	Provide a To (recipient) email address for emails.
CC:	Provide a CC email address for emails.
BCC:	Provide a BCC email address for emails.
Subject:	Provide a default subject line for the email messages.
Message:	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: .

6. In the **Signing and Encryption** area, set the signing and encryption preferences.

Signing and Encryption settings:

Feature	Description
Signing	Select whether to sign the security certificate. Select the User editable check box to make this setting editable at the printer control panel.
Hashing Algorithm	Select the algorithm to use for signing the certificate.
Encryption	Select whether to encrypt the email. Select the User editable check box to make this setting editable at the printer control panel.
Encryption Algorithm	Select the algorithm to use for encrypting the email.
Attribute for Recipient Public Key	Enter which attribute to use to retrieve the recipient's public key certificate from LDAP.
Use the recipient public key certificate to verify the recipient	Select this setting to use the recipient's public key certificate to verify the recipient.

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.

Scan settings:

Feature	Description
Original Size	Select the page size of the original document.
Original Sides	Select whether the original document is single-sided or double-sided.
Optimize Text/Picture	Select to optimize for the output of a particular type of content, or select Manually adjust .
Optimize For	This setting is only available when Optimize Text/Picture is set to Manually adjust . Select a manual-adjust value.
Content Orientation	Select the way the content of the original document is placed on the page: Portrait or Landscape , or select Automatically detect .
2-Sided Format	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.
Background Cleanup	Select a value to remove faint images from the background or to remove a light background color.
Darkness	Select a value to adjust the darkness of the file.
Contrast	Select a value to adjust the contrast of the file.
Sharpness	Select a value to adjust the sharpness of the file.
Image Preview	Select whether to require or make optional a displayed preview of the job or to disable a preview.
Cropping Options	Select whether or not to allow a job to be cropped and the type of cropping option.

Feature	Description
Job Build	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.
Automatic Tone	Select this setting to set to automatic the Darkness, Contrast, and Background cleanup settings, which then makes these settings unavailable on this page.
Multi-feed Detection	Select this setting to enable detection of multi-feed jobs.
Erase Edges	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.

9. In the **File Settings** area, set the default file settings preferences.

File settings:

Feature	Description
File Name Prefix	Set the default file name prefix used for files saved to a network folder.
Default File Name	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.
File Name Suffix	Set the default file name suffix used for files saved to a network folder. Duplicate filename suffix default [filename]_YYYYMMDDT
File Number Format	Select a file name format for when the job is divided into multiple files.
Default File Type	Select the file format for the saved file. Select the User editable check box to make this setting editable at the printer control panel.
File Name Preview	Enter a file name, and then click the Update Preview button.
Default Color Preference	Select whether the file is in black & white or in color.
Default Output Quality	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.
Default Resolution	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.
Compression	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.
Black TIFF Compression	Select the black TIFF compression algorithm to be used to compress the generated TIFF file.
Color/Grayscale TIFF Compression	Select the color/grayscale TIFF compression algorithm to be used to compress the generated TIFF file.
PDF encryption	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.

Feature	Description
Disable OCR file types	Select this setting to prevent OCR file types from being available from the product control panel.
Enable Blank Page Suppression	If the Enable Blank Page Suppression option is enabled, blank pages will be ignored.

- 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.

- 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.
- 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)

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 e-mail server (SMTP) to send an e-mail from an Office 365 Outlook account

- Using the EWS top navigation tabs, click **Networking**.
- In the left navigation pane, click **TCP/IP Settings**.
- In the **TCP/IP Settings** area, click the **Network Identification** tab.

- 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.

- Click **Apply**.
- Click the **Scan/Digital Send** tab.
- On the left navigation pane, click **E-mail Setup**.
- 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.



- In the **Outgoing E-mail Servers (SMTP)** area, click **Add** to start the SMTP wizard.
- In the **I know my SMTP server address or host name** field, type *smtp.onoffice.com*, and then click **Next**.
- 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)**.

- Select the **Enable SMTP SSL Protocol** check box, and then click **Next**.
- 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

Introduction

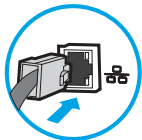
The printer has a feature that enables it to scan a document and send it to one or more email addresses. To use this scan feature, the printer must be connected to a network; however, the feature is not available until it has been configured. There are two methods for configuring Scan to Email, the **Scan 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 4 printers](#)

If you are unable to view the video above, or to view the video in a different size, click [here](#) to watch the video on YouTube.

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.

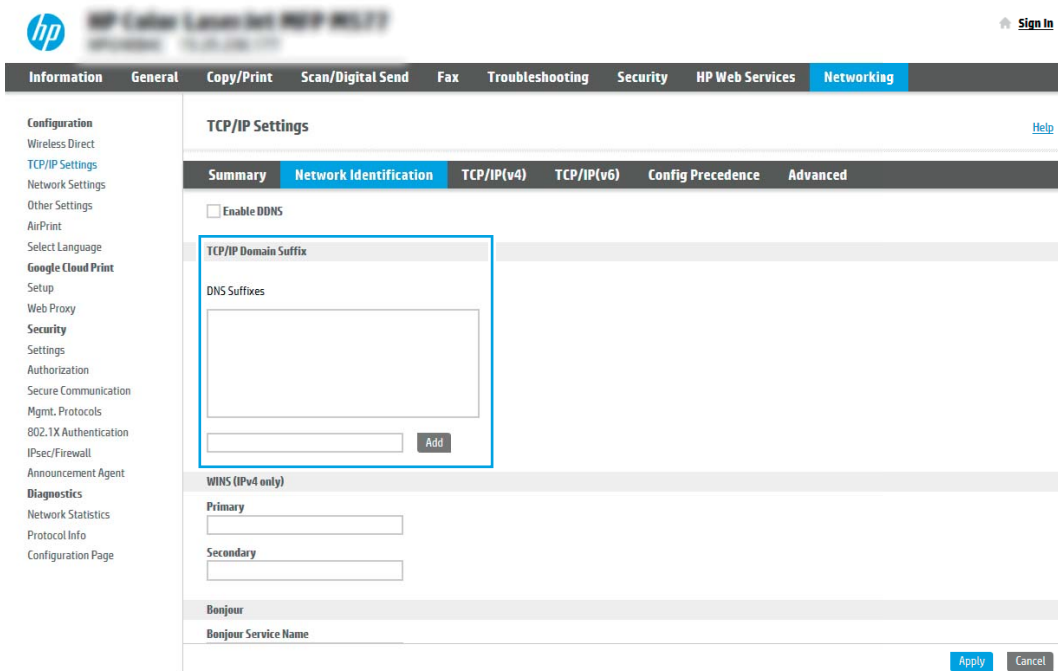
Step one: Configure the Network Identification settings

 **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, 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.



The screenshot shows the HP EWS interface for TCP/IP Settings. The 'Networking' tab is selected in the top navigation bar. The left sidebar lists various configuration options, with 'TCP/IP Settings' selected. The main content area shows the 'TCP/IP Settings' dialog with the 'Network Identification' tab active. A blue box highlights the 'TCP/IP Domain Suffix' section, which includes a 'DNS Suffixes' list and an 'Add' button. Below this are fields for 'WINS (IPv4 only)' Primary and Secondary, and a 'Bonjour' section with a 'Bonjour Service Name' field. 'Apply' and 'Cancel' buttons are located at the bottom right of the dialog.

 **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:

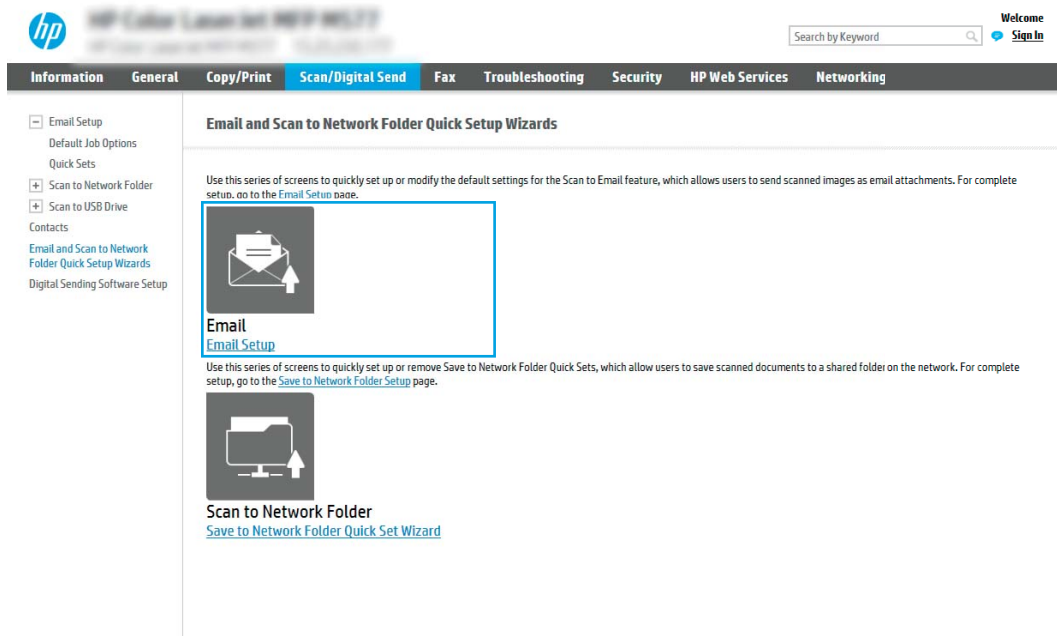
- [Method one: Basic configuration using the Email Setup Wizard](#)
- [Method two: Advanced configuration using the Email Setup](#)

Method one: Basic configuration using the Email Setup Wizard

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 another function

- ▲ Select **Use a server already in use by another function**, and then click **Next**.

Option two: Search network for outgoing email server

This option finds outgoing SMTP servers inside your firewall only.

- a. Select **Search the network for outgoing email servers**, and then click **Next**.
- b. Select the appropriate server from the **Configure Email 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**.


-OR-

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

Option three: Add SMTP server

- Select **Add SMTP server**
- 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.

- 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:
 - **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**.
- On the **Configure Email Settings** dialog, enter the following information for 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.

Option	Description
From (Required)	Select one of the following options from the From drop-down list: <ul style="list-style-type: none"> • 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 <p>NOTE: Create an email account for the printer, and use this address for the default email address.</p> <p>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.</p>
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**.


Option	Description
File Type	Select the default file type that the for the scanned document: <ul style="list-style-type: none"> • PDF • JPEG • TIFF • MTIFF • XPS • PDF/A
Color/Black	Select the default color setting for the scanned document: <ul style="list-style-type: none"> • Color • Black • Black/Gray • Automatically detect

Option	Description
Quality and File Size	Select the default output quality for the scanned document: <ul style="list-style-type: none"> • Low (small file) • Medium • High (large file)
Resolution	Select the default scan resolution for the scanned document: <ul style="list-style-type: none"> • 75 dpi • 150 dpi • 200 dpi • 300 dpi • 400 dpi • 600 dpi

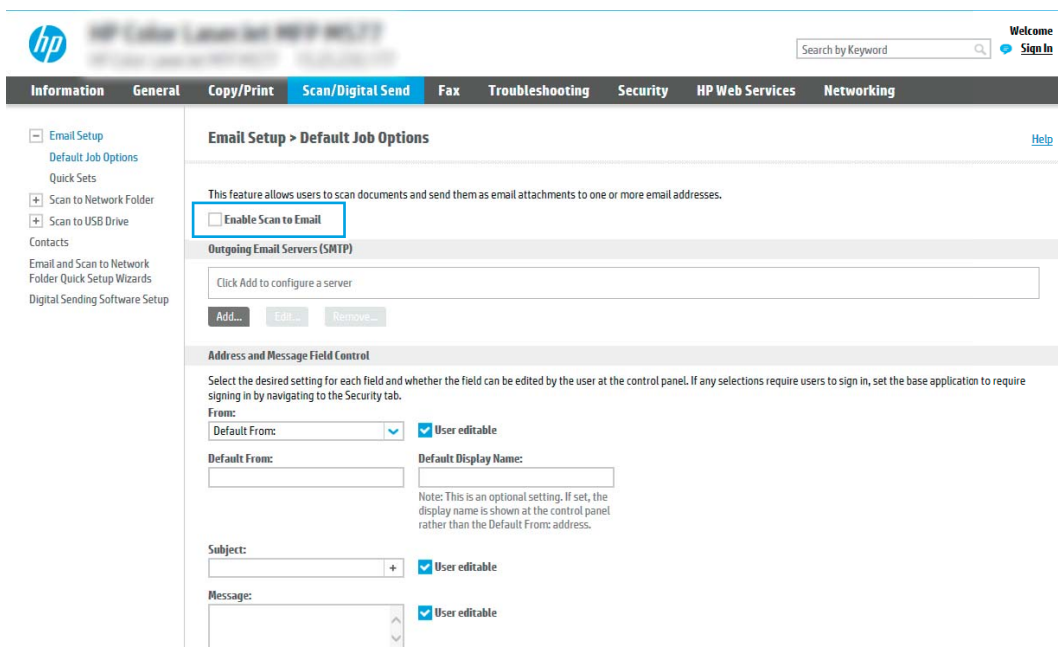
- Review the **Summary** area, and then click **Finish** to complete the setup.

Method two: Advanced configuration using the Email Setup

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

 **NOTE:** By default, the Email Setup 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.

- On the **Email Setup** dialog, select the **Enable Scan to Email** check box. If this check box is not selected, the feature is unavailable at the printer control panel.




The screenshot shows the HP EWS interface for Email Setup. The top navigation bar includes tabs for Information, General, Copy/Print, Scan/Digital Send (selected), Fax, Troubleshooting, Security, HP Web Services, and Networking. The left navigation pane shows 'Email Setup' expanded with 'Default Job Options' selected. The main content area is titled 'Email Setup > Default Job Options' and includes a 'Help' link. A note states: 'This feature allows users to scan documents and send them as email attachments to one or more email addresses.' Below this is a checkbox for 'Enable Scan to Email', which is highlighted with a red box. Underneath is the 'Outgoing Email Servers (SMTP)' section with a text input field and an 'Add...' button. The 'Address and Message Field Control' section allows users to select settings for 'From', 'Subject', and 'Message' fields, each with a 'User editable' checkbox.

- 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**.

 **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)**.


 **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 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.

Address and Message Field Control settings:

Feature	Description
Address Field Restrictions ¹	<p>Specify whether users must select an email address from an address book or whether users are allowed to enter in an email address manually.</p> <p>CAUTION: 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.</p> <p>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.</p>
Allow invalid email address formats	Select to allow an invalid email address format.
User editable	<p>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.</p> <p>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.</p>
Default From: and Default Display Name:	<p>Provide an email address and name to use for the From: address for the email message.</p> <p>NOTE: Create an email account for the printer, and use this address for the default email address.</p> <p>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.</p>
To: ¹	Provide a To (recipient) email address for emails.
CC: ¹	Provide a CC email address for emails.
BCC: ¹	Provide a BCC email address for emails.
Subject:	Provide a default subject line for the email messages.
Message:	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: .

¹ This setting is available only on the Advanced Settings page.

5. In the **Signing and Encryption** area, set the signing and encryption preferences.

 **NOTE:** These settings are available only on the Advanced Settings page.

Signing and Encryption settings:

Feature	Description
Signing	Select whether to sign the security certificate. Select the User editable check box to make this setting editable at the printer control panel.
Hashing Algorithm	Select the algorithm to use for signing the certificate.
Encryption	Select whether to encrypt the email. Select the User editable check box to make this setting editable at the printer control panel.
Encryption Algorithm	Select the algorithm to use for encrypting the email.
Attribute for Recipient Public Key	Enter which attribute to use to retrieve the recipient's public key certificate from LDAP.
Use the recipient public key certificate to verify the recipient	Select this setting to use the recipient's public key certificate to verify the recipient.

- 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.
- In the **Scan Settings** area, set the default scanning preferences.

 **NOTE:** These settings are available only on the Advanced Settings page.

Scan settings:

Feature	Description
Original Size	Select the page size of the original document.
Original Sides	Select whether the original document is single-sided or double-sided.
Optimize Text/Picture	Select to optimize the output of a particular type of content.
Content Orientation	Select the way the content of the original document is placed on the page: Portrait or Landscape .
Background Cleanup	Select a value to remove faint images from the background or to remove a light background color.
Darkness	Select a value to adjust the darkness of the file.
Contrast	Select a value to adjust the contrast of the file.
Sharpness	Select a value to adjust the sharpness of the file.
Image Preview	Select whether to require or make optional a displayed preview of the job or to disable a preview.
Cropping Options	Select whether or not to allow a job to be cropped and the type of cropping option.
Erase Edges	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.

- In the **File Settings** area, set the default file settings preferences.

File settings:

Feature	Description
File Name Prefix ¹	Set the default file name prefix used for files saved to a network folder.

Feature	Description
File Name	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.
File Name Suffix¹	Set the default file name suffix used for files saved to a network folder. Duplicate filename suffix default [filename]_YYYYMMDDT
File Name Preview¹	Enter a file name, and then click the Update Preview button.
File Numbering Format¹	Select a file name format for when the job is divided into multiple files.
Add numbering when job has just one file (ex. _1-1)¹	Select this setting to add numbering to a file name when the job is only one file instead of multiple files.
File Type	Select the file format for the saved file. Select the User editable check box to make this setting editable at the printer control panel.
High Compression (smaller file)¹	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.
PDF encryption¹	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.
Resolution	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.
Quality and File Size	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.
Color/Black	Specify whether copies are to be printed in color, black and gray, or black only.
Suppress blank pages¹	If the Suppress blank pages option is enabled, blank pages will be ignored.
Create Multiple Files¹	Select this setting to scan pages into separate files based on a predetermined maximum number of pages per file.

¹ This setting is available only on the Advanced Settings page.

- 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.

- In the **Email Setup** area of the left navigation pane, click **Quick Sets**.
- 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.
- 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)

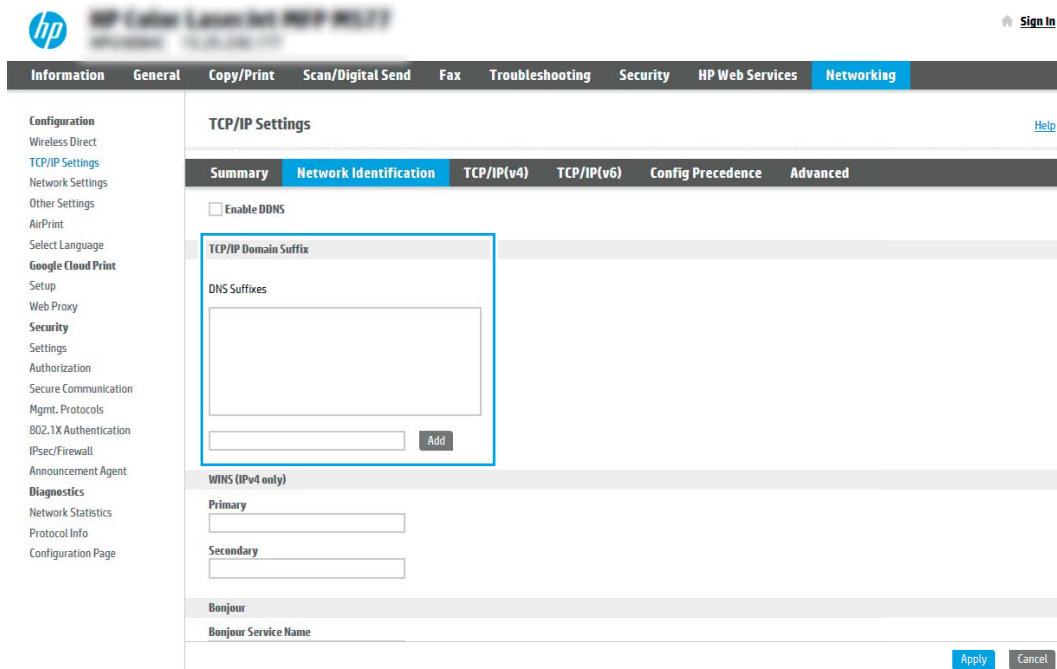
Introduction

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

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.




The screenshot shows the HP EWS interface for TCP/IP Settings. The 'Networking' tab is selected in the top navigation bar. In the left-hand menu, 'TCP/IP Settings' is selected. The main content area shows the 'TCP/IP Settings' page with the 'Network Identification' tab active. A blue box highlights the 'TCP/IP Domain Suffix' section, which includes a 'DNS Suffixes' list and an 'Add' button. Below this, there are sections for 'WINS (IPv4 only)' with 'Primary' and 'Secondary' fields, and a 'Bonjour' section with a 'Bonjour Service Name' field. 'Apply' and 'Cancel' buttons are at the bottom right of the settings area.

 **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.

The screenshot shows the HP printer control panel interface. At the top, there's a navigation bar with tabs: Information, General, Copy/Print, Scan/Digital Send (selected), Fax, Troubleshooting, Security, HP Web Services, and Networking. Below the navigation bar, the left sidebar shows 'Email Setup' expanded with sub-items: Default Job Options, Quick Sets, Scan to Network Folder, Scan to USB Drive, Contacts, Email and Scan to Network Folder Quick Setup Wizards, and Digital Sending Software Setup. The main content area is titled 'Email Setup > Default Job Options'. It contains a section for 'Enable Scan to Email' with a checkbox that is highlighted by a red box. Below this is the 'Outgoing Email Servers (SMTP)' section, which includes a text input field with the placeholder 'Click Add to configure a server' and buttons for 'Add...', 'Edit...', and 'Remove...'. The 'Address and Message Field Control' section allows users to select settings for 'From:', 'Subject:', and 'Message:' fields, each with a 'User editable' checkbox.

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 sntp.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 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.

Use the Quick Sets page

Quick Sets are preconfigured sets of options that allow users to easily start a job without having to manually configure frequently used job settings. For more information, see the **Quick Sets** page on the **General** tab.

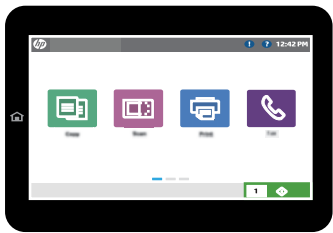
Set up Scan to Network Folder

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

FutureSmart 3



FutureSmart 4



- [FutureSmart 3](#)
- [FutureSmart 4](#)

FutureSmart 3

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

 **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


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) (e.g., `\servername.us.companyname.net\scans`) or the IP address of the server (e.g., `\\16.88.20.20\scans`). Be sure that the folder path (e.g., `\scans`) follows the FQDN or IP address.

 **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.

 **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

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

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 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 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.

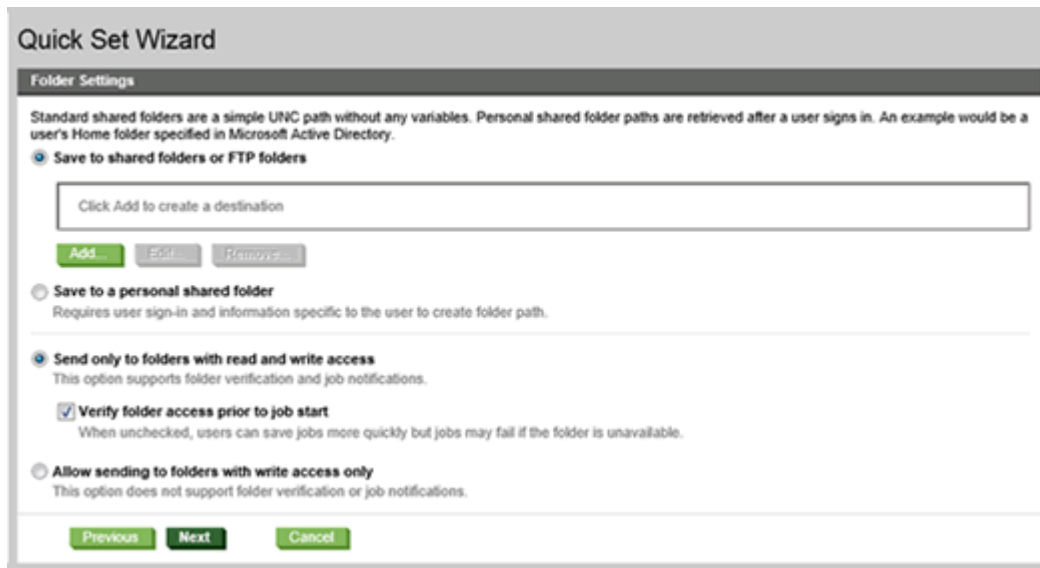
There are two types of destination folders to select from:

- 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.

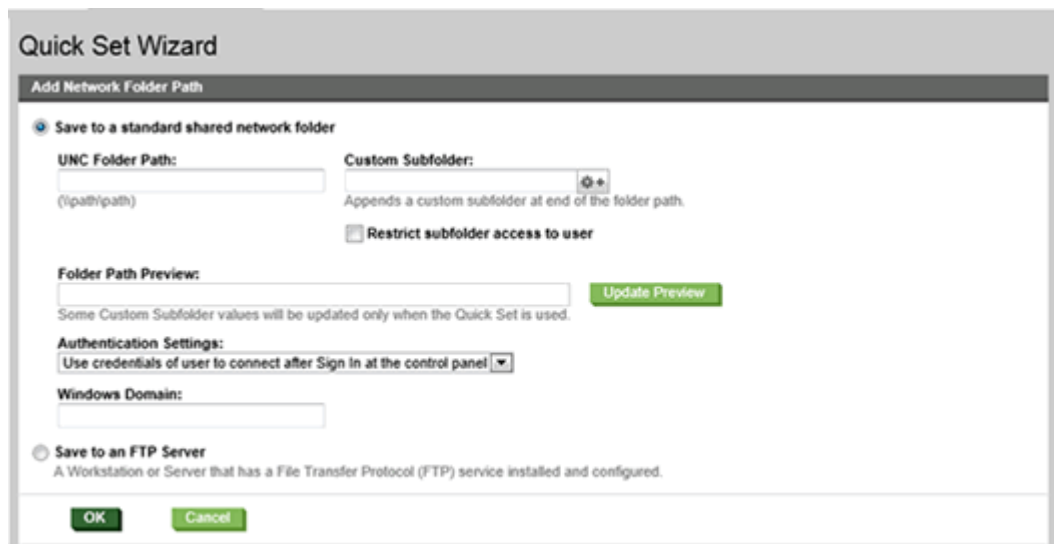


Configure the destination folder for scanned documents

Option 1: Shared folders or FTP folders

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**



 **NOTE:** For more information about creating shared network folders see [Set up a shared folder \(c04345591\)](#).

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) (e.g., \servername.us.companyname.net\scans) or the IP address of the server (e.g., \16.88.20.20\scans). Be sure that the folder path (e.g., \scans) follows the FQDN or IP address.

 **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**

Quick Set Wizard

Add Network Folder Path

Save to a standard shared network folder
 Save to an FTP Server
 A Workstation or Server that has a File Transfer Protocol (FTP) service installed and configured.

FTP Server: **Port:** **FTP Folder Path:**
Server hostname or IP address (folder/subfolder)

Custom Subfolder:
Appends a custom subfolder at end of the folder path.

Folder Path Preview:
Some Custom Subfolder values will be updated only when the Quick Set is used.

FTP Transfer Mode

This is an advanced setting.

Username: **Password:**

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

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

- ▲ 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

On the **Scan Settings** dialog, set the default scanning preferences for the Quick Set, and then click **Next**.

Scan settings:

Feature	Description
Original Size	Select the page size of the original document.
Original Sides	Select whether the original document is single-sided or double-sided.
Optimize Text/Picture	Select to optimize for the output of a particular type of content, or select Manually adjust .
Optimize For	This setting is only available when Optimize Text/Picture is set to Manually adjust . Select a manual-adjust value.
Content Orientation	Select the way the content of the original document is placed on the page: Portrait or Landscape , or select Automatically detect .
2-Sided Format	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.
Background Cleanup	Select a value to remove faint images from the background or to remove a light background color.
Darkness	Select a value to adjust the darkness of the file.

Feature	Description
Contrast	Select a value to adjust the contrast of the file.
Sharpness	Select a value to adjust the sharpness of the file.
Image Preview	Select whether to require or make optional a displayed preview of the job or to disable a preview.
Cropping Options	Select whether or not to allow a job to be cropped and the type of cropping option.
Job Build	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.
Automatic Tone	Select this setting to set to automatic the Darkness , Contrast , and Background cleanup settings, which then makes these settings unavailable on this page.
Multi-feed Detection	Select this setting to enable detection of multi-feed jobs.
Erase Edges	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.

Dialog five: File Settings

On the **File Settings** dialog, set the default file settings for the Quick Set, and then click **Next**.

File settings:

Feature	Description
File Name Prefix	Set the default file name prefix used for files saved to a network folder.
Default File Name	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.
File Name Suffix	Set the default file name suffix used for files saved to a network folder.
File Number Format	Select a file name format for when the job is divided into multiple files.
Default File Type	Select the file format for the saved file. Select the User editable check box to make this setting editable at the printer control panel.
File Name Preview	Enter a file name, and then click the Update Preview button.
Default Color Preference	Select whether the file is in black & white or in color.
Default Output Quality	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.
Default Resolution	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.
Compression	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.
Black TIFF Compression	Select the black TIFF compression algorithm to be used to compress the generated TIFF file.
Color/Grayscale TIFF Compression	Select the color/grayscale TIFF compression algorithm to be used to compress the generated TIFF file.

Feature	Description
PDF encryption	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.
Disable OCR file types	Select this setting to prevent OCR file types from being available from the product control panel.
Enable Blank Page Suppression	If the Enable Blank Page Suppress option is enabled, blank pages will be ignored.

Dialog six: Summary

On the **Summary** dialog, review the **Summary** dialog, and then click **Finish**.

Step three: Complete the configuration

- ▲ On the **Save to Network Folder** dialog, review the selected settings, and then click **Apply** to complete the setup.

FutureSmart 4

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 demonstration on how to set up the Scan to Network feature on FutureSmart 4 printers](#)

Before you begin

 **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


Method one: Use the Scan 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.

1. Using the EWS top navigation tabs, click **Scan/Digital Send** tab.
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 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.

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) (e.g., `\servername.us.companyname.net\scans`) or the IP address of the server (e.g., `\\16.88.20.20\scans`). Be sure that the folder path (e.g., `\scans`) follows the FQDN or IP address.

 **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**.

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

1. Click the **Scan/Digital Send** tab.
2. On the left navigation menu, click the **Scan to Network Folder Setup** link.

Step two: Configure the Scan to Network Folder settings

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 short-cut 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

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.

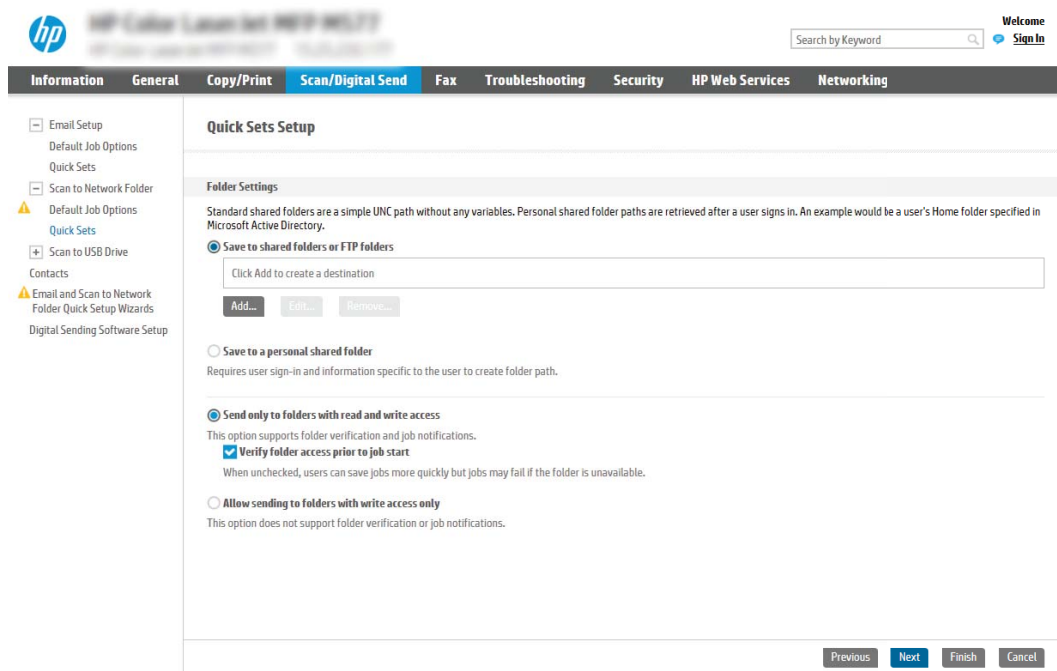
There are two types of destination folders to select from:

- 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.




Configure the destination folder for scanned documents

Option 1: Shared folders or FTP folders


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**

 **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) (e.g., \servername.us.companyname.net\scans) or the IP address of the server (e.g., \16.88.20.20\scans). Be sure that the folder path (e.g., \scans) follows the FQDN or IP address.

 **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**.

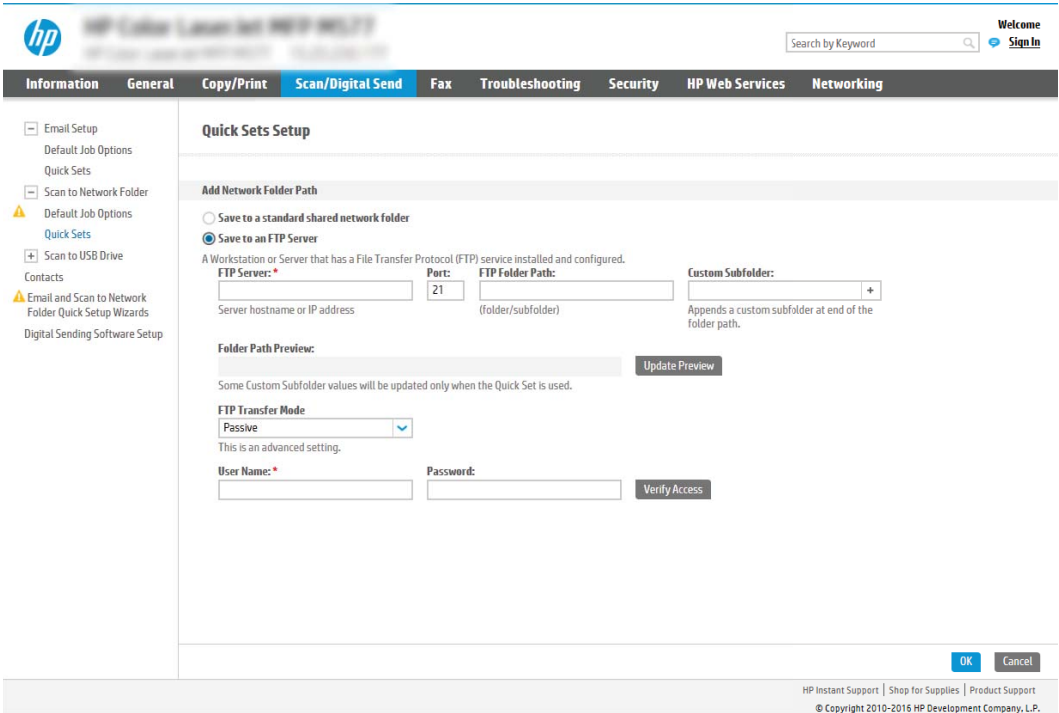
The domain is listed under **Computer name, domain, and workgroup settings**.

 **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**



The screenshot shows the HP EWS 'Quick Sets Setup' page. The 'Scan/Digital Send' tab is active. Under 'Add Network Folder Path', the 'Save to an FTP Server' option is selected. The form includes fields for 'FTP Server' (Server hostname or IP address), 'Port' (set to 21), 'FTP Folder Path' (folder/subfolder), and 'Custom Subfolder'. There is a 'Folder Path Preview' section with an 'Update Preview' button. The 'FTP Transfer Mode' is set to 'Passive'. There are also 'User Name' and 'Password' fields with a 'Verify Access' button. At the bottom right, there are 'OK' and 'Cancel' buttons. The footer contains 'HP Instant Support | Shop for Supplies | Product Support' and '© Copyright 2010-2016 HP Development Company, L.P.'

 **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

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

▲ On the **Notification** 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 **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

On the **Scan Settings** dialog, set the default scanning preferences for the Quick Set, and then click **Next**.

Scan settings:

Feature	Description
Original Size	Select the page size of the original document.
Original Sides	Select whether the original document is single-sided or double-sided.
Optimize Text/Picture	Select to optimize for the output of a particular type of content.
Content Orientation	Select the way the content of the original document is placed on the page: Portrait or Landscape .
Background Cleanup	Select a value to remove faint images from the background or to remove a light background color.
Darkness	Select a value to adjust the darkness of the file.
Contrast	Select a value to adjust the contrast of the file.
Sharpness	Select a value to adjust the sharpness of the file.
Image Preview	Select whether to require or make optional a displayed preview of the job or to disable a preview.
Cropping Options	Select whether or not to allow a job to be cropped and the type of cropping option.
Erase Edges	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.

Dialog five: File Settings

On the **File Settings** dialog, set the default file settings for the Quick Set, and then click **Next**.

File settings:

Feature	Description
File Name Prefix	Set the default file name prefix used for files saved to a network folder.
File Name	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.
File Name Suffix	Set the default file name suffix used for files saved to a network folder.
File Name Preview	Enter a file name, and then click the Update Preview button.
File Numbering Format	Select a file name format for when the job is divided into multiple files.
Add numbering when job has just one file (ex. _1-1)	Select this setting to add numbering to a file name when the job is only one file instead of multiple files.
File Type	Select the file format for the saved file. Select the User editable check box to make this setting editable at the printer control panel.
High Compression (smaller file)	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.
PDF encryption	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.

Feature	Description
Resolution	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.
Quality and File Size	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.
Color/Black	Specify whether copies are to be printed in color, black and gray, or black only.
Suppress blank pages	If the Suppress blank pages option is enabled, blank pages will be ignored.
Meta Data File Format	Use the drop-down list to select the file format for meta-data information.
Create Multiple Files	Select this setting to scan pages into separate files based on a predetermined maximum number of pages per file.

Dialog six: Summary

On the **Summary** dialog, review the **Summary** dialog, and then click **Finish**.

Step three: Complete the configuration

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.

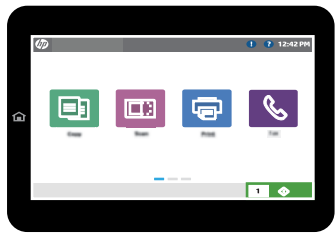
Set up Scan to SharePoint

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

FutureSmart 3



FutureSmart 4



Video overview

[View a video demonstration on how to enable Scan to SharePoint and create a Save to SharePoint Quick Set](#)

Click [here](#) to see this video in full screen on YouTube.

FutureSmart 3

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).

 **NOTE:** The Save to SharePoint® feature is only available 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. Save to SharePoint® is disabled by default.

Enable Save to SharePoint® and create a Save to SharePoint Quick Set


Follow these steps to enable the **Save to SharePoint** feature and create a Save to SharePoint 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 5-1 Scan settings for Save to SharePoint® on page 137](#).
14. Select options from the **File Settings** page, and then click **Next**. For more information, see [Table 5-2 File settings for Save to SharePoint on page 137](#).
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

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 5-1 Scan settings for Save to SharePoint®

Feature	Description
Original Size	Select the page size of the original document.
Original Sides	Select whether the original document is single-sided or double-sided.
Optimize Text/Picture	Select to optimize for the output of a particular type of content, or select Manually adjust .
Optimize For	This setting is only available when Optimize Text/Picture is set to Manually adjust . Select a manual-adjust value.
Content Orientation	Select the way the content of the original document is placed on the page: Portrait or Landscape , or select Automatically detect .
2-Sided Format	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.
Background Cleanup	Select a value to remove faint images from the background or to remove a light background color.
Darkness	Select a value to adjust the darkness of the file.
Contrast	Select a value to adjust the contrast of the file.
Sharpness	Select a value to adjust the sharpness of the file.
Image Preview	Select whether to require or make optional a displayed preview of the job or to disable a preview.
Cropping Options	Select whether or not to allow a job to be cropped and the type of cropping option.
Job Build	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.
Automatic Tone	Select this setting to set to automatic the Darkness , Contrast , and Background cleanup settings, which then makes these settings unavailable on this page.
Multi-feed Detection	Select this setting to enable detection of multi-feed jobs.
Erase Edges	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.

Table 5-2 File settings for Save to SharePoint

Feature	Description
File Name Prefix	Set the default file name prefix used for files saved to a network folder.
Default File Name	Default file name for the file to be saved. Select the User editable check box to make this setting editable at the product control panel.
File Name Suffix	Set the default file name suffix used for files saved to a network folder. Duplicate filename suffix default [filename]_YYYYMMDDT
File Number Format	Select a file name format for when the job is divided into multiple files.

Table 5-2 File settings for Save to SharePoint (continued)

Feature	Description
Default File Type	Select the file format for the saved file. Select the User editable check box to make this setting editable at the product control panel.
File Name Preview	Enter a file name, and then click the Update Preview button.
Default Color Preference	Select whether the file is in black & white or in color.
Default Output Quality	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.
Default Resolution	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.
Compression	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.
Black TIFF Compression	Select the black TIFF compression algorithm to be used to compress the generated TIFF file.
Color/Grayscale TIFF Compression	Select the color/grayscale TIFF compression algorithm to be used to compress the generated TIFF file.
PDF encryption	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.
Disable OCR file types	Select this setting to prevent OCR file types from being available from the product control panel.
Enable Blank Page Suppression	If the Enable Blank Page Suppression option is enabled, blank pages will be ignored.

FutureSmart 4

Introduction

Use Scan 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.

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 Scan to SharePoint® in the HP Embedded Web Server (EWS).



NOTE: The Scan to SharePoint® feature is only available 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


Follow these steps to enable the **Scan to SharePoint** feature and create a Scan to SharePoint 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®

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

Table 5-3 Scan settings for Scan to SharePoint®

Feature	Description
Original Size	Select the page size of the original document.
Original Sides	Select whether the original document is single-sided or double-sided.
Optimize Text/Picture	Select to optimize for the output of a particular type of content.
Content Orientation	Select the way the content of the original document is placed on the page: Portrait or Landscape .
Background Cleanup	Select a value to remove faint images from the background or to remove a light background color.
Darkness	Select a value to adjust the darkness of the file.
Contrast	Select a value to adjust the contrast of the file.
Sharpness	Select a value to adjust the sharpness of the file.
Image Preview	Select whether to require or make optional a displayed preview of the job or to disable a preview.
Cropping Options	Select whether or not to allow a job to be cropped and the type of cropping option.
Erase Edges	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.

Table 5-4 File settings for Scan to SharePoint

Feature	Description
File Name Prefix	Set the default file name prefix used for the file to be saved.
File Name	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.
File Name Suffix	Set the default file name suffix used for the file to be saved. Duplicate filename suffix default [filename]_YYYYMMDDT
File Name Preview	Enter a file name, and then click the Update Preview button.
File Numbering Format	Select a file name format for when the job is divided into multiple files.
Add numbering when job has just one file (ex. _1-1)	Select this setting to add numbering to a file name when the job is only one file instead of multiple files.
File Type	Select the file format for the saved file. Select the User editable check box to make this setting editable at the printer control panel.
High Compression (smaller file)	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.
PDF encryption	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.
Resolution	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.
Quality and File Size	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.
Color/Black	Specify whether copies are to be printed in color, black and gray, or black only
Suppress blank pages	If the Suppress blank pages option is enabled, blank pages will be ignored.
Create Multiple Files	Select this setting to scan pages into separate files based on a predetermined maximum number of pages per file.

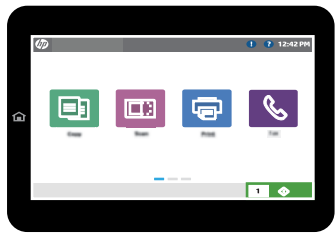
Set up Scan to USB Drive

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

FutureSmart 3



FutureSmart 4



FutureSmart 3

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).

Step one: 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)

 **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 144](#).

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 145](#).

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

Table 5-5 Scan settings for Save to USB Setup:

Option	Description
Default File Type	Select the default file type that the for the scanned document: <ul style="list-style-type: none">• PDF• JPEG• TIFF• MTIFF• XPS• PDF/A• Text (OCR)• Unicode Text (OCR)• RTF (OCR)• Searchable PDF (OCR)• Searchable PDF/A (OCR)• HTML (OCR)• CSV (OCR) <p>NOTE: The OCR file types are available only for Flow models.</p>
Default Color Preferences	Select the default color setting for the scanned document: <ul style="list-style-type: none">• Color• Black• Black/Gray• Automatically detect
Default Output Quality	Select the default output quality for the scanned document: <ul style="list-style-type: none">• Low (small file)• Medium• High (large file)
Default Resolution	Select the default scan resolution for the scanned document: <ul style="list-style-type: none">• 75 dpi• 150 dpi• 200 dpi• 300 dpi• 400 dpi• 600 dpi

Default file settings for Save to USB Setup

Table 5-6 File settings for Save to USB Setup:

Feature	Description
File Name Prefix	Set the default file name prefix used for files saved to a network folder.
Default File Name	Default file name for the file to be saved. Select the User editable check box to make this setting editable at the product control panel.
File Name Suffix	Set the default file name suffix used for files saved to a network folder. Duplicate filename suffix default [filename]_YYYYMMDDT
File Number Format	Select a file name format for when the job is divided into multiple files.
Default File Type	Select the file format for the saved file. Select the User editable check box to make this setting editable at the printer control panel.
File Name Preview	Enter a file name, and then click the Update Preview button.
Default Color Preference	Select whether the file is in black & white or in color.
Default Output Quality	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.
Default Resolution	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.
Compression	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.
Black TIFF Compression	Select the black TIFF compression algorithm to be used to compress the generated TIFF file.
Color/Grayscale TIFF Compression	Select the color/grayscale TIFF compression algorithm to be used to compress the generated TIFF file.
PDF encryption	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.
Disable OCR file types	Select this setting to prevent OCR file types from being available from the printer control panel.
Enable Blank Page Suppression	If the Enable Blank Page Suppression option is enabled, blank pages will be ignored.

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).

Step one: 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)



NOTE: 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**.



NOTE: For more information on the available scan settings, see “Default scan settings for Scan to USB Drive setup.”

7. 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 Scan to USB Drive setup”

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

Table 5-7 Scan settings for Scan to USB Drive Setup:

Feature	Description
Original Size	Select the page size of the original document.
Original Sides	Select whether the original document is single-sided or double-sided.
Optimize Text/Picture	Select to optimize for the output of a particular type of content.
Content Orientation	Select the way the content of the original document is placed on the page: Portrait or Landscape .
Background Cleanup	Select a value to remove faint images from the background or to remove a light background color.
Darkness	Select a value to adjust the darkness of the file.
Contrast	Select a value to adjust the contrast of the file.
Sharpness	Select a value to adjust the sharpness of the file.
Image Preview	Select whether to require or make optional a displayed preview of the job or to disable a preview.
Cropping Options	Select whether or not to allow a job to be cropped and the type of cropping option.
Erase Edges	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.

Default file settings for Scan to USB Drive setup

Table 5-8 File settings for Scan to USB Drive Setup:

Option name	Description
File Name Prefix	Set the default file name prefix for the file to be saved.
File Name	Set the 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.
File Name Suffix	Set the default file name suffix for the file to be saved. Duplicate filename suffix default [filename]_YYYYMMDDT
File Name Preview	Enter a file name, and then click the Update Preview button.
File Numbering Format	Select a file name format for when the job is divided into multiple files.
Add numbering when job has just one file (ex. _1-1)	Select this setting to add numbering to a file name when the job is only one file instead of multiple files.
File Type	Select the file format for the saved file. Select the User editable check box to make this setting editable at the printer control panel.
High Compression (smaller file)	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.

Table 5-8 File settings for Scan to USB Drive Setup: (continued)

Option name	Description
PDF encryption	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.
Resolution	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.
Quality and File Size	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.
Color/Black	Specify whether the file to be saved is color, black and gray, or black only.
Suppress blank pages	If the Suppress blank pages option is enabled, blank pages will be ignored.
Create Multiple Files	Select this setting to scan pages into separate files based on a predetermined maximum number of pages per file.

Set up and Configure the Address Book

- [Introduction](#)
- [Step one: Setup the Network Contacts Setup](#)
- [Step two: Setup the Contacts Stored on the Device](#)

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: Setup the Network Contacts Setup

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

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)

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)

- [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.

Types of authentication for the printer to communicate with the LDAP server:

Authentication type	Description
Server does not require authentication	The server does not require user credentials to access the LDAP database. The option to use the MFP user credentials is unavailable.
Server requires authentication	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.

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: Setup the Contacts Stored on the Device

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.

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

Add a contact or group by clicking **Add Contact** or **Add Group**, which opens the **Add Contact** or **Add Group** page.

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

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

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

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/Export All

Use this page to import and export address book and user information to and from the printer.

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. 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

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")

- dlname
- 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

Record type	Required data	Maximum field length
E-mail address	name (or "first name" and "last name")	64 unicode characters
	address ¹	256 unicode characters
User record	name	245 characters
	pin	4-8 digits
	address ¹	255 characters

Record type	Required data	Maximum field length
E-mail distribution list	name	64 unicode characters
	address ¹	256 unicode characters
	dlname	64 unicode characters ²
Fax number	name	64 unicode characters
	faxnumber ¹	80 unicode characters
Fax speed-dial	faxnumber ¹	80 unicode characters
	speeddial ²	64 unicode characters
	code ²	2 digits
		A maximum of 100 speed-dials, each with a maximum of 100 entries

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.

Create a .CSV file using Microsoft Outlook

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.

Export data

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.

Use the Digital Sending Software Setup page

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.

6 Fax tab

- [Set up Fax Send in the Embedded Web Server \(EWS\)](#)
- [Create and manage fax speed dials](#)
- [Set up Fax Receive in the Embedded Web Server \(EWS\)](#)
- [Set up and Configure Fax Archive](#)
- [Use the Fax Activity Log](#)

Set up Fax Send in the Embedded Web Server (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](#)

Click [here](#) to see this video in full screen on YouTube.

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

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

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

FutureSmart 3

- **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

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.

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.

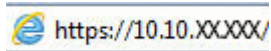
Before you begin

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)

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.

1. From the Home screen on the printer control panel, touch the Network  button to display the IP address or host name.
2. Open a Web browser, and in the address line, type the IP address or host name of the printer exactly as it displays on the printer control panel. Press the **Enter** key on the computer keyboard. The EWS opens.



3. Using the top navigation tabs, click **Fax**.
4. In the left navigation pane, click **Speed Dials**.
5. 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**.



NOTE: Multiple fax numbers can be associated with a single speed dial.

- e. Click the **OK** button to save the speed dial.
6. 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.

7. To delete a speed dial, select the checkbox next to the **Speed Dial Code** and then click **Delete...**
8. 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.
9. 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



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

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.

- [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](#)

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)

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

FutureSmart 3

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

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

FutureSmart 3

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


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

FutureSmart 3

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

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




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

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

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 Fax Receive in the Embedded Web Server (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

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: 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

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: 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

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

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.

Use a fax printing schedule:

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.

Set up and Configure Fax Archive

- [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


Select and configure Fax Archiving:

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.

Configure the Archive and print settings:


1. Select the **Type of Fax Job to Archive**.
2. Choose whether to select to enable the **Print archive failure notice** check box.
3. 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.
 1. In the SMTP wizard, select one of the following options:
 - Enter the address of an SMTP server, and then click **Next**
 - 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 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.

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.

 **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 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.

4. 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.

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.
 - **Network folder:** Enter the settings in the **Folder Settings** area.
 - **FTP server:** Enter the settings in the **FTP Server** area.

Configure the Archive only settings:

1. Select the **Type of Fax Job to Archive**.
2. Select an **On Archive Failure** option.
3. Choose whether to select to enable the **Print archive failure notice** check box.
4. Select the **Archive Destination** (see [4](#) for more information):
 - **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.

Use the Fax Activity Log

Use the **Fax Activity Log** page to view statistics about the faxes received and sent from this printer.

7 Troubleshooting tab

- [Use the General Troubleshooting page](#)
- [Configure the EWS Online Help options](#)
- [Use the Diagnostic Data page](#)
- [Color Calibration and Cleaning Cycles](#)
- [Update firmware using a USB flash drive or the Embedded Web Server \(EWS\)](#)
- [Reset Factory Settings page](#)

Use the General Troubleshooting page

1. Using the top navigation tabs, click **Troubleshooting**.
2. In the left navigation pane, click **General Troubleshooting**.
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.

Configure the EWS Online Help options

Use the Online Help page to configure settings for the EWS online help.

The EWS Online Help feature provides links to solution pages for product issues. To connect to the correct page, the product sends information to HP. This information includes event details, model number, and product serial number. HP treats this information in the manner set out in the HP Privacy Statement. If you do not wish to send this information to HP, but would like to receive generic support for your product, visit the HP Product Support page.

Use the Diagnostic Data page

Use the **Diagnostic Data** page to retrieve diagnostic data from the printer that will help you troubleshoot printer problems.

Color Calibration and Cleaning Cycles

- [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 7-1 Normal Timings and Durations

When	Cycle Performed	Duration
The product is powered on or brought to Ready from sleep mode.	<ul style="list-style-type: none">• Dhalf, Dmax	1 minute 21 seconds
NOTE: Dhalf ¹ and Dmax ² 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.	<ul style="list-style-type: none">• Color Plane Registration (CPR)³	
One or more new print cartridges are installed.	<ul style="list-style-type: none">• Dhalf, Dmax	1 minute 21 seconds
NOTE: Dhalf and Dmax calibration are run after 50 pages are printed on the new cartridge(s).	<ul style="list-style-type: none">• Color Plane Registration (CPR)	
Intermediate Transfer Belt (ITB) ⁴ is replaced.		
Laser Scanner is replaced.		
After 1000 pages have printed since the last calibration.		
NOTE: The printer will finish printing the current job before calibrating.		
After 8 hours has elapsed since the last print job.	<ul style="list-style-type: none">• Dhalf, Dmax	43 seconds

Table 7-1 Normal Timings and Durations (continued)

When	Cycle Performed	Duration
After 15 minutes of continuous printing.	<ul style="list-style-type: none"> Color Plane Registration (CPR) 	38 seconds
In the middle of print operations.	<ul style="list-style-type: none"> Color Plane Registration (CPR) 	38 seconds
NOTE: When the printer needs to perform a CPR calibration, it will wait until the end of the print job or 100 pages before execution.		
When Quick Calibration is selected from the control panel menu.	<ul style="list-style-type: none"> Dhalf, Dmax 	43 seconds
When Full Calibration is selected from the control panel menu.	<ul style="list-style-type: none"> Dhalf, Dmax Color Plane Registration (CPR) 	1 minute 21 seconds
When the printer needs to evaluate toner level in print cartridge.	<ul style="list-style-type: none"> Cleaning, toner level sensing 	45 seconds
When the printer needs to perform periodic lubrication and cleaning of toner cartridges.	<ul style="list-style-type: none"> Toner Purge 	21 seconds
After a mis-print.	<ul style="list-style-type: none"> Cleaning primary transfer 	13 seconds
After a paper jam.	<ul style="list-style-type: none"> Clearing paper path 	28 seconds

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.

Steps to Minimize Interruptions

- 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

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.


Update firmware using a USB flash drive or the Embedded Web Server (EWS)

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 models.

 **NOTE:** If you have another HP LaserJet model, a firmware update might not be recommended. Check the ReadMe file for these printers before performing a firmware update.

This document provides instructions on how to update the firmware for a single printer when the printer is in a ready state or an error state.

 **NOTE:** A ready state is indicated either when **Ready** displays on the control panel, or after the printer finishes initializing and all lights illuminate solid.

For instructions on how to update the firmware for multiple printers at one time using HP Web Jetadmin, go to [Update firmware using HP Web Jetadmin](#) (c03840402) (in English).

For information about updating Jetdirect Print Servers using HP Web Jetadmin or HP Download Manager with FTP or the Jetdirect Embedded Web Server, go to www.hp.com/go/wja_firmware.

What you need to know

Before performing a firmware update, review these requirements:

- This printer cannot be updated using the traditional FTP, LPR, or Port 9100 methods.
- If you have a third party solution, HP recommends contacting the vendor to make sure that the latest firmware version is compatible with the third party solution.
- A firmware update can require 10 to 30 minutes or more to complete depending on the speed of the computer and the connection type to the printer, and any print jobs pending in the printer queue.
- The firmware update process requires a network connection or USB flash drive.
- Access to some menus on the control panel might require administrator privileges or a passcode.

About firmware downgrades

If you attempt to downgrade the firmware from a remote location to a version older than FutureSmart Version 4 for some newer HP Enterprise printer models, the downgrade will fail and you will receive a 99.02.32 control panel error and a 33.05.09 event log message.


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. This applies to HP Enterprise models M506, M552, M553, M604, M605, and M606. Other HP Enterprise printer models will not experience this issue. For more information about this feature, go to [Embedded Security features](#) (c04920057).

HP recommends using the latest firmware available but if a downgrade is absolutely necessary, then use the Preboot menu at the control panel to downgrade the firmware and avoid any errors. Any attempt to downgrade

the firmware remotely-- or to downgrade using the Device Maintenance menu, the printer's EWS, or Web Jetadmin-- will result in an error and the downgrade will fail. For instructions on how to downgrade the firmware for a single printer using the Preboot menu method with a USB flash drive, see *Method three: USB flash drive - Preboot menu* in the **Step three: Update the firmware** section in this document.

Step one: Determine the current firmware version installed on the printer

To determine the current firmware version that is installed on the printer, print a configuration page using one of the methods below.

 **NOTE:** If the printer is in an error state, skip to *Method three: USB flash drive - Preboot menu* in the **Step three: Update the firmware** section in this document.

- [Method one: Print a configuration page from the printer control panel](#)
- [Method two: Print a configuration page from the Embedded Web Server \(EWS\)](#)

Method one: Print a configuration page from the printer control panel

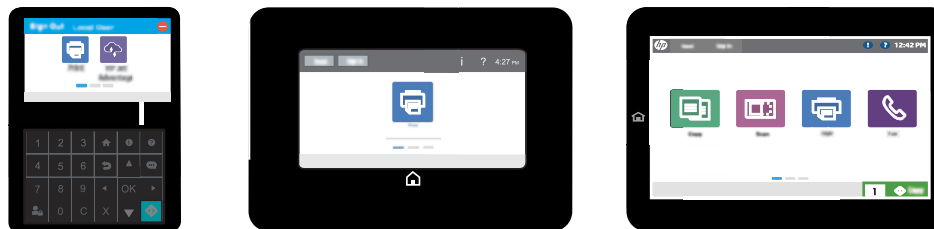
Follow the steps below to print a configuration page from the printer control panel.

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

FutureSmart 3



FutureSmart 4



FutureSmart 3

1. From the Home screen on the printer control panel, scroll to and touch the [Administration](#) button.
2. Open the following menus:
 - [Reports](#)
 - [Configuration/Status Pages](#)
3. Touch the [Configuration Page](#) item to select it.

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

1. From the Home screen on the printer control panel, scroll to and select [Reports](#).
2. Select [Configuration/Status Pages](#).
3. Select [Configuration Page](#).
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: Print a configuration page from the 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 **Printable Reports and Pages** in the left navigation pane, select **Configuration page**, and then select **Print** to print the configuration page.
2. 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)

Step two: Download the latest firmware


The HP LaserJet firmware download available from www.hp.com contains firmware for the printer, embedded Jetdirect (if applicable), and HP paper handling accessories used with the printer in one convenient file.

1. Go to [HP Support](#).
2. Select **Drivers & Downloads**, type your printer name/number in the search box, select **Go**, and then select your model from the list of search results.
3. Scroll to the bottom of the operating system list and then select **OS Independent**.
4. Under the **Firmware** section, locate the latest firmware file, select **Download**, and then select **Save**.




NOTE: To view the latest enhancements, fixes, and other helpful information, select the firmware filename and then select the **Readme** tab.

5. Select **Open folder** or browse to the location where you saved the file, right-click the .zip file, and then extract all files.
6. Note the location of the .bdl file.

 **NOTE:** The firmware file is in the format "xxxxxxx.bdl" where "xxxxxxx" indicates the firmware file name and ".bdl" is the file extension. This file will not launch or install automatically.


Step three: Update the firmware

There are three supported methods to perform a firmware update on this printer. Use only one of the following methods to update the firmware of this printer either locally or remotely. If the printer is in an error state, use **Method three: USB flash drive — Preboot menu.**

 **NOTE:** Depending on the firmware release version, the Preboot menu method using a USB flash drive (typically used when the printer is in an error state) might be recommended even when the printer is in a ready state.

Method one: Embedded Web Server (EWS)

Use the Embedded Web Server (EWS) to update the firmware remotely on a network-connected printer. These steps should only be used if the printer is able to boot to a ready state. For a USB-connected printer, skip to **Method two: USB flash drive — Device Maintenance menu.**

 **NOTE:** When using the Embedded Web Server to update the firmware, if the update process hangs or you receive an incorrect/corrupt file error, the printer should still function properly but the firmware update is not complete. Try to update the firmware using the USB flash drive method. Updating the firmware from version 11.1 to 11.3 will help eliminate this occurrence.

Follow the instructions below and/or watch the following video.

[View a video demonstration on how to use the EWS to update the firmware](#)

If the video does not play, click [here](#) to view it on YouTube.


1. Turn the printer **Off** and then **On**, and then wait until it arrives at a ready state.

 **NOTE:** If there is an error message displayed on the control panel, resolve the error first. If the error message persists, see **Method three: Update firmware using a USB flash drive - Preboot menu.**


2. Open a Web browser, and in the address field, type the printer IP address exactly as it appears on the Configuration Page and then press **Enter**.

The Embedded Web Server (EWS) opens.


3. Select the **General** tab.
4. In the left pane, select **Firmware Upgrade**, and then select **Browse** or **Choose File** (depending on the EWS version).

 **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.

5. Browse to the location where the firmware files were extracted, select the .bdl file, select **Install**, and then wait for the update process to complete.

 **NOTE:** Do not close the browser window until the HP Embedded Web Server (EWS) displays the confirmation page.

6. On the EWS confirmation page, select **Restart Now**, or turn the printer Off and then On again.

 **NOTE:** The printer will NOT automatically reboot. To ensure a successful firmware update, make sure to reboot the printer.

7. After the printer is back online, print a Configuration Page and verify that the new firmware version is installed.

Method two: USB flash drive - Maintenance menu


Use a portable USB flash drive to update the firmware directly from the printer control panel. These steps should only be used if the printer is able to boot to a ready state.

Follow the instructions below and/or watch the following video.

[View a video demonstration on how to use a USB flash drive to update the firmware](#)

If the video does not play, click [here](#) to view it on YouTube.

1. Copy the .bdl file (downloaded previously) to a portable USB flash drive.

 **NOTE:** USB flash drives with a CD formatted partition might not be recognized by the printer. You might need to try a different USB flash drive.

2. Turn the printer Off and then On, and then wait until it arrives at a ready state.


 **NOTE:** If there is an error message displayed on the control panel, resolve the error first. If the error message persists, see **Method three: Update firmware using a USB flash drive - Preboot menu**.

3. On the printer control panel, navigate to the USB Firmware Upgrade option using the following steps:

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

- **FutureSmart 3:** From the Home screen on the printer control panel, scroll to and select **Device Maintenance**, and then select **USB Firmware Upgrade**.
- **FutureSmart 4:** From the Home screen on the printer control panel, select **Support Tools**, select **Maintenance**, and then select **USB Firmware Upgrade**.

4. Insert the USB flash drive with the .bdl file on it into the USB port on the *front* of the printer (remove the seal if necessary).

 **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.

5. 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.

6. If you receive a prompt to re-install the same version, roll back to an older version, or upgrade to the newer version, make sure you selected the correct firmware revision, and then select **OK** or select **Reinstall**, **Rollback**, or **Upgrade**.


7. Wait for the update process to complete and for the printer to automatically reboot.
8. After the printer is back online, print a Configuration Page and verify that the new firmware version is installed.

Method three: USB flash drive - Preboot menu

It might be necessary to upgrade the firmware to resolve an issue with a single printer. When the printer is in an error state, use the Preboot menu to update the firmware directly from the control panel using a portable USB flash drive.

 **NOTE:** Do NOT use these steps to update the firmware for a printer that is in a ready state unless otherwise recommended. If a **Disk Full** message displays when using this method, contact the HP support center in your country/region to help troubleshoot the issue.

1. Copy the [.bdl](#) file (downloaded previously) to a USB flash drive.


 **NOTE:** USB flash drives with a CD formatted partition might not be recognized by the printer. You might need to try a different USB flash drive.

2. On the control panel, open the Preboot menu.
 - Turn the printer Off and then On, and when the HP logo displays on the control panel and all three Ready, Data, and Attention LEDs illuminate solid, press **X**.


OR

 - Turn the printer Off and then On, and when **1/8** displays below the HP logo on the control panel, touch the logo.

3. Scroll to and select [Administrator](#).


 **NOTE:** To scroll on the control panel, use the touch screen scrollbar or the up/down arrow buttons. If indicated on the touchscreen, you will need to use the **3** (up) and **9** (down) keys on the control panel to scroll.

4. Scroll to and select [Download](#).
5. Insert the USB flash drive with the [.bdl](#) file on it into the USB port on the *front* of the printer (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.

6. Scroll to and select [USB Thumbdrive](#).
7. Select the [.bdl](#) file, select **OK** or the **6** key, and then wait for the update process to complete.

 **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.

8. When [Complete](#) displays on the control panel, select the back arrow  until [Continue](#) displays, select [Continue](#), and then wait for the printer to automatically reboot.
9. After the printer is back online, print a Configuration Page and verify that the new firmware version is installed.

Applicable printers

This document applies to HP LaserJet Enterprise, HP Officejet Enterprise, and HP PageWide Enterprise models.

Reset Factory Settings page

Use the **Reset Factory Settings** page to reset all the product settings to the factory defaults. For more information, see the Reset Factory Settings page on the General tab.

8 Security tab


- [Printer security features](#)
- [Configure the Account Policy settings](#)
- [Configuring Access Control settings for walk-up features in the HP Embedded Web Server \(EWS\)](#)
- [Protect Stored Data on the Printer's Hard Drive](#)
- [Install, view, and manage certificates to ensure data security in the HP Embedded Web Server \(EWS\)](#)
- [Install, view, and manage certificates for whitelisting remote apps on the printer](#)
- [Use the Web Service Security page](#)
- [Use the Self Test page](#)

Printer security features

- [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.



Video overview

 **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](#)






If you are unable to view the video above, or to view the video in a different size, click [here](#) to watch the video on YouTube.


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

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. Open the HP Embedded Web Server (EWS):
 - a. First, locate the printer's IP address on the printer control panel using the following steps:
 - **FutureSmart 3**
 - **4-line control panels:** View the control-panel display to see the IP address.
 - **Touchscreen control panels:** From the Home screen on the printer control panel, touch the Network  button to display the IP address or host name.
 - **FutureSmart 4**
 - **4-line control panels:** On the printer control panel, press the Information  button on the keypad, and then press the Down arrow  button until the printer IP address displays.
 - **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.
 - b. Open a web browser, and in the address line, type the IP address or host name exactly as it displays on the printer control panel. Press the **Enter** key on the computer keyboard. The EWS opens.



 **NOTE:** If the web browser displays a message indicating that accessing the website might not be safe, select the option to continue to the website. 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. Click the **Networking** tab, and then select **Mgmt. Protocols** in the left navigation pane. On the **Web Mgmt.** tab, clear the **Encrypt All Web Communication (not including IPP)** check box, and then click **Apply**.


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

 **NOTE:** This is the default password.

3. Click the **Security** tab.
4. In the left navigation pane, click **General Security**.
5. In the **User Name** field, enter 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:** 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.

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 hard disk provides hardware-based encryption so you can securely store 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** menu in the HP Embedded Web Server to configure the disk.

1. Open the HP Embedded Web Server (EWS):
 - a. First, locate the printer's IP address on the printer control panel using the following steps:
 - **FutureSmart 3**
 - **4-line control panels:** View the control-panel display to see the IP address.
 - **Touchscreen control panels:** From the Home screen on the printer control panel, touch the Network  button to display the IP address or host name.
 - **FutureSmart 4**

- **4-line control panels:** On the printer control panel, press the Information  button on the keypad, and then press the Down arrow  button until the printer IP address displays.
 - **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.
- b. Open a web browser, and in the address line, type the IP address or host name exactly as it displays on the printer control panel. Press the **Enter** key on the computer keyboard. The EWS opens.

 <https://10.10.XXXXX/>



NOTE: If the web browser displays a message indicating that accessing the website might not be safe, select the option to continue to the website. 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. Click the **Networking** tab, and then select **Mgmt. Protocols** in the left navigation pane. On the **Web Mgmt.** tab, clear the **Encrypt All Web Communication (not including IPP)** check box, and then click **Apply**.

2. On the EWS Home page, click the **Security** tab.
3. Open the **Protect Stored Data** menu.
4. Configure the desired options and then click **Apply**.

Configure the Account Policy settings

Introduction


The HP Embedded Web Server (EWS) provides features to increase printer security. These features include the option to protect administrator and remote configuration accounts by locking an administrator account after too many failed log in attempts, and by enabling password complexity requirements.

 **NOTE:** Remote configuration accounts include access to management tools, such as HP Web Jetadmin.


Configure the Account Policy settings

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 allows the administrator to specify the password characteristics that users must have in the passwords that they use to access the HP Embedded Web Server (EWS).

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 0, which indicates that the minimum number of characters is disabled and that no password is required to access an account. The number of characters required in a password can range from 0 to 16.

5. Click the **Apply** button to save the settings.

Configuring Access Control settings for walk-up features in the HP Embedded Web Server (EWS)

- [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](#).

Sign-in methods

 **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.

- **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

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.

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.

- b. Click **Add**.

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



NOTE: 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.
7. 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**.
 8. 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

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

In the **Job Status and Screen Behavior** area, 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:
 - Copy
 - Digital Send
 - Fax

Step four: Set up the default permissions for each sign-in method

In the **Relationships Between Network Users or Groups and Device Permissions** area, 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

In the **Device User Accounts** area, 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 Stored Data on the Printer's Hard Drive

- [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

- [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

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

Perform an Erase Job Data operation:

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

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:

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

Manually set a new password for all 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)
 - **1 hour**
 - **4 hours**
 - **1 day**
 - **1 week**
- **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, view, and manage certificates to ensure data security in the HP Embedded Web Server (EWS)

- [Introduction](#)
- [Step one: Create or install certificates](#)
- [Step two: Manage the installed certificates](#)
- [Step three: 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

Step one: Create or install 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

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

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

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**.

Step two: Manage the installed certificates



NOTE: The following procedures may also be performed from the **Authorization** page of the **Networking** tab.

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

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

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

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.

Step three: Configure the Certificate Validation settings

- [Configure OCSP certificate validation](#)
- [Configure CDP certificate validation](#)

Configure 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

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

Install, view, and manage certificates for whitelisting remote apps on the printer

- [Introduction](#)
- [Step one: Install Remote App Certificates](#)
- [Step two: Manage the installed 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)

Step one: 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**.

Step two: Manage the installed Remote App Certificates

The following procedures may also be performed using the **Manage Remote Apps** page of the **Security** tab.

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

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

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....**

Use the Web Service Security page

Use the **Web Service Security** page 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.

Use the Self Test page

Use the **Self Test** page 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.

9 HP Web Services tab

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.

10 Networking tab

- [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, [Jetdirect EWS](#)
- (For devices that support IPsec/Firewall) IPsec/Firewall wizard help at HP.com, [Jetdirect IPsec/Firewall Help](#)
- 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's 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

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

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.

Networking Tab

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

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

CONFIGURATION

Use these menu items to set general network configuration parameters.

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.

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.

- WirelessDirect Name: The unique name of the printer given by the user, used to identify the printer in the wireless network.
- Connection Method:
 - Advanced: This connection method includes security features like hiding the Wireless 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 in case of Advanced and Manual connection
- Channel: This provide choice to the user in which frequency band the printer operates
- IP Address: IP address to access the printer wirelessly.

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.

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, 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.

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.

Network Settings

Use the tabs on this page to configure other network protocols. Depending on the print server model, you can view or configure IPX/SPX, AppleTalk, DLC/LLC, and SNMP settings.

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

Please note:

- If you are using direct-mode (peer-to-peer) printing on a Microsoft IPX network, do not disable IPX/SPX (Internet Packet Exchange/Sequenced Packet Exchange) protocols.
- For selected HP Jetdirect print server models intended for secure environments, some network protocols (other than TCP/IP) may be disabled by factory default.

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

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

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

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

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.

Admin. Account. Configure an administrator password to control access to configuration parameters. This password will be shared with other Jetdirect configuration tools, such as Telnet, and is typically synchronized to match the password used for printer configuration. In addition, you may choose to use this password as the SNMP Set Community Name when using SNMP management applications, such as HP Web Jetadmin, to manage 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.

For a detailed description of wizard settings and additional help, click [Jetdirect IPsec/Firewall Help](#).

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

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

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**.