



HP SmartCard SIPRNet and NIPRNet Solutions for US Government using HP FutureSmart firmware

Administrator's Guide

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1 Introduction

The HP SmartCard NIPRNet Solution for US Government and the HP SmartCard SIPRNet Solution for US Government are designed to optimize security in imaging and printing environments for various Department of Defense (DoD) agencies and military branches of the US government.

This guide is intended for administrators responsible for managing security in their network environment, and provides instructions on how to install and configure settings on HP products with FutureSmart firmware version using the HP SmartCard SIPRNet or NIPRNet Solution for US Government.

2 Getting started with HP SmartCard SIPRNet or NIPRNet Solution

Get started by installing the HP SmartCard SIPRNet or NIPRNet Solution on HP products with HP FutureSmart firmware version. This chapter provides instructions on the following topics:

- [Supported Products](#)
- [Install the HP SmartCard NIPRNet or SIPRNet Solution](#)
- [Obtain tools for configuring the printer](#)
- [Update the firmware](#)

Supported Products

For a list of HP products compatible with the HP SmartCard SIPRNet Solution for US Government, go to [Supported products for SIPRNet Solution](#) (c04896003), and for products that are compatible with the NIPRNet Solution, go to [Supported products for NIPRNet Solution](#) (c04896573).

Install the HP SmartCard NIPRNet or SIPRNet Solution

Purchase one of the following Smart Cards, and then install it on the printer.

- HP SmartCard US Govt NIPRNet Solution: CC543B #201
- HP SmartCard US Govt SIPRNet Solution: F8B30A #201

For installation instructions of the HP SmartCard NIPRNet Solution for US Government or the HP SmartCard SIPRNet Solution for US Government, go to: [Installation Guide](#). (c04797700)

Figure 2-1 HP SmartCard NIPRNet Solution



Figure 2-2 HP SmartCard SIPRNet Solution



Obtain tools for configuring the printer


The **Tools** directory in the HP CAC website provides the files required for configuring a printer with the HP SmartCard SIPRNet or NIPRNet Solutions.

Obtain the following files in the Tools directory:

- KerbosInfoCert2.exe OR KerbosInfoCert2.vbs: To view the configuration information.
- FutureSmartBackupRestore 2.0.0.3.exe: To obtain the FutureSmart Restore tool

Follow these steps to obtain the files in the **Tools** directory:

1. Go to <https://ftp.usa.hp.com/hprc>.
2. Read the **HPRC Terms of Use & Service**, and then click **Accept**.
3. Type in your Account name and password, and then click **Login**.

 **NOTE:** Passwords must be changed annually to the next consecutive number.

4. Click the **Tools** directory.
5. Select the following files, and then click **Save**.
 - KerbosInfoCert2.exe OR KerbosInfoCert2.vbs


Make sure to print this page to verify the Kerberos Client settings information when configuring the device.

- FutureSmartBackupRestore 2.0.0.3.exe

Update the firmware

To download the latest firmware, go to [HP Support](#), and then select **Software and Drivers**.

For instructions to download and update the firmware, go to [Update the firmware using a USB flash drive or the Embedded Web Server \(EWS\)](#).

 **NOTE:** After downloading the firmware, make sure to note the following information in the **Configuration Page**:

Product Name, Model number, Device Serial Number, and the Firmware Level.


3 Configure the printer settings using the Embedded Web Server


After installing the HP SmartCard NIPRNet or SIPRNet Solution on the printer, open the HP Embedded Web Server (EWS) to configure the printer settings. The following topics provides instructions for configuring the printer settings using the EWS.


- [Access the Embedded Web Server \(EWS\)](#)
- [Set the date and time](#)
- [Verify the network settings](#)
- [Configure the sign-in method to enable SmartCard authentication](#)
- [Configure certificate management](#)
- [Configure the Scan/Digital Send settings](#)

Access the Embedded Web Server (EWS)


Follow these steps to open the EWS:

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 of the printer exactly as it displays on the printer's control panel. Press the [Enter](#) key.

 **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.

 **NOTE:** To prevent unauthorized changes in the printer configuration settings, IT administrators might set a password in the EWS.

3. Depending on how the HP EWS is configured, it might be necessary to log in using the administrator's password to access and configure printer settings.

 **NOTE:** If passwords are set in the EWS, only the **Information tab** will be available to the users.

Set the date and time

The device date and time must be synchronized to within five minutes of the date and time on the Kerberos server. If the time difference is greater than five minutes, the HP Smart Card authentication attempts will fail.

1. Open the EWS.

For instructions, see [Access the Embedded Web Server \(EWS\) on page 4](#)

2. On the top navigation tabs, select the **General** tab.
3. In the left navigation pane, select **Date and Time**.

Figure 3-1 Date and Time

The screenshot shows the 'Date and Time' configuration page. At the top, there are navigation tabs: Information, General, Copy/Print, Scan/Digital Send, Fax, Troubleshooting, Security, HP Web Services, and Networking. The 'General' tab is selected. On the left, a navigation pane lists various settings, with 'Date and Time' highlighted. The main content area is titled 'Date and Time' and contains two sections: 'Device Time' and 'Network Time Server'. The 'Device Time' section has a heading 'Device Time' and a sub-heading 'This section allows the manual configuration of the date and time.' Below this are fields for 'Current Date' (Month: Jan, Day: 25, Year: 2016) and 'Current Time' (Hour: 1, Minute: 37, AM/PM: PM). There is also a 'Current time zone' dropdown menu set to '(GMT-07:00) Mountain Time (US & Canada)' and an 'Advanced' button. The 'Network Time Server' section has a heading 'Network Time Server' and a sub-heading 'If a Network Time Server is available it should be considered as the preferential source of date/time information due its greater accuracy and possibility of re-synchronization.' Below this is a checked checkbox for 'Automatically synchronize with a Network Time Server' and an 'NTS Settings' button. At the bottom of the page are 'Apply' and 'Cancel' buttons.

4. Set the date and time in the **Device Time** or in the **Network Time Server** section.

Follow these steps to set the date and time in the **Device Time** section:

- a. Type the day and year for the **Current Date** and the time for the **Current Time**.
- b. Click **Advanced**, select the correct **Time zone** from the drop-down list, select the desired options in the **Daylight Savings Time Settings** section, and then click **OK**.

Follow these steps to set the date and time in the **Network Time Server** section:

- a. Select the **Automatically synchronize with a Network Time Server** check box.
- b. Click **NTS Settings**, and then provide the server information, and then click **OK**.

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

Verify the network settings

Use the following information to verify the HP printer's TCP/IP network information.

1. Open the EWS.

For instructions, see [Access the Embedded Web Server \(EWS\) on page 4](#)

2. On the top navigation tabs, select the **Networking** tab.
3. On the left navigation pane, select the **TCP/IP Settings**, and then select the **Network Identification** tab.

Figure 3-2 TCP/IP Settings


The screenshot displays the 'TCP/IP Settings' page in the HP printer's EWS. The left navigation pane shows 'TCP/IP Settings' selected. The main content area is titled 'TCP/IP Settings' and has several tabs: 'Summary', 'Network Identification', 'TCP/IP(v4)', 'TCP/IP(v6)', 'Config Precedence', and 'Advanced'. The 'Network Identification' tab is active. The settings are as follows:

- Host Name:** NP920D32
- Domain Name (IPv4/IPv6):** boi.rd.hpcorp.net
- Domain Name (IPv6 only):** (empty)
- Enabled Features:**
 - DNS (IPv4):** Primary: 16.110.135.51, Secondary: 16.110.135.52
 - DNS (IPv6):** Primary: (empty), Secondary: (empty)
 - Enable DDNS
- TCP/IP Domain Suffix:**
 - DNS Suffixes:** Lrd.hpcorp.net (with a 'Delete' button)
 - (with an 'Add' button)
- WINS (IPv4 only):** Primary: (empty), Secondary: (empty)
- Bonjour:** Bonjour Service Name: HP Color LaserJet CM3530 MFP [920D32], Bonjour Domain Name: NP920D32.local

4. Verify that the **Host Name** and **Domain Name (IPv4/IPv6)** are properly set.
5. Verify that the **DNS Primary** and **DNS Secondary** are correctly set.
6. If required, type additional DNS suffixes in the **DNS Suffixes** text box of the **TCP/IP Domain Suffix** section.
7. If applicable, type the WINS **Primary** and **Secondary** addresses in the **WINS (IPv4 only)** section.
8. Click **Apply** to save the changes.

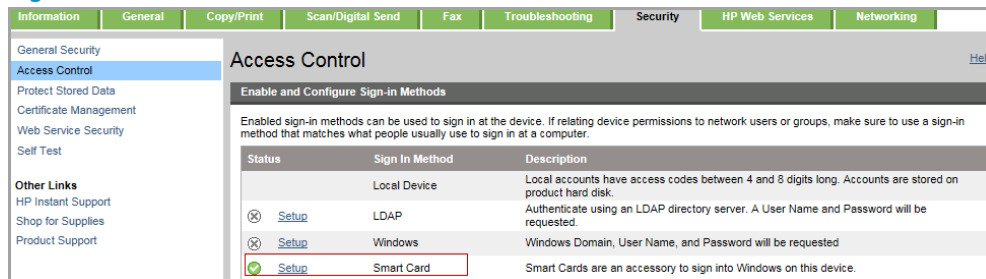
Configure the sign-in method to enable SmartCard authentication

Use the **Access Control** page of the EWS to set up the **Smart Card** or the **SIPRNet Smart Card** in the sign-in method and domain information, to access functions at the device, and for E-mail settings.

 **NOTE:** Verify that the printer is on and the HP SmartCard reader (NIPRNet or SIPRNet Solutions) is connected to the printer before beginning.

1. Open the EWS.
For instructions, see [Access the Embedded Web Server \(EWS\) on page 4](#)
2. On the top navigation tabs, select the **Security** tab.
3. In the left navigation pane, click **Access Control**.

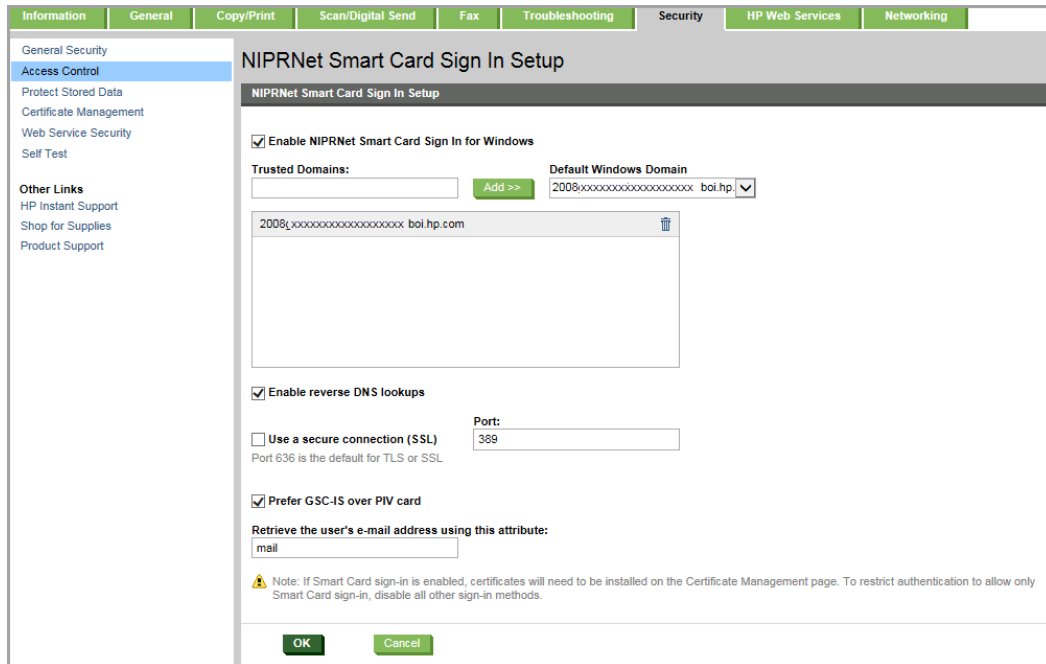
Figure 3-3 Access Control



4. Verify that the **Smart Card** (for HP SmartCard NIPRNet Solution) or the **SIPRNet Smart Card** (for HP SmartCard SIPRNet Solution) is listed in the **Sign In Method** column.

5. In the **Enable and Configure Sign-in-Methods** section, select **Setup** in the **Status** column where the Sign in method column is either the **Smart Card** entry to set up the HP SmartCard NIPRNet Solution for US Government, OR the **SIPRNet Smart Card** entry to set up the HP SmartCard SIPRNet Solution for US Government.

Figure 3-4 Smart Card Sign in Setup



6. On the **NIPRNet Smart Card Sign In Setup** or **SIPRNet Smart Card Sign In Setup** page, perform the following tasks to enable the SmartCard as a sign-in method:
 - a. Select the **Enable NIPRNet Smart Card Sign In for Windows**, or **Enable SIPRNet Smart Card Sign In for Windows** check box.
 - b. Type the fully qualified domain name (FQDN) of the domain controller in the **Trusted Domains** text box, and then click **Add**.
 - c. If your environment has reverse DNS disabled, clear the **Enable reverse DNS lookups** check box.
 - d. Depending on your HP MFP Authentication Reader, select the proper environment setting.
 - HP CAC: Select **Prefer GSC-IS over PIV card** check box.
 - PIV cards: Select to clear the **Prefer GSC-IS over PIV card** check box.
 - e. Verify that the correct LDAP e-mail attribute is specified in the **Retrieve the device user's e-mail address using this attribute** (LDAP E-mail attribute) text box.
 - f. Click **OK** to save the settings, or click **Cancel** to discard the changes.

7. After the page refreshes, review the **Enable and Configure Sign In Methods** section of the **Access Control** panel to verify that the **Status** for the **Smart Card** or **SIPRNet Smart Card** entry contains a green check mark. If not, perform the tasks in Step 6.

 **NOTE:** If the **Smart Card** or **SIPRNet Smart Card** is not displayed on any of the drop-down lists as a **Sign In Method** in the **Sign In and Permission Policies** section, then the HP SmartCard (NIPRNet or SIPRNet) Solution for US Government might not be properly installed.

Figure 3-5 Sign in and Permission Policies

Control Panel Application	Device Guest	Device Administrator	Device User	Sign In Method
Administration application	✓	✓	✓	Smart Card
Supply Status application	✓	✓	✓	Smart Card
Remote Control-Panel	✓	✓	✓	Smart Card
Copy application	✓	✓	✓	Smart Card
Save to Device Memory application	✓	✓	✓	Use Default
Open from Device Memory application	✓	✓	✓	Use Default
Trays				Use Default
Printing				Use Default
Open from USB application	✓	✓	✓	Use Default
Fax application	✓	✓	✓	Use Default
E-mail application	✓	✓	✓	Use Default
Address Book				Use Default
Save to SharePoint®	✓	✓	✓	Use Default
Network Folder application	🔒	✓	✓	Smart Card
Job Status application	✓	✓	✓	Use Default
Save to USB application	✓	✓	✓	Use Default
Device Maintenance application	✓	✓	✓	Use Default

Allow users to choose alternate sign-in methods

 Access Granted
 Requires Sign In
 Full Access
 Access Denied

8. To restrict the **Sign In Method** to only the **Smart Card** or **SIPRNet Smart Card**, perform the following tasks on the **Enable and Configure Sign In Methods** section
 - a. Select **Setup** in the **Status** column for the **Sign In Method** for entries that should be restricted (e.g. LDAP entry).
 - b. On the Sign In Setup page (e.g. LDAP Sign In Setup), clear the **Enable** Sign In Method entry check box (e.g. Enable LDAP Sign In), and then select **OK**.

 **NOTE:** When the **Smart Card** or **SIPRNet Smart Card** option is selected from the **Sign in Method** drop-down list, all other functions are also restricted to the SmartCard authentication option.

9. On the **Sign In and Permission Policies** section, perform the following tasks for each **Control Panel Application** that requires the HP SmartCard (NIPRNet or SIPRNet) Solution for the US Government:
 - a. Select the **Smart Card** or **SIPRNet Smart Card** option from the **Sign In Method** drop-down list.
 - b. In the **Device Guest** column, click the **Access Granted** icon (✓) and change it to the **Requires Sign In** icon (🔒).

10. Click **Apply** to save the changes.

Figure 3-6 Smart Card option in the Sign In and Permission Policies

Control Panel Application	Device Guest	Device Administrator	Device User	Sign In Method
	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Smart Card
Administration application	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Smart Card
Supply Status application	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Use Default
Remote Control-Panel	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Use Default
Copy application	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Use Default
Save to Device Memory application	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Use Default
Open from Device Memory application	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Use Default
Trays				Use Default
Printing				Use Default
Open from USB application	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Use Default
Fax application	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Use Default
E-mail application	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Use Default
Address Book				Use Default
Save to SharePoint®	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Use Default
Network Folder application	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Smart Card
Job Status application	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Use Default
Save to USB application	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Use Default
Device Maintenance application	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Use Default

Access Granted
 Requires Sign In
 Full Access
 Access Denied

Allow users to choose alternate sign-in methods

Configure certificate management

Set up security certificates on the **Certificate Management** page of the EWS:

1. Open the EWS.
For instructions, see [Access the Embedded Web Server \(EWS\) on page 4](#)
2. On the top navigation tabs, select the **Security** tab.
3. In the left navigation pane, click **Certificate Management**.

Figure 3-7 Certificate Management

The screenshot shows the 'Certificate Management' page with the following sections:

- General Security** (left navigation pane): Access Control, Protect Stored Data, **Certificate Management**, Web Service Security, Self Test.
- Other Links** (left navigation pane): HP Instant Support, Shop for Supplies, Product Support.
- Certificate Management** (main content):
 - Certificates** (tab): Certificate Validation.
 - Identity Certificates**:
 - Text: Certificates are used for data encryption and identification of the product on the network.
 - Text: A self-signed identity certificate is installed by default. Though it ensures data security through encryption, it is not accepted for authentication because it is not signed by a trusted Certificate Authority (CA). If trusted authentication is required, a new certificate signed by a CA must be installed.
 - Create New Self-Signed Certificate**: Click the button below to create a new identity certificate signed by the product. This operation will overwrite the current self-signed certificate. **Create...**
 - Create Certificate Signing Request**: Click the button below to create a Certificate Signing Request (CSR) to be signed by a Certificate Authority (CA). The resulting signed certificate is installed using the "Install Identity Certificate from CSR" option. **Create...**
 - Install Identity Certificate**:
 - Install Identity Certificate from CSR**: Install the certificate that is the result of a CA signing the CSR that was created above. This option is available only if there is a CSR pending.
 - Import Identity Certificate with Private Key**:
 - Choose File**: **Browse...** (Only .pfx files are accepted.)
 - Certificate Password**: (Enter the same password that was used to encrypt the private key.)
 - Mark private key as exportable**
 - Install**
 - CA Certificates**:
 - Text: When this product connects securely to a server, for example, an SMTP or LDAP server, the CA certificate is used to validate authenticity of the server so that data is not exchanged with an imposter. To validate server identity, install the certificate of the CA that issued the server certificate.
 - Choose File**: **Browse...** **Install**
 - Accepted file types: .cer, .der, .pem, and .p7b.
 - Warning: Installing an intermediate CA certificate might limit the scope of authentication.
 - Certificates** (table):

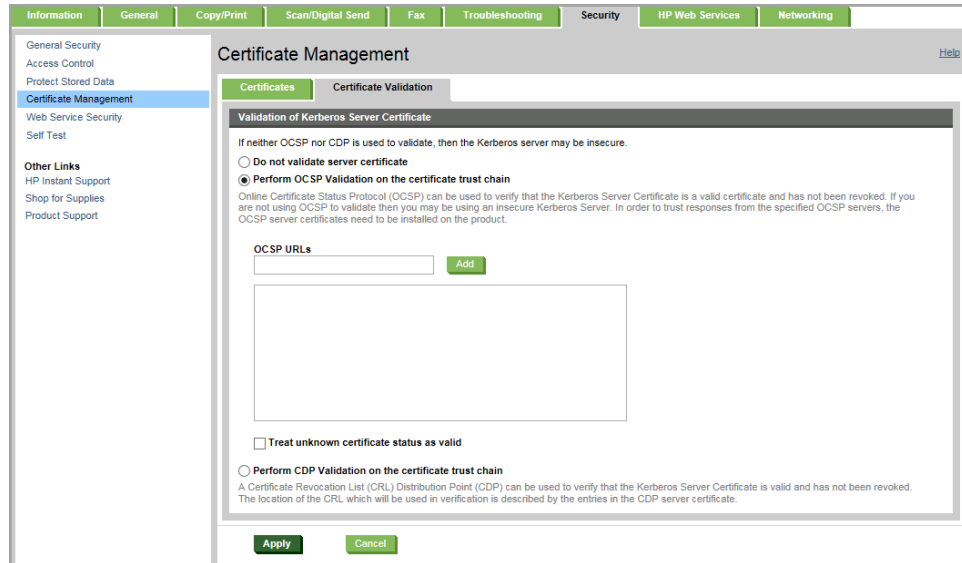
Issued To	Issued By	Expiration Date	Certificate Type	Certificate Usage
<input checked="" type="radio"/> HP Color LaserJet FlowMFP M577 BSL48V	HP Color LaserJet FlowMFP M577 BSL48V	12/06/2020 8:39:58 PM	Self-Signed Identity Certificate	Network Identity, E-mail signing
<input type="radio"/> HP Color LaserJet FlowMFP M577 BSL48V	HP Color LaserJet FlowMFP M577 BSL48V	12/06/2020 8:39:59 PM	Self-Signed CA Certificate	
<input type="radio"/> Baltimore CyberTrust Root	Baltimore CyberTrust Root	5/12/2025 11:59:00 PM	Root CA Certificate	
<input type="radio"/> DigiCert Assured ID Root CA	DigiCert Assured ID Root CA	11/09/2031 11:00:00 PM	Root CA Certificate	
<input type="radio"/> Equifax Secure Certificate Authority	Equifax Secure Certificate Authority	8/22/2018 4:41:51 PM	Root CA Certificate	
<input type="radio"/> GlobalSign Root CA	GlobalSign Root CA	1/28/2028 11:00:00 AM	Root CA Certificate	
<input type="radio"/> VeriSign Class 3 Public Primary Certification Authority - G5	VeriSign Class 3 Public Primary Certification Authority - G5	7/16/2036 11:59:59 PM	Root CA Certificate	
<input type="radio"/> 2008GENREP-MIT	2008GENREP-MIT	10/08/2020 8:21:28 PM	Root CA Certificate	

View Details **Remove...** **Export...** **Use for E-mail Signing** **Use for Network Identity**

4. Click the **Certificates** tab.
5. Install the root CA certificate, intermediate CA certificate, and the subordinate CA certificate of the Windows Active Directory domain controller.
6. If OCSP is used for certificate-revocation checking, also install the root CA certificate, intermediate CA certificate, and the subordinate CA certificate of the OCSP server.

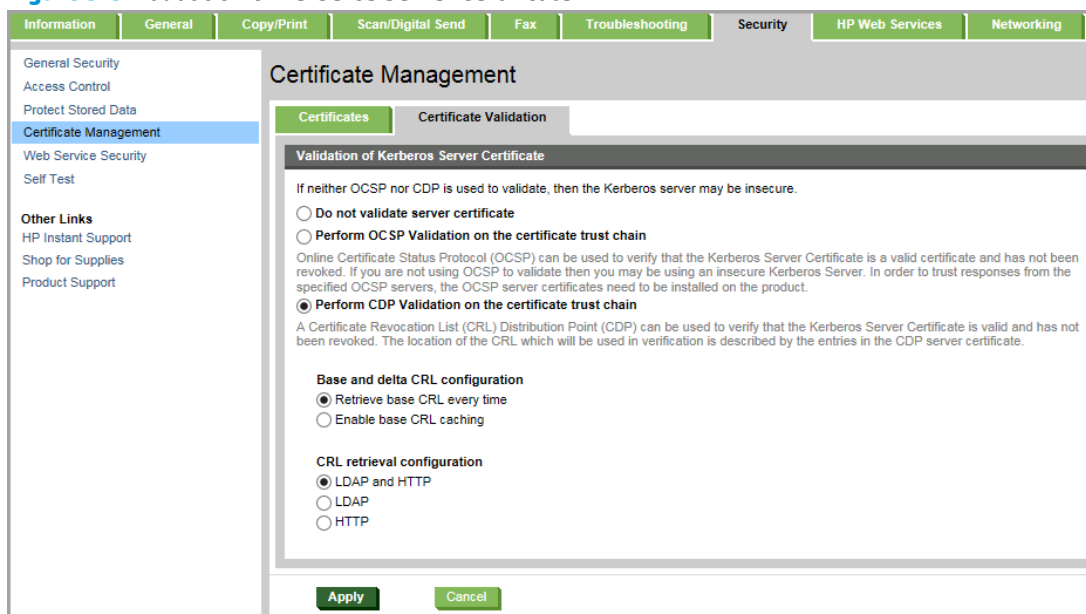
7. If OCSP is used for certificate revocation checking, complete the following steps:
 - a. Click the **Certificate Validation** tab.
 - b. Select the **Perform OCSP Validation on the certificate trust chain** check box to enable OCSP validation.

Figure 3-8 Certificate Validation



- c. Enter the URL(s) of the OCSP server(s) in the **OCSP URLs** field.
8. Click **Apply** at the bottom of the **Certificate Validation** section to save the changes.
9. If CDP is used for verification of the kerberos server certificate using a certificate revocation list, select the **Perform CDP Validation on the certificate trust chain** check box and complete the following.

Figure 3-9 Validation of Kerberos Server Certificate



NOTE: The retrieval options indicate which methods to use to retrieve the certificate revocation list (CRL).

- a. Select the **Retrieve base CRL every time** check box (the default) to retrieve the list every time.
-or-
Select the **Enable base CRL caching** check box to allow selection of **Enable delta CRL support** and **Treat unknown CRL status as valid**.
 - b. Select one of the **CRL retrieval configuration** options to use. (**LDAP and HTTP** is the default.)
- 10.** Click **Apply** at the bottom of the **Certificate Validation** section to save the changes.

Configure the Scan/Digital Send settings

Use the **Scan/Digital Send** tab of the EWS to configure the address book, e-mail, and network folder settings.

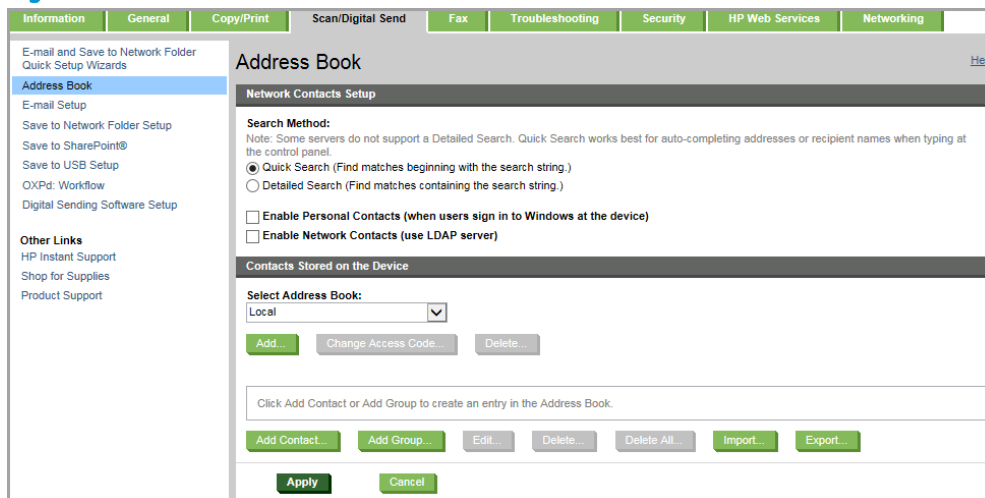
- [Address Book settings](#)
- [E-mail settings](#)
- [Save to Network Folder settings](#)

Address Book settings

Use the following steps to configure the **Address Book** settings.


1. Open the EWS.
For instructions, see [Access the Embedded Web Server \(EWS\) on page 4](#)
2. On the top navigation tabs, select the **Scan/Digital Send** tab.
3. In the left navigation pane, click **Address Book**.

Figure 3-10 Address Book



4. Select the **Enable Network Contacts (use LDAP server)** check box, and then click the **Add** button to start the wizard. The **Network Contacts Setup** page displays.
5. On the **Network Contacts Setup**, complete the following tasks to set up the network:

- a. In the **LDAP Server Address** field, type the FQDN of the domain controller.

 **NOTE:** This must be the same FQDN that was typed in the **Trusted Domains** field of the **NIPRNet Smart Card Sign In Setup** or the **SIPRNet Smart Card Sign In Setup** page.

- b. If applicable, in the **Port** field type the correct SSL or Global port number.
 - SSL Port: 636 or 3269
 - Global Catalog Port: 3268

- c. In the **Server Authentication Requirements** section, select the **Server requires authentication** radio button, and then select **Use credentials of user to connect after Sign In at the control panel** from the drop-down list.
- d. In the **LDAP Data base Search Settings**, type the LDAP database search root in the **Path to start search (BaseDN, Search Root)** (OU=Installations,DC=SMARTCARDHQ,DC=DOD,DC=MIL, for example) field.
- e. In the **Source for Attribute Names**, make sure that the **Use Active Directory Default** button is selected, unless the search attributes are different.

For example, some sites require user principal name (userPrincipalName) instead of mail for the e-mail attribute.

Figure 3-11 Network Contacts Setup

6. Click **OK** to save any changes.

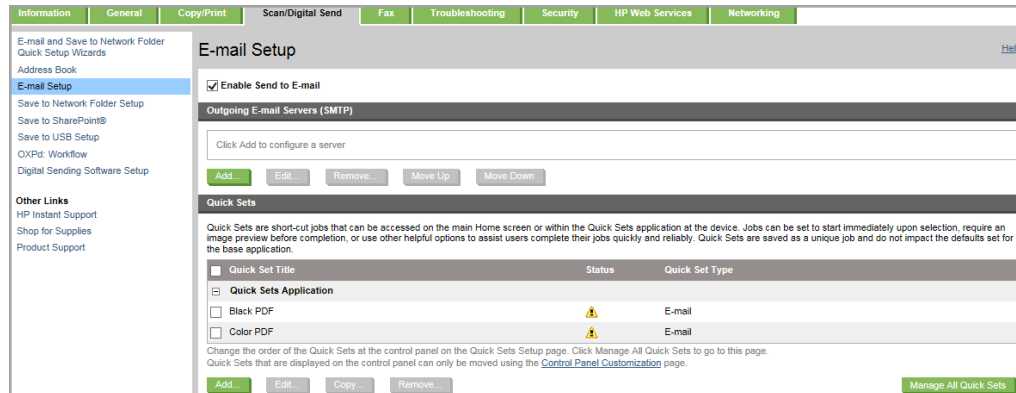
E-mail settings

Use the following steps to configure the **E-mail Setup**.

1. Open the EWS.
For instructions, see [Access the Embedded Web Server \(EWS\) on page 4](#)
2. On the top navigation tabs, select the **Scan/Digital Send** tab.
3. In the left navigation pane, click **E-mail Setup**.
4. On the **E-mail Setup** page, perform the following tasks to set up the email:

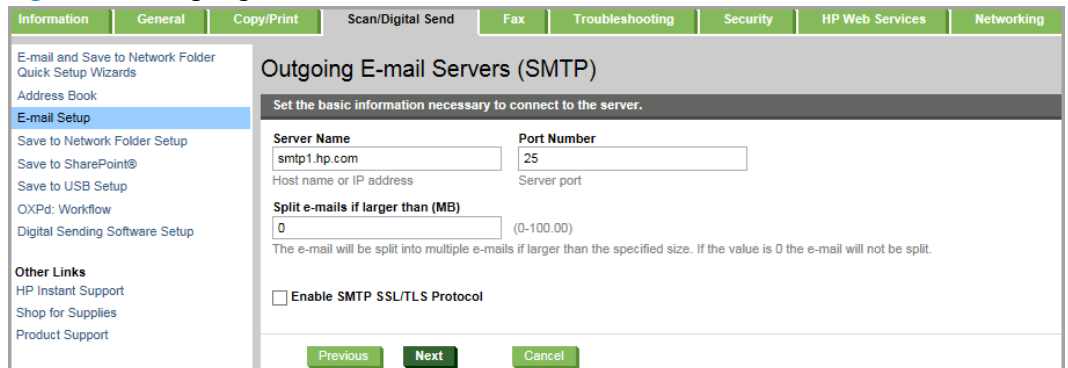
- a. Select the **Enable Send to E-mail** check box.
- b. In the **Outgoing E-mail Servers (SMTP)** section, click **Add** to start the wizard.

Figure 3-12 E-mail Setup

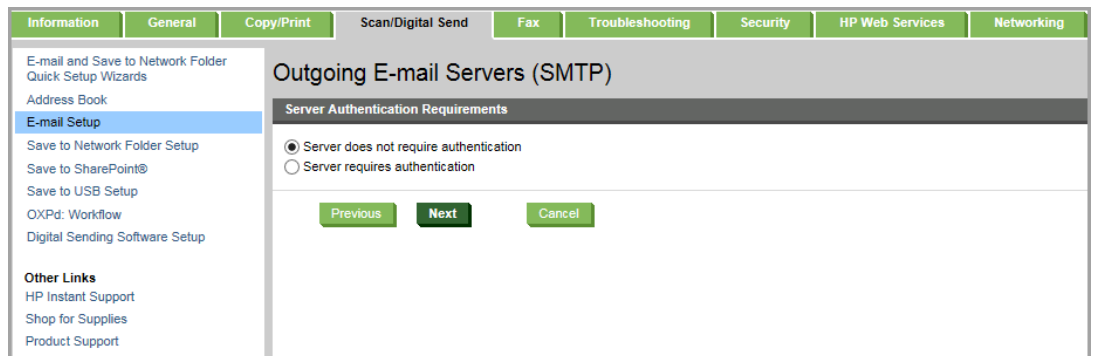


- c. On the **Outgoing E-mail Servers (SMTP)** page, complete the following tasks:
 - i. Select **I know my SMTP server address or host name:** check box.
 - ii. Type the **SMTP Server Name** and the **Port Number**. To split large e-mails, type a value in megabytes in the **Split e-mails if larger than (MB)** field.
 - iii. Click **Next** to continue.

Figure 3-13 Outgoing E-mail Servers



- iv. On the **Server Authentication Requirements** section, select **Server does not require authentication** radio button, and then click **Next**.



- d. On the **Server Usage** section, select which functions the server is used for, and then click **Next**.
 - e. Review the **Summary and Test** page. To test the settings, enter an e-mail address and then click **Test**.
 - f. Click **Finish** to complete the configuration and return to the **E-mail Setup** page.
5. On the **Address and Message Field Control** section, complete the following steps to set up the address section:
- a. In the **From** field, select **User's address (sign-in required)** from the drop-down list.



NOTE: To prevent users from changing the **From** setting at the control panel, clear the **User editable** check box

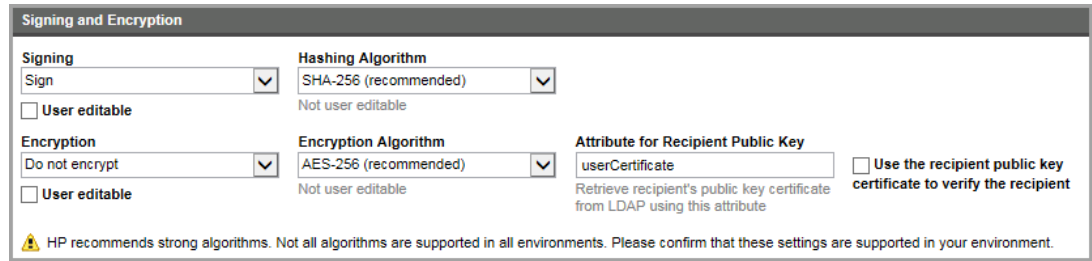
- b. Select the settings from the drop-down list for the following fields: **To**, **CC**, and **BCC**.

Figure 3-14 Address and Message Field Control

- c.
6. On the **Signing and Encryption** section, complete the following steps:
- a. In the **Signing** field, select **Sign** from the drop-down list, and then clear the **User editable** check box.
 - b. In the **Hashing Algorithm**, select SHA-1 or SHA-256.
 - c. For the **Encryption** field, select **Do not encrypt** from the drop-down list, and then clear the **User editable** check box.

- d. Select to clear the **Use the recipient public key certificate to verify the recipient** check box.

Figure 3-15 Signing and Encryption



Signing and Encryption

Signing
 Sign (dropdown) | Hashing Algorithm: SHA-256 (recommended) (dropdown)
 User editable | Not user editable

Encryption
 Do not encrypt (dropdown) | Encryption Algorithm: AES-256 (recommended) (dropdown)
 User editable | Not user editable

Attribute for Recipient Public Key
 userCertificate (text field) | Use the recipient public key certificate to verify the recipient
Retrieve recipient's public key certificate from LDAP using this attribute

⚠ HP recommends strong algorithms. Not all algorithms are supported in all environments. Please confirm that these settings are supported in your environment.

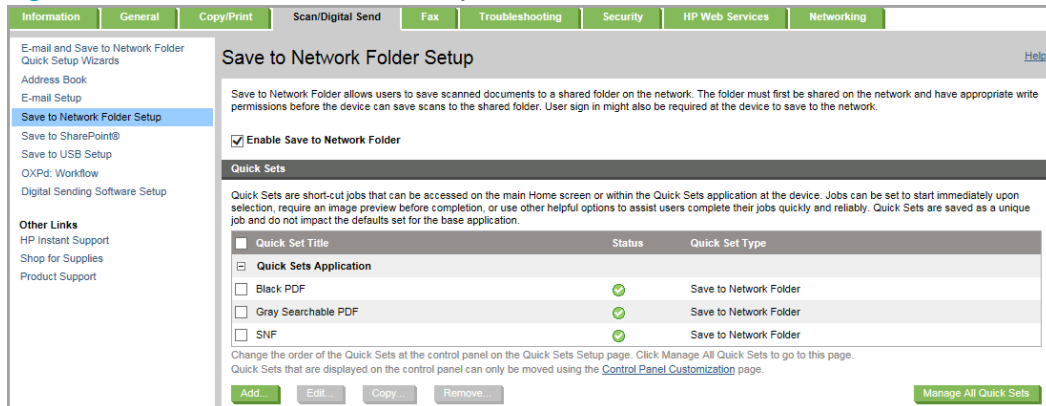
- 7. Click the **Apply** button at the bottom of the **E-mail Setup** page to save any changes.

Save to Network Folder settings

Use the following steps to configure the **Save to Network Folder Setup**.

1. Open the EWS.
For instructions, see [Access the Embedded Web Server \(EWS\) on page 4](#)
2. On the top navigation tabs, select the **Scan/Digital Send** tab.
3. In the left navigation pane, click **Save to Network Folder Setup**.

Figure 3-16 Save to Network Folder Setup



Save to Network Folder Setup

Save to Network Folder allows users to save scanned documents to a shared folder on the network. The folder must first be shared on the network and have appropriate write permissions before the device can save scans to the shared folder. User sign in might also be required at the device to save to the network.

Enable Save to Network Folder

Quick Sets

Quick Sets are short-cut jobs that can be accessed on the main Home screen or within the Quick Sets application at the device. Jobs can be set to start immediately upon selection, require an image preview before completion, or use other helpful options to assist users complete their jobs quickly and reliably. Quick Sets are saved as a unique job and do not impact the defaults set for the base application.

Quick Set Title	Status	Quick Set Type
<input type="checkbox"/> Black PDF	✓	Save to Network Folder
<input type="checkbox"/> Gray Searchable PDF	✓	Save to Network Folder
<input type="checkbox"/> SNF	✓	Save to Network Folder

Change the order of the Quick Sets at the control panel on the Quick Sets Setup page. Click Manage All Quick Sets to go to this page. Quick Sets that are displayed on the control panel can only be moved using the [Control Panel Customization](#) page.

Add... Edit... Copy... Remove... Manage All Quick Sets

- 4. Select the **Enable Save to Network Folder** check box, and then click the **Add** button to start the wizard.

5. In the **Quick Sets** section, click **Add** to start the wizard.

Figure 3-17 Quick Set Wizard

The screenshot shows the 'Quick Set Wizard' window. The title bar reads 'Quick Set Wizard'. Below the title bar, there is a navigation pane on the left with the following items: 'E-mail and Save to Network Folder', 'Quick Setup Wizards', 'Address Book', 'E-mail Setup', 'Save to Network Folder Setup' (highlighted), 'Save to SharePoint@', 'Save to USB Setup', 'OXPD: Workflow', 'Digital Sending Software Setup', 'Other Links', 'HP Instant Support', 'Shop for Supplies', and 'Product Support'. The main content area has a header 'Quick Set Wizard' and a sub-header 'Set the button location for the Quick Set and options for user interaction at the control panel.' Below this, there is a paragraph: 'Each Quick Set can be located either on the Home screen or within the Quick Sets application. Each Quick Set must have a title and a description as these help users at the control panel understand the Quick Set.' The form contains three main sections: 1. 'Quick Set Title:' with a text input field. 2. 'Button Location:' with a dropdown menu showing 'Quick Sets Application'. 3. 'Quick Set Description:' with a text area. Below these is the 'Quick Set Start Option:' section with two radio buttons: 'Enter application, then user presses Start' (which is selected) and 'Start instantly upon selection'. At the bottom of the window are two buttons: 'Next' and 'Cancel'.

6. In the **Quick Set Wizard**, complete the following tasks to define the control panel quick set options:
 - a. Type a title in the **Quick Set Title** field
 - b. Select the **Button Location** from the drop-down list.
 - c. Type a description in the **Quick Set Description** field, if desired.
 - d. Click **Next**.
 - e. In the **Folder Settings** section, select one of the following options to set the folder destination:

Option one : **Save to shared folders or FTP folders**

 - i. Select the **Save to shared folders or FTP folders** radio button, and then click **Add**.
 - ii. In the **UNC Folder Path:**, type the entire FQDN in the UNC folder path.
 - iii. In the **Authentication Settings:**, select **Use credentials of user to connect after Sign in at the control panel**, and then select **OK**.

Option two: **Save to a personal shared folder**

 - i. Select the **Save to a personal shared folder** radio button.

- ii. In the **Retrieve the device user's home folder using this attribute** field, type **homeDirectory**, and then click **Next**.

Figure 3-18 Folder settings in the Quick Set Wizard

The screenshot shows the 'Quick Set Wizard' interface with the 'Folder Settings' tab selected. The left sidebar contains a navigation menu with options like 'E-mail and Save to Network Folder', 'Address Book', and 'Save to Network Folder Setup' (which is highlighted). The main content area is titled 'Folder Settings' and includes a descriptive paragraph about shared folders. There are three radio button options: 'Save to shared folders or FTP folders' (selected), 'Save to a personal shared folder', and 'Send only to folders with read and write access'. The 'Send only to folders with read and write access' option has a checked checkbox for 'Verify folder access prior to job start'. At the bottom, there are 'Previous', 'Next', and 'Cancel' buttons.


- iii. Complete the remaining settings as needed, and then click **Finish** to save the settings.

4 Device Resets

This chapter provides instructions to restore the HP printer to factory defaults.

- [Restore Factory defaults](#)
- [Preboot Menu](#)

Restore Factory defaults

 **NOTE:** When the HP printer resets all settings to default, the **Authentication Agent** is also set to default.

Follow these steps to restore the HP printer to factory defaults:

1. On the printer's control panel, select [Administration](#) and then select the following menus:
 - [General Settings](#)
 - [Restore Factory Settings](#)

Figure 4-1 Administration menu

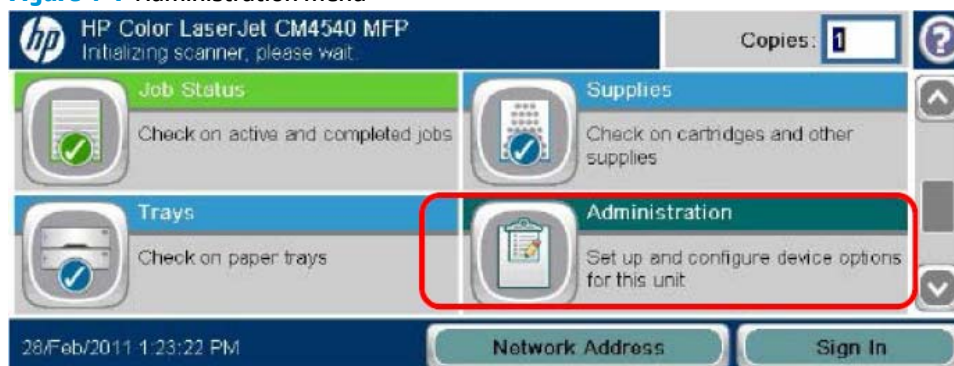


Figure 4-2 General Settings

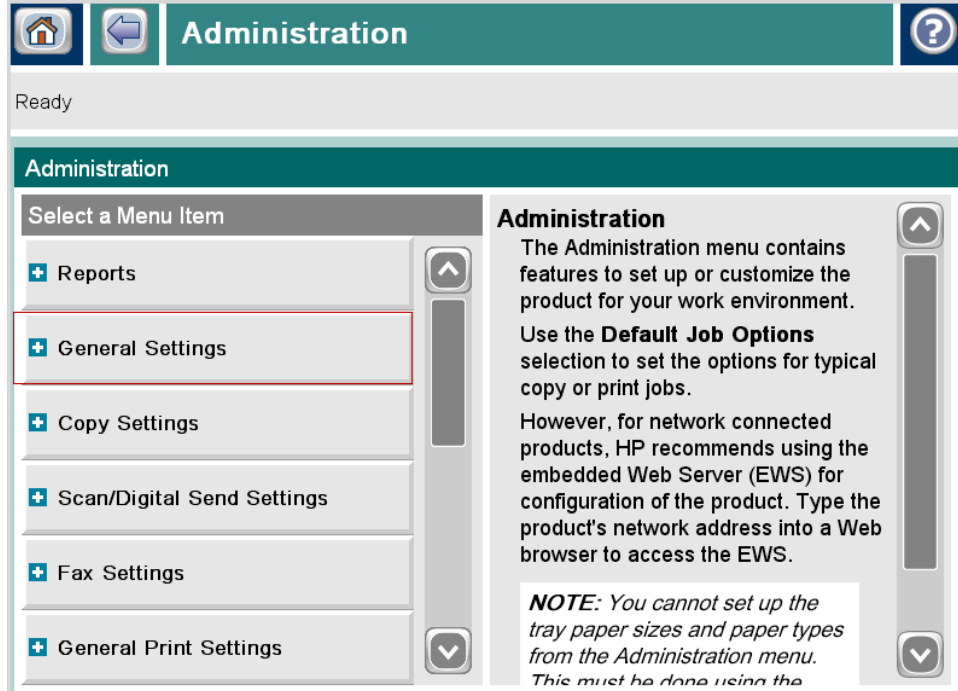
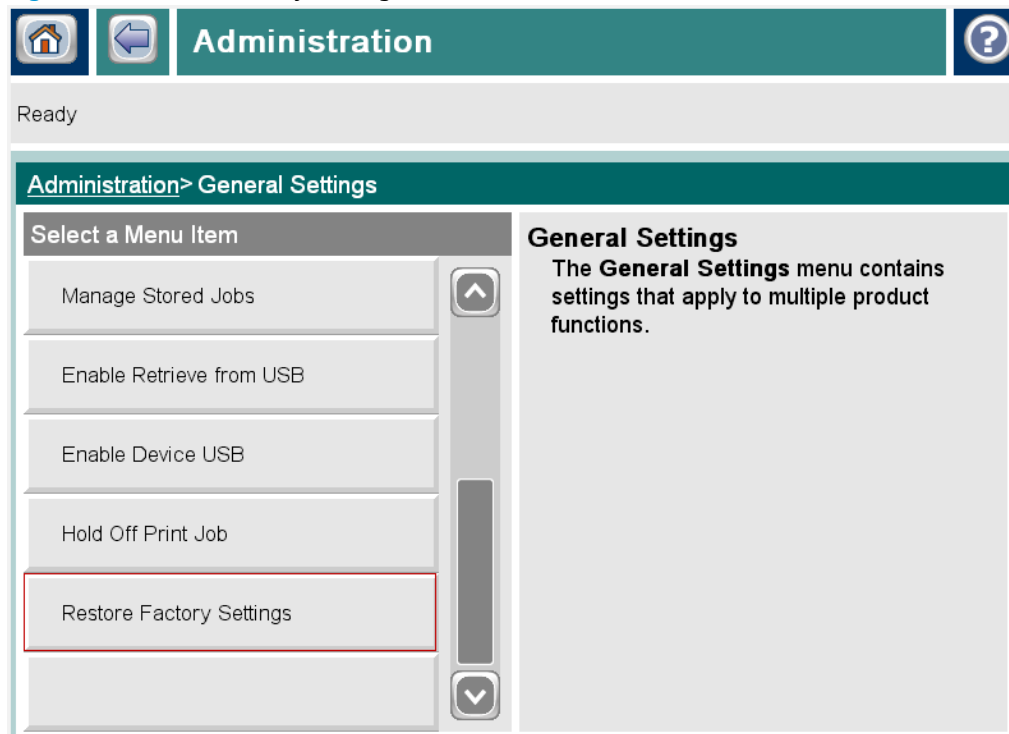



Figure 4-3 Restore Factory Settings



2. In **Restore Factory Settings**, select **Restore** or **Cancel**.

 **NOTE:** Access code might be required to select this option.

3. Make sure to check and set the following settings before using the printer

- Date and Time (Time Zone)
- Network Settings (IP, DNS)
- Certificates
- Control Panel Customization

Drag icons off the homescreen that are not used and place them in the lower section.

Preboot Menu

This section provides instructions on how to perform a [Partial Clean](#) using the printer's control panel when an error message displays on the control panel screen while rebooting.

The [Partial Clean](#) option removes all data except the firmware from the repository location where a backup copy of the master firmware bundle is downloaded and saved. When selecting this option, it allows a disk to be reformatted by removing the firmware image from the active directory without having to download new firmware code and the printer is bootable.

Partial Clean is similar Disk Initialization and Partial NVRAM in legacy firmware.

⚠ WARNING! Do not select [Format Disk](#). This option performs a disk initialization for the entire disk, cleans all disk partitions, and removes all data. All custom settings, third-party solutions, firmware files, and the operating system are completely lost. A delete confirmation prompt is not provided. The system is not bootable after this action—a firmware download via an approved portable HDD must be performed to return the system to a bootable state

Follow these steps to perform a Partial Clean on the printer's control panel:

📝 NOTE: Before performing a Partial Clean, make sure to back up the printer's configuration data.

To restore the customer-defined settings, select the [Backup/Restore](#) option in the [Device Maintenance](#) menu.

1. Turn the printer Off and then On.

Wait for the Ready and Attention LEDs to illuminate and then dim out.

2. On the printer's control panel screen, touch the HP logo when **1/8** displays below the logo to open the Preboot menu.

-or-

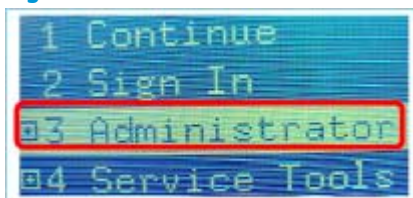
Turn the printer Off and then On, and when the HP logo displays on the control panel and all three Ready, Data, and Attention LEDs illuminate solid, press **⊗**

-or-

For M4555 and CM4540, press the Stop button **⊗** when the LED lights are illuminated.

3. Depending on your printer (Touchscreen or LCD control panel), perform one of the following tasks:
 - Use the touch screen scrollbar or touch the down arrow ▼ to select [Administrator](#), and then touch [OK](#).OR
 - Press **3** (up) or **9** (down) keys to highlight the [Administrator](#) menu, and then press **6** to open the selected menu.

Figure 4-4 Preboot menu



4. Depending on your printer, perform one of the following tasks:

Use the touch screen scrollbar or touch the down arrow ▼ to select **Partial Clean**, touch **OK**, and then touch **OK** again.

OR

Press **3** (up) or **9** (down) keys to highlight the **Partial Clean** menu, and then press **6** to open the selected option.

Figure 4-5 Partial Clean option



5. Depending on your printer, perform one of the following tasks:

Touch the Back button ↶, touch **Continue**, and then touch **OK**.

OR

Press **5** or the **Back** button to return to the first menu and then press **6** to select **Continue**.

The printer should continue to boot up.

 **NOTE:** A reboot will automatically restore the firmware files from the repository, but does not restore any customer-defined settings.

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6. TO THE EXTENT ALLOWED BY LOCAL LAW, THE ABOVE WARRANTIES ARE EXCLUSIVE AND NO OTHER WARRANTY OR CONDITION, WHETHER WRITTEN OR ORAL, IS EXPRESSED OR IMPLIED AND HP SPECIFICALLY DISCLAIMS ANY IMPLIED WARRANTIES OR CONDITIONS OF MERCHANTABILITY, SATISFACTORY QUALITY, AND FITNESS FOR A PARTICULAR PURPOSE. Some countries/regions, states or provinces do not allow limitations on the duration of an implied warranty, so the above limitation or exclusion might not apply to you. This warranty gives you specific legal rights and you might also have other rights that vary from country/region to country/region, state to state, or province to province.

7. HP's limited warranty is valid in any country/region or locality where HP has a support presence for this product and where HP has marketed this product. The level of warranty service you receive may vary according to local standards. HP will not alter form, fit or function of the product to make it operate in a country/region for which it was never intended to function for legal or regulatory reasons.

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

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

Customer self-repair warranty service

HP products are designed with many Customer Self Repair (CSR) parts to minimize repair time and allow for greater flexibility in performing defective parts replacement. If during the diagnosis period, HP identifies that the repair can be accomplished by the use of a CSR part, HP will ship that part directly to you for replacement. There are two categories of CSR parts: 1) Parts for which customer self repair is mandatory. If you request HP to replace these parts, you will be charged for the travel and labor costs of this service. 2) Parts for which customer self repair is optional. These parts are also designed for Customer Self Repair. If, however, you require that HP replace them for you, this may be done at no additional charge under the type of warranty service designated for your product.

Based on availability and where geography permits, CSR parts will be shipped for next business day delivery. Same-day or four-hour delivery may be offered at an additional charge where geography permits. If assistance is required, you can call the HP Technical Support Center and a technician will help you over the phone. HP specifies in the materials shipped with a replacement CSR part whether a defective part must be returned to HP. In cases where it is required to return the defective part to HP, you must ship the defective part back to HP within a defined period of time, normally five (5) business days. The defective part must be returned with the associated documentation in the provided shipping material. Failure to return the defective part may result in HP billing you for the replacement. With a customer self repair, HP will pay all shipping and part return costs and determine the courier/carrier to be used.