

Printer Profile Manager Enterprise

Version 4.3



ZEBRA

Installation Guide

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About This Document

This section provides you with contact information, document structure and organization, and additional reference documents.

Who Should Use This Document

This Installation Guide is intended for use by any person who needs to perform installation, routine maintenance, upgrade, or troubleshoot problems with the printer.

How This Document Is Organized

The Installation Guide is set up as follows:

Section	Description
Installation, Upgrade, and Uninstall on page 6	This section includes the procedure to install Printer Profile Manager Enterprise (PPME), upgrade, and uninstall it.
License on page 37	This section provides general and specific information about the license.
LDAP User Directory Configuration on page 43	This section provides you with contact information, document structure and organization, and additional reference documents.
Troubleshooting on page 45	This section provides assistance with installation and other known issues.

Installation, Upgrade, and Uninstall

This section includes the procedure to install Printer Profile Manager Enterprise (PPME), upgrade, and uninstall it.

System Requirements

Supported Operating Systems

Windows:

- Windows Server® 2019, 64-bit processor
- Windows Server® 2022, 64-bit processor
- Windows Server® 2025, 64-bit processor
- Windows® 10, 64-bit processor
- Windows® 11, 64-bit processor

Browsers

- Chrome versions in Google's stable release channel.

Minimum System Requirements

CPU cores: 8

Memory (RAM): 16GB

Minimum: 50GB available drive space

Recommended System Requirements

CPU cores: 8

Memory (RAM): 32GB

Minimum: 100GB available drive space



NOTE: Using the printer analytics or battery management functions will require up to 1TB of disk space. Please refer to the Printer Profile Manager Enterprise User Guide for more information on these features.

Printer Requirements

Printers must run Link-OS 5.0 or later in order to connect to PPME.

Printers must run Link-OS 6.0 or later in order to use the Certificate Management feature.

Printers must run Link-OS 6.6 or later in order to use the SGD escape syntax in a Certificate Management Item subject alternative name field.

Printers must run Link-OS 7.0 or later in order to use IPv6 network connectivity.

Network Access Requirements

Internet Access



IMPORTANT: PPME requires internet access for the following functions:

- Trial activation*
- License activation*
- License deactivation*
- License update for add-on orders*
- Access to product help
- Printer and application analytics (optional)



NOTE:

- *Access to <https://zebratechnologies.prod.sentinelcloud.com:443/> is required for license related actions.
- Previous versions of PPME used port 80. Port 443 is used in version 3.2 and later.

Internal Network Outgoing Ports

Zebra printers support a discovery process that utilizes UDP on port 4201.

Initial printer configuration may use TCP ports 9100, 9200, or 6101.

If using LDAP, additional ports may need to be opened.

Server Access (Incoming Ports)

The server firewall should be configured to only allow the following incoming ports:

- Port 8443: printer connections
- Port 443: client connections



Best Practice: Zebra recommends that PPME is installed on a physical or virtual server that complies with Microsoft [Windows security baselines](#). Local access to the server should only be by an administrator for software updates, maintenance, and backup. It should not be used as a workstation.

Figure 1 System Overview Diagram

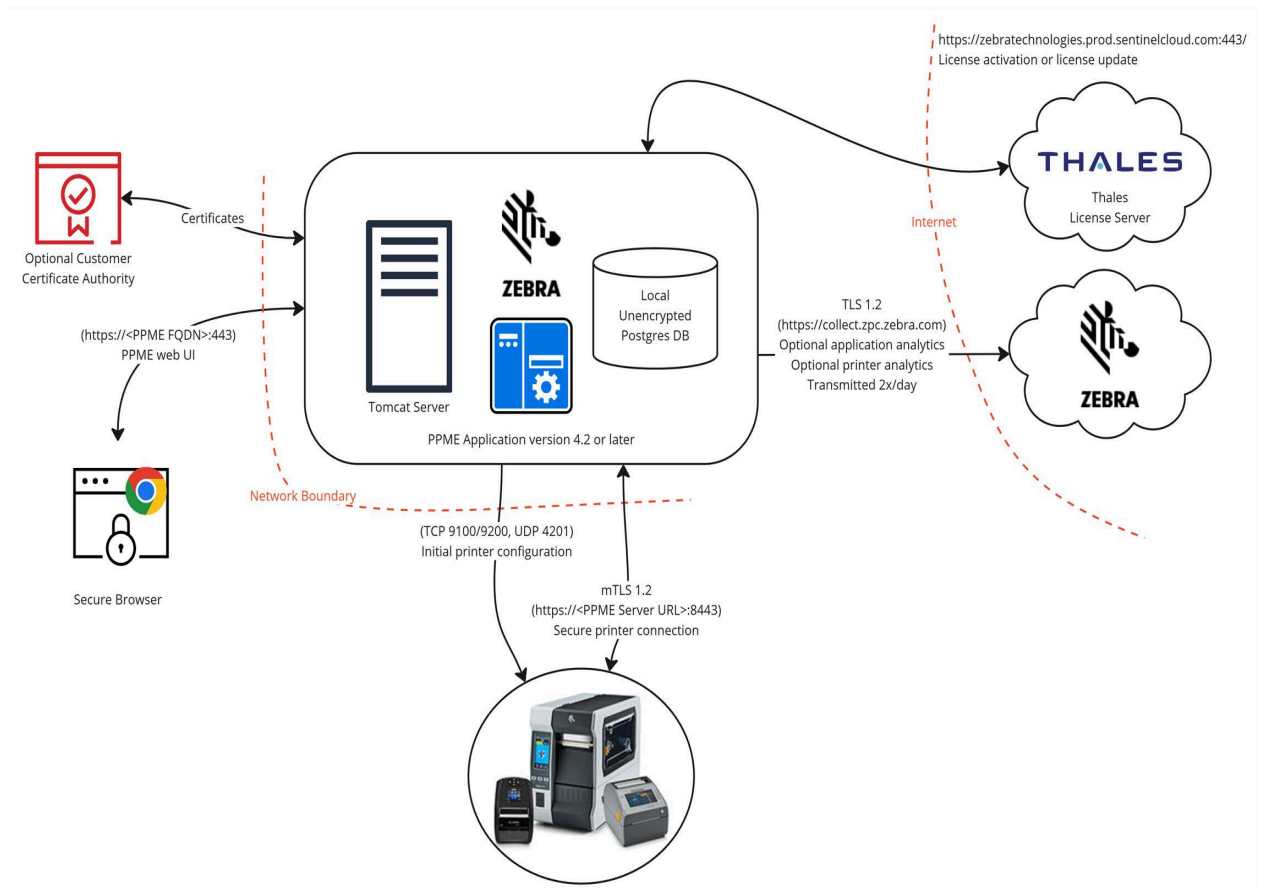
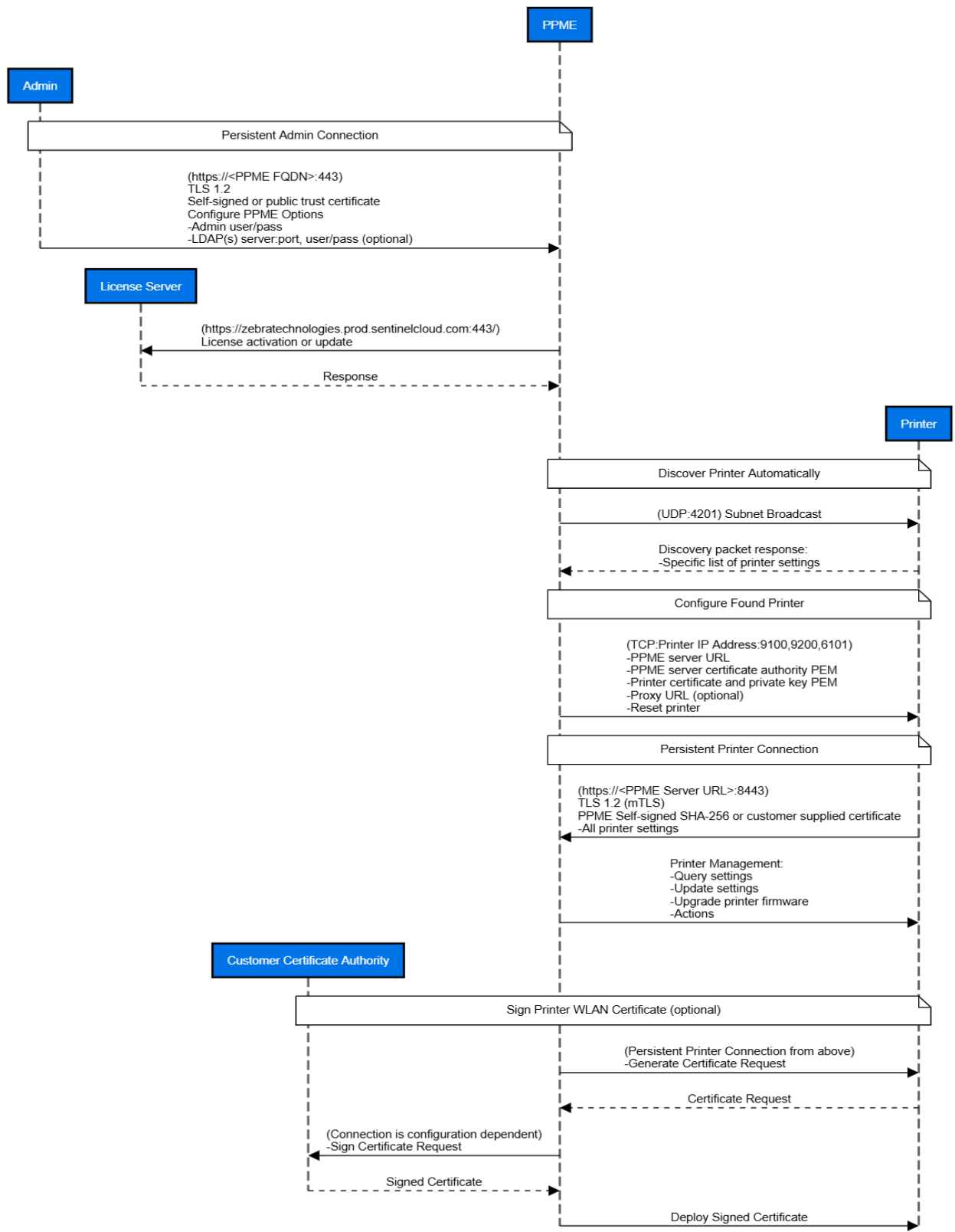


Figure 2 Data Flow Diagram



Before You Begin

Ensure that your system clock and time zone are set properly before beginning the installation.



CAUTION: If your server clock is not set to the current time, you will experience issues with installation, provisioning events, operations log, and licensing.

If you have a version of PPME currently installed, continue with [Backup PPME on page 12](#), and then proceed to [Upgrading PPME on page 32](#).

If you do not have a version of PPME installed, proceed to [Installation on page 14](#).

Information Checklist for Installation

The following is a list of information that the user setting up the administrator (admin) account must have before he begins the installation. If you have made changes to these assumptions (location, user, or directory), substitute your changes in the steps, as needed.

1. Installation location: The default location is **C:\Program Files\Zebra Technologies\Printer Profile Manager Enterprise**
2. Local PPME directory: The default location for versions later than v3.3.7607 is:
%PROGRAMDATA%\Zebra Technologies\Printer Profile Manager Enterprise\PPME
3. Administrator account information:
 - a. Full Name
 - b. Username
 - c. Email Address
 - d. Password
4. Server
 - a. Fully Qualified Domain Name (FQDN)
 - b. Do you wish to Use Detected FQDN? (Checkbox)
5. PPME License code or Use in Evaluation Mode (Checkbox for Use in Eval. Mode)
6. Network IP Addressing:
 - a. DHCP or Static/Permanent IP addressing (Radio buttons)
 - b. DNS Server List
The DNS Server List is a space-delimited list of DNS Server IP addresses. Ensure that each IP address is a valid address and that the addresses are separated by a space. The total list of addresses should not be longer than 255 characters.
 - c. DNS Domain Name
The DNS Domain Name needs to be a valid DNS name (for example, no white space in the name and no longer than 255 characters).
7. Outgoing Email Server (SMTP Server)
 - a. SMTP Server Host Name
 - b. Port

- c. From Address
 - Spaces or other whitespaces in the email address is a common cause for failure when requesting a certificate.
 - d. Enable SSL and Require Authentication (Checkboxes)
 - e. (Optional) Do you wish to Send Test Email or skip to refrain from sending the test email.
- 8. Certificate Creation details:
 - a. Company name
 - b. Department
 - c. Address
 - d. City
 - e. State
 - f. Country
 - g. Postal Code
 - h. Email address
 - i. Phone number
 - j. Server Name (Fully Qualified Domain Name)
- 9. Type of Server's SSL Certificate
 - a. SHA-2: Self-Signed Certificate
- 10. For SHA-2 certificate, you will need the Password and Port number.

Backup PPME

Key Assumptions

If you have made changes to these assumptions (location, user, or directory), substitute your changes in the steps, as needed.

- Assume the location of installation is **C:\Program Files\Zebra Technologies\Printer Profile Manager Enterprise**
- Assume the local user is **Administrator**



NOTE: Versions later than v3.3.7607 do not install anything under user profile folders.

- Assume the local PPME directory is located at:
 The default location in v3.3.7607 and prior versions is: **%USERPROFILE%\PPME**
 The default location for versions later than v3.3.7607 is:
 %PROGRAMDATA%\Zebra Technologies\Printer Profile Manager Enterprise\PPME



IMPORTANT: If you are using the same server, printers will not connect after an uninstall or re-install. If you save the certificate, then you are able to re-use it. If you have not saved it, you will not be able to re-use it.

Stop Services

This section directs you to “stop an “xyz” service”. You may stop a Microsoft service using several methods:

- Services Window
- net Command
- Sc Command
- Task Manager
- PowerShell

To stop services using the Task Manager, perform the following steps:

1. Open the Task Manager (**CTRL+SHIFT+ ESC**).
 - Click the **Services** tab at the top of the Task Manager window.
2. To stop the **Printer Profile Manager Enterprise** service (ppme-service):
 - a. Select the name of the service.
 - b. Right-click on the service.
 - c. Select **STOP** to stop the specific service.
3. To stop the '**Printer Profile Manager Enterprise Database x.x.xxxx**' service (Printer Profile Manager Enterprise Database x.x.xxxx): (Where x.x.xxxx indicates the version number of the software.)
 - a. Select the name of the service.
 - b. Right-click on the service and select **STOP** to stop the specific service.

4. Close the Task Manager window.

To backup your installation, perform the following steps:

1. Backup the following directories:

In v3.3.7607 and prior versions:

%USERPROFILE%\PPME

%LOCALAPPDATA%\Printer Profile Manager Enterprise

In versions later than v3.3.7607:

%PROGRAMDATA%\Zebra Technologies\Printer Profile Manager Enterprise

2. Backup the 'C:\Program Files\Zebra Technologies\Printer Profile Manager Enterprise' directory.
3. Start the 'Printer Profile Manager Enterprise Database x.x.xxxx' service using Task Manager. (Where x.x.xxxx indicates the version number of the software.)
4. Start the 'Printer Profile Manager Enterprise' service using Task Manager.

Installation

The PPME Installation consists of two parts: the File Deployment and the Application Setup Wizard. Both parts must be completed to use and access the PPME application.



IMPORTANT: Internet access is required to complete the installation of PPME.

File Deployment

This section shows the screens you will see during the file deployment portion of the installation.

1. Log into the server (where you wish to install PPME) as an Administrator.
2. To launch the Printer Profile Manager Enterprise (PPME) installer, double-click on **PPMEx.x.xxxx.exe**.
(where x.x.xxxx indicates the version number of the software)

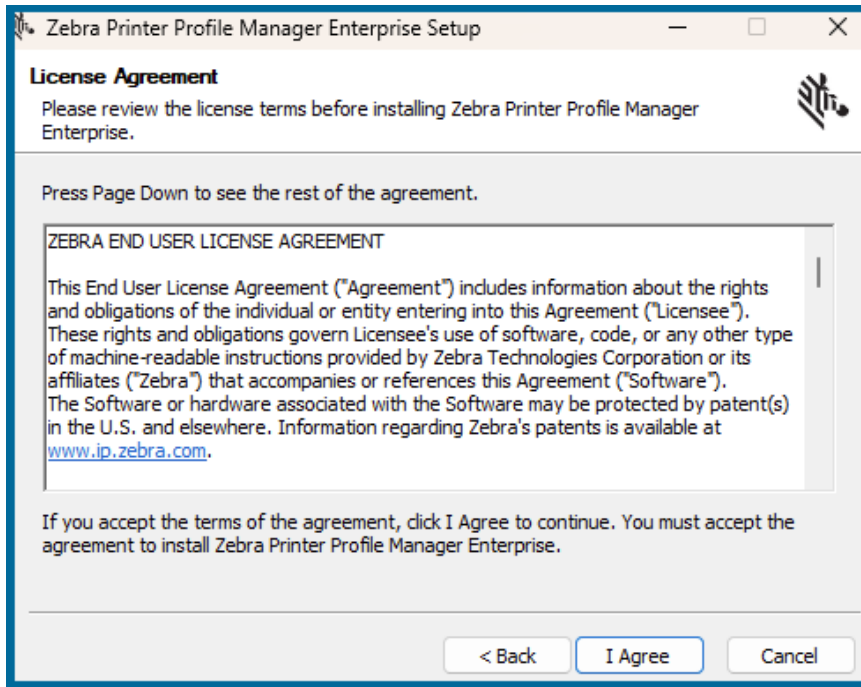
Figure 3 Welcome Dialog



3. Click **Next** to continue.

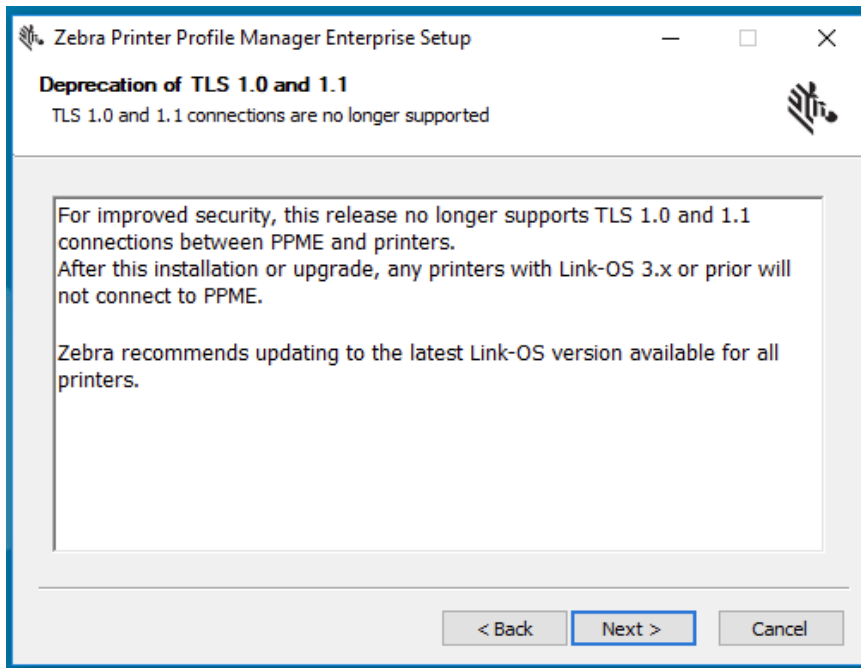
The **License Agreement** dialog displays.

Figure 4 License Agreement Dialog



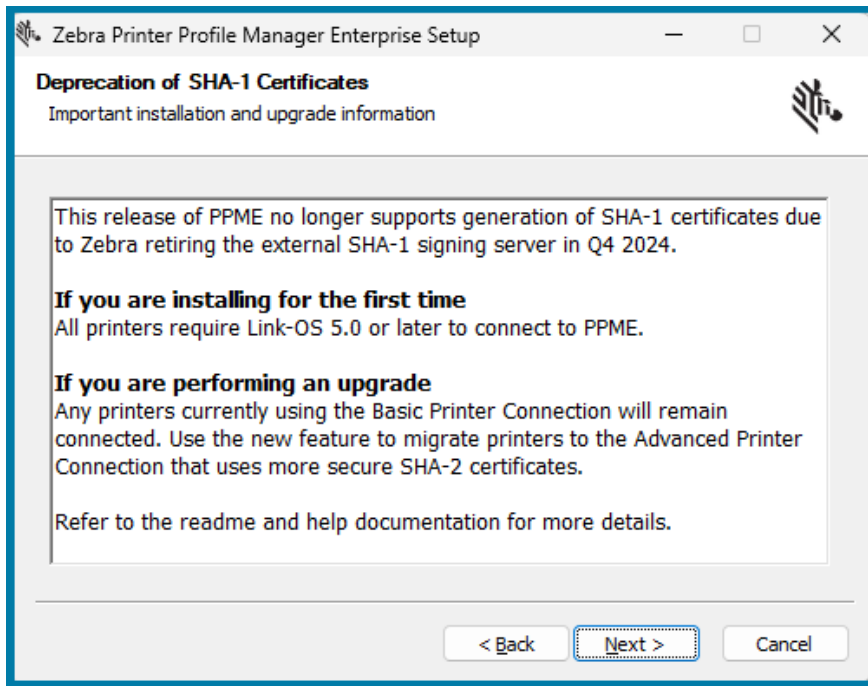
4. Click **I Agree** to accept the terms of the license agreement.

Figure 5 Deprecation of TLS 1.0 and 1.1 Dialog



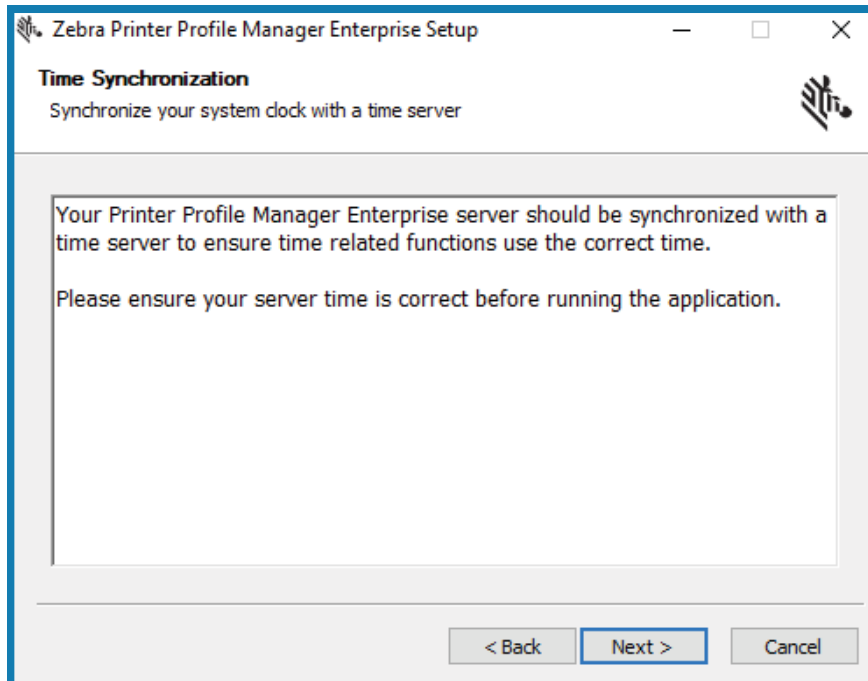
5. Click **Next** on the Deprecation of TLS 1.0 and 1.1 screen.

Figure 6 Deprecation of SHA-1 Certificates Dialog



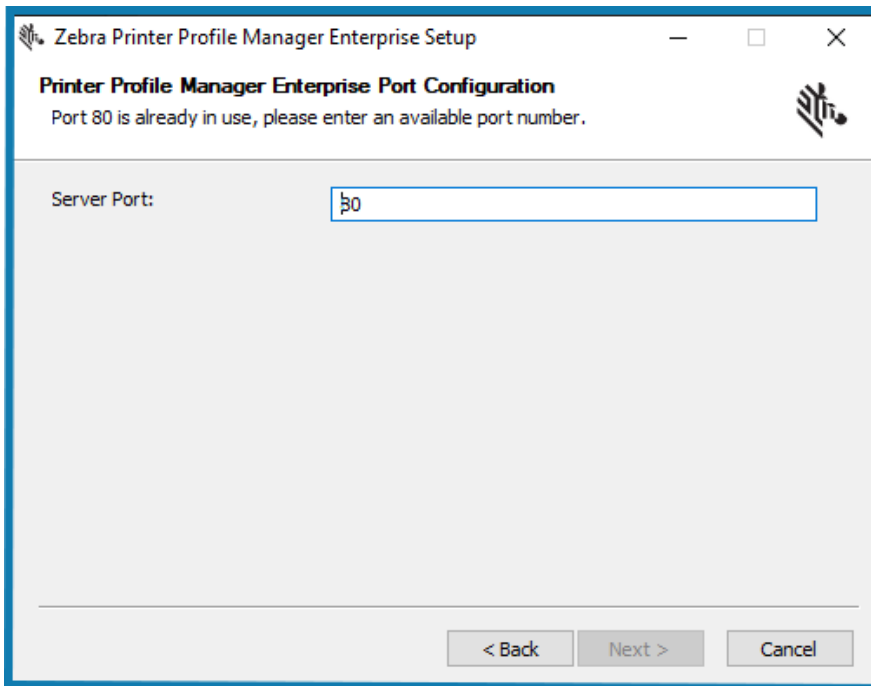
6. Click **Next** on the Deprecation of SHA-1 Certificates screen.
7. Ensure that your server's system clock is synchronized with a time server.

Figure 7 Time Synchronization Dialog



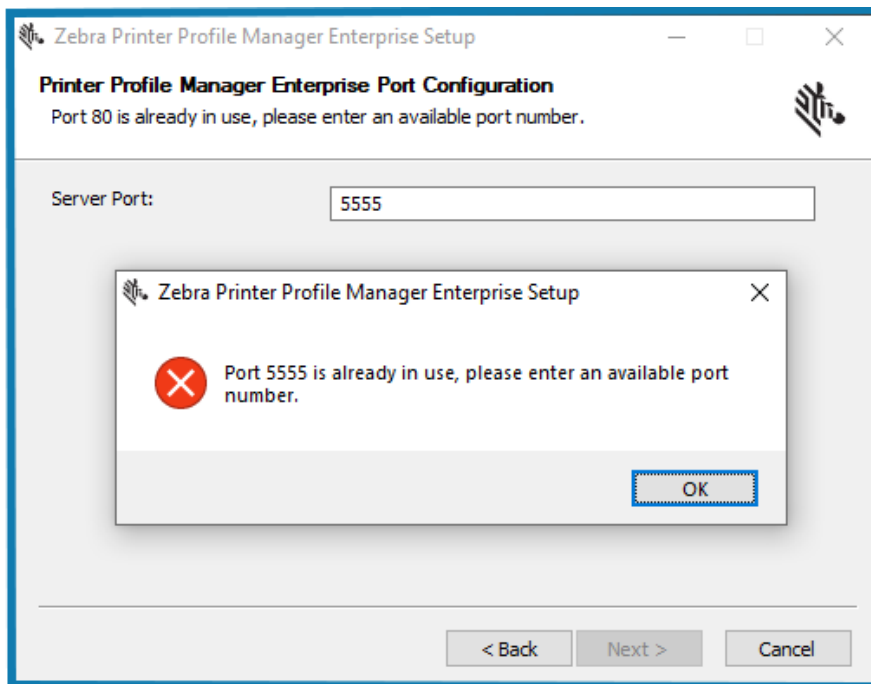
8. Click **Next** to continue.

Figure 8 Port Configuration Dialog



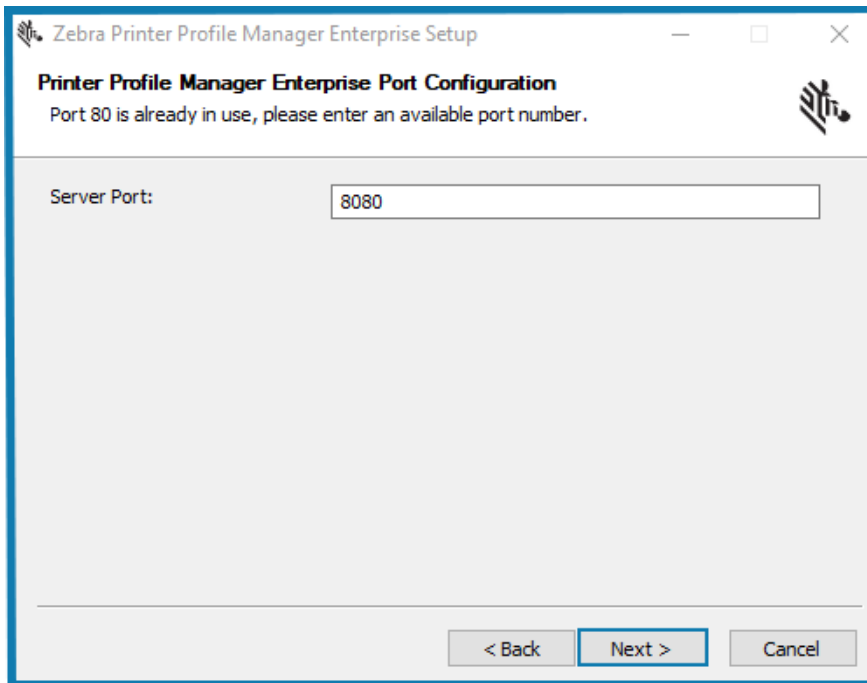
9. The availability of port 80 will be detected. The port configuration dialog will only display if port 80 is in use on your server.

Figure 9 Port Configuration Error Dialog



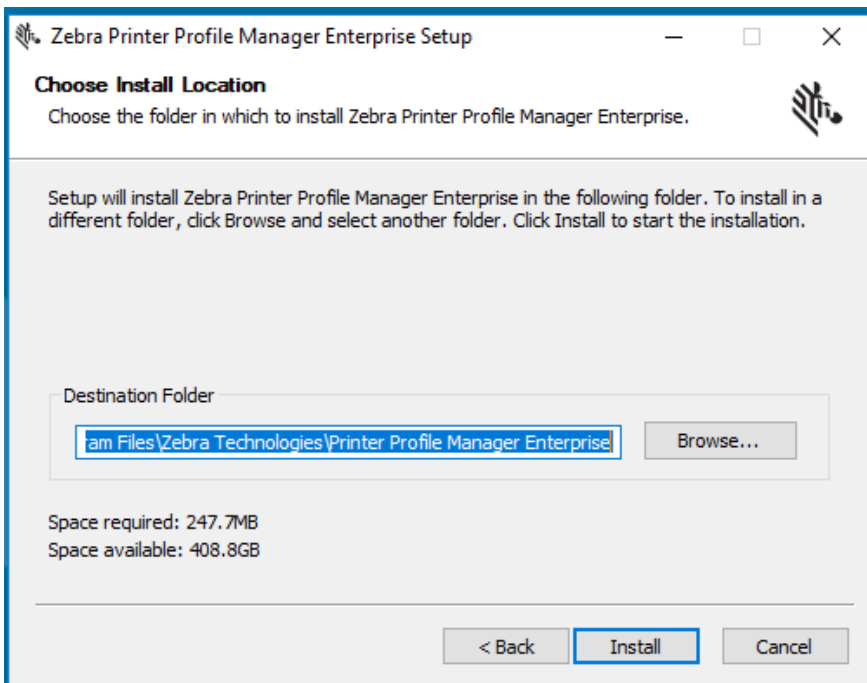
10. Enter an available port number in the **Server Port** field. The port number entered will be checked and must be available in order to continue. If not, an error dialog will display.

Figure 10 Available Port Number Dialog



11. Once an available port number is entered (for example, 8080), click **Next** to continue. The **Installation Location Dialog** displays (Figure 11).

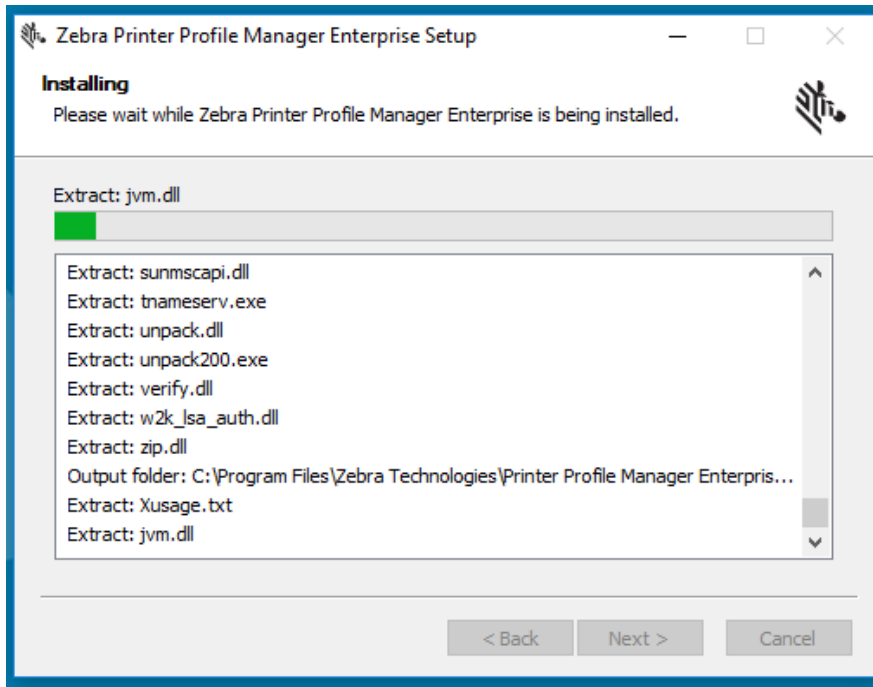
Figure 11 Printer Profile Manager Enterprise Installation Location Dialog



12. Click **Install** to begin the installation.

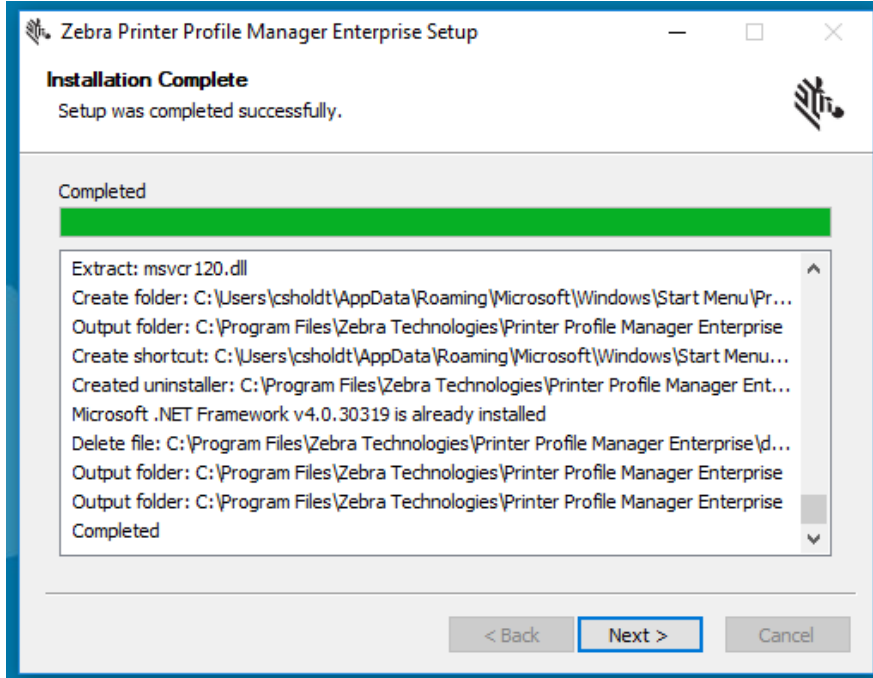
The **Installing** dialog displays (Figure 12 on page 19).

Figure 12 Installing Dialog



The **Installation Complete** dialog displays.

Figure 13 Installation Complete Dialog



13. Click **Next** to continue.

The **Starting Required Services** dialog displays.

Figure 14 Starting Required Services Dialog

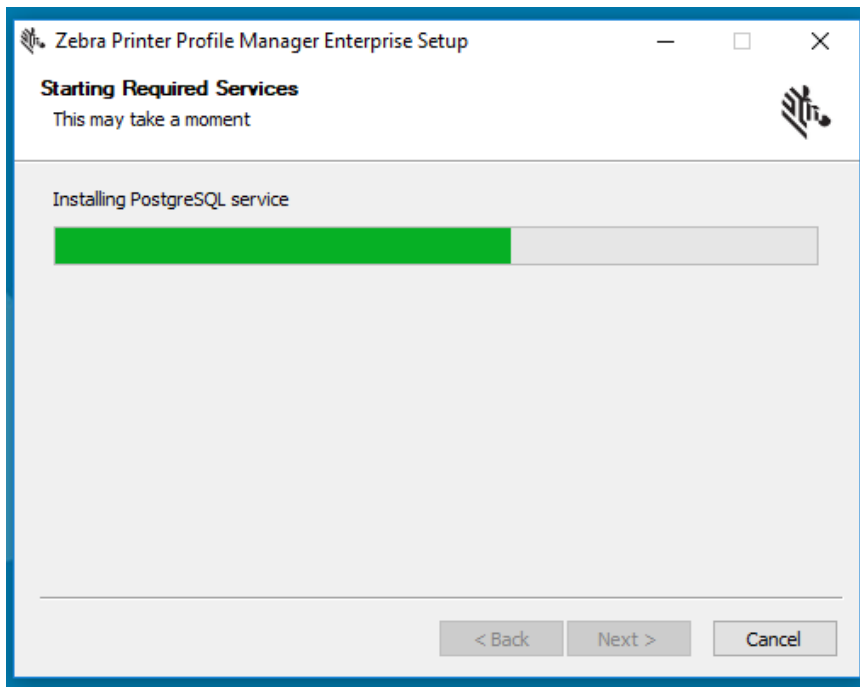
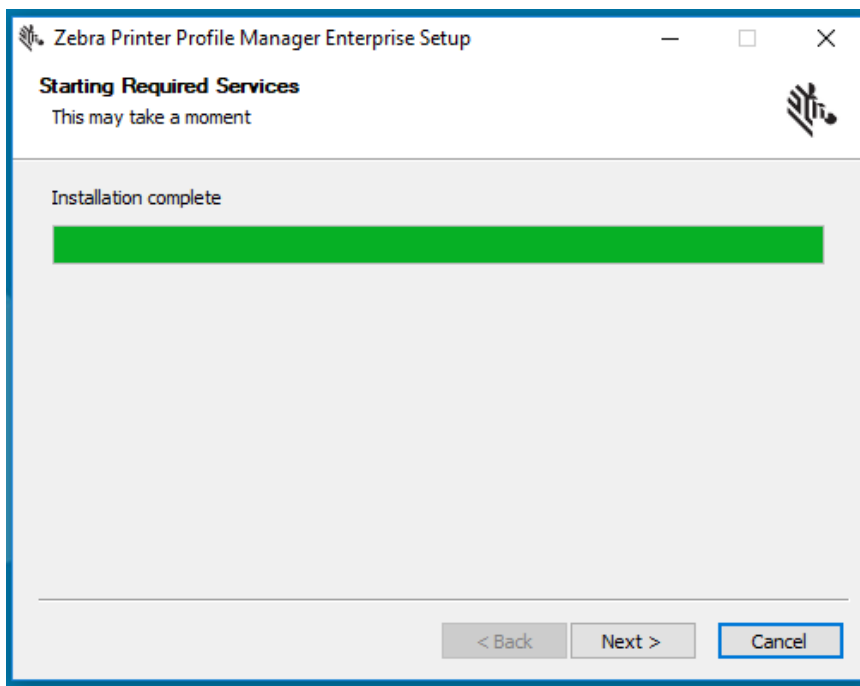
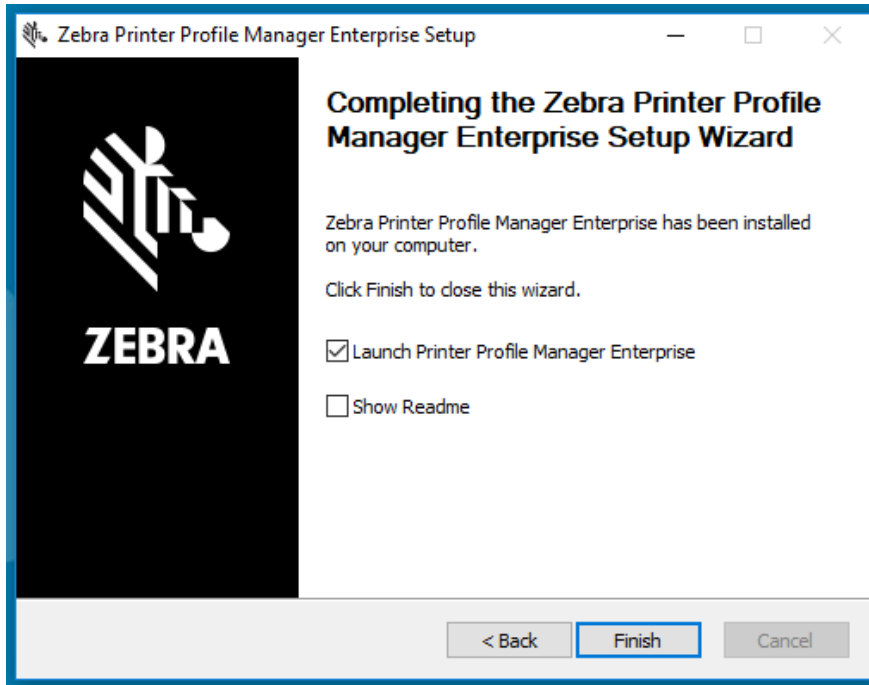


Figure 15 Starting Required Services Installation Complete Dialog



Once the Required Services are complete, the **Setup Wizard Complete** dialog displays.

Figure 16 Setup Wizard Complete Dialog



14. Click **Finish** to close the Setup Wizard.

Ensure that the checkbox is checked.

A browser window will display.



NOTE: If the browser window doesn't connect immediately, be patient, refresh your screen as PPME services may still be starting.

Chrome Browser

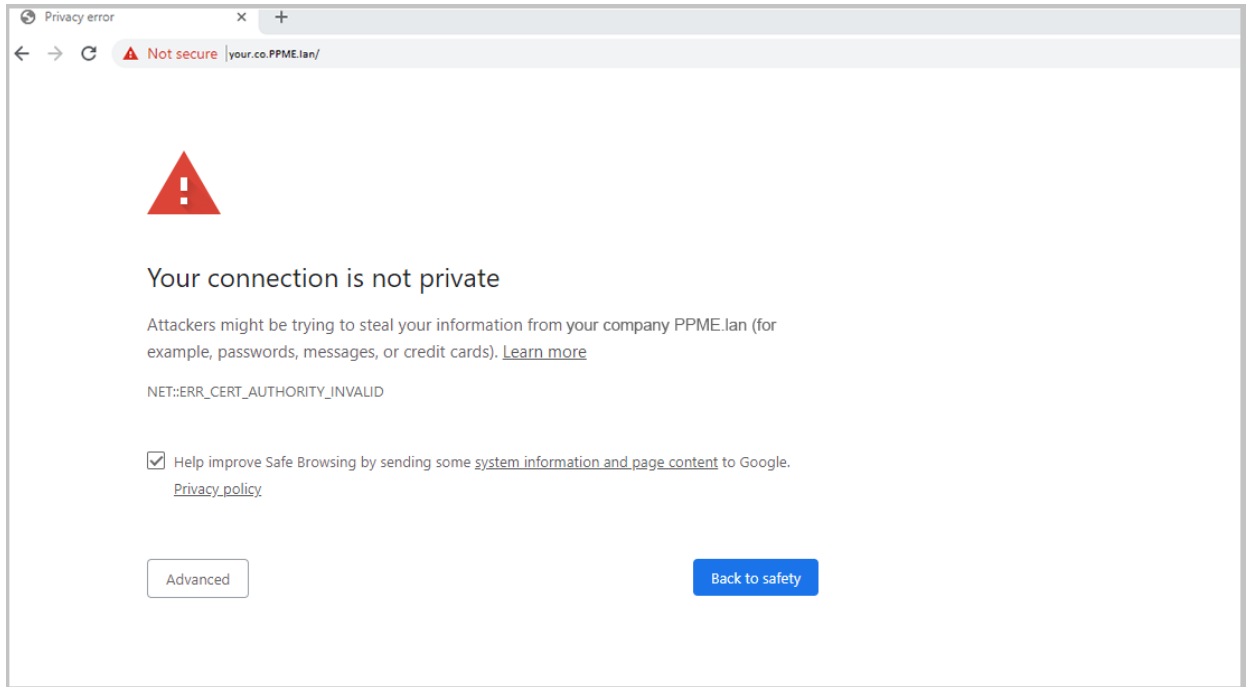
If this is the first time you are logging into PPME and you use Chrome as your browser, you may see the Privacy Error warning. The notification displays will display because PPME generates a self-signed certificate to secure your initial connection.

Click **Advanced** to continue to the Setup Wizard where you will be guided to set up PPME.



Warning: Do not click on **Back to Safety** or close the browser window without saving the PPME URL.

Figure 17 Privacy Error Warning



Application Setup Wizard

Introduction to the Setup Wizard

Figure 18 is a complete screenshot of the PPME Application Setup Wizard. To improve readability, all other screens for the Application Setup Wizard are cropped and the size has been increased.

Figure 18 Full Screenshot of PPME Application Setup Wizard

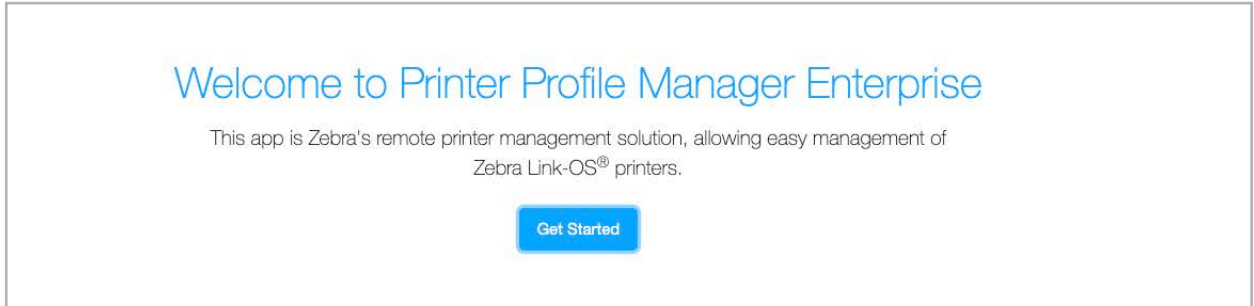
The screenshot displays the 'Setup Wizard' window for 'Server Name'. At the top left is a progress bar (1). The title bar includes a gear icon for 'Setup Wizard' (2) and the 'ZEBRA' logo (3). The main content area asks, 'Is this the fully qualified domain name for this server?' (4) and provides a text input field for the 'Fully Qualified Domain Name (FQDN)' (5). Below the input field is a checkbox labeled 'Use Detected FQDN'. A blue 'Continue' button (6) is positioned to the right of the input field. At the bottom of the window are 'Back' (8) and 'Help' (7) buttons.

1	Progress bar
2	Purpose (or main focus) of this screen
3	Zebra logo
4	Information button provides additional information. (Click on the icon to open it.)
5	Fields to fill in
6	Continue button advances to the next screen
7	Help button
8	Back button returns to the previous screen

Setup Wizard

The Welcome dialog displays.

Figure 19 Welcome Dialog



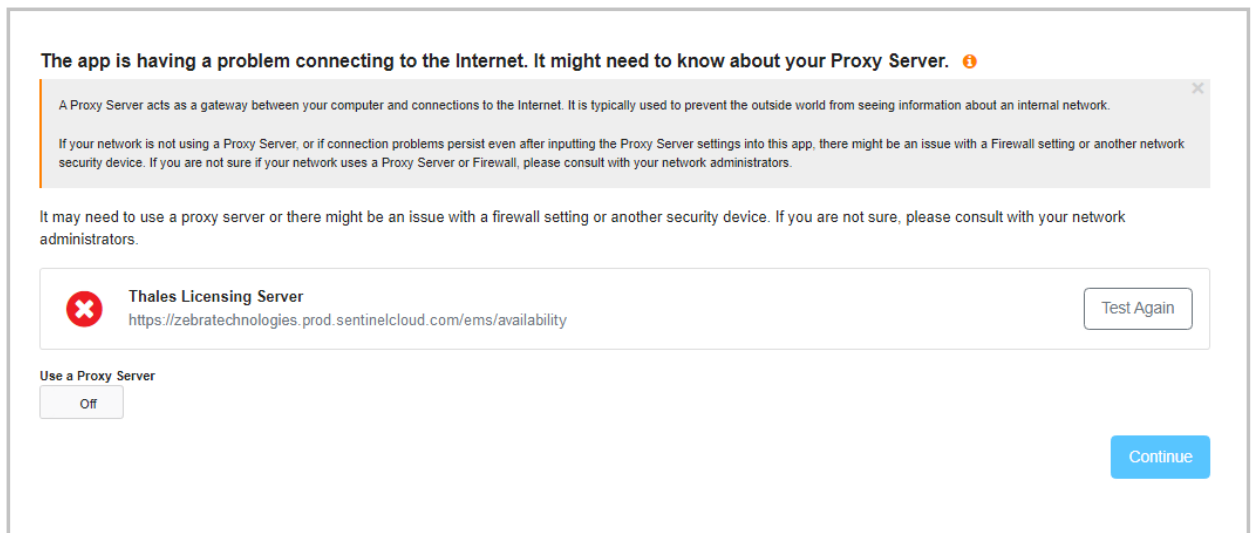
1. Click **Get Started** to continue.

The Administrator Account dialog displays.



NOTE: If you cannot access the Thales Licensing Server, [Figure 20](#) displays. You **must** be able to connect to the server to continue.

Figure 20 Issue Connecting to Thales Licensing Server Dialog



2. See [Figure 21](#). Fill in the fields to create your Admin account.



NOTE: The Admin username is the role with a complete set of permissions and functionality.

- Enter the **Full Name**, **Username**, **Email Address**, and **Password** fields.

3. Click **View EULA**, and then click **Accept EULA and Continue**.

Figure 21 Administrator Account Dialog

The first step is to create your administrative account. ⓘ

This initial Administrator account is needed to complete the preliminary setup process, including inviting other users.

We recommend using a strong password and keeping these credentials in a safe place.

Here are the password requirements. The password must:

- Be between 8 characters and 64 characters long
- Use at least one uppercase and one lowercase letter
- Contain at least one number
- Have at least one of these special characters: - ~ ! @ # \$ % ^ & * () _ + ' = { } | [] \ ; ' : " , . / < > ?

Full Name
Required

Username
Required

Email Address
Required

Password
Required

Verify

[View EULA](#) [Accept EULA and Continue](#)

The Server Accessibility dialog displays.

4. See [Figure 22](#). Enter the **Fully Qualified Domain Name (FQDN)** or click the checkbox to **Use Detected FQDN**.
5. Click **Continue**.

Figure 22 Server Accessibility Dialog

Next, let's make sure your app can connect to the Internet. ⓘ

The complete domain name for this server is vital for this application to properly work. It is recommended that you do not change the value below unless you are certain it is correct.

Fully Qualified Domain Name (FQDN)
your.co.PPME.lan

☒ Use Detected FQDN

[Continue](#)

The Server License dialog displays.

6. See [Figure 23](#). Enter your license code to register or select **Use in Evaluation Mode**, and then click **Continue**.

Figure 23 Server License Dialog



The next step is to activate your software license key or choose to use the software in evaluation mode. ⓘ

You have 30 days to evaluate this software - or enter your license code below to register it.

License Code

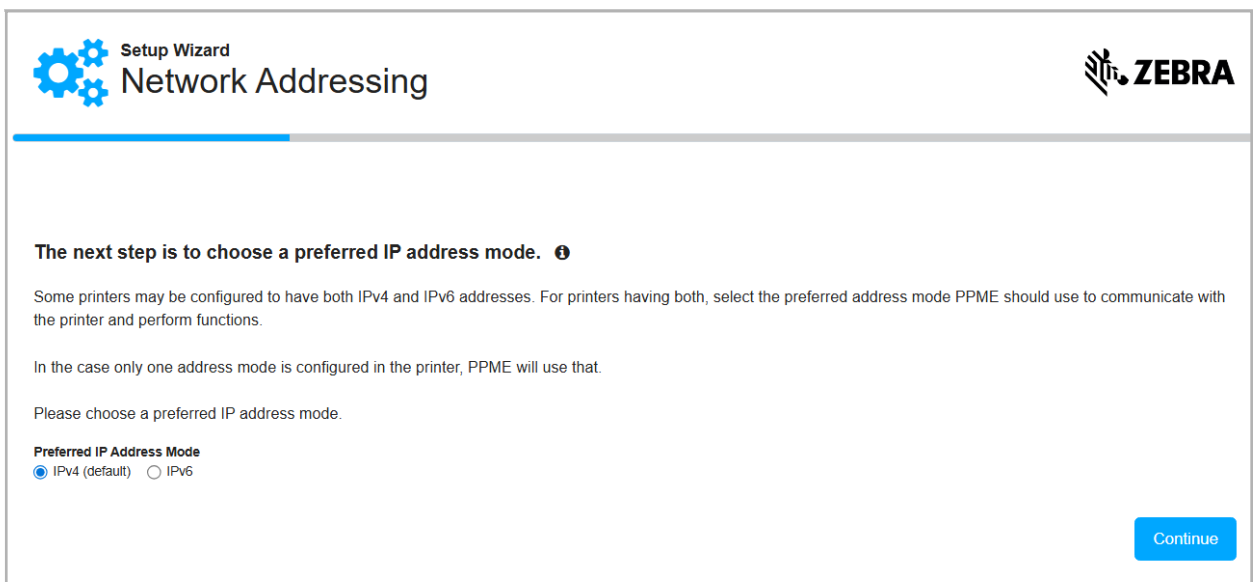
☒ Use in Evaluation Mode

Continue

The Preferred IP Address Mode dialog displays.

7. See [Figure 24](#). Select IPv4 or IPv6, and then click **Continue**.

Figure 24 Preferred IP Address Mode



Setup Wizard

Network Addressing

ZEBRA

The next step is to choose a preferred IP address mode. ⓘ

Some printers may be configured to have both IPv4 and IPv6 addresses. For printers having both, select the preferred address mode PPME should use to communicate with the printer and perform functions.

In the case only one address mode is configured in the printer, PPME will use that.

Please choose a preferred IP address mode.

Preferred IP Address Mode

☒ IPv4 (default) ☐ IPv6

Continue

The Network Addressing dialog displays.

8. See [Figure 25](#). Click the radio button for **DHCP** or **Static/Permanent** IP addressing.
9. Enter the **DNS Server List** and **DNS Domain**.



NOTE: The DNS Server List is a space-delimited list of DNS Server IP addresses. Ensure that each IP address is a valid address and that the addresses are separated by a space. The total list of addresses should not be longer than 255 characters.



NOTE: The DNS Domain Name needs to be a valid DNS name (for example, no white space in the name and no longer than 255 characters).

10. Click **Continue**.

Figure 25 Network Addressing Dialog

The next step is to look at how your printers get their Internet Protocol (IP) address. ⓘ

Please specify how IP addressing for your printers is handled within your network. This will help ensure the app and printers can communicate with each other.

Note: If your printers use both DHCP and Static, choose Static / Permanent.

IP Addressing
☒ DHCP ☐ Static / Permanent

DNS Server List

DNS Domain

[Continue](#)

The Outgoing Email Server dialog displays.

- See [Figure 26](#). Enter the SMTP server **Host Name**, **Port**, and **From Address**.



NOTE: Spaces or other whitespaces in the email address is a common cause for failure when requesting a certificate.

- If you select the checkboxes to **Enable SSL** and **Require Authentication**, enter the username and password.

- (Optional) Click **Send Test Email**.

Or, click **Skip** to refrain from sending the test email.

- Click **Continue**.

Figure 26 Outgoing Email Server Dialog

The next step is to configure the app to talk to your email server. ⓘ

This capability will be used to invite new users to the app, update the administrator and important events – and to help recover/reset passwords when necessary.

These settings are not required and can be added at a later time.

Host Name Port

From Address ☐ Enable SSL ☐ Require Authentication

Username Password

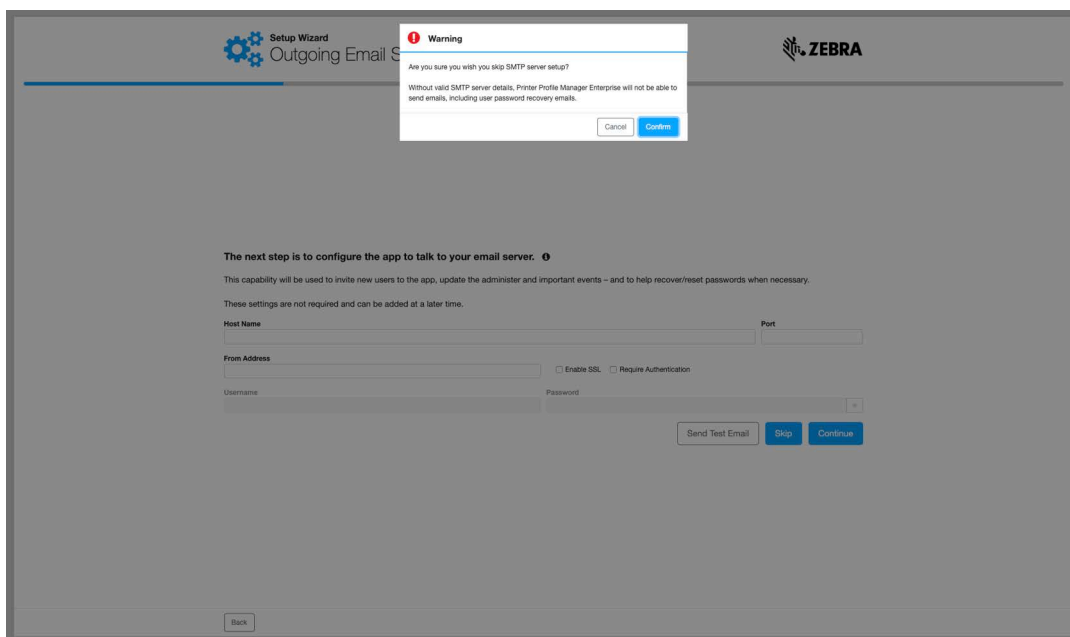
[Send Test Email](#) [Skip](#) [Continue](#)

- If you chose **Skip** on the previous screen, you must confirm the choice.

The Warning dialog displays.

- See [Figure 27](#). Click **Confirm** to skip the SMTP server setup or click **Cancel** to return to the previous screen.

Figure 27 Warning Dialog



The Certificate Creation dialog displays.

17. See [Figure 28](#). Enter the requested company information, for example, your company name, etc.

18. Click **Continue**.

Figure 28 Certificate Creation Dialog

Certificate Creation

The following information is needed for certificate creation in order to ensure encrypted communication between the server, printers, and users' web browsers.

Company

Department

Address

City

State

Country

Postal Code

Email Address

Phone Number

Server Name (Fully Qualified Domain Name)

Continue

Setting up the Advanced Printer Connection

The Advanced Printer Connection uses SHA-2 certificates.

1. See [Figure 29](#). Click **Generate** to create a SHA-2 Certificate or click **Back** to return to the previous screen.


Figure 29 Advanced Connection Dialog

Port and Certificates for the Advanced Connection ⓘ

In order to enable the Advanced Connection to your printers, we need to locally generate a SHA-2 certificate.

Port ☒ Use Default

AVAILABLE OPTIONS

 **Locally Generate the SHA-2 Certificates**
This is the fastest and easiest method of obtaining the necessary certificates.

Generate

Restore Using Backup

The Passwords for Locally Generated Certificates dialog displays.

2. See [Figure 30](#). Enter the **Server Certificate Password** and **Printer Certificate Password** number.
3. Click **Continue**.

Figure 30 Locally Generated Certificates Dialog

Passwords for Locally Generated Certificates ⓘ

We recommend the use of passwords when generating the required SHA-2 or greater certificates.

Server Certificate Password

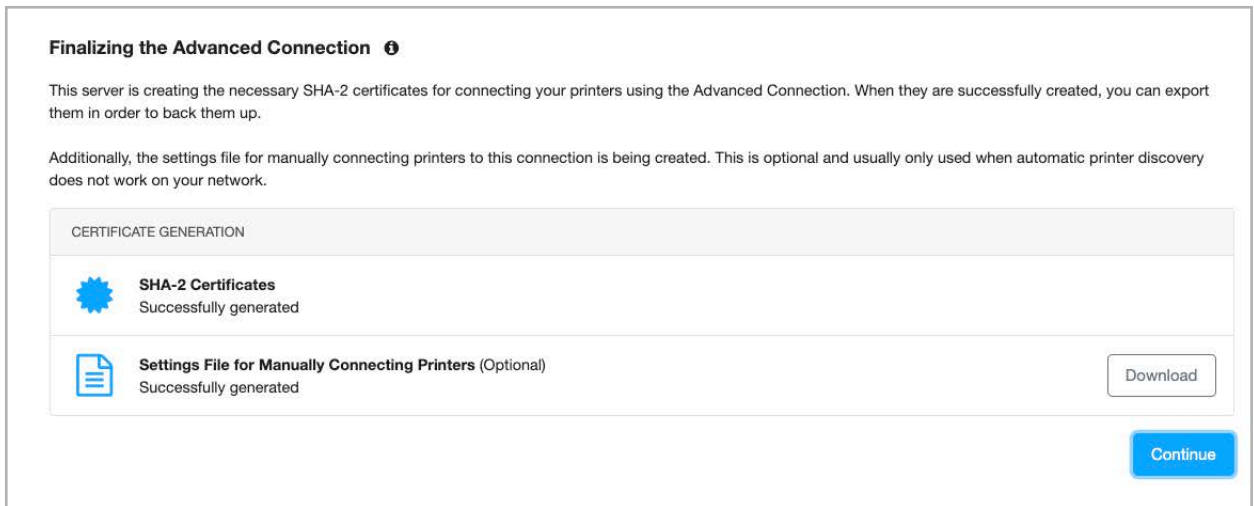
Printer Certificate Password

Continue

The Finalizing the Advanced Connection dialog displays.

4. See [Figure 31](#). (Optional) Click **Download** to save a copy of the printer settings if you need to manually connect your printer to PPME.
5. Click **Continue**.

Figure 31 Advanced Connection Dialog



The Backup Your Connection Settings and Certificates dialog displays.

6. Go to [Setup Complete on page 30](#).

Setup Complete

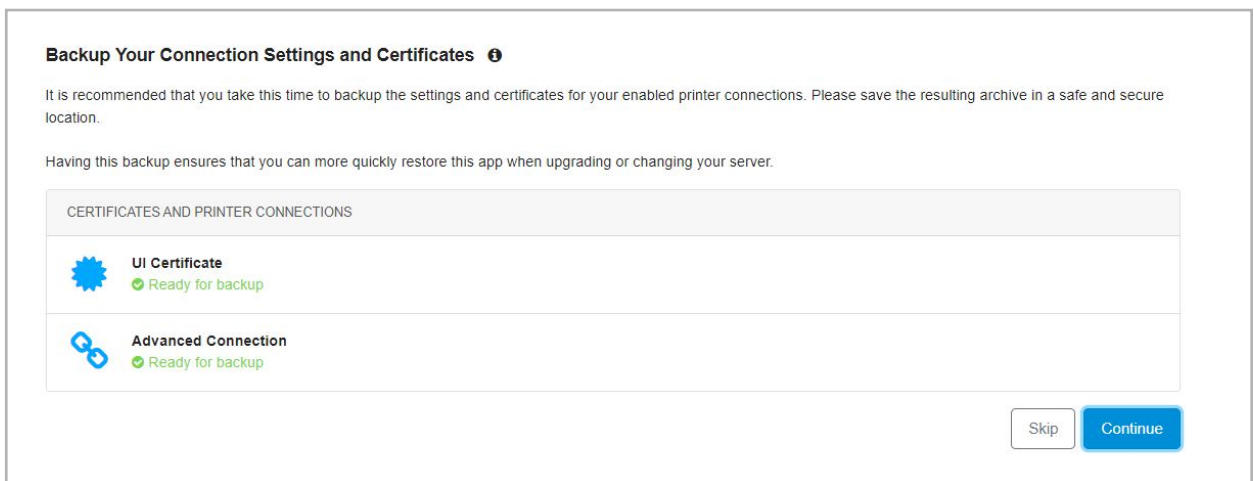
1. See [Figure 32](#). Click **Continue** to create the backup archive and save the certificates and configurations for the Weblink connections (Advanced connection).

The backup archive does not contain any other settings, tags, profiles, or resources.



IMPORTANT: Save this file and the password in a safe and secure location in case you ever need to re-install your PPME instance.

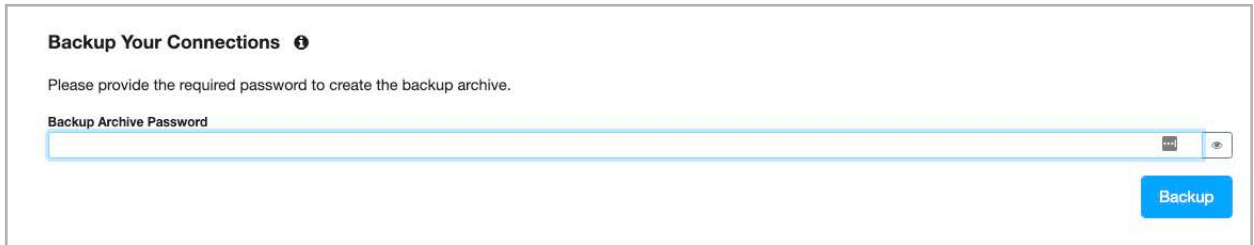
Figure 32 Backup Your Connection Settings and Certificates Dialog



The Backup Your Connections dialog displays.

2. See [Figure 34](#). Enter the **Backup Archive Password**.
3. Click **Backup**.

Figure 33 Backup Your Connections Dialog



Backup Your Connections ⓘ

Please provide the required password to create the backup archive.

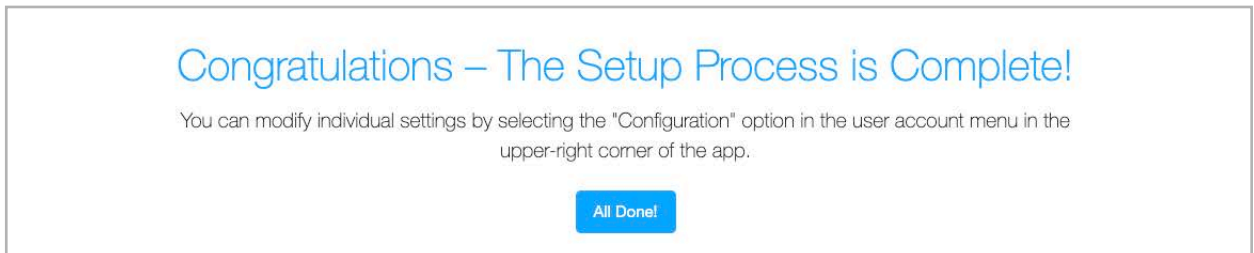
Backup Archive Password

Backup

The Setup Complete dialog displays.

4. See [Figure 34](#). Click **All Done!** to complete the PPME application setup and close the Setup Wizard.

Figure 34 Setup Complete Dialog



Congratulations – The Setup Process is Complete!

You can modify individual settings by selecting the "Configuration" option in the user account menu in the upper-right corner of the app.

All Done!

If you experience any connection issues or receive an error message, see [Installation Issues on page 45](#).

Upgrading PPME

Before continuing with the upgrade, it is recommended that you backup your current installation. See [Backup PPME on page 12](#) for more information.

Any printer management events, or users logged into the software at the time of this upgrade will experience a disruption in service while the upgrade is in progress.

Upgrades should only be performed on successful installations. If an installation was incomplete, the product should be completely uninstalled and a new installation performed. See [Uninstall PPME on page 36](#) for more information.



NOTE: In order to upgrade to v4.x or later, you must already have v3.4.7711. Otherwise, you must upgrade to v3.4.7711 and then perform the upgrade to a 4.x or latest version.

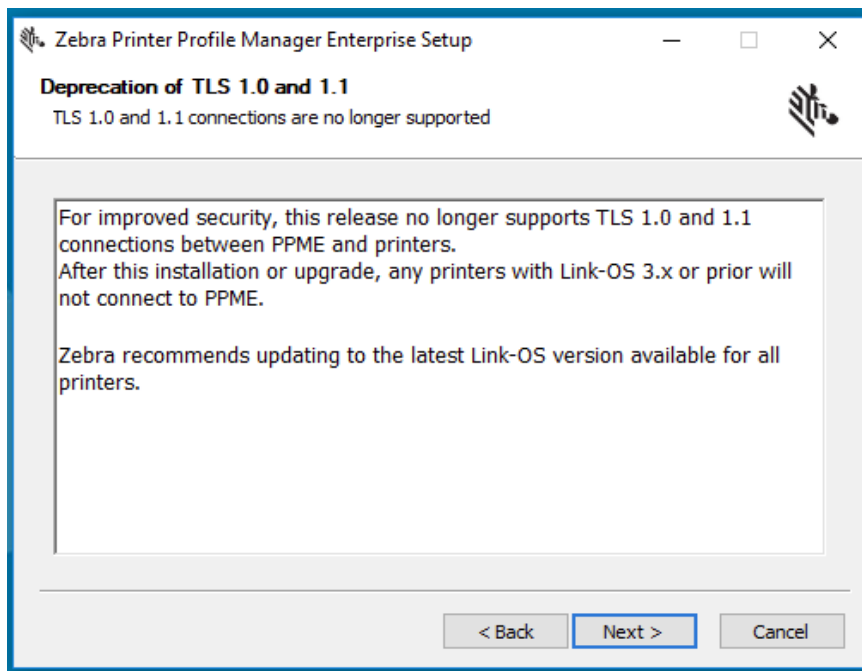


NOTE: Downgrading to an earlier version of PPME is not recommended since new features, data, and recent fixes will be lost in the downgrade process.

To upgrade your installation, perform the following steps:

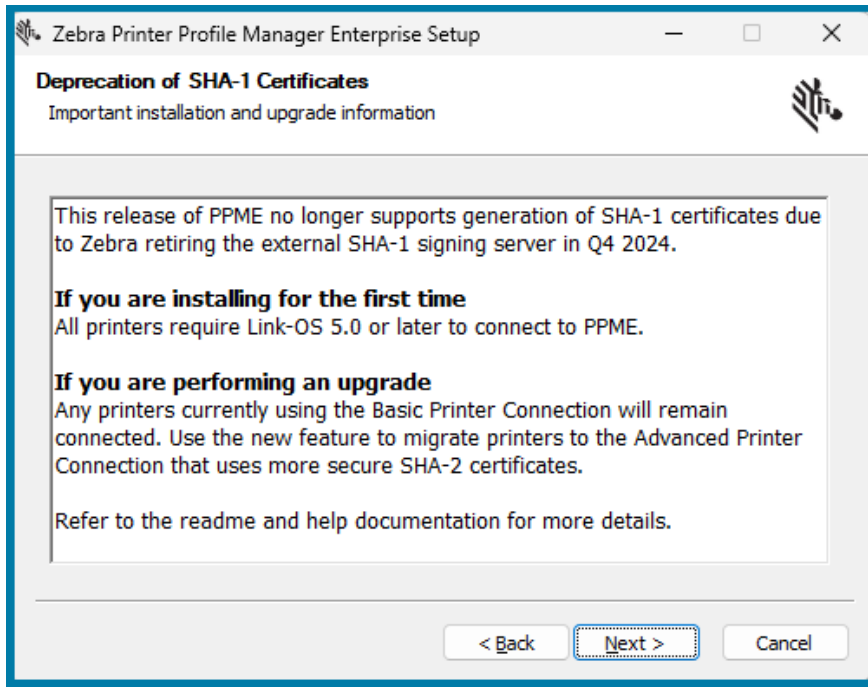
1. Log in to the server using the same User Account that was used to install PPME.
2. To launch the Printer Profile Manager Enterprise (PPME) installer, double-click on PPMEEx.x.xxxx.exe. (where x.x.xxxx indicates the version number of the software)
3. You will start with the same first two screens as the installation. These screens include:
 - Welcome
 - End User License Agreement

Figure 35 Deprecation of TLS 1.0 and 1.1 Dialog



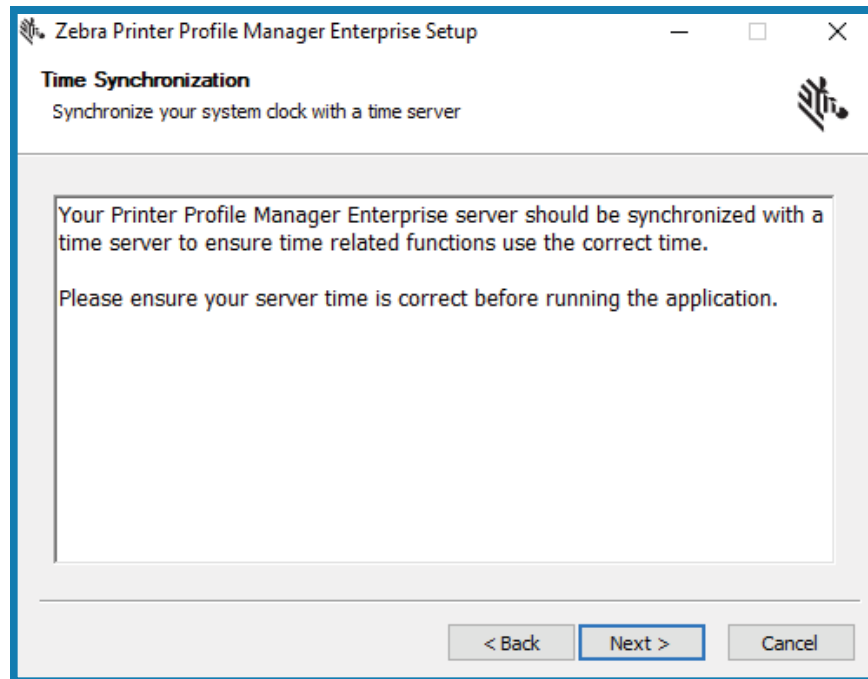
4. Click **Next** on the Deprecation of TLS 1.0 and 1.1 screen.

Figure 36 Deprecation of SHA-1 Certificates Dialog



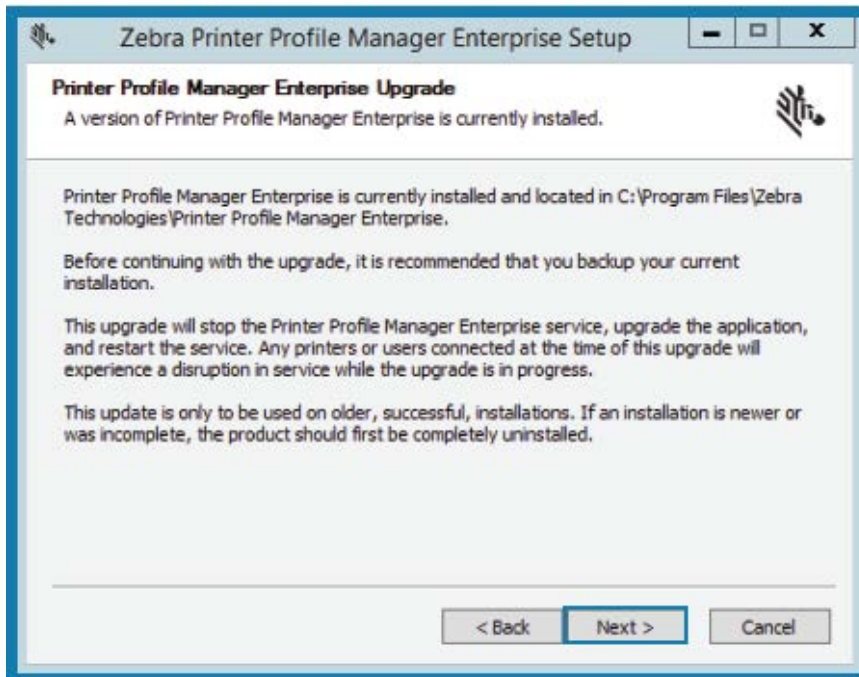
5. Click **Next** on the Deprecation of SHA-1 Certificates screen.

Figure 37 Time Synchronization Dialog



6. The Time Synchronization dialog displays.
7. Click **Next**.
The Printer Profile Manager Enterprise Upgrade dialog displays.

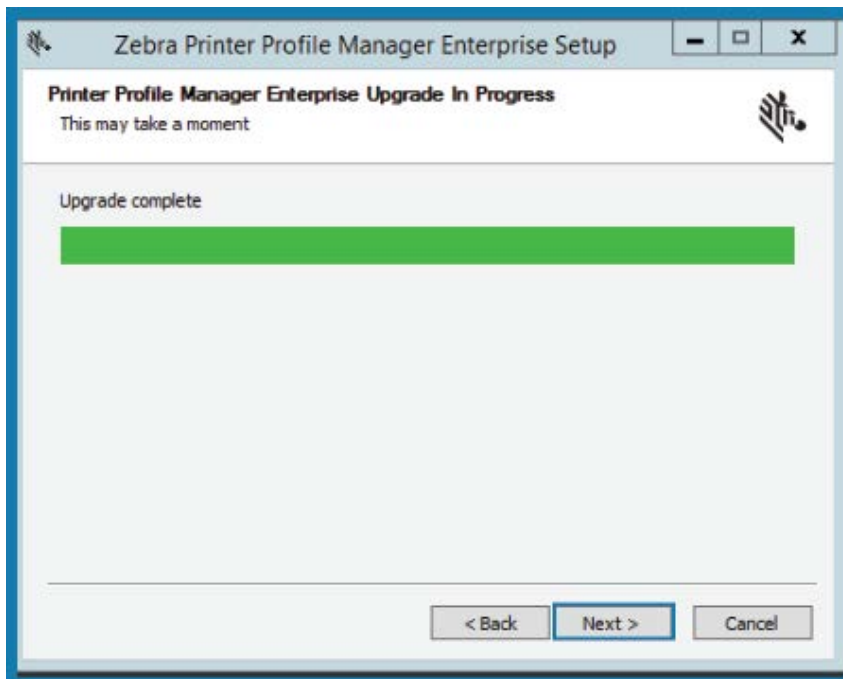
Figure 38 Printer Profile Manager Enterprise Upgrade Dialog



8. Click **Next**.

The **Printer Profile Manager Enterprise Upgrade In Progress** dialog shows the Upgrade complete.

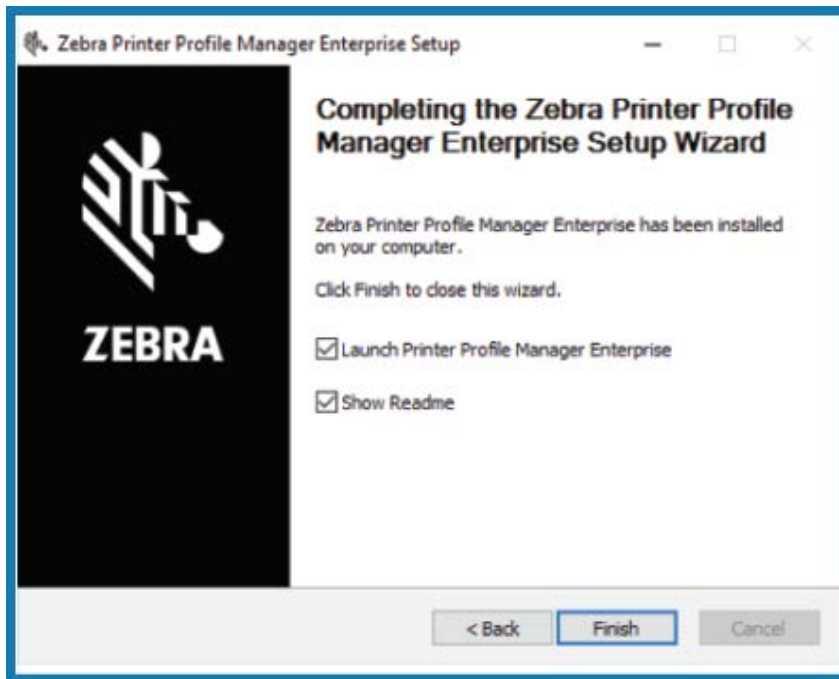
Figure 39 Printer Profile Manager Enterprise Upgrade in Progress Dialog



9. Click **Next**.

The **Completing...Setup Wizard** dialog displays.

Figure 40 Setup Wizard Complete Dialog



10. Click **Finish** to close the wizard.

Uninstall PPME

Release License

1. Navigate to the main licensing page from the **User** menu



2. Choose **Release** (beside **License Code**) and confirm.

The license code is returned to the server and allow it to be used on another server without going over the activation limit.



CAUTION: This will log the user out of the application and make it unusable until a valid license is entered.

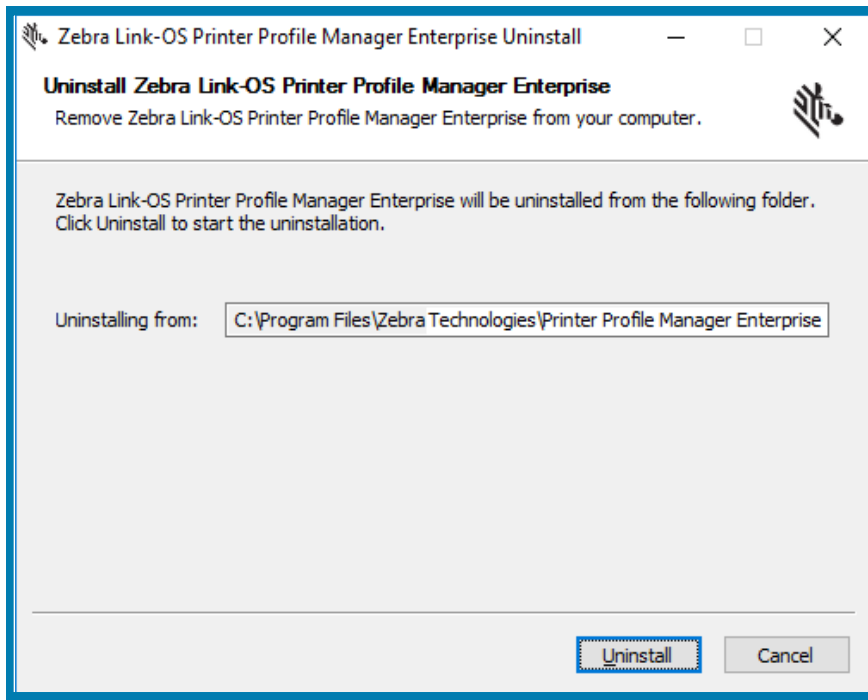
Uninstall PPME

1. Log in as Administrator.
2. Navigate to the drive and folder where you installed PPME.

For example:

C:\Program Files\Zebra Technologies\Link-OS Printer Profile Manger Enterprise...

3. Double-click uninstaller.exe to run the uninstaller program.



Reboot the Server

- If PPME is uninstalled, rebooting the server is required before re-installing.

License

This section provides general and specific information about the license.

The PPME license limits concurrent printer connections. When the maximum printer count is reached, further connection attempts from printers will be denied. All PPME administrators will receive an e-mail notification.

PPME requires internet access to <https://zebratechnologies.prod.sentinelcloud.com:443/> for the following license related actions:

- Trial activation
- License activation
- License deactivation
- License update for add-on orders



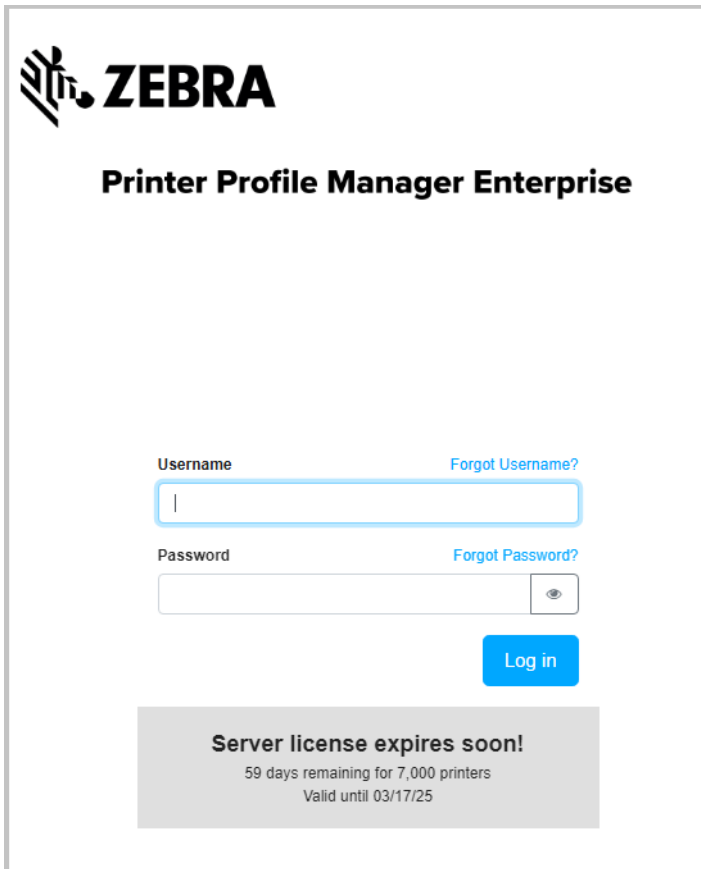
NOTE: If the server is unable to access the above website, the server may revert to an unlicensed status and indicate License Expired.

View License Status

License information is displayed on the login screen and will show whether the product is in trial mode or has a perpetual license activated for a quantity of printers.

Trial

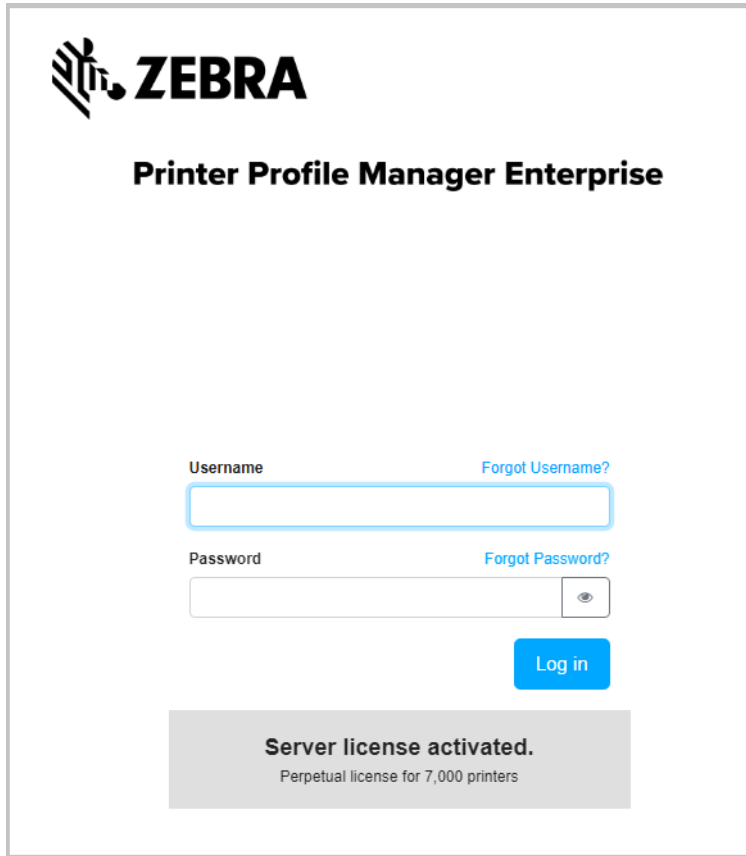
A trial is indicated by remaining days and a validity date.



The screenshot displays the login interface for Zebra's Printer Profile Manager Enterprise. At the top left is the Zebra logo. Below it, the title "Printer Profile Manager Enterprise" is centered. The login form includes a "Username" field with a "Forgot Username?" link, a "Password" field with a "Forgot Password?" link and a toggle for visibility, and a blue "Log in" button. A gray warning box at the bottom states: "Server license expires soon! 59 days remaining for 7,000 printers Valid until 03/17/25".

Perpetual License

Licensed mode is indicated by perpetual license for a quantity of printers.

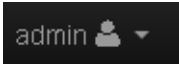


The screenshot displays the ZEBRA Printer Profile Manager Enterprise interface. At the top left is the ZEBRA logo. Below it, the title "Printer Profile Manager Enterprise" is centered. The login section includes a "Username" label with a "Forgot Username?" link, a text input field, a "Password" label with a "Forgot Password?" link, another text input field with a toggle icon, and a blue "Log in" button. At the bottom, a gray box contains the message "Server license activated." followed by "Perpetual license for 7,000 printers".



License Management


PPME administrators can view additional license information, activate a new license and manage an existing license from within PPME.

Access the License Screen



1. Log into PPME and click **User** menu .
2. Select **License** from the User dropdown menu.

The license details display.

 **License Status** 

 **Your server license expires soon!**
Expires in 59 days on March 17, 2025

Customer ID
TRIAL



Product ID (Release)
TRIAL  


Trial Expiration
March 17, 2025

Trial Time Remaining
59 Days



License Status
Offline Trial

Licensing Version
RMS SDK v10.2.0 license - License v23

 **License Status** 

 **Your server license is active**

Customer ID
e750ede3-3a12-479e-b0f1-3-d7298e1cacfc

Product ID (Release)
a4f27e38-0d8e-4fc1-b577-baefbc1191ec  

Trial Expiration
N/A

Trial Time Remaining
N/A

Entitlement ID
7fadab3f-832a-4218-9337-514e117094e5

License Status
Active License

Licensing Version
RMS SDK v10.2.0 license - License v23

Activate a New License

The Customer ID and Product ID delivered with your order are required to activate the license.

1. On the license screen, locate the Product ID field with the lock icon.
2. Click the lock icon to allow editing and enter the Customer ID and Product ID in the appropriate fields.
3. Click the icon once again to save and activate the new license.

Deactivate a License

It may be necessary to deactivate a license and reactivate it on a different installation of PPME.

1. On the license screen, locate the Product ID field.
2. Choose **Release** (beside **Product ID**) and confirm.

The license code is returned to the server to allow it to be used on another server without going over the activation limit.



CAUTION: This will log the user out of the application and make it unusable until a valid license is entered.

Update a License

It is necessary to have or upgrade to version 4.2.x or later to increase the manageable printer quantity because of the migration to the Thales licensing platform. Add-on orders to increase the manageable printer quantity can only be applied to your Thales license.



After an add-on order has been fulfilled, you must use the license refresh function for PPME to contact the license server and update the license with the new printer quantity.

1. On the license screen, locate the Product ID field.
2. Click the refresh icon next to the lock icon.

License Status

Your server license is active

Customer ID
e750ede3-3a12-479d-8013-d7298e1cacfc

Product ID (Release)
a4f27e38-bdbd-4fc1-8f77-baefbc1191ec  

Trial Expiration
N/A

Trial Time Remaining
N/A

Entitlement ID
7fadab3f-832a-4218-9337-514e117094e5

License Status
Active License

Licensing Version
RMS SDK v10.2.0 license - License v23

License Refresh Icon



NOTE: The license is updated in the background and nothing is displayed on screen.

3. Navigate back to the printer listing page and validate the value in the “License n of nnn Connected” field has changed to show the new manageable printer quantity.

The screenshot shows the 'Printers' management page. At the top, there is a navigation bar with tabs: LES, NETWORKS, CERTIFICATES, PROVISIONING, TAGGING, and RESOURCES. To the right of the tabs are status indicators: a green checkmark with '0', a red circle with '0', a yellow warning triangle with '0', and a grey circle with '0'. Further right is a 'TOTAL' section showing '0'. The user 'admin' is logged in. Below the navigation bar, the page title is 'Printers'. There are buttons for 'Discover Printers', 'List', and 'Grid'. A dropdown menu shows 'Sort by Status: Ascending'. A search bar is present. A dark banner at the bottom of the page displays 'License: 0 of 7000 Connected'. Below this banner, a message states: 'There are no printers to display. Click here to add a printer.' A blue callout box with a white exclamation mark icon is on the left. A blue box with the text 'Manageable printer quantity' is on the right, with a line pointing to the '0' in the license status.

Manageable
printer
quantity

LDAP User Directory Configuration

This section describes how to configure the fields in the PPME LDAP User Directory section for user authentication with Active Directory. This can be configured from the PPME configuration page after logging into the console with admin privileges.

Name (Required): This is used only for display purposes within PPME.

Hostname (Required): The address which Active Directory is available at, should not include port or protocol prefix.

Port (Required): The port Active Directory is available on, usually this is 389 for non-secure traffic and 636 for secure traffic.

Use SSL: Check this if the Active Directory system requires secure traffic.

Username (Required): This should be the full path to a management/admin user within Active Directory that can be used for the initial connection, allowing PPME to validate/authenticate users.

Password: The password for the management user.

CA Certificate: If using SSL, you will most likely need to add the certificate which your Active Directory system is hosting unless the certificate is signed by a trusted certificate authority. This will allow PPME to trust the Active Directory server, otherwise, the connection will be refused.

Base DN (Required): This is the base distinguished name for which all queries will be run against. Generally this will be your internal domain for example zebra.lan would be an internal domain and the Base DN might be dc=zebra,dc=lan.

The URL used to connect to the Active Directory server would be ldap://HOSTNAME:PORT/BASE_DN

Additional User DN: This is an optional field which can be used to limit where PPME will query users, for example users may be stored in a path such as CN=PPME_Users,DC=zebra,DC=com in which case you would want to set this field to CN=PPME_Users, as the Base DN will be automatically added. It can however, be left blank and PPME will attempt to search the Active Directory tree for users.

Use of this field requires PPME version 2.1.6638 or later.

Additional Group DN: This is an optional field which can be used to enforce users be part of an Active Directory group via theirmemberOf attribute. For example, you may have a Group within Active Directory at path CN=PPME_Admins,OU=Groups,DC=zebra,DC=lan in which case you would want to set this field to CN=PPME_Admins,OU=Groups. If you have multiple groups and you want them to be created with specific PPME roles when the users log in, you will have to create multiple LDAP User Directory entries inside of PPME where each one defines a separate Additional Group DN and Default User Role.

User Name Attribute (Required): This is the field name inside of your Active Directory system which maps the username. This is NOT a username, it is a field. Generally, this will be samAccountName if using Active Directory or if using OpenLDAP, it will probably be uid.

User Full Name Attribute (Required): This is the field name inside of your Active Directory system which maps the user's full name.

User Email Attribute (Required): This is the field name inside of your Active Directory system which maps the user email addresses. While this field is required, it is only used to store the email address within PPME and no validation of whether it is a valid email address occurs. Therefore, if you are using an Active Directory system which does not map an email address to users, you can set this to something else, such as the User Name Attribute (samAccountName), and PPME will store the username as the email address.

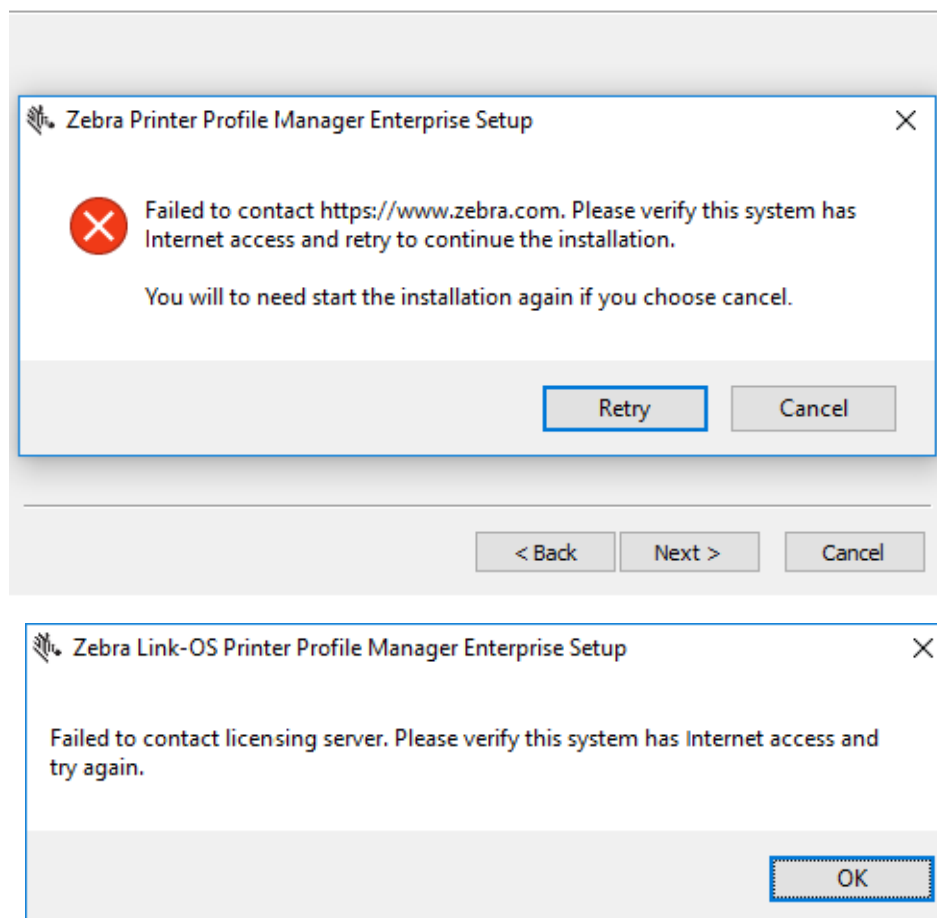
Default user Role: This is used to predefine which role Active Directory users will be given when they first login to PPME.

Troubleshooting

This section provides assistance with installation and other known issues.

Installation Issues

- If you receive either of the error messages below, check your internet connection.



Other reasons you may not be able to connect include:

- Connection to a network that has no internet access
- Firewall is blocking outgoing ports 80/443
- Firewall is blocking zebra.com

- Firewall is blocking zebratechnologies.prod.sentinelcloud.com.
- DNS issues

Other Issues

Enabling License Logging

Logging for the license system can be enabled in situations where the licensing may not be functioning correctly.

The rms.trace.txt log file can be found at the location below and should be provided to Zebra for interpretation.

C:\ProgramData\Zebra Technologies\Printer Profile Manager Enterprise\Thales

To enable logging:

1. Stop the PPME service.
2. Edit the ppme.properties file at %PROGRAMDATA%\Zebra Technologies\Printer Profile Manager Enterprise\PPME and add the following entry:
`linkos.licensing.logLevel=1`
3. Restart the PPME service.



NOTE: Logging should be disabled for normal usage.

To disable logging:

1. Stop the PPME service.
2. Edit the PPME properties file and set the property below to 0:
`linkos.licensing.logLevel=0`
3. Restart the PPME service.

Increasing Application Log Capture Content

The logging levels for PPME are controlled by the ppmelogback.xml file stored in the .PPME folder (for example, %PROGRAMDATA%\Zebra Technologies\Printer Profile Manager Enterprise\PPME). To change the levels, one must edit the file and save it. PPME will automatically check every 2 minutes for any updates and apply them without the need to reboot the server/service.

To Change the Level to Debug for Non-Printer Data:

1. Edit the ppmelogback.xml file in a text editor that understands Windows and Linux line endings. (Notepad or a browser are not recommended.)
2. Find the PPME_LOGS appender. The xml line looks like this:
`<appender name="PPME_LOGS" class="ch.qos.logback.core.rolling.RollingFileAppender">`

3. Change the filter level to DEBUG:

```
<filter class="ch.qos.logback.classic.filter.ThresholdFilter">
    <level>DEBUG</level>
</filter>
```

4. Find the root level filter that contains the PPME_LOGS appender and change it to DEBUG.

```
<root level="DEBUG">
    <!--<appender-ref ref="CONSOLE"/>-->
    <appender-ref ref="PPME_LOGS"/>
</root>
```

5. Save the file and wait approximately 2 minutes.
6. The .PPME/logs/ppme.log file should start to increase in size at a much faster rate (depending upon how many printers being used).
7. If the file is opened, the 'DEBUG' level should be seen as a prefix to some messages.

To Change the Level to Debug for Printer Data:

1. Edit the ppmelogback.xml file in a text editor that understands Windows and Linux line endings. (Notepad or a browser are not recommended.)

2. Find the PPME_LOGS appender. The xml line looks like this:

```
<appender name="PRINTER_DATA_LOGS"
class="ch.qos.logback.core.rolling.RollingFileAppender">
```

3. Change the filter level to DEBUG:

```
<filter class="ch.qos.logback.classic.filter.ThresholdFilter">
    <level>DEBUG</level>
</filter>
```

4. Find the root level filter that contains the PPME_LOGS appender and change it to DEBUG.

```
<root level="DEBUG">
    <!--<appender-ref ref="CONSOLE"/>-->
    <appender-ref ref="PPME_LOGS"/>
</root>
```

5. Save the file and wait approximately 2 minutes.
6. The .PPME/logs/ppme_printer_data.log file should start to increase in size.
7. If the file is opened, the 'DEBUG' level should be seen as a prefix to some messages.



NOTE: In both scenarios above, only leave the new DEBUG level in place for the duration that is needed in order to collect the logs. Once the collection period is over, make sure to put the levels back to WARN, so that the log is not filled up with DEBUG data during normal operation.

Uploading large files triggers an exception in the System Log

No solution required. This exception is just a warning from the database code stating that the operation is taking too long and may be a memory/data leak.

LDAP encounters a communication or connection error

This can happen when attempting to 'Save and Test' settings and can be due to several issues:

- One of the server settings being incorrect.
- The PPME server cannot resolve the Hostname.
- The port is blocked between PPME and the LDAP server.
- If the SSL box is checked, the LDAP server may be issuing a self-signed certificate. In order for PPME to connect, it must trust the server's Certificate Authority (CA). If the certificate is self-signed, then PPME needs to be updated to trust that CA. In order to do that, you must configure PPME to trust the LDAP CA.

The following steps can be used to resolve this error in the ppme.log file:

PKIX path building failed: sun.security.provider.certpath.SunCertPathBuilderException: unable to find valid certification path to requested target

1. Stop the PPME service.
2. Open a Windows Command Prompt.
3. Navigate to the jre folder within the PPME installation folder, e.g., **C:\Program Files\Zebra Technologies\Printer Profile Manager Enterprise\java\jdk-x.x.xxxx-jre** (Where x.x.xxxx indicates the version number of the software).
4. Note the location of the LDAP CA PEM file. In this example, assume it is **%USERPROFILE%\Desktop\ldap_ca.pem**
5. Run the following command using any value for the -alias parameter, e.g. 'ldapca'.

```
> bin\keytool -importcert -keystore lib\security\cacerts -file
%USERPROFILE%\Desktop\ldap_ca.pem -alias ldapca
```
6. Start the PPME service.
7. Attempt to configure and connect to your LDAP server again.

The printer will not connect to PPME and/or the printer is stuck in the 'Adding' state



NOTE: The Zebra Programming Guide contains much of what you see below and goes into more detail on the operation and functionality of Weblink.

The printer uses HTTPS to connect to the PPME server. Therefore, it does hostname verification when connecting to ensure that the certificate that is presented by the server matches the hostname/DNS name the printer is attempting to connect to. In order to make a successful connection to PPME, several things have to be true:

- The PPME server must be reachable from the printer's subnet (for example, you can ping the PPME server from the printer's subnet).
- The port that printers use to connect to PPME (for example, 8443) must be reachable from the printer's subnet (e.g., any firewalls or firewall rules that prevent access to the server port should be modified to allow access).
- The Fully Qualified Domain Name (FQDN) of the server (for example, acme.internal.lan) must be in the DNS server that the printer is configured to use, so that it can be properly resolved.
- The certificate associated with the port that the printer connects to must be signed by Zebra. Only the default certificate generated by the installer or any issued by Zebra after the installation are acceptable.

Printers do not always connect right away

In some cases, a user cannot always login, or there is a large delay when logging in. Other times, pages are extremely slow to load or don't load completely.

It is possible that the database (DB) connections are overwhelming the database. Take the following steps to ensure the PPME DB connection pool size is correct:

1. Open the ppme.log (and maybe a few of the previous days' logs) and look for a message similar to the following:
ERROR org.hibernate.engine.jdbc.spi.SqlExceptionHelper - FATAL: sorry, too many clients already
2. If the above message is found, proceed with the rest of these steps. Otherwise, the DB pool size is not the issue.
3. Open the Windows Services window and find 'Printer Profile Manager Enterprise Database'.
4. Double-click the service to open it.
5. Locate the value passed into the service using the -N parameter (e.g., it is likely -N 75).
6. Close the service dialog.
7. Go to the .PPME directory (e.g., %PROGRAMDATA%\Zebra Technologies\Printer Profile Manager Enterprise\PPME) and open the ppme.properties file.
8. Edit (or insert if it is not present) the linkos.database.poolsize value to be about five fewer than the value seen in step 5.
9. Restart the PPME service and see if the issue(s) still occur.

