ZDownloader

User Guide

ZEBRA

2025/05/21

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Contents

Introduction

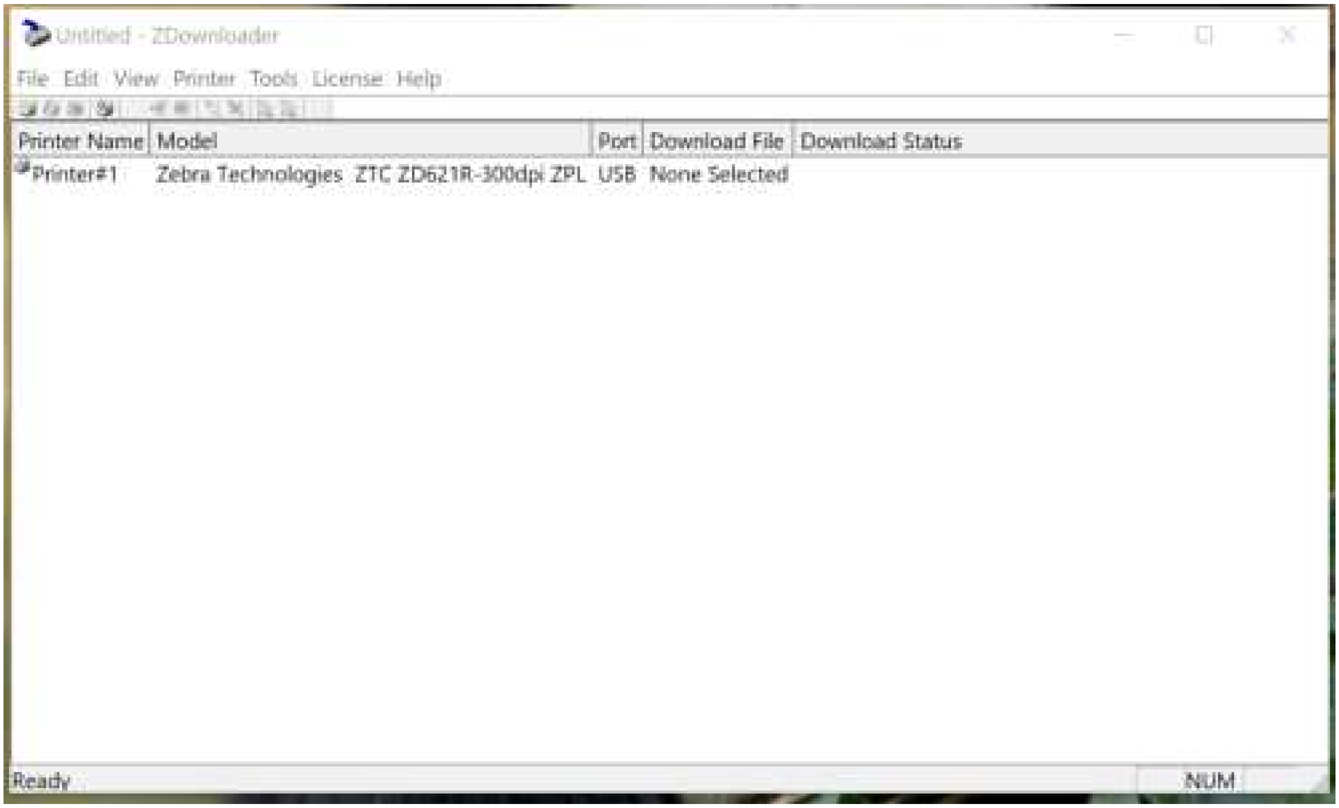
ZDownloader simplifies updating Zebra Printer firmware and managing licensed content provided by Zebra Technologies.

This application supports Zebra printers connected by serial, parallel, USB, and IP Ethernet networks.

ZDownloader is supported on the following operating systems:

- 32-bit Windows 10
- 32-bit Windows 11
- 64-bit Windows 10
- 64-bit Windows 11

Figure 1 ZDownloader Application



Printer Name	Model	Port	Download File	Download Status
Printer#1	Zebra Technologies ZTC ZD621R-300dpi ZPL	USB	None Selected	

Adding a Printer

You can add printers to Zdownloader automatically or manually depending on your configuration.

Auto-Detecting Printers

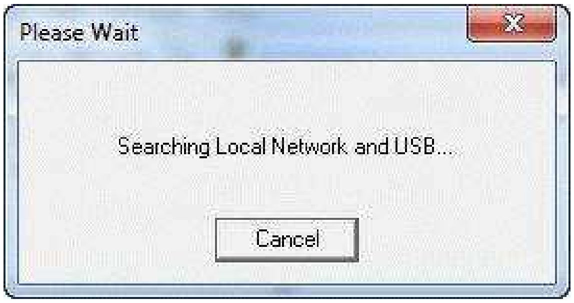
Zdownloader detects and configures USB and IP-Ethernet printers automatically.

Your printer must connect via a USB or IP-Ethernet interface.

Begin auto-detecting printers by either:

- Clicking on the toolbar.
- Selecting **Printer** > **Auto-Detect.**

The Auto-Detect dialogue box appears.



Searching Local Network and USB...

The detected printers are added to the printer list.

NOTE: The application broadcasts a UDP packet onto the network to detect Ethernet-connected printers. The discovery process uses UDP port number 4201. Some networks filter out UDP packets. This means it may be impossible to detect all printers on your network. See your network administrator for more information. If you cannot Auto-Detect your network printers, refer to Manually Adding Printers.

Manually Adding Printers

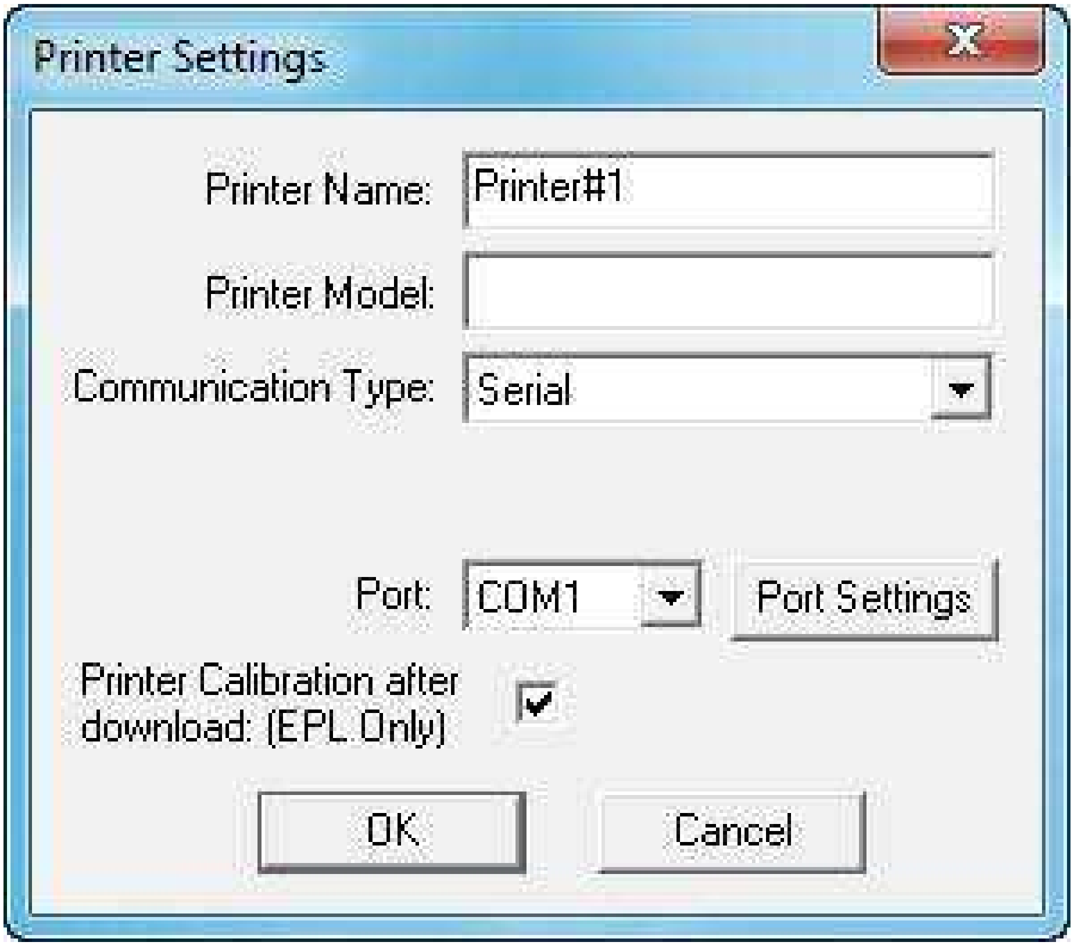
Zdownloader allows you to add printers with a variety of communication types.

Adding a Serial Printer

You can manually add a Serial Printer.

1. Click on the toolbar.
2. Click **Printer** > **Add.**

   The **Printer Settings** displays.



Printer Name: Printer#1

Printer Model:

Communication Type: Serial

Port: COM1

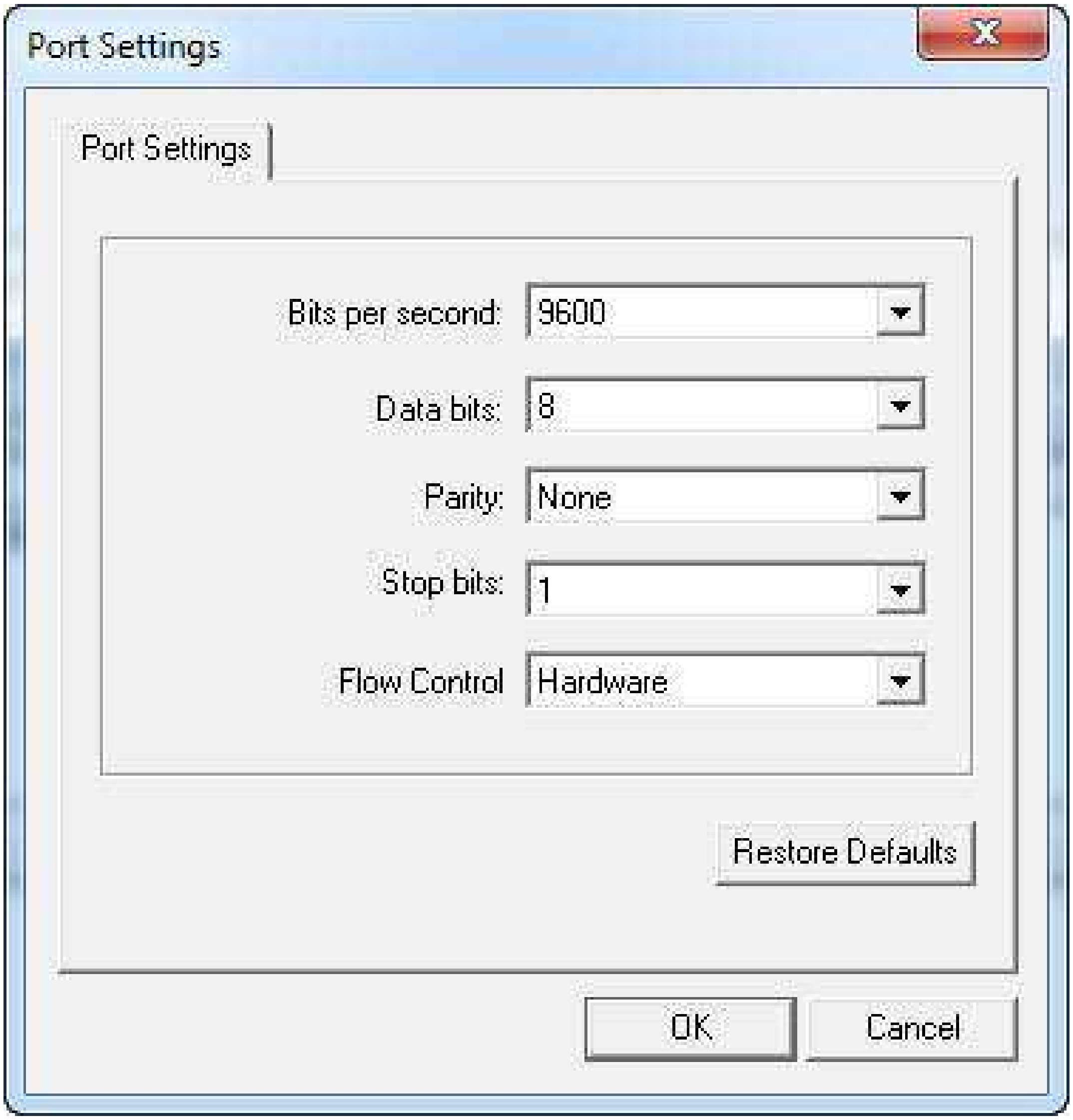
Printer Calibration after download: (EPL Only) ☑

3. In the **Printer Name** text box, enter a name for the printer.
4. In the **Printer Model** text box, enter the model number of the printer.
5. In the **Communication Type** drop-down, select **Serial**.
6. In the **Port** drop-down, select the serial port to which the printer is connected.

NOTE: You can view the printer's serial port settings by performing an AutoSense on the printer and reading the Dump Mode status labels' serial configuration data. Refer to the printer's User Guide for details. Example: `9600,N,8,1` which matches the Port Settings shown in step 7.

7. Click **Port Settings.**

   The **Port Settings** displays.



Bits per second: 9600

Data bits: 8

Parity: None

Stop bits: 1

Flow Control Hardware

8. Enter the configuration data of the serial port.
9. Click **OK.**
10. In **Printer Settings**, click **OK**.

The serial printer is added to the printer list.

See Also

Adding a Network Printer

Adding a USB Printer

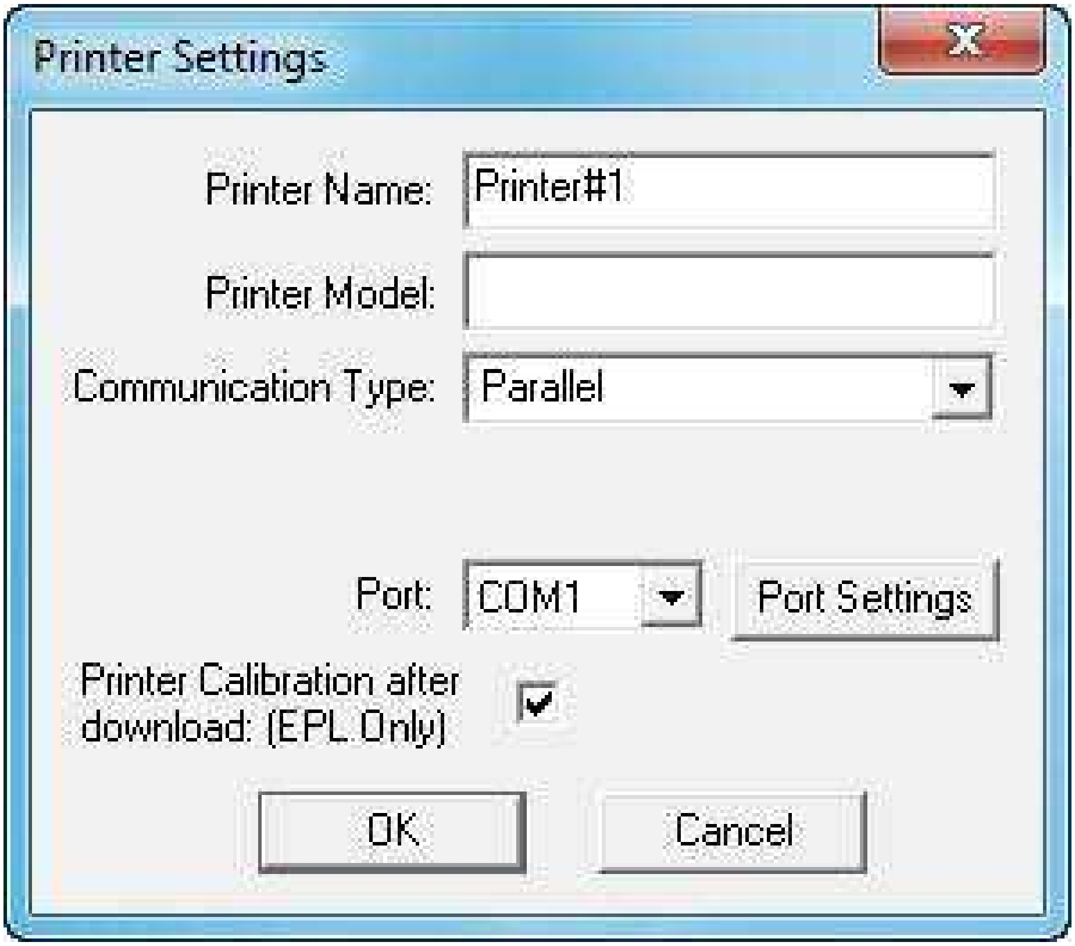
Adding a Parallel Printer

Adding a Parallel Printer

You can manually add a parallel printer.

1. Click on the toolbar.
2. Choose: **Printer** > **Add.**

   The Printer Settings window displays.



Printer Name: Printer#1

Printer Model:

Communication Type: Parallel

Port: COM1

Printer Calibration after download: (EPL Only) ☑

3. In the **Printer Name** text box, enter a name for the printer.
4. In the **Printer Model** text box, enter the model number of the printer.
5. From the **Communication Type** drop-down menu, select Parallel.
6. From the **Port** drop-down menu, select the port to which the printer is connected.
7. Click **OK.**

The printer is displayed in the Printer List.

See Also

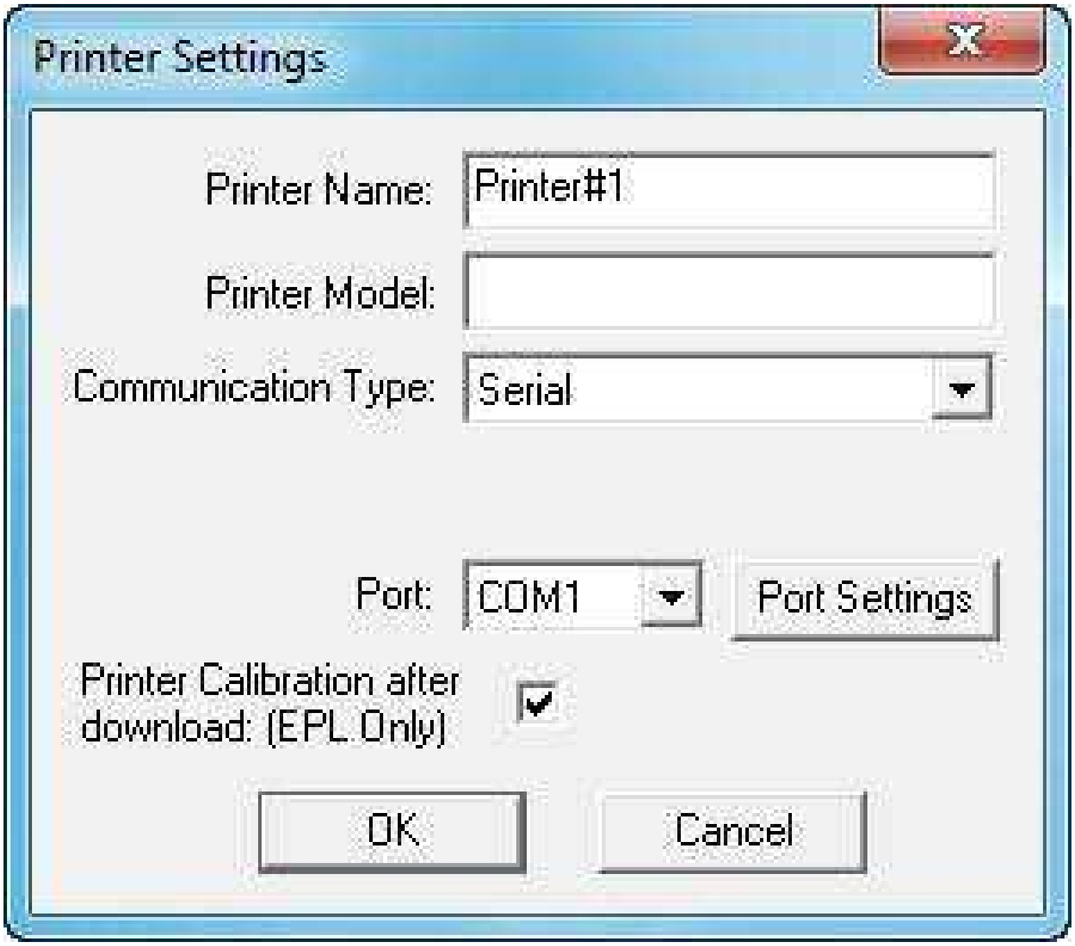
Adding a Network Printer
Adding a USB Printer
Adding a Serial Printer

Adding a Network Printer

You can manually add an Ethernet printer.

1. Click on the toolbar.
2. Select **Printer** > **Add.**

   The Printer Settings window appears.



Printer Name: Printer#1

Printer Model:

Communication Type: Serial

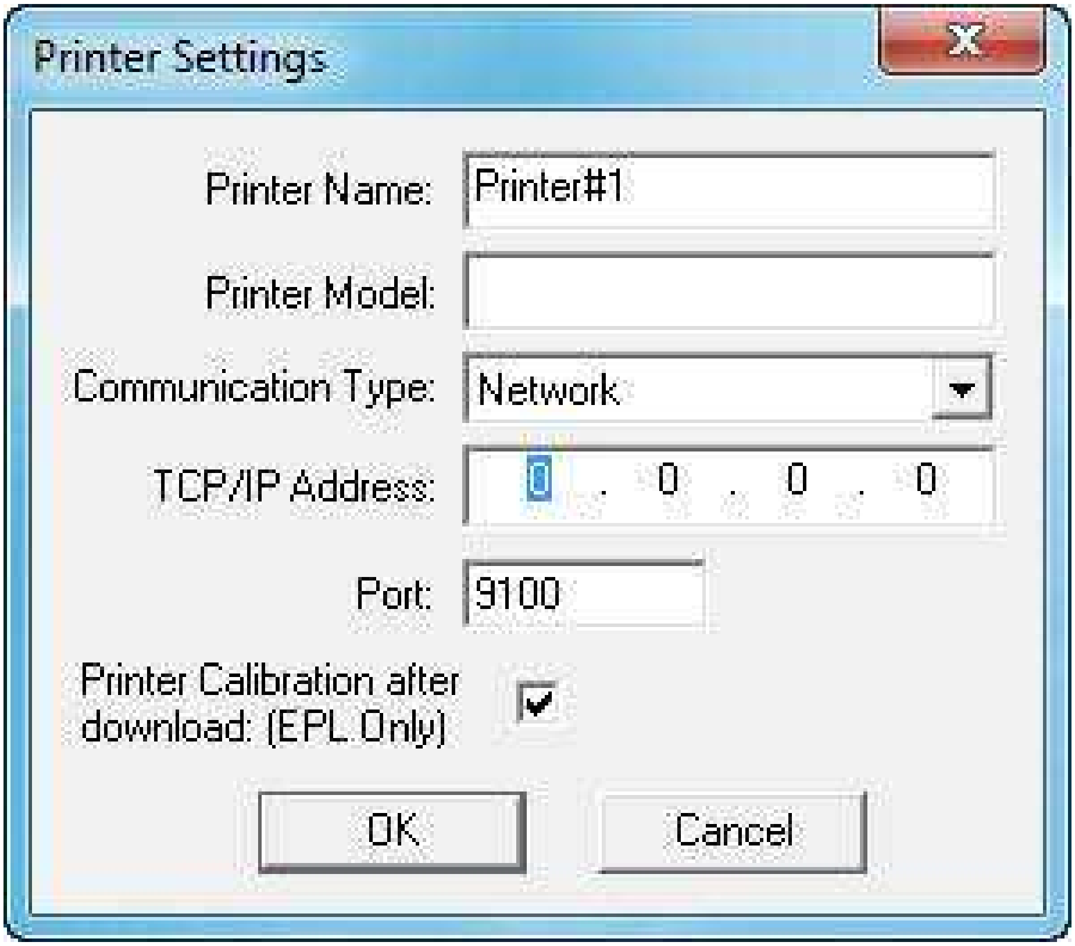
Port: COM1

Printer Calibration after download: (EPL Only) ☑

3. In the **Printer Name** text box, enter a name for the printer.
4. In the **Printer Model** text box, enter the model number of the printer.

5. From the **Communication Type** drop-down menu, select Network.

   The **Printer Settings** window updates.



Printer Name: Printer#1

Printer Model:

Communication Type: Network

TCP/IP Address: 0 . 0 . 0 . 0

Port: 9100

Printer Calibration after download: (EPL Only) ☑

6. In the **TCP/IP Address** text box, enter the TCP/IP address of the printer.
7. In the **Port** text box, enter the port number of the printer.

NOTE: Press the printer's networking configuration status button, located next to the Ethernet interface on the printer or the PrintServer Ethernet adapter, to print a status label.

8. Click **OK.**

The printer is added to the printer list.

See Also

Adding a USB Printer
Adding a Serial Printer
Adding a Parallel Printer

Adding a USB Printer

You can add a printer connected via USB by using Auto-Detect.

- USB printers can only be added by using Auto-Detect.

- All printers connected via USB have the list designation of USB.
- The program can support as many USB printers as the computer can.
- Computers can typically support up to 255 USB devices.

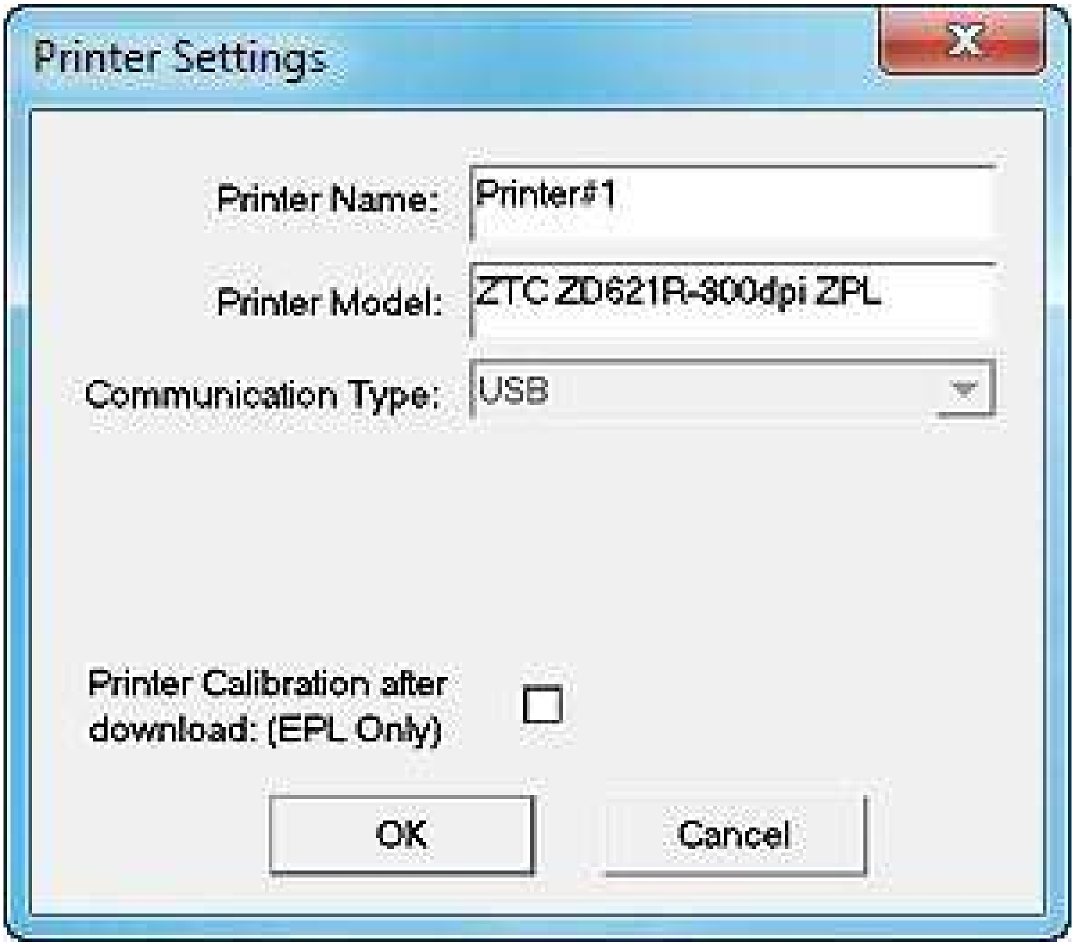
See Also
Adding a Network Printer
Adding a Serial Printer
Adding a Parallel Printer

Modifying Printers in the Printer List

Zdownloader allows you to modify printers in the Printer List.

1. Select a printer from the list.
2. Open **Printer Settings** in one of three ways:
    - Click on the toolbar.
    - Select **Printer** > **Modify.**
    - **Right-click** on the printer in the list and select **Modify Printer.**

   Printer Settings displays.



Printer Name: Printer#1

Printer Model: ZTC ZD621R-300dpi ZPL

Communication Type: USB

Printer Calibration after download: (EPL Only) ☐

3. Configure the printer settings. Refer to Adding a Printer
4. Select **Print Configuration Label after Download (EPL Only)** checkbox to cause the printer to calibrate the sensor and print a configuration label. This ensures the media sensor is calibrated correctly, as a firmware download will overwrite existing values.
5. Click **OK.**

The printer settings are updated.

Deleting Printers from the Printer List

Zdownloader is capable of removing previously added printers.

1. Select the printer to be deleted from the Printer List.
2. Delete a printer from the Printer List with one of the following methods:
    - Click ✗ on the toolbar.
    - Select **Printer** > **Delete.**
    - **Right-click** on the printer to be deleted and select **Delete Printer(s).**

The printer is removed from the Printer List.

Printing Test Pages

Zdownloader provides a variety of ways to print a test page.

- Click EPL for EPL test page.
- Click ZPL for ZPL test page.
- Select the desired printer and press the **Print Test Page** toolbar button.
- Select **Printer** > **Print EPL Test Page.**
- Select **Printer** > **Print ZPL Test Page.**
- **Right-click** on the selected printers and select **Print EPL Test Page.**
- **Right-click** on the selected printers and select **Print ZPL Test Page.**

Saving Printer Settings

Zdownloader is capable of saving settings to a file.

1. Select **File** > **Save Printer Settings.**
2. Select a location for the Printer Settings file.
3. Enter a name for the settings file.

NOTE: Printer settings files are stored as .zps.

4. Select **Save.**

The printer settings are saved to a file.

Restoring Printer Settings from a File

Zdownloader is capable of restoring printer settings from a file.

NOTE: Restoring printer settings from a file erases printers currently on the Printer List.

1. Select **File** > **Load Printer Settings File.**
2. Locate the `.zps` file.
3. Select **Open.**

The saved printers display in the Printer List.

Updating the Printer Firmware

Zdownloader can assign and download firmware to each printer.

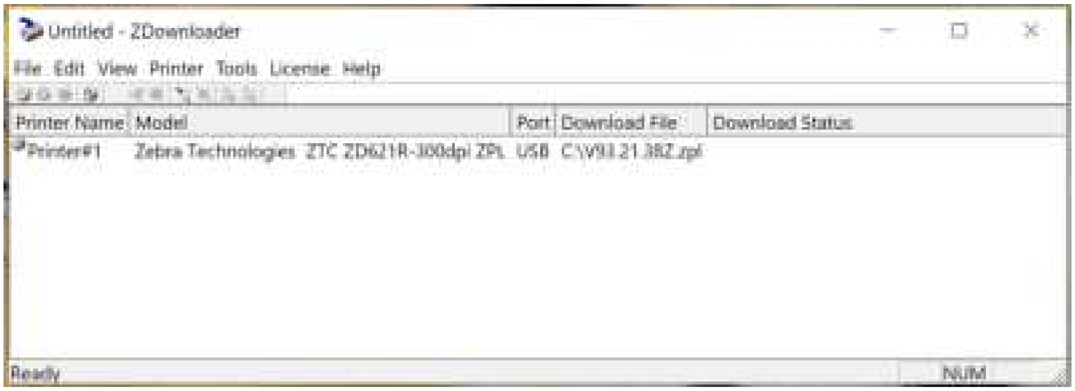
1. Select the printer from the Printer List.

TIP: Hold **SHIFT** down to select a range of printers. Hold **CTRL** to select individual printers.

2. Choose one:
   - Click on the toolbar.
   - Select **File** > **Select File.**
   - **Right-click** the selected printer and select **Select File.**

NOTE: Printers that are present in the Printer List but do not have a firmware file are ignored when downloading starts.

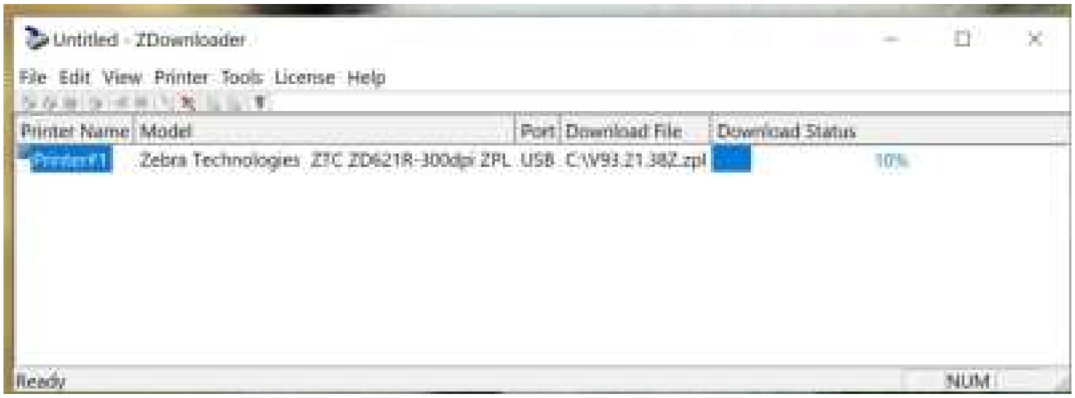
3. Navigate to the file to be downloaded.
4. Select **Open.**



Printer Name	Model	Port	Download File	Download Status
Printer#1	Zebra Technologies ZTC ZD621R-300dpi ZPL	USB	C:\V93.21.38Z.zpl	

The file is shown under the **Download File** column.

5. Download the printer firmware.
   - To download firmware to all printers, click on the toolbar.
   - To download firmware to specific printers, select the printer and select **Printer** > **Download to Selected.**



Printer Name	Model	Port	Download File	Download Status
Printer#1	Zebra Technologies ZTC ZD621R-300dpi ZPL	USB	C:\V93.21.38Z.zpl	10%

The progress of each printer displays in the **Download Status** column.

The toolbar icon and the **Printer** > **Cancel Download** menu option is now available if the download must be canceled.

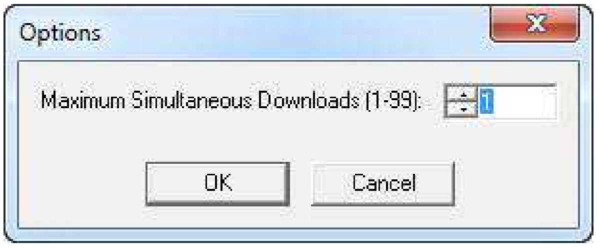
Accelerating Printer Firmware Update

Zdownloader is capable of updating several printers simultaneously.

Zdownloader downloads one update at a time by default; you can increase this number in order to reduce overall update time.

1. Select **Tools** > **Options.**

   The Options window appears.



Maximum Simultaneous Downloads (1-99): 1

2. Increase or decrease the **Maximum Simultaneous Downloads** counter.

NOTE: Some computers may slow down as the number of simultaneous downloads increases.

Zdownloader is now capable of downloading several printer updates simultaneously.

Licensed Content Management

Licensed Content files are used in specific circumstances.

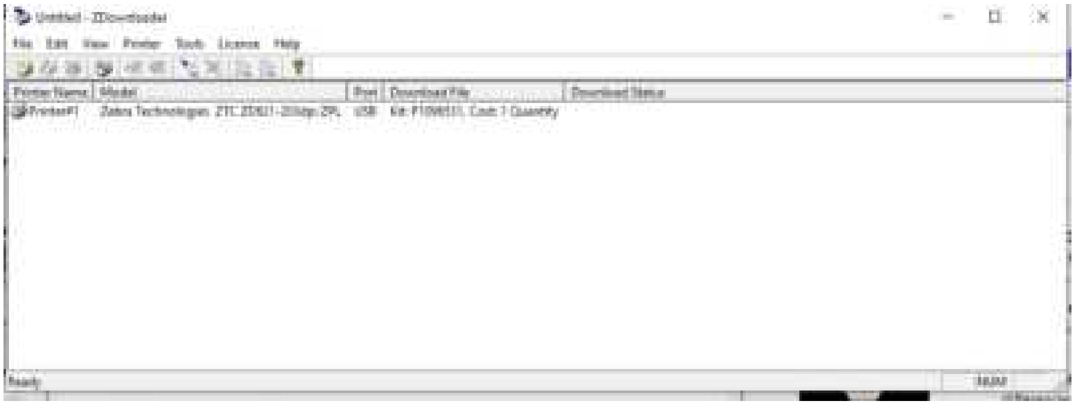
- Zebra Technologies provides Licensed Content files for content that may require tracking or regulation, such as special firmware or licensed fonts.
- Licensed Content files use the file extension .dss.
- A Licenced Content file may be downloaded from Zebra.com/support or received from your Zebra Account Manager.

Downloading Licensed Content Files to Printers

Licensed Content files are downloaded to printers using the same method as firmware.

You must configure the license associated with the Licensed Content files prior to downloading to the printer. Follow the steps for Configuring a Product License on page 20 to configure Licensed Content Files.

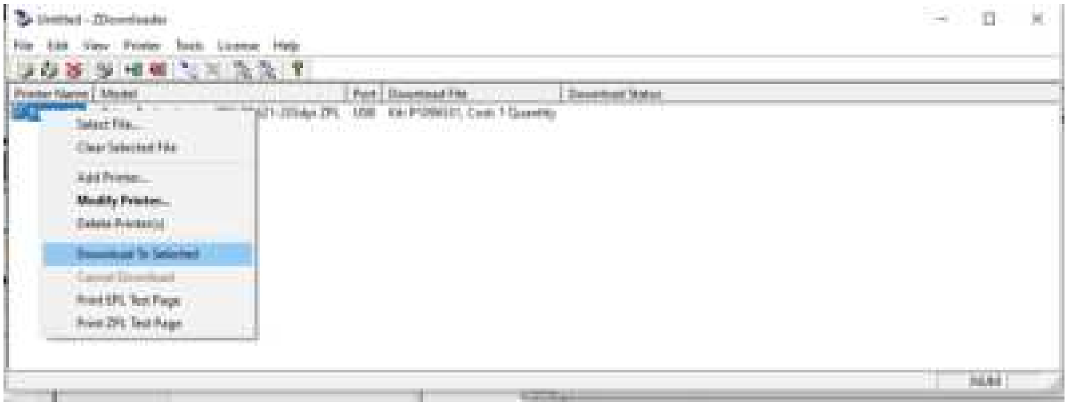
1. Configure the printers. Refer to Auto-Detecting Printers.
2. Select the Licensed Content file in one of the following ways:



   - Select ▤ on the toolbar.
   - Select **File** > **Select File.**
3. **Right-click** the Licensed Content file.

NOTE: The Licensed Content file has a .DSS extension and may be downloaded from Zebra.com/support or received from your Zebra Account Manager.

4. Select **Download to Selected.**



NOTE: If sending firmware, you may have to wait another minute for the printer to fully load after sending the file. Wait until the printer's LED light remains green for more than 5 seconds or the primary menu is shown on the screen before using it.

The Licensed Content file is downloaded to the printer.

Repeat this process to utilize additional license uses.

License Manager

Zdownloader contains a utility for managing installed licenses.

The **License Manager** simplifies updating Zebra Printer firmware and managing licensed content provided by Zebra Technologies. With the License Manager, you can:

- Check the status of a license using the Dashboard screen.
- Configure a license via the internet using the Configure screen.
- Clear a license via the internet using the Configure screen.
- Configure a proxy server using the Settings screen.
- Access License Manager version details from the info screen.

Opening the License Manager

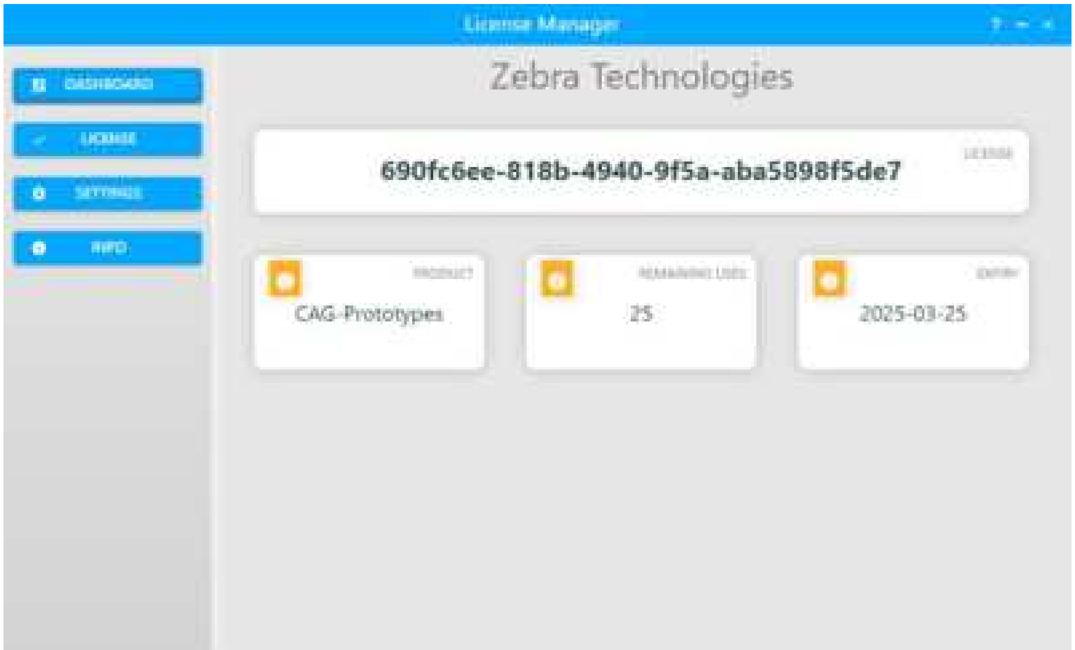
Access the License Manager from the Zdownloader interface.

NOTE: Your computer must have access to the Internet to configure or clear licenses. If you connect to the Internet through a proxy server, configure the proxy server via the Settings screen before configuring or clearing licenses. Refer to Configuring the Proxy Settings on page 24.

1. Launch Zdownloader.

2. Select **License** > **Launch License Manager.**

   The **License Manager** displays.



LICENSE 690fc6ee-818b-4940-9f5a-aba5898f5de7

PRODUCT CAG-Prototypes

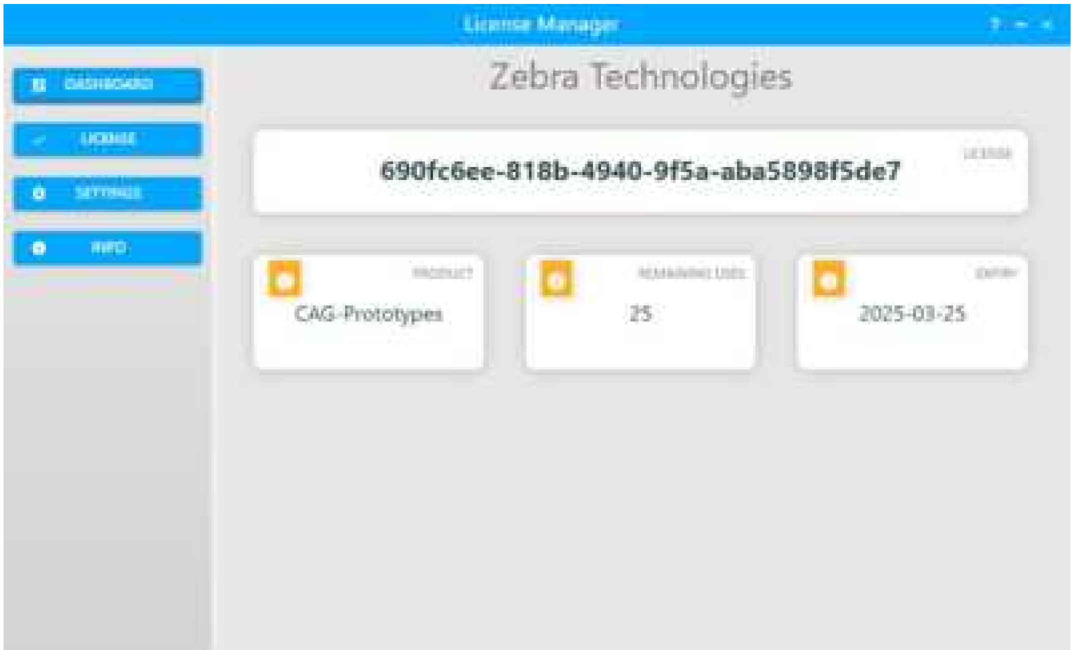
REMAINING USES 25

EXPIRY 2025-03-25

License Status

The Dashboard screen displays the license status of active licenses. If you do not have any active licenses, the dashboard will indicate N/A. For the active license code, depending on the mode, the dashboard provides the following information:

- Product type
- Remaining uses
- Expiry date



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CAG-Prototypes

25

2025-03-25

Configuring a Product License

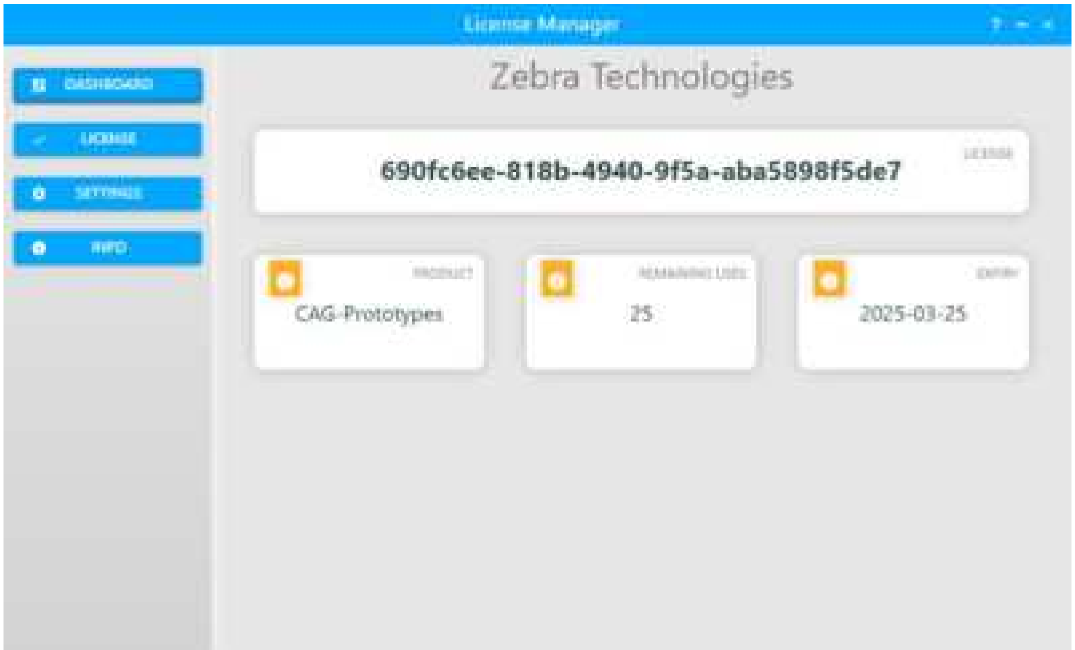
Licenses must be entered and configured in License Manager.

NOTE: Your computer must have access to the Internet to configure or clear licenses. If you connect to the Internet through a proxy server, configure the proxy server via the Settings screen before configuring or clearing licenses. Refer to Configuring the Proxy Settings on page 24.

NOTE: A license must be obtained from the Zebra Custom Solutions (CAG) team.

1. Select **License** > **Launch License Manager.**

   The **License Manager** displays.



LICENSE 690fc6ee-818b-4940-9f5a-aba5898f5de7

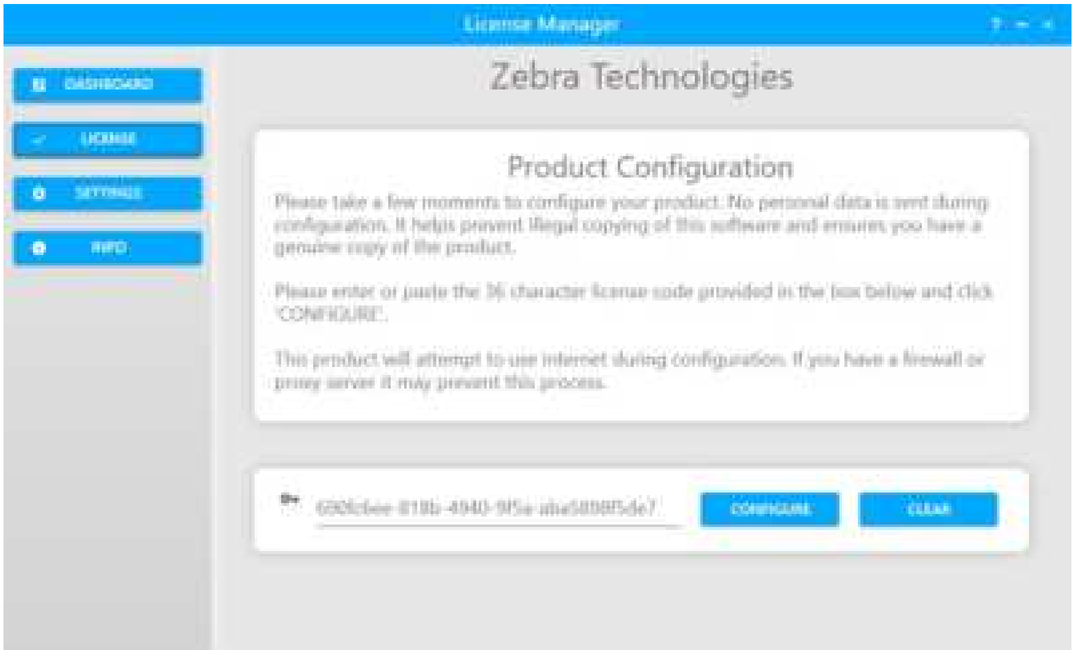
PRODUCT CAG-Prototypes

REMAINING USES 25

EXPIRY 2025-03-25

2. Click **License.**

   The **License Manager** updates.



Product Configuration

Please take a few moments to configure your product. No personal data is sent during configuration. It helps prevent illegal copying of this software and ensures you have a genuine copy of the product.

Please enter or paste the 36 character license code provided in the box below and click 'CONFIGURE'.

This product will attempt to use internet during configuration. If you have a firewall or proxy server it may prevent this process.

690fc6ee-818b-4940-9f5a-aba5898f5de7

3. In the 🔑 field, enter the license number.
4. Click **Configure.**

   A message displays indicating the configuration was successful.

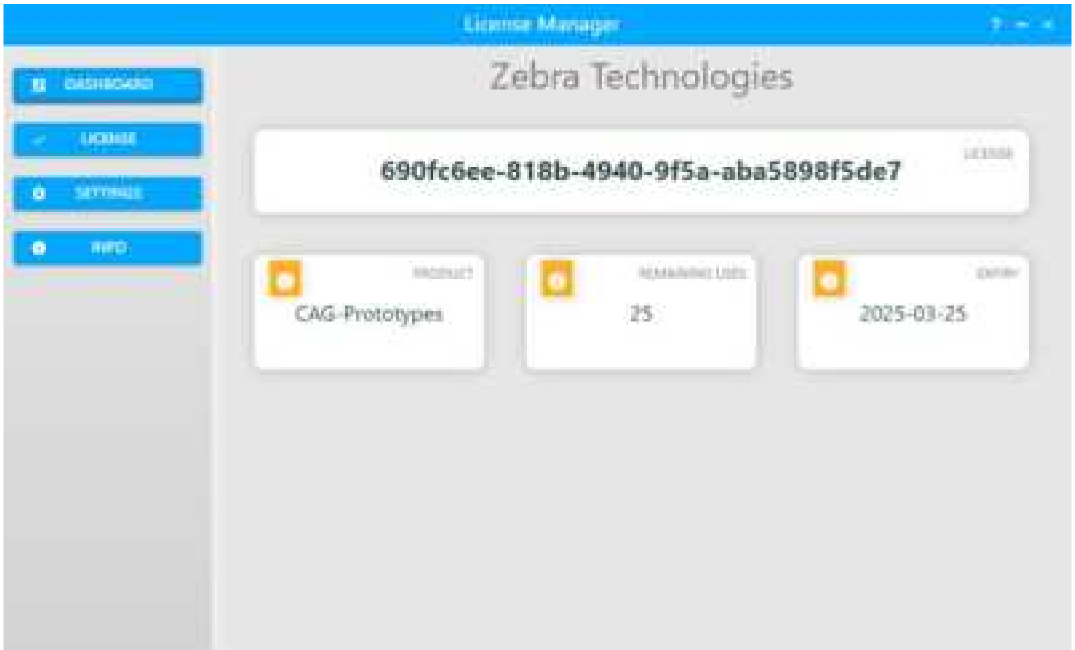
Clearing a License

Clearing a license allows the license to be moved to a different computer.

- The computer must be connected to the internet.
- If connecting to the internet through a proxy server, configure the proxy server before configuring the license code. Refer to Configuring the Proxy Settings on page 24.

1. Select **License** > **Launch License Manager.**

   The **License Manager** displays.



LICENSE 690fc6ee-818b-4940-9f5a-aba5898f5de7

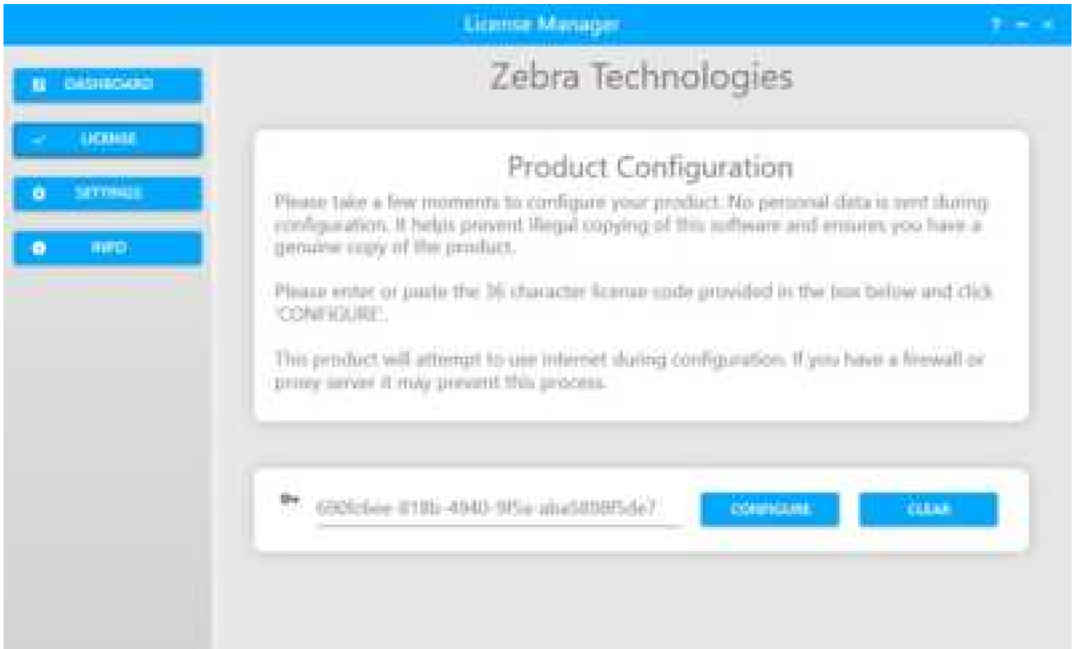
PRODUCT CAG-Prototypes

REMAINING USES 25

EXPIRY 2025-03-25

2. Click **License**

   The product configuration interface opens.



Product Configuration

Please take a few moments to configure your product. No personal data is sent during configuration. It helps prevent illegal copying of this software and ensures you have a genuine copy of the product.

Please enter or paste the 36 character license code provided in the box below and click 'CONFIGURE'.

This product will attempt to use internet during configuration. If you have a firewall or proxy server it may prevent this process.

3. Enter the License in the 🔑 field.
4. Click **Clear.**

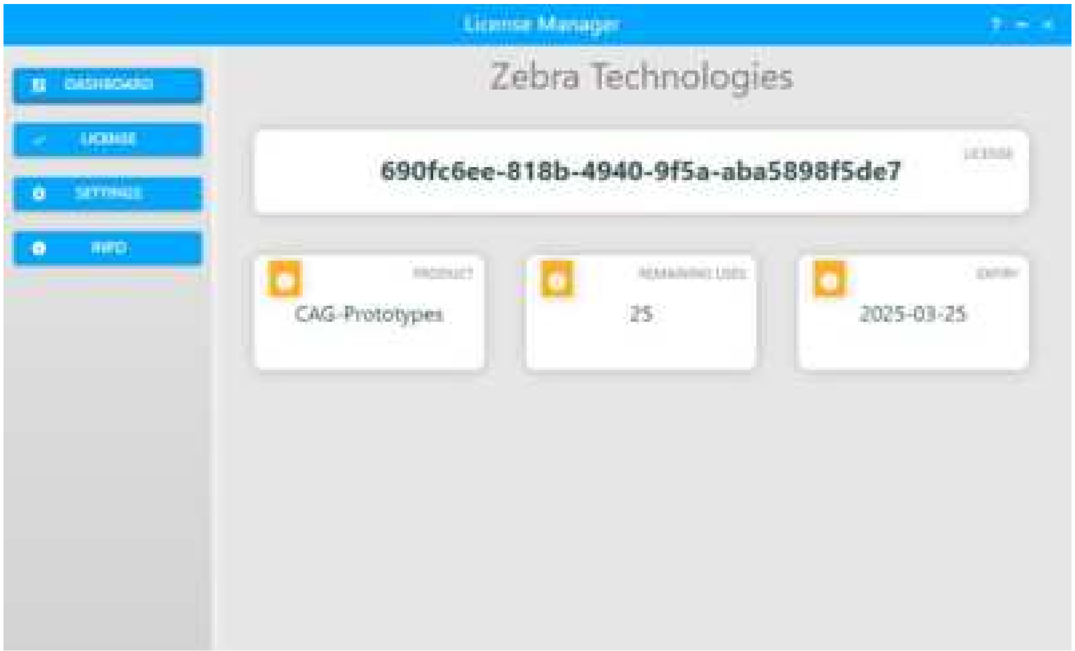
The license is deactivated and may be used on a different computer.

Configuring the Proxy Settings

The License Manager allows configuration of proxy server settings.

1. Select **License** > **Launch License Manager.**

   The **License Manager** displays.



LICENSE: 690fc6ee-818b-4940-9f5a-aba5898f5de7

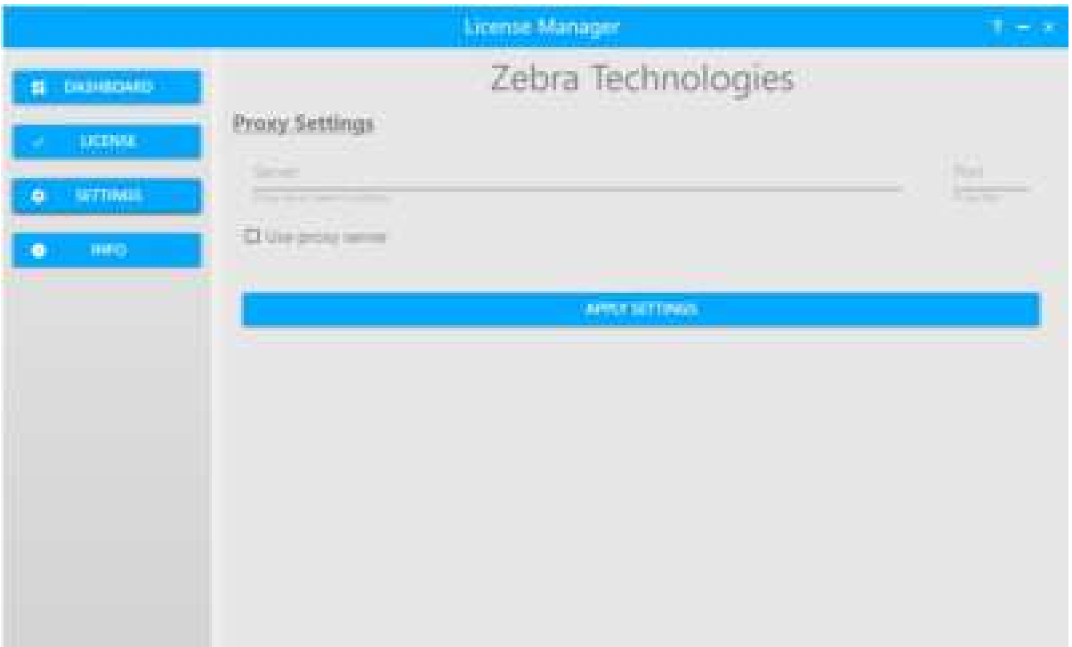
PRODUCT: CAG-Prototypes

REMAINING USES: 25

EXPIRY: 2025-03-25

2. Click **Settings.**

   The Proxy Settings screen displays.



3. In the **Server** text box, enter the server address.
4. In the **Port** text box, enter the port number.

5. Enable **Use proxy server** checkbox.
6. Click **APPLY SETTINGS.**