ZEBRA ZXP Series 3™

Installation Guide
Linux Printer Driver
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Introduction

This manual describes installing the Linux printer driver on the following operating systems:

- Ubuntu 12.04 or later (32- or 64-bit)
- Red Hat Enterprise Linux (RHEL) 6.5 or later (32- or 64-bit)

This procedure supports the following Zebra card printers:

- ZXP Series 1
- ZXP Series 3

Important • To ensure a successful driver installation, follow the integrated Linux Driver install wizard. Although the Zebra ZXP Card printer driver is based on the CUPS driver standard, it has critical modifications and additions to correctly support and print to a Card Printer.

Do not attempt to manually install the driver as this will not install the unique Zebra CUPS back-end driver filters correctly, and will likely result in printing errors.

For support or product questions please contact your Zebra Reseller, Zebra Technical Support, or email CardLinux@zebra.com.
To verify that you have a supported Ubuntu or RHEL Linux OS installation, open a terminal prompt and type the following command:

- In Ubuntu:
  \texttt{cat /etc/lsb-release}

- In RHEL
  \texttt{cat /etc/redhat-release}

To verify that you have a 32- or 64-bit Linux OS, open the terminal window and enter the following command:

- In Ubuntu or RHEL:
  \texttt{uname -m}

The following text string will be returned:

- For a 32-bit OS:
  \texttt{i386} or \texttt{i686}

- For a 64-bit OS:
  \texttt{X86_64}

To verify that you have the Zebra ZXP Series 3 driver installed:

- Ubuntu:
  Go to the Wubi dashboard and type \texttt{zebra}; if it displays \texttt{Zebra ZXP Series 3 Printer Properties} and \texttt{Uninstall ZXP Series 3 Printer Driver} applications then
2: Verifying the Linux Environment

the driver is already installed.

- RHEL:

  Go to Applications, if you see the Zebra ZXP Series 3 Card Printer Driver > Zebra ZXP Series 3 Printer Driver Properties menu, the driver is already installed.
To verify that you have installed Zebra ZXP Series 3 driver installed using the terminal window:

- Open a terminal window and enter the following command:

  ```
  # cd /usr/local
  # ls
  
  If the **ZebraZXP3Driver** folder is displayed, the driver is already installed.
  ```
To install the Zebra ZXP Series 3 Driver, right click on the **Unified_Zebra_ZXP3_Series_Card_Printer_Driver-0.0.x.x-Linux-x86_64-Install.tar.gz** file and select **Extract Here**.
3: Installing the Driver

Double-click on the extracted file to launch the installer.

Click Yes on the confirmation message to continue the installation.

Click Next.
3: Installing the Driver

Click the I accept radio button on the License Agreement screen and then click Next.

Select the printer model that you want to install.

Now the installation wizard shows the two setup types:

- USB Installation
- Ethernet Installation
3: Installing the Driver

USB Installation

Select the USB setup type and click Next.

![USB Installation Screen]

Ethernet Installation

Or, select the Ethernet setup type and click Next.

![Ethernet Installation Screen]
The IP address(es) of the connected ZXP Series 3 card printers will be displayed; select the desired printer and click **Next**.

Setup will copy all the necessary files to the destination as displayed below.
Unplug any Zebra ZXP Series printers and click **OK** to continue the installation.

Now all the necessary files will be copied to the destination and the installation is completed. Click **Finish** to close the installation wizard.
Plug in the Zebra ZXP Series 3 printer and turn it on. Open the Wubi dashboard and type `printing`.

The installed printers will be displayed in the printer control panel.
Redhat

To install the Zebra ZXP Series 3 Driver:

- Open the Terminal
- Change the directory to where the downloaded Zebra ZXP Series 3 files reside:
  
  For example: `cd /home/zebra/Desktop`

- Extract the files using the following command:

  ```bash
  # tar -xvf <tar.gz file name>
  ```

  For example: `# tar -xvf Unified_Zebra_ZXP3_Series_Card_Printer_Driver-0.0.1.3-Linux-x86_64-Install.tar.gz`

- Launch the installer using the following command:

  ```bash
  # su -c ./Unified_Zebra_ZXP3_Series_Card_Printer_Driver-0.0.1.3-Linux-x86_64-Install
  ```

  Click **Yes** on the confirmation message to continue the installation.
Click **Next**.

Now the installation wizard shows the two setup types:

- **USB Installation**
- **Ethernet Installation**
3: Installing the Driver
Redhat

USB Installation

Select the USB setup type and click Next.

![USB Installation Screenshot]

Ethernet Installation

Or, select the Ethernet setup type and click Next.

![Ethernet Installation Screenshot]
The IP address(es) of the connected ZXP Series 3 card printers will be displayed; select the desired printer and click **Next**.

Setup will copy all the necessary files to the destination as displayed below.
Select the printer model that you want to install.

Unplug any Zebra ZXP Series printers and click OK to continue the installation.
Now all the necessary files will be copied to the destination and the installation is completed. Click **Finish** to close the installation wizard.
## Silent Mode Installation

To install the Zebra ZXP Series 3 Driver:

- Open the Terminal.
- Change the directory to where you have downloaded Zebra ZXP Series 3 files.
  
  For example: `cd /home/zebra/Desktop`
- Extract the files using the following command:
  
  ```
  # tar -xvf <tar.gz file name>
  ```
  
  For Example: `#tar -xvf Unified_Zebra_ZXP3_Series_Card_Printer_Driver-0.0.1.3-Linux-x86_64-Install.tar.gz`
- Launch the installer in silent mode using the following command:
  
  ```
  #sudo ./Unified_Zebra_ZXP3_Series_Card_Printer_Driver-0.0.x.x-Linux-x86_64-Install --mode silent
  ```
  
  - Enter the password to continue the installation. When the messages stop, press Enter again for the command prompt.
- Plug in the printer and turn it on.
- The printer will be added automatically by the Zebra PnP.
The printer is in the “Printing” Control Panel.
Uninstalling the Driver

Ubuntu

To Uninstall the Zebra ZXP Series 3 Printer Driver, click on the Wubi dashboard and type Zebra.

Double-click on the Uninstall Zebra ZXP Series 3 Printer Driver icon.

Type the root password and click Yes in the uninstallation confirmation to proceed with uninstallation.
Unplug the Zebra ZXP Series 3 USB Printer and click **OK** to uninstall the driver.

Once the driver is uninstalled successfully, click **Finish**.
To uninstall the Zebra ZXP Series 3 Printer driver, open the Terminal window and change the directory to `/usr/local/ZebraZXP3Driver/`.

Type the following command to launch the GUI Uninstaller:

```
# su -c ./uninstall
```
Uninstalling in Silent Mode

To uninstall the Zebra ZXP Series 3 Printer driver in silent mode, open the Terminal window and change the directory to `/usr/local/ZebraZXP3Driver/`.

Type the following command to launch the uninstaller in silent mode:

```
#sudo ./uninstall
```

Once all the files are uninstalled, close the Terminal window.
To add the Ethernet printer through the terminal window, open the terminal and enter the following command:

```
# lpadmin -p <printername> -E -v "zxp3socket://<printerIP>:9100" -m <ppdName>
```

For example:

```
# lpadmin -p lpt3 -E -v zxp3socket://130.0.100.109:9100 -m /usr/share/cups/model/ZebraZXPS31Printer.ppd
```

All Zebra ZXP Series 3 Printer requests should go through Zebra Backend which is indicated by zxsps3socket.
Technical Commands

• Printing through terminal
  Command: `#lpr <filename>`
  For example: `#lpr test.txt`
  This will print through default printer.

• To print using specific printer
  Command: `#lpr -P <printer name>`
  For example: `#lpr -P Zebra-ZXP11-USB-Printer-Serial=Z1J124400043 test.txt`

• To view the Zebra ZXP Series 3 Log Files
  Log File Path: `/tmp`
  Log File Names:
  • `ZXPS3Filter.log` (Common for both USB and Ethernet printers)
  • `ZXPS3USB.log` (For USB printers)
  • `ZXPS3SOCK.log` (For Ethernet printers)

• To view the log files
  Command: `#vi /tmp/ZXPS3Filter.log`
  User must have root access to view the log files.
  User can use any text editor to view the log files
• Printer does not print
  Open the terminal and restart the service
  • Ubuntu
    \texttt{#sudo service cups restart}
  • RHEL
    \texttt{su}
    \texttt{#service cups restart}
• Check the permission of the Zebra ZXP Series 3 CUPS filter
  Open the terminal and change the directory /usr/lib/cups/filter and enter the following command:
  \texttt{# ls -l rastertozxp3}
  If the permission is correct, the following will be displayed:
  \texttt{-rwxr-xr-x}
  If the permission is not correct, enter the following command to reset the permission:
  • Ubuntu
    \texttt{# sudo chmod 755 /usr/lib/cups/filter/rastertozxp3}
  • RHEL
    \texttt{su}
    \texttt{#chmod 755 /usr/lib/cups/filter/rastertozxp3}
• Check the permission of the Zebra ZXP Series 3 Backend
Open the terminal and change the directory `/usr/lib/cups/backend` and enter the following command:

```
# ls -l zxp3socket
# ls -l zxp3usb
```

If the permission is correct, the following will be displayed:

```
-rwxr-xr-x
```

If the permission is not correct, enter the following command to reset the permission:

- **Ubuntu**
  ```
  # sudo chmod 755 /usr/lib/cups/filter/zxp3usb
  # sudo chmod 755 /usr/lib/cups/backend/zxp3socket
  ```

- **RHEL**
  ```
  # su
  # chmod 755 /usr/lib/cups/filter/zxp3usb
  # chmod 755 /usr/lib/cups/filter/zxp3socket
  ```

If the printer was manually added (USB or Ethernet), make sure the backend is configured correctly in the CUPS Printer Properties.

- For USB printers, the backend should start with `zxp3usb`.
- For Ethernet printers, the backend should start with `zxp3socket`.

The following pid and vid are supported by the current Zebra ZXP Series 3 Printer Driver:

- PID: 0050, 00f6, and 005C
- VID: 0a5f
You can check the pid and vid of the printer in the terminal by typing the following command:

```bash
# lsusb
```