

# **ZEBRA** ZXP Series 3<sup>™</sup>



## **Installation Guide**

## **Linux Printer Driver**



P1075320-001

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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.



# **2** Verifying the Linux Environment

To verify that you have a supported Ubuntu or RHEL Linux OS installation, open a terminal prompt and type the following command:

• In Ubuntu:

#### cat /etc/lsb-release

In RHEL

#### 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:

#### uname -m

The following text string will be returned:

• For a 32-bit OS:

i386 or i686

• For a 64-bit OS:

#### X86\_64

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

• Ubuntu :

Go to the Wubi dashboard and type **zebra**; if it displays **Zebra ZXP Series 3 Printer Properties** and **Uninstall ZXP Series 3 Printer Driver** applications then 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

# Is

If the ZebraZXP3Driver folder is displayed, the driver is already installed .

ganesh@ganesh-HP-	Pro-3330-M	1T: /usr/lo	cal		008
ganesh@ganesh-HP-Pro- bin CodeCorpLinuxLibrary etc ganesh@ganesh-HP-Pro-	3330-MT:/u games include java 3330-MT:/u	sr/locals lib man QUORiON sr/locals	sls SAM4S sbin share	src SWEDA ZebraZXP3Driver	



## **Installing the Driver**

## Ubuntu

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.

Unified_Ze	bra		
Printer_Dr	i 🚭 Open With Archive Manager		
0.0.1.3-Linux 64-Install.t	a ♦ Open With Archive Mounter Open With Other <u>Application</u>		
	<mark>Ж</mark> Си <u>к</u> ℡ <u>С</u> ору		
	Ma <u>k</u> e Link <u>R</u> ename Copy to Move to	•	
	Move to Trash		
	Extract Hege		
	<ul> <li>Send To</li> <li>Revert to Previous Version</li> </ul>		
	Properties		

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



Click Yes on the confirmation message to continue the installation.



#### Click Next.



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

Unified Zebra ZXP Series 3 Card Printer Driver Set 🛛 🔵 😣
License Agreement
Please read the following license agreement carefully.
END USER LICENSE AGREEMENT
Please read the terms of this "End User License Agreement" (the "Agreement") carefully. The Agreement is a legal agreement between you (either an individual or a single entity) and Zebra Technologies International, LLC ("Zebra") for the Zebra computer software and/or firmware accompanying this End User License Agreement, and any associated media, printed materials and any "online" or electronic documentation (collectively, "Software"). By installing or using the Software, you agree to be bound by the terms of this Agreement. If you do not agree to the terms of this Agreement, you may not install or use the Software.
1. Grant of License. The Software is protected by copyright and other intellectual property laws and international treaties. The Software is licensed to you, and not sold, subject to the
I accept the terms of the license agreement.     I do not accept the terms of the license agreement. InstallJammer
<pre> Back Next &gt; Cancel</pre>

Select the printer model that you want to install.

Unified Zebra ZXP Series 3 Card Printer Driver Set 🛛 🔗 😣
Choose Zebra ZXP Series 3 Printer Model
Please select your Zebra ZXP Series 3 Printer Model
Zerba ZXP Series 1 Printer 💌
Zerba ZXP Series 1 Printer Zebra ZXP Series 31 Printer Zebra ZXP Series 32 Printer
InstallJammer -
<pre></pre>

Now the installation wizard shows the two setup types:

- USB Installation
- Ethernet Installation

### **USB** Installation

Select the **USB** setup type and click **Next**.



### **Ethernet Installation**

Or, select the Ethernet setup type and click Next.



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

🛛 😔 📄 Zebra ZXP Series 3 Card Printer Driver Setup
Please select available printers or provide IP Address
192.168.100.12
InstallJammer
<pre> Back Next &gt; Cancel</pre>

Setup will copy all the necessary files to the destination as displayed below.

😣 🖨 Zebra ZXP Series 3 Card Printer Driver Setup
Installing Installing Zebra ZXP Series 3 Card Printer Driver
Please wait while Setup installs Zebra ZXP Series 3 Card Printer Driver on your computer.
Building uninstall
InstallJammer
< Back Next Cancel

Unplug any Zebra ZXP Series printers and click **OK** to continue the installation.

Unified Zebra ZXP Series 3 Card Printer Driver Set 😑 😒
Start Copying Files
Review settings before copying files
Setup has enough information to start copying the program files. If you want to review or change any settings, click Back. If you are satisfied with the settings, click Next to begin copying files.
Install Directory:
Install
Please unplug any printers connected to the system.
ΟΚ
<pre></pre>

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 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:

#### # 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:

# su -c ./Unified\_Zebra\_ZXP3\_Series\_Card\_Printer\_Driver-0.0.1.3-Linuxx86\_64-Install

Click Yes on the confirmation message to continue the installation.



#### Click Next.



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

Unified Zebra ZXP Series 3 Card Printer Driver Set	- 😣
License Agreement	
Flease read the following license agreement carefully.	
END USER LICENSE AGREEMENT	
Please read the terms of this "End User License Agreement" (the "Agreement") carefully. The Agreement is a legal agreement between you (either an individual or a single entity) and Zebra Technologies International, LLC ("Zebra") for the Zebra computer software and/or firmware accompanying this End User License Agreement, and any associated media, printed materials and any "online" or electronic documentation (collectively, "Software"). By installing or using the Software, you agree to be bound by the terms of this Agreement. If you do not agree to the terms of th Agreement, you may not install or use the Software.	e
1. Grant of License. The Software is protected by copyrigh and other intellectual property laws and international treaties. The Software is licensed to you, and not sold, subject to the	-
I accept the terms of the license agreement.     I do not accept the terms of the license agreement.  InstallJammer	Þ
<pre></pre>	1

Now the installation wizard shows the two setup types:

- USB Installation
- Ethernet Installation



### **USB** Installation

Select the **USB** setup type and click **Next**.



### **Ethernet Installation**

Or, select the Ethernet setup type and click Next.



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

😣 🖨 Zebra ZXP Series 3 Card Printer Driver Setup
Please select available printers or provide IP Address
192.168.100.12
InstallJammer
<pre> Kack Next &gt; Cancel</pre>

Setup will copy all the necessary files to the destination as displayed below.

😣 🔵 Zebra ZXP Series 3 Card Printer Driver Setup
Installing Installing Zebra ZXP Series 3 Card Printer Driver
Please wait while Setup installs Zebra ZXP Series 3 Card Printer Driver on your computer.
Building uninstall
InstallJammer
K Back Next > Cancel

 Unified Zebra ZXP Series 3 Card Printer Driver Set

 Choose Zebra ZXP Series 3 Printer Model

 Please select your Zebra ZXP Series 3 Printer Model

 Zerba ZXP Series 1 Printer

 Zerba ZXP Series 31 Printer

 Zebra ZXP Series 32 Printer

 Zebra ZXP Series 32 Printer

 InstallJammer

 Back
 Next > Cancel

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 your 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 usning the following command:

#sudo ./Unified\_Zebra\_ZXP3\_Series\_Card\_Printer\_Driver-0.0.x.x-Linuxx86\_64-Install --mode silent

• Enter the password to continue the installation. When the messages stop, press Enter again for the command prompt.

ganesh@ganesh-HP-Pro-3330-MT: ~/Desktop/Zebra/RHEL_New_Code/Installer/Source/output 🌀	$\sim$	⊨†µ	<b>4</b> ))	4:15 PM	1 Ganes	ht≵
<pre>//usr/local/ZebraZXP3Driver/ZebraZXP531Printer.ppd' -&gt; '/usr/share/cups/model/ZebraZXP531Printer.ppd' '/usr/share/cups/model/ZebraZXP532Printer.ppd' '/usr/share/cups/model/ZebraZXP531Printer.ppd' '/usr/share/</pre>						
installing files access control disabled, clients can connect from any host						
access control disabled, clients can connect from any host access control disabled, clients can connect from any host access control disabled, clients can connect from any host						
access control disabled, clients can connect from any host access control disabled, clients can connect from any host access control disabled, clients can connect from any host						
access control disabled, clients can connect from any host access control disabled, clients can connect from any host access control disabled, clients can connect from any host						
access control disabled, clients can connect from any host Rather than invoking init scripts through /etc/init.d, use the service(8) utility, e.g. service cups restart						
Since the script you are attempting to invoke has been converted to an Upstart job, you may also use the stop(8) and then start(8) utilities, e.g. stop cups ; start cups. The restart(8) utility is also available. ganeshgganeshHPPr0-3330-MT:-/Desktop/zebra/RHEL_Mew_Code/Installer/Source/output\$ cups start/running, process 1	2874					
Installation Completed for Ubuntu Libudev.so.0 is not present Libudev.so.0 is present Libudev.so.0 is present						
of Bit System Rather than (nvoking init scripts through /etc/init.d, use the service(8) utility, e.g. service cups restart						
Since the script you are attempting to invoke has been converted to an Upstart job, you may also use the stop(8) and then start(8) utilities, e.g. stop cups; start cups. The restart(8) utility is also available.						1
cups stop/walting cups star/running, process 12927 cups stop/walting cups star/running, process 12954						

- 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.



## Redhat

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

Applications Places Syste	em 🔮 隆 🗾			🕧 🕼 🛃	Fri Jan 30, 1:52 PM	ZEBRA
	Ze	bra@localhost:/usr/local	ZebraZXP3Driver		-	_ • ×
File Edit View Search Term	inal Help					
[zebra@localhost Desktop]\$ (	cd /usr/local/ZebraZXP3Driver/					A
<pre>[2ebra@tocathost 2ebraZXP30] images LUTFiles [2ebra@tocathost ZebraZXP30] Password:</pre>	riverjs is anf profile Remove_ZebraZXPS3_Printer scripts river]\$ su -c ./uninstall	uninstall uninstall.ico ZebraZXPSIPrinter.ppd	ZebraZXPS31Printer.ppd ZebraZXPS32Printer.ppd	ZXP3PrinterEthernetDiscovery zxps3printerproperties.conso zxps3printerproperties.pam	le	
	Uninst	all Unified Zebra ZXP Se	ries 3 Card Printer Drive	r _ x		
	This will completely remove Un	ified Zebra ZXP Series 3 Card P	rinter Driver from your system.	Are you sure you want to do this?		
		Yes	No			
zebra@localhost:/usr/l	Uninstall Unified Zebr					

## **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/.

ganesh@ganesh-HP-Pro-3330-MT: ~	9	$\sim$	tų.	<b>(()</b>	4:40 PM	1 Ganes	hψ
ganesh@ganesh-HP-Pro-3330-MT:-\$ cd /usr/local/ZebraZXP3Driver/							
· 🔁 ·							
<u>-</u>							
·🔽							
· 🛃							
2							

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

#### #sudo ./uninstall

Once all the files are uninstalled, close the Terminal window.

ganesh@ganesh-HP-Pro-3330-MT: /usr/local/ZebraZXP3Driver	9	$\bowtie$	tį.	<b>()</b> )	4:43 PM	👤 Ganesh	ψ
ganesh@ganesh-HP-Pro-3330-MT:/usr/local/ZebraZXP3Driver\$ sudo ./uninstallmode silent							
• 🔁 •							
<b>k</b>							

## **Adding an Ethernet Printer**

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 -P /usr/share/** cups/model/ZebraZXPS31Printer.ppd

All Zebra ZXP Series 3 Printer requests should go through Zebra Backend which is indicated by zxps3socket.



## **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: #Ipr -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



## Troubleshooting

• Printer does not print

Open the terminal and restart the service

Ubuntu

**#sudo service cups restart** 

RHEL

•

#su

#### **#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:

#### # Is -I rastertozxp3

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/rastertozxp3

RHEL

#su

#### #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:

#### # Is -I zxp3socket

#### # Is- I 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 be start with **zxp3socket**.

Printer Properties	- 'lpt3' on localhost		• •
Settings Policies Access Control Printer Options Job Options Ink/Toner Levels	Settings Description: Location: Device URI:	[pt3 [zxp3socket://130.0.100.109:9100	Change
	Make and Model:	ZXPS31	Change
	Printer State:	Idle	
	Tests and Mainten Print Test Page	ance	
		Apply Can	сel ОК

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:

#lsusb	
ganesh@ganesh-HP-Pro-3330-MT: ~ ganesh@ganesh.HP-Pro-3330-MT: ~\$ lsusb Bus 001 Device 001: ID 1d6b:0002 Linux Foundation 2.0 root hub Bus 001 Device 001: ID 1d6b:0002 Linux Foundation 2.0 root hub Bus 001 Device 002: ID 8087:0024 Intel Corp. Integrated Rate Matching Hub Bus 001 Device 003: ID 0407:0024 Intel Corp. Integrated Rate Matching Hub Bus 001 Device 003: ID 0407:0024 Intel Corp. Integrated Rate Matching Hub Bus 001 Device 003: ID 0407:0024 Intel Corp. Integrated Rate Matching Hub Bus 002 Device 003: ID 0407:0024 Intel Corp. Integrated Rate Matching Hub Bus 002 Device 003: ID 0407:0024 Intel Corp. USB 2.0 Hub Bus 002 Device 0041: ID 0457:0007 Zebra	🍙 🖾 ût (4)) 4:08 PM ⊥ Ganesh ለ‡
° fganeshganesh-HP-Pro-3330-MT:-\$ <b>k</b>	

