

```
Parameters: hPrinter, printerType, imgBufIdx, contrast, err, TRUE, FALSE, Appendix A, ZBRPRNSetContrastIntensityLvl, Description: Sets the color intensity level for the specified image buffer, Syntax: int ZBRPRNSetContrastIntensityLvl( HANDLE hPrinter, int printerType, int imgBufIdx, int intensity, int *err), device context value for a printer driver, printer type value, Appendix B, image buffer index: 0 = Yellow (Y), 1 = Magenta (M), 2 = Cyan (C), 3 = Dye Sublimation Black (K dye), contrast value (0 thru 10), error value, successful, failed, Return Value: intensity, err, TRUE, FALSE, Appendix A, Error Codes: ZBRPRNSetHologramIntensity, Description: Sets the hologram intensity level, Syntax: int ZBRPRNSetHologramIntensity( HANDLE hPrinter, int printerType, int intensity, int *err), device context value for a printer driver, printer type value, Appendix B, intensity value (0 thru 10), error value, successful, failed, Parameters: hPrinter, printerType, intensity, err
```

**ZXP Series 1 and ZXP Series 3**

**RHEL 6.5 Driver  
User's Manual**



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[www.zebra.com/environment](http://www.zebra.com/environment)

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# Getting Started

## Introduction

The purpose of this document is describe how to install a Zebra ZXP Series 1 and ZXP Series 3 printer driver for Red Hat Enterprise Linux (RHEL) in detail. The document provides information on installation of ZXP Series 1 and ZXP Series 3 Printer on RHEL 6.5 operating systems on 32-bit and 64 Bit environments.

## Overview

The Zebra ZXP Series 1 and ZXP Series 3 printer driver for RHEL supports color printing, dual side printing, magnetic encoding, and provides information about the printer and ribbon details.

## Prerequisite

The Zebra ZXP Series 1 and ZXP Series 3 printer driver for RHEL has been tested on the following distributions of Linux:

- Red Hat Enterprise Linux 6.5 32 bit
- Red Hat Enterprise Linux 6.5 64 bit

## Extracting files using GUI

To install the Zebra ZXP Series 1 and ZXP Series 3 Printer Driver for RHEL by means of GUI, the user needs to be a root user.

Click on the Zebra ZXP3 Series Card Printer Driver-0.0.0.xx-Linux-x86-Install.tar archive file to untar the setup for installation of the driver to a desired directory location.

**Note** • In the FireFox web browser the setup will be downloaded inside the download. Right click *Open Containing folder*; Right click *Open with Archive Manager*; Right click *Extract* or click *Extract*; select the desired location; Click *Extract*.

## Installation Wizard

### Prerequisite

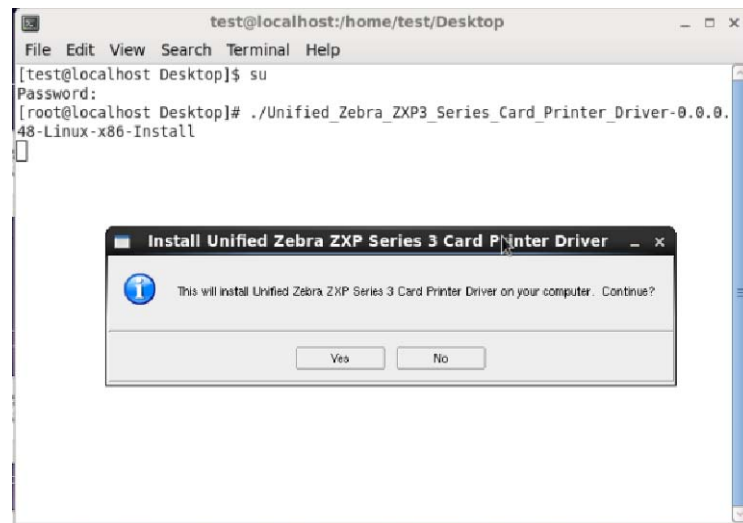
The installation can be performed only from terminal with administrator mode. Type the Administrator password when prompted.

Open the terminal by clicking the menu Applications—System Tools—Terminal

Navigate to the directory where the driver files are extracted and enter *su* in the terminal and press the **Enter** key.

Enter the root password when prompted

Type the following commands in the terminal:



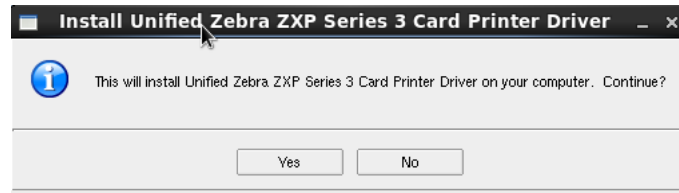
## To install 64 bit driver

`./Unified_Zebra_ZXP3_Series_Card_Printer_Driver-0.0.0.48-Linux-x86_64-Install`

## To install 32 bit driver

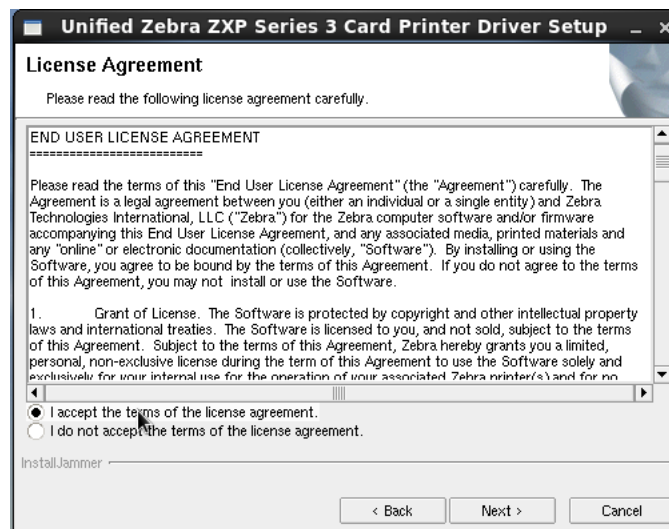
`./Unified_Zebra_ZXP3_Series_Card_Printer_Driver-0.0.0.48-Linux-x86-Install`

To install the driver, click **Yes**; click **No** to cancel the installation.



The License Agreement page appears. Select the radio button next to *I accept the terms of the license agreement* to continue the installation and click **Next**.

**Note** • The license agreement must be accepted to continue installation. Selecting *I do not accept the terms of the license agreement* and clicking **Next** will cancel the installation; as will clicking **Cancel**.



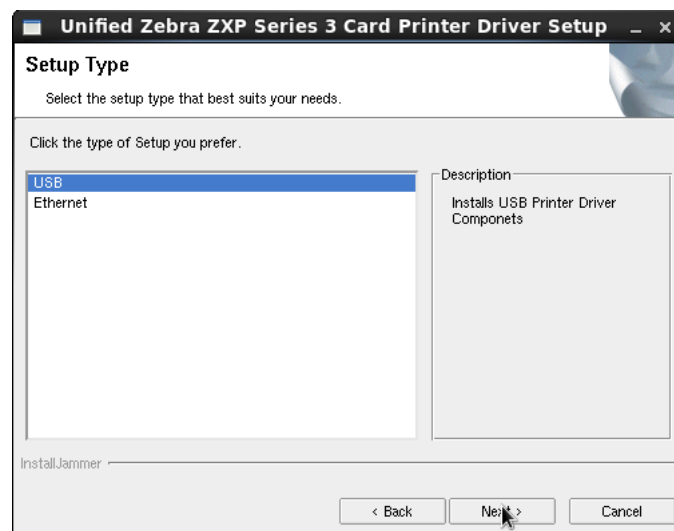
After accepting the license agreement, the *Printer Model* selection screen is displayed. From the pull-down menu, select the printer model to be installed and click **Next**.

## 1: Getting Started

### Installation Wizard

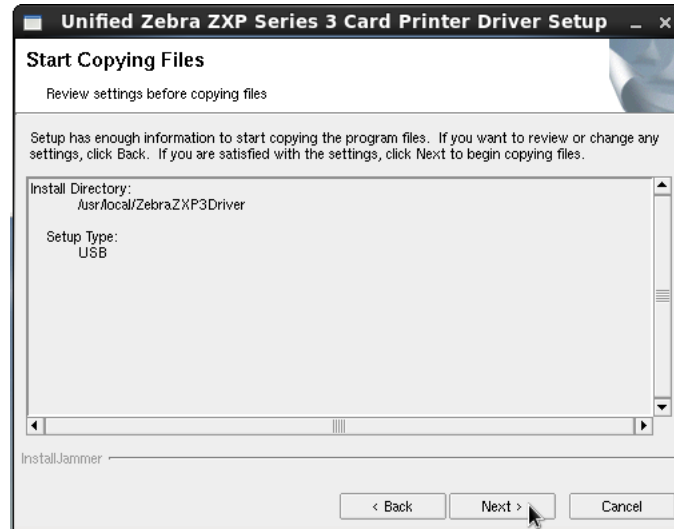


Select the type of printer to be installed: USB or Ethernet.





## USB Printer Driver Installation



**Note** • Do not plug in the USB Printer before the Installation is complete.

Upon selecting the USB printer type and clicking next, the installation progress will be displayed. The driver files will be copied into the following directories:

- /usr/lib/cups/filter/rastertoexp3
- /usr/lib/cups/filter/pstoexp3ps

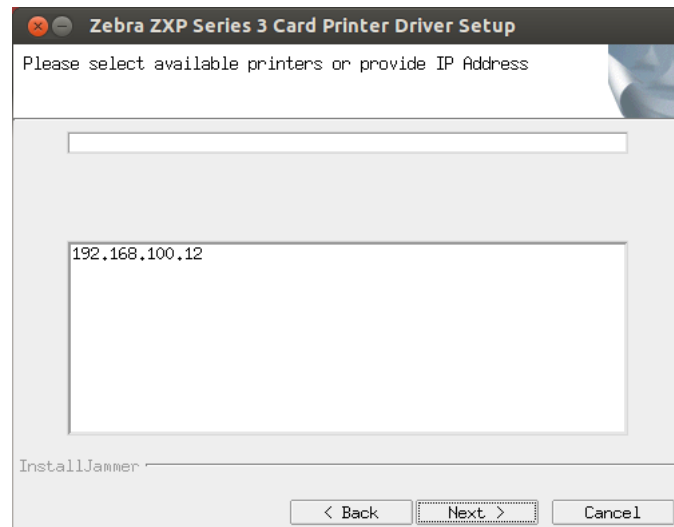
After the copying is complete, the final Install Jammer Wizard page shows that the driver has been installed successfully.



Click **Finish** into complete the installation and exit the Installer.

## Ethernet Printer Driver Installation

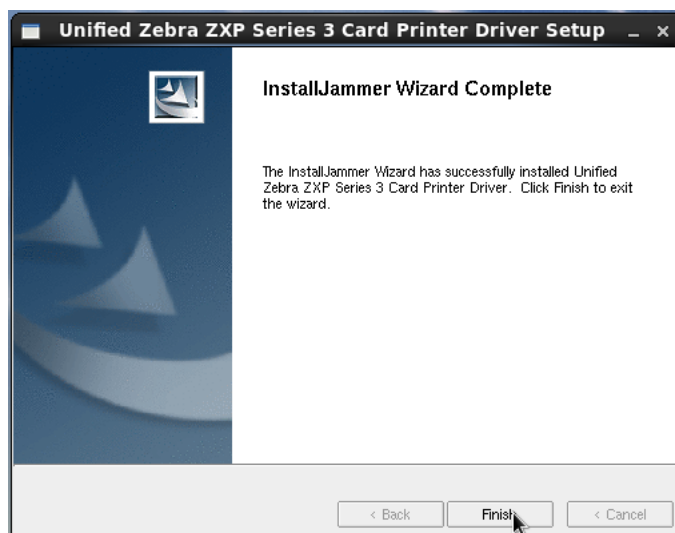
Upon selecting the Ethernet printer type and clicking **Next**, a window will display the IP addresses of the connected ZXP Series 3 card printers.



Select the IP address of the printer and click **Next**. The driver files will be copied into the following directories:

- /usr/lib/cups/filter/rastertoexp3
- /usr/lib/cups/filter/pstoexp3ps
- /usr/local/ZebraZXP3Driver/

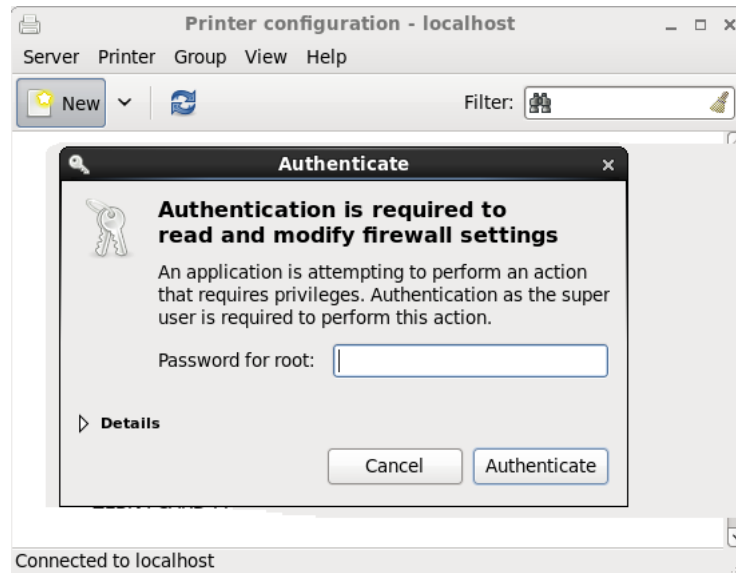
After the copying is complete, the final Install Jammer Wizard page shows that the driver has been installed successfully.



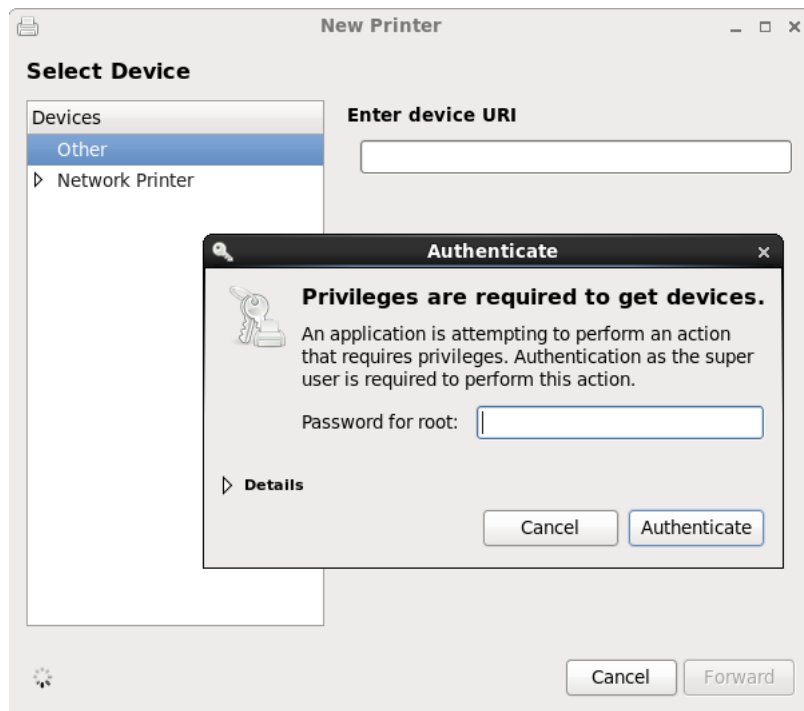
Click **Finish** into complete the installation and exit the Installer.

## Adding a Printer Manually

To add the printer manually, select the menu System—Administration—Printing. The printer properties window will open. Select the **New** from the Printer properties as shown in below.



Enter the root password. Then select the printer to install.

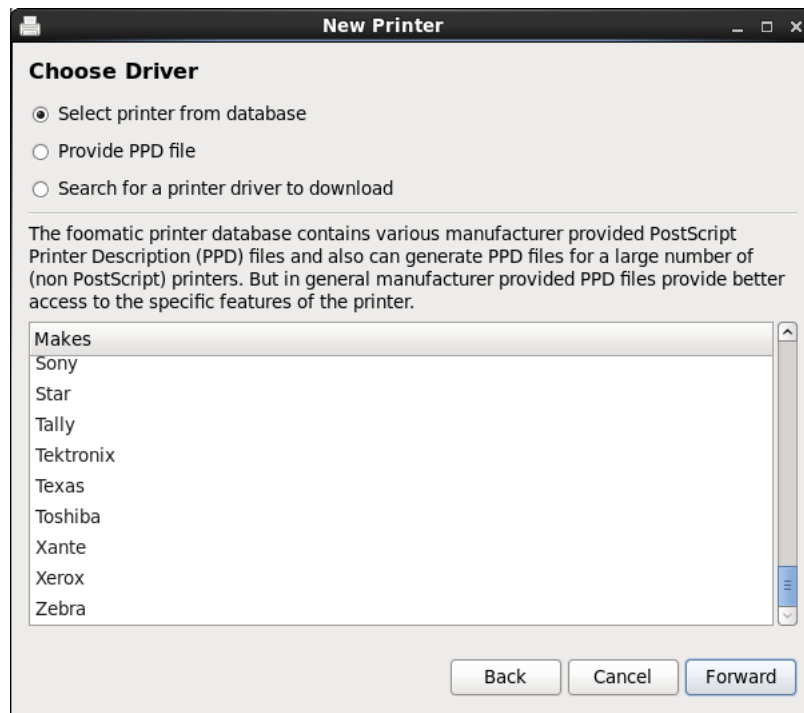


Select the printer to install and provide the root password if prompted.

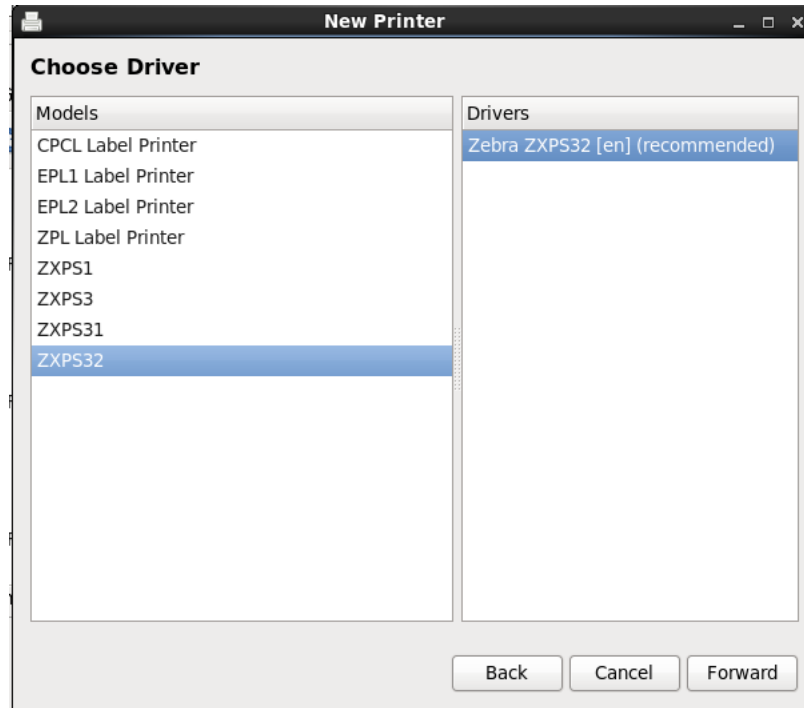
Select the driver from the installed driver list.

## 1: Getting Started

### Adding a Printer Manually



Select the Zebra printer.



Click **Forward** to add the printer. The new printer will be updated in the Printer properties window.

## Extracting files using Terminal

Launch the terminal by selecting Applications—System Tools—Terminal.

Locate the Zebra Linux Driver tar file: Unified\_Zebra\_ZXP3\_Series\_Card\_Printer\_Driver-0.0.0.x-Linux-x-Install.tar.gz.

Extract the Binary file using the following command:

```
tar -xvf Unified_Zebra_ZXP3_Series_Card_Printer_Driver-0.0.0.x-Linux-x-Install.tar.gz
```

Run the Installation inside the extracted directory using the following command:

```
su ./Unified_Zebra_ZXP3_Series_Card_Printer_Driver-0.0.0.48-Linux-x86_64-Install
```

Proceed with the installation using the setup wizard.

## Uninstall

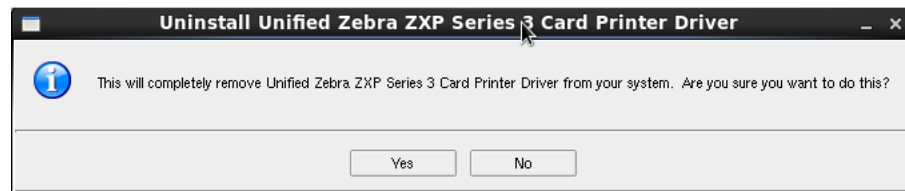
To Remove the Zebra ZXP Series 3 Printer Application:

Launch the terminal by selecting Applications—System Tools—Terminal.

Change the Directory: `cd /usr/local/ZebraZXP3Driver`

Run the Uninstall program using the following command:

```
./uninstall
```



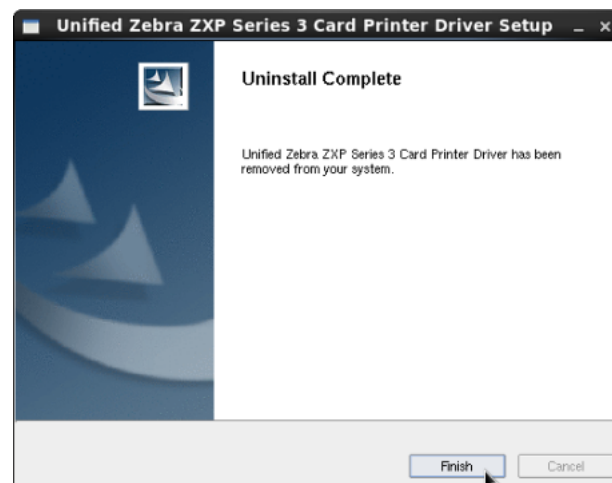
Click **Yes** to continue, otherwise click **No** to cancel the uninstall.

## 1: Getting Started

Extracting files using Terminal



Click **OK**.

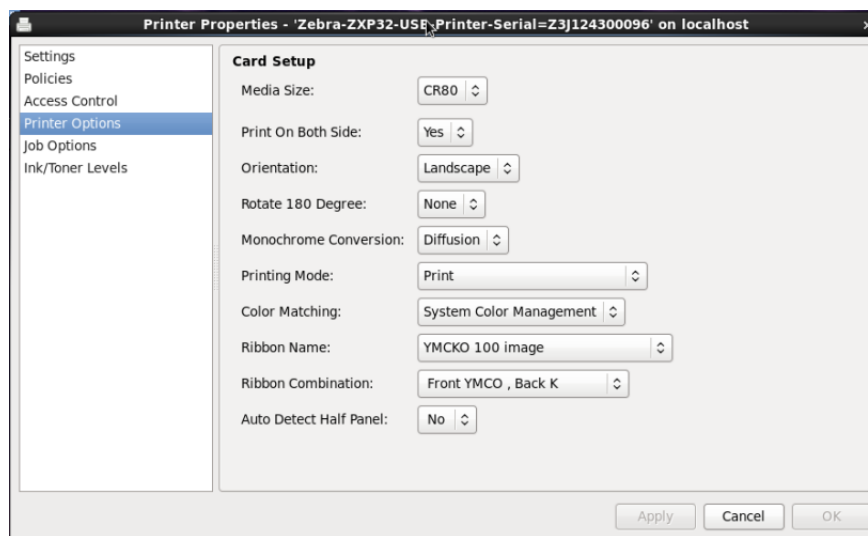


Click **Finish**.

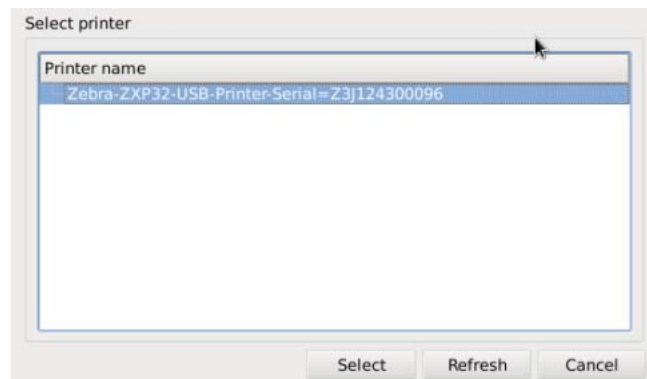
**Note** • The following instructions are for the USB interface. If you are using the Ethernet interface, the corresponding screens will refer to the Network Printer.

## Printing Preferences

Go to the menu System—Administration—Printing to display all the available installed printers. Select the printer and click **Select** to open the Printer Preferences menu.

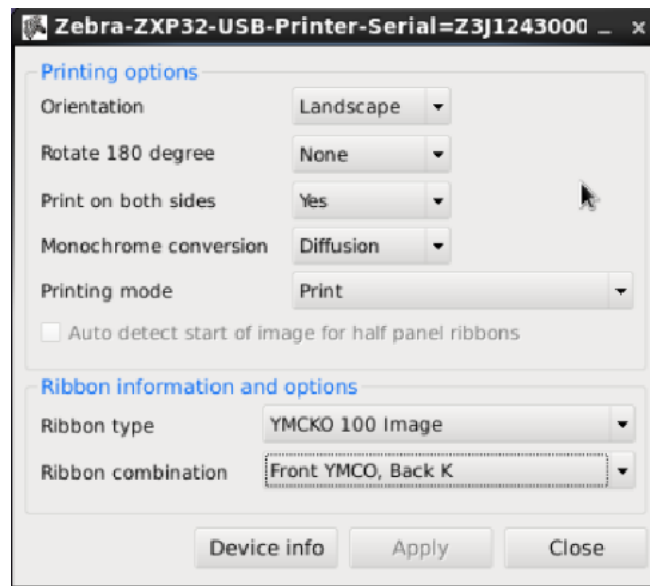


The Printing Preferences application will launch and will display the available installed printers. Select the printer and click on the Select button to open the Printer Preferences page of the corresponding printer.



Select the Printer click **Select**.

## Printer Options



- Orientation: Selection for portrait or landscape printing.
- Rotate 180 Degree: Selection for rotating the image 180°.
- Print on both sides: Selection for single-sided or dual-sided printing.
- Monochrome Conversion: Specifies the method of monochrome conversion used in printing. Different selections have different effects on the way the image is printed.
- Printing Mode: Sets the type of printing required:
  - Print
  - Encode only (Use this when magnetic encoding is the only function desired, printing will not occur).



- Print and Encode on same side.
- Ribbon type: The supported ribbons are displayed.
- Ribbon combinations: Are based on ribbon type; for example:
  - YMCKO 100 Images, YMCKO 200 Images, YMCKO 280 Images
    - Front YMCO, Back K
    - Front YMCKO, Back YMCKO
    - Front YMC, Back KO
    - Front YMCKO
  - 1/2 YMCKO 250, 1/2 YMCKO 400
    - Front YMCO, Back K
    - Front YMCKO, Back YMCKO
    - Front YMC, Back KO
    - Front YMCKO
  - YMCKOK 165, YMCKOK 230
    - Front YMCKO, Back YMCKO
    - Front YMC, Back KO
    - Front YMCK, Back K
    - Front YMCKO, Back K
    - Front YMCKO
  - YMCKOKO
    - Front YMCO, Back K
    - Front YMCKO, Back YMCKO
    - Front YMC, Back KO
    - Front YMCK, Back K
    - Front YMCKO, Back K
    - Front YMCKO, Back KO
    - Front YMCO, Back KO
    - Front YMCK, Back KO
    - Front YMCKO
  - 1/2 YMCKOKO 250
    - Front YMCO, Back K
    - Front YMCKO, Back YMCKO
    - Front YMC, Back KO
    - Front YMCK, Back K
    - Front YMCKO, Back K
    - Front YMCKO, Back KO
    - Front YMCO, Back KO
    - Front YMCK, Back KO
    - Front YMCKO
  - K Resin
    - Front K / Back K

- Front K
- KDO 500 image, KDO 700 image
  - Front KdO /Back KdO
  - Front KdO
- KRO 500 image, KRO 700 image
  - Front KrO / Back KrO
  - Front KrO
- Std Mono chrome, High capacity mono chrome
  - Front K / Back K
  - Front K
- Auto detect Half panel: Insert the Half panel ribbon in to the printer Auto detects check box is checked automatically.

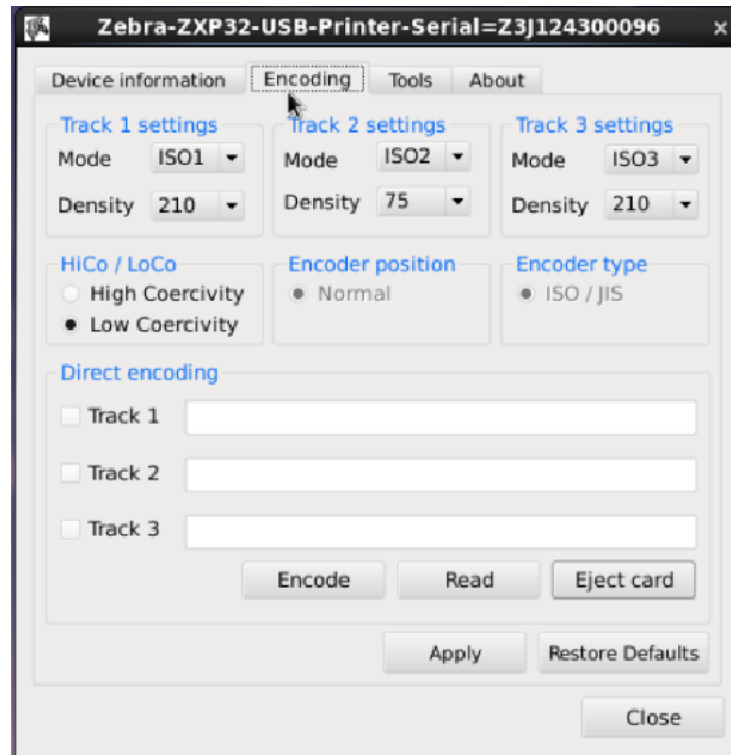
## Device Info



- **Printer Model:** Displays the current Printer Model
- **FW Version:** Displays the Current firmware version in the Printer
- **Serial Number:** Displaying the Printer Serial Number
- **Ribbon Type:** Displaying the Current Ribbon Information
- **Head Resistance:** Displaying the Head Resistance Information
- **Mag Encode:** Mag encoding Option is support and Not supported Option
- **Panels Printed:** The number of Panels are printed status information.

- **Remaining Count:** The Ribbon Remaining count status information
- **Smart Card Type:** The smart card supported status information

## Encoding Options



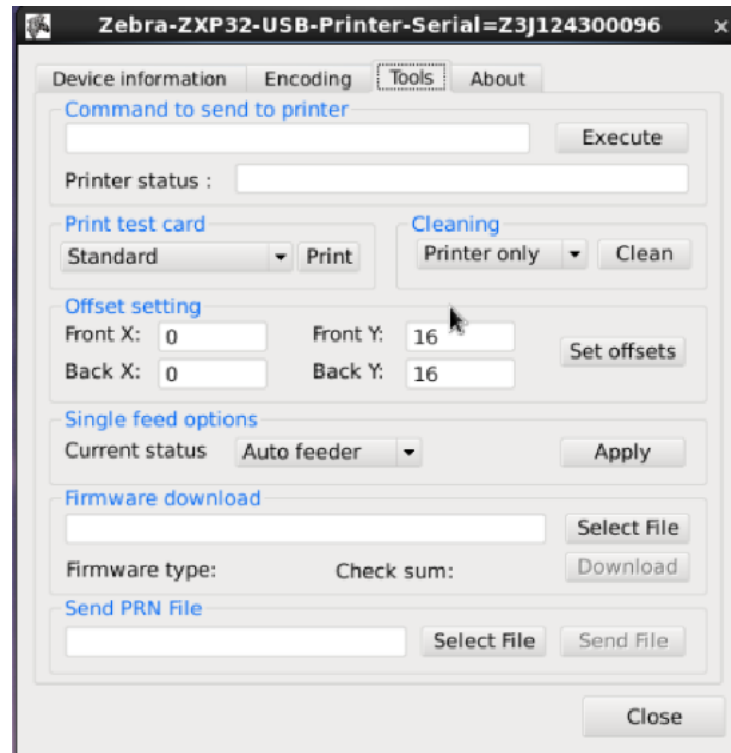
- **Track 1 encoding mode:** The following options are displayed.
  - ISO1
  - ISO2
  - ISO3
- **Track 1 Bit Density:** The following options are displayed.
  - 210 bpi
  - 75 bpi
- **Track 2 encoding mode:** The following options are displayed.
  - ISO1
  - ISO2
  - ISO3
- **Track 2 Bit Density:** The following options are displayed.
  - 210 bpi

- 75 bpi
- **Track 3 encoding mode:** The following options are displayed.
  - ISO1
  - ISO2
  - ISO3
- **Track 3 Bit Density:** The following options are displayed.
  - 210 bpi
  - 75 bpi
- **Coercivity:** Select the type of coercivity of magnetic stripe cards to be used. The list of options is displayed.
  - High coercivity
  - Low coercivity
- **Encoding Position:** The default encoder position normal is displayed.
- **Encoder Type:** The default encoder Type ISO /jis is getting displayed..

### Direct Encoding

- **Track 1:** Allowed Characters are \$ ^ ( ) . / - <space> and Caps (Alphabets), Numeric. Length: 76
- **Track 2:** Allowed characters are Numbers and Symbol = and Length: 37
- **Track 3:** Allowed characters are Numbers and Symbol = and Length: 104
- **Encode:** Enter the Mag track value in the Text box field and click Encode Button
- **Read:** Encode the mag track details and insert the card in to the printer and click read button
- **Eject Card:** The card Eject from the Printer
- **Restore Defaults:** Settings are restored.
- **Apply:** Selected settings are applied successfully..

## Tools



- **Command to send to printer:** Enter the command in the *Command to send to printer* text box and click *Execute*.
- **Print Test card:** The following options are displayed in the *Print Test card* drop-down list:
  - Standard
  - Encoder Parameters
  - Printer Parameters
- **Cleaning:** The following options are displayed in the cleaning drop-down list.
  - Printer Only
  - Magnetic Encoder
- **Offset Setting:** Enter the X and Y offset values and click the “Set Offset” button on the Offset setting. Test card should be printed with the change the printer offset value.
- **Single feed Options:** Current Status displays the current card feed method; choices are Card feeder, Single feeder slot, and Auto feed.
- **FW Download:** Browse and select the Firmware file and click download button the FW is downloading successfully.

## 2: Setup

### Printer Properties: Test Print Card

- **Send PRN File:** Browse the Saved PRN file and click Send file button. The PRN file Printed Successfully.

## About



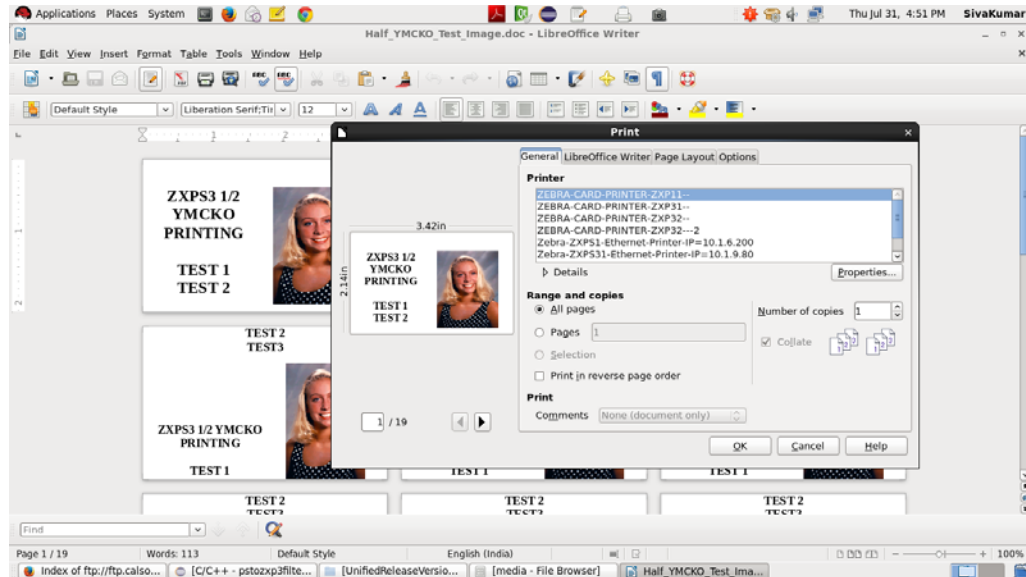
The *About* tab displays the Printer Model and Driver Version information.

## Printer Properties: Test Print Card

The Printing Properties will list all the available printers. Right click on the available printer and select *Properties* and click *Test Print*.

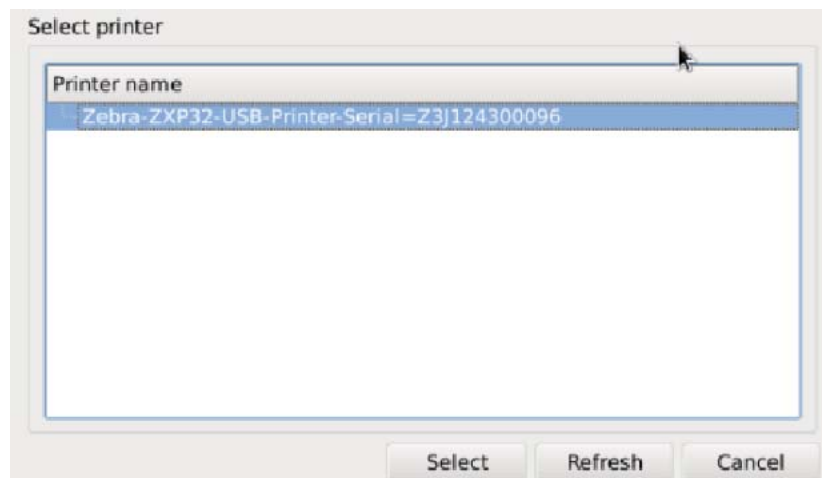
## Printing From Libre Office

Open the suitable document. Click on the *File* menu and then select *Print*. Select the appropriate printer and click *Print*. The print job will be sent to the printer.



## Changing Printer Options

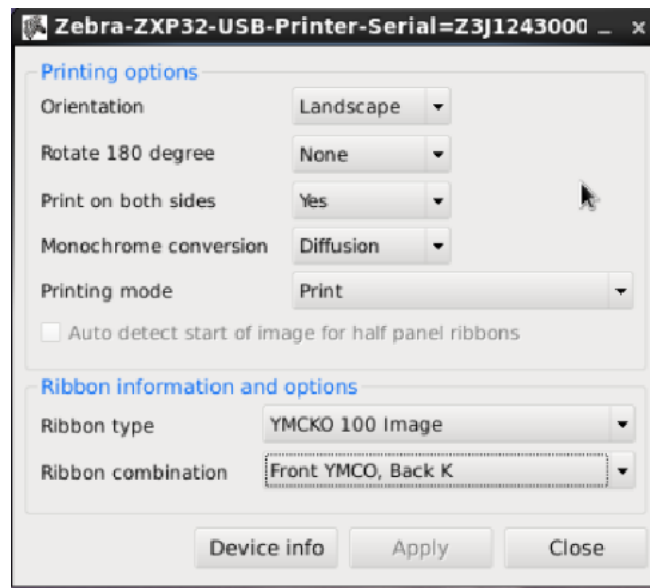
To change the printer options go to Application—Zebra ZXPS 3 Printer Driver—Zebra ZXPS 3 Printer Driver Properties screen. The installed printers will be displayed; select the appropriate printer.



To change the printer options go to System Tools—Admin—Printing, then it will show the installed printers. From that select the appropriate printer. Then following screen will appear.

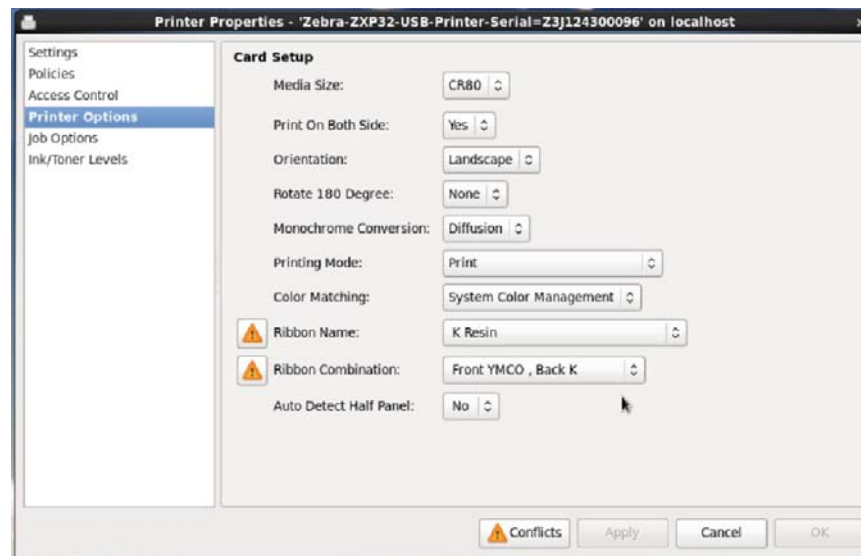
## 2: Setup

### Changing Printer Options

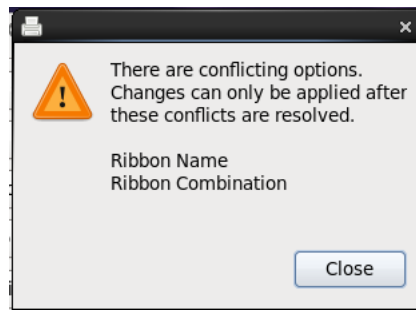


Select the appropriate printing option and click *Apply*; enter the root password to save the settings.

A warning icon will be displayed next to an incorrect setting. A warning dialog box will appear advising the user to correct the errors to be able to save the changes.









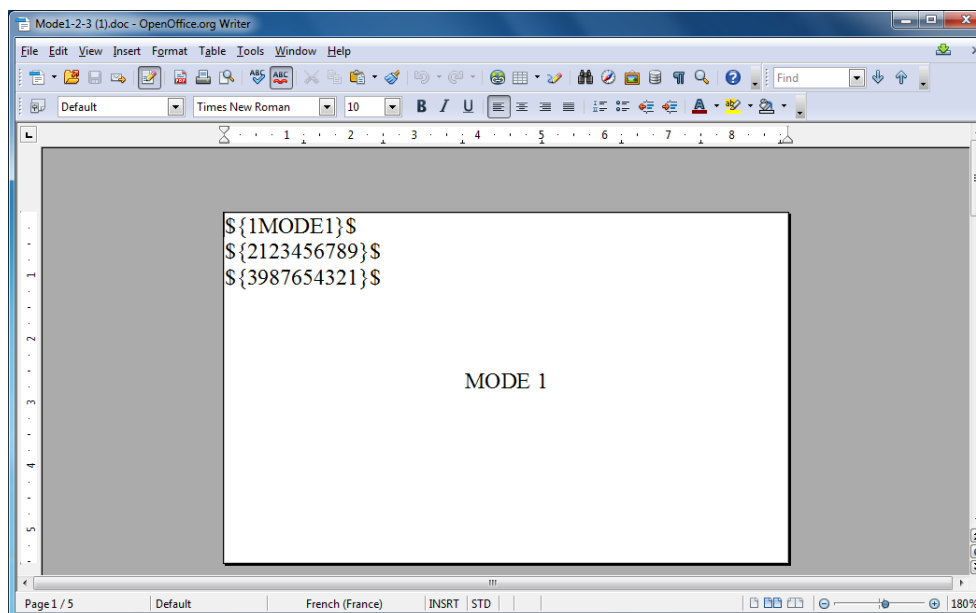
# Magnetic Encoding

## Introduction

The purpose of this document is to describe how to perform magnetic encoding with the Zebra ZXP Series 1 and ZXP Series 3 printer driver for Linux, using Libre Office, in detail. The document provides information on magnetic encoding with ZXP Series 1 and ZXP Series 3 Printer on 32-bit and 64-bit Linux operating systems tested on RHEL 6.5 environment.

## Magnetic Encoding Using Open Office

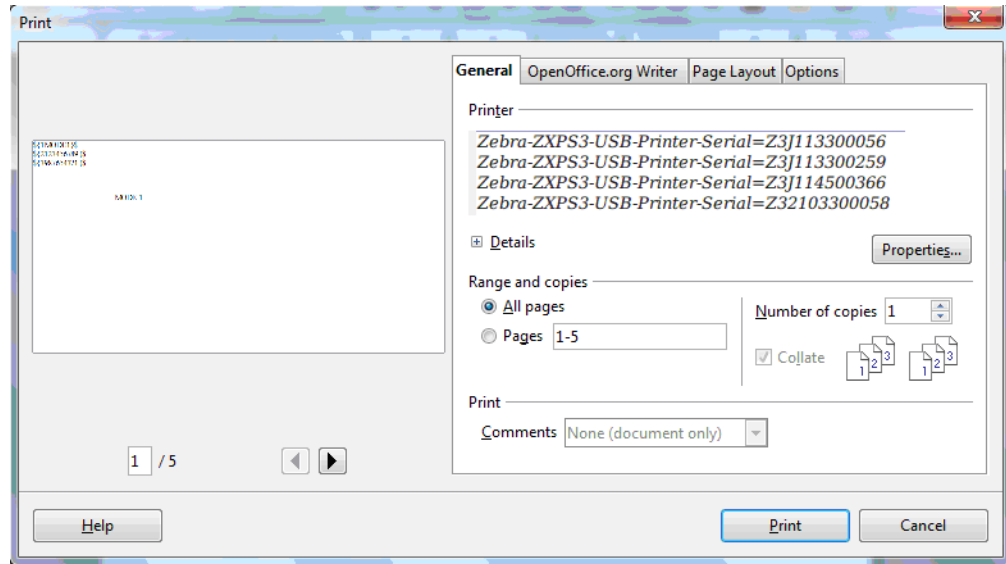
Open any existing document with magnetic encoding data or create a new document.



### 3: Magnetic Encoding

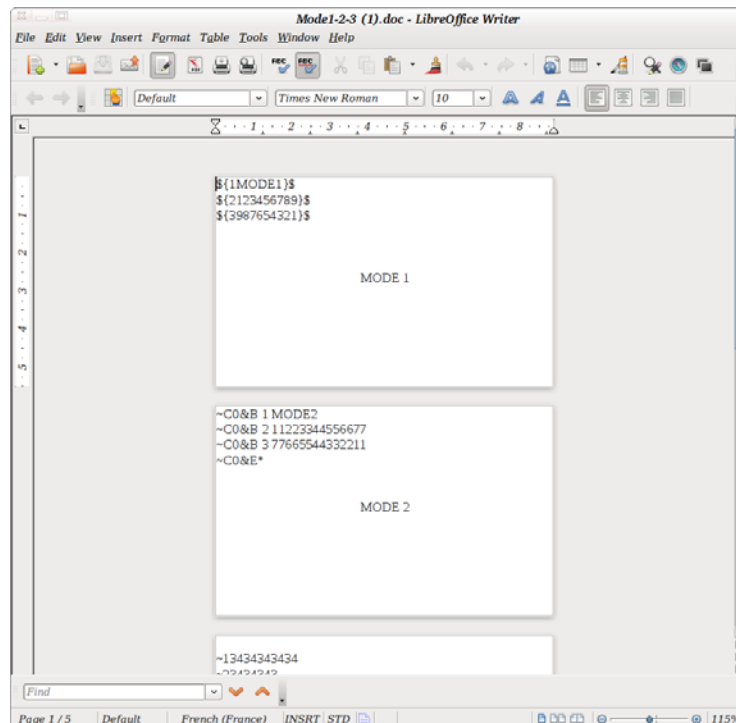
#### Magnetic Encoding Using Libre Office

Click the *File* menu and select *Print*. Select the desired printer from the available printers list and print the document.

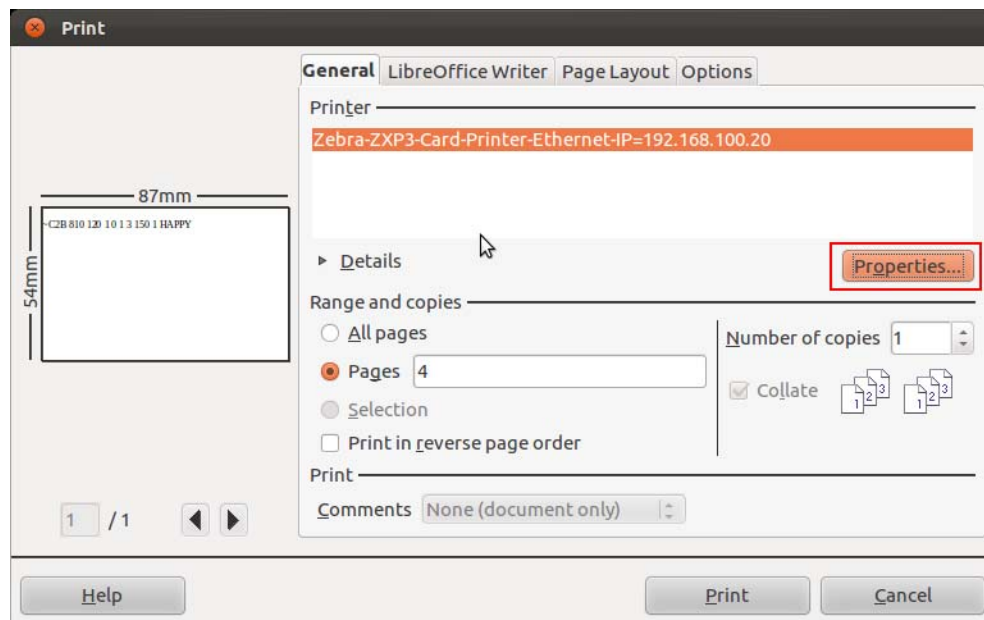


## Magnetic Encoding Using Libre Office

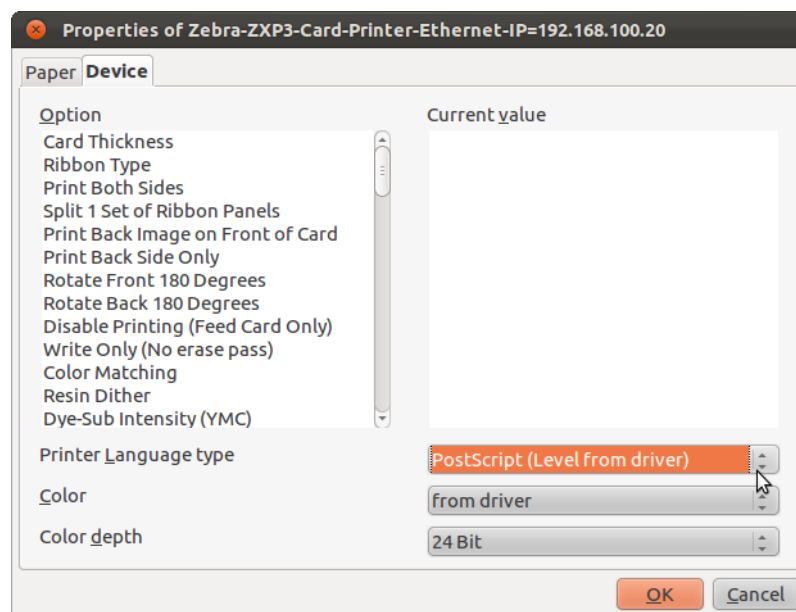
Open any existing document with magnetic encoding data or create a new document.



Click the *File* menu and select *Print*. Select the desired printer from the available printers list and click *Properties*.



Click the *Device* tab. From the *Printer Language type* drop-down select the *Post Script (Level from driver)* and click *OK*.



**Note** • In Open office the print job will use the Postscript Pre-filter but the Libre office uses the PDF Pre-filter. The PDF data is in encrypted format so we are not able to extract the Magnetic Encoding data from the file. In order to do the Magnetic encoding successfully using Libre Office the above setting is required.

Track 1 will accept only 76 characters. And it should accept Uppercase, Numbers and the special characters like " \$,^,-,(,),space,../,

### **3: Magnetic Encoding**

#### Magnetic Encoding Using Libre Office

Track 2 will accept only 37 characters. It should accept only numbers and " = " sign.

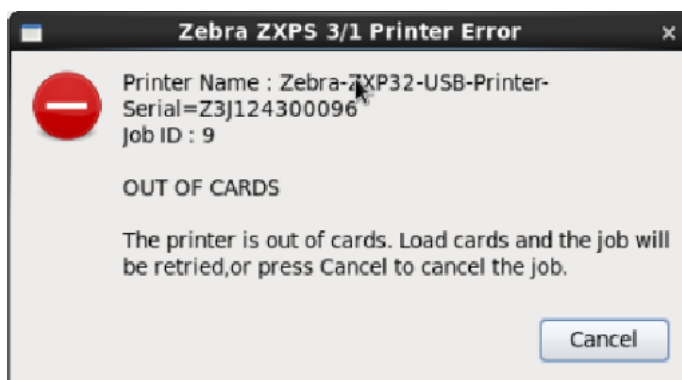
Track 3 will accept only 104 characters. It should accept only numbers and " = " sign.

---

# Error Codes

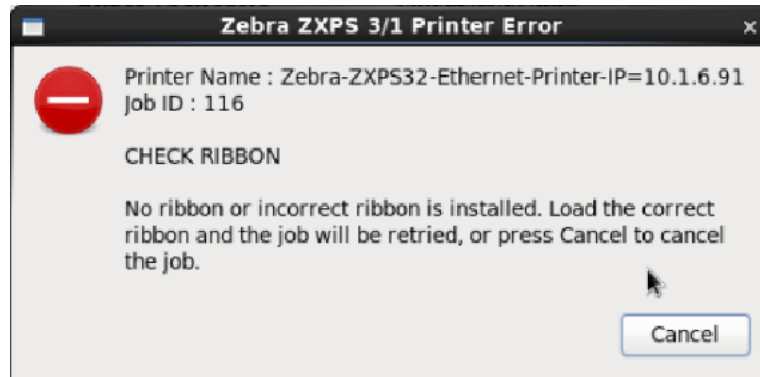
## Out of Cards

The printer is out of cards. Load cards to continue the print job, or click *Cancel* to cancel the job.



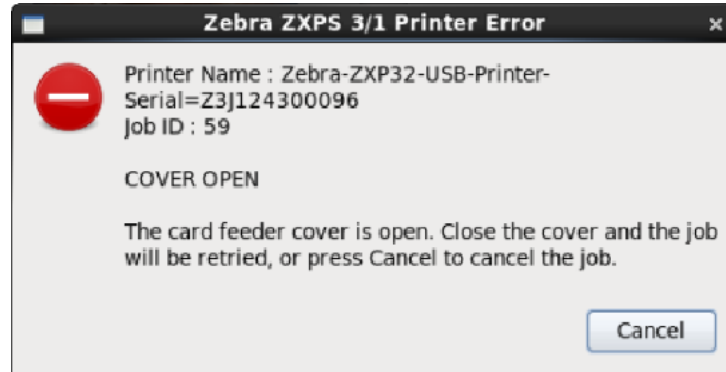
### Check Ribbon

No ribbon or incorrect ribbon is installed. Load the correct ribbon to continue the print job, or click *Cancel* to cancel the job.



### Cover Open

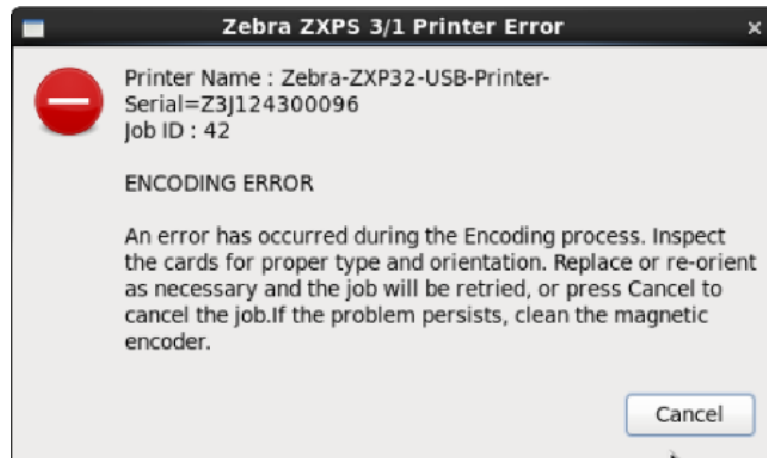
The card feeder cover is open. Close the cover to continue the print job, or click *Cancel* to cancel the job.





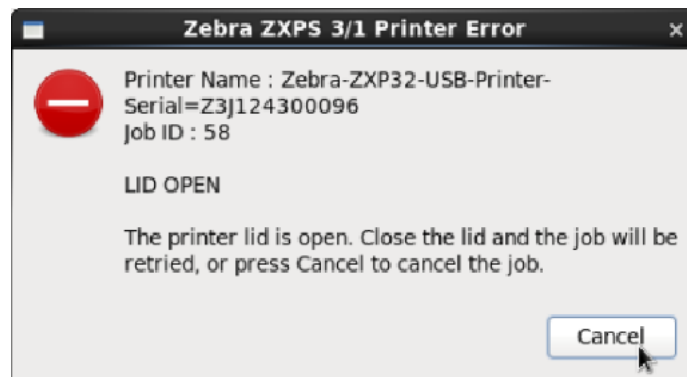
## Encoding Error

The error has occurred during the Encoding process. Inspect the cards for proper type and orientation. Replace or re-orient as necessary to continue the print job. or click *Cancel* to cancel the job. If the problem persists, clean the magnetic encoder.



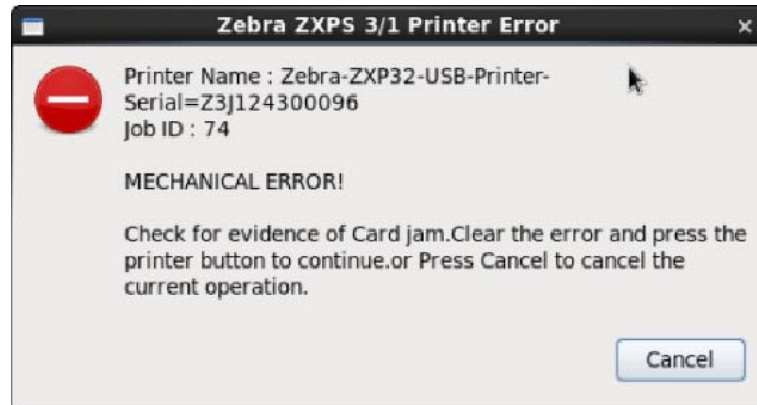
## Lid Open

The printer lid is open. Close the lid to continue the print job. or click *Cancel* to cancel the job.



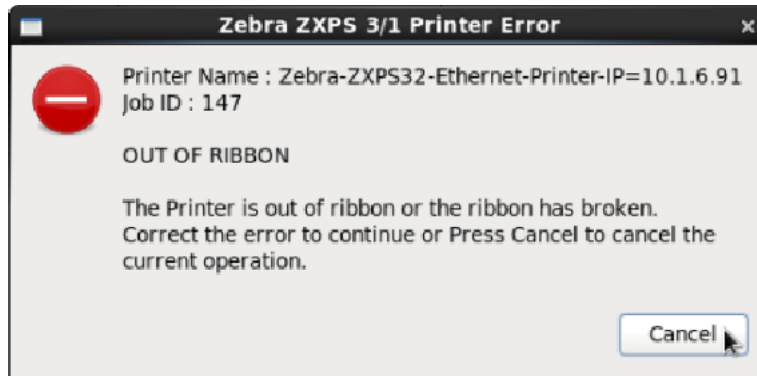
### Mechanical Error

Check for evidence of Card Jam. Clear the error and press the printer button to continue the print job. or click *Cancel* to cancel the job.



### Out of Ribbon

The printer is out of ribbon or the ribbon has broken. Correct the error to continue the print job. or click *Cancel* to cancel the job.



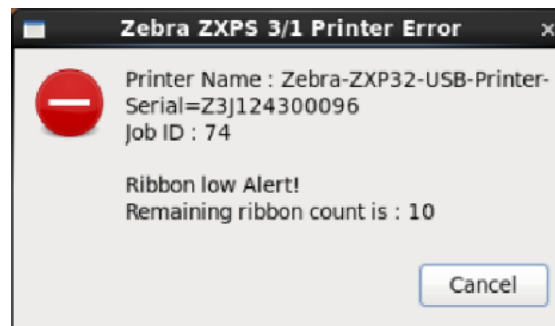
## Job Complete

Job completed. Remove card to continue the print job, or click *Cancel* to cancel the job.



## Low Ribbon

The alert is displayed in the when the Ribbon is low and needs to be replaced. Replace the ribbon to continue the print job, or click *Cancel* to cancel the job.





# Appendix 5

## Worldwide Support

For Technical Support or Repair Services, contact the appropriate facility listed below.

### North America and Latin America - Technical Support

T: +1 877 ASK ZEBRA (877 275 9327)  
+1 847 913 2259  
E: [ts1@zebra.com](mailto:ts1@zebra.com)

### North America and Latin America - Repair Services

Before returning any equipment to Zebra Technologies Corporation for in-warranty or out-of-warranty repair, contact Repair Services for a Repair Order (RO) number. Mark the RO number clearly on the outside of the box. Ship the equipment, freight prepaid, to the address listed below:

Zebra Technologies Repair Services  
333 Corporate Woods Parkway  
Vernon Hills, IL 60061

webform: [www.zebra.com/repair](http://www.zebra.com/repair)  
T: +1 877 ASK ZEBRA (877 275 9327)  
E: [repair@zebra.com](mailto:repair@zebra.com)

## Europe, Middle East, and Africa - Technical Support

Language	Phone	Email
Arabic	+971 (0)46058220	zebraCareUAE@zebra.com
Dutch	+31 (0)33 450 50 48	ZebraCareBNL@zebra.com
English (UK)	+44 (0)1628 556 225	zebraCareUK@zebra.com
(Sweden)	+46 (0)8 594 709 88	zebraCareUK@zebra.com
(South Africa)	+27 (0)11 201 7712 / 0860 393272	zebracareSA@zebra.com
French	+33 (0) 1 53 48 12 74	zebraCareFR@zebra.com
German	+49 (0) 2159 676 870	zebraCareDE@zebra.com
Hebrew	+97 236 498 140	ZebraCareIL@zebra.com
Italian	+39 0 2 575 06388	ZebraCareIT@zebra.com
Polish	+48 223 801 980	zebraCarePL@zebra.com
Russian	+7 495 739 5993	ZebraCareRU@zebra.com
Spanish	+34 (0) 917 992 896	zebraCareES@zebra.com
Turkish	+90 212 314 1010	zebraCareTR@zebra.com

### For further assistance, contact:

Zebra Technologies Card Printer Solutions  
 Dukes Meadow  
 Millboard Road, Bourne End  
 Buckinghamshire SL8 5XF, UK

T: +44 (0) 1628 556 025  
 F: +44 (0) 1628 556 001  
 E: cardts@zebra.com

## Europe, Middle East, and Africa - Repair Services

Before returning any equipment to Zebra Technologies Corporation for in-warranty or out-of-warranty repair, contact your supplier for a Return Materials Authorization (RMA) number, or contact one of the following repair centers for support and instructions:

Type of repair and location	Phone	Email
Depot Repair in Germany, Austria, Switzerland	+49 (0) 2159 676 870	zebracareDE@zebra.com
Depot Repair in France	+33 (0) 1 53 48 12 74	zebracareFR@zebra.com
Depot and On-Site Repair in UK and Ireland	+44 (0) 1628 556 225	zebracareUK@zebra.com
Depot Repair in South Africa	+27 (0) 11 201 7777	-
Depot Repair in Middle East	+971 (0) 46058220	support_dxb@emitac.ae

### For further assistance, contact:

For assistance anywhere in the EMEA, contact After Sales Customer Services at:

T: + 44 (0) 177 2 69 3069

E: ukrma@zebra.com

## **Asia Pacific - Technical Support**

Zebra Technologies Asia Pacific Pte. Ltd.  
120 Robinson Road  
#06-01 Parakou Building  
Singapore 068913

T: +65 6858 0722  
F: +65 6885 0838  
E: [tsasiapacific@zebra.com](mailto:tsasiapacific@zebra.com)

## **Asia Pacific - Repair Services**

Before returning any equipment to Zebra Technologies Corporation for in-warranty or out-of-warranty repair, contact Repair Services for a Return Materials Authorization (RMA) number. Repack the equipment in the original packing material, and mark the RMA number clearly on the outside. Ship the equipment, freight prepaid, to either address listed below:

Zebra Technologies Asia Pacific Pte. Ltd.  
No.5 Changi North Way Level 3  
Singapore 498771  
Agility Building

T: +65 6546 2670 ext 3203 and 3204  
F: +65 6546 5328  
E: [APACRepair@zebra.com](mailto:APACRepair@zebra.com)

## **Zebra Website**

[www.zebra.com](http://www.zebra.com)

[km.zebra.com](http://km.zebra.com) (Knowledge Base)