# Zebra<sup>®</sup> Printer Driver

# **User Guide**



© 2012 ZIH Corp. The copyrights in this manual and the software and/or firmware in the printer described therein are owned by ZIH Corp. Unauthorized reproduction of this manual or the software and/or firmware in the printer may result in imprisonment of up to one year and fines of up to \$10,000 (17 U.S.C.506). Copyright violators may be subject to civil liability.

This product may contain ZPL<sup>®</sup>, ZPL II<sup>®</sup>, and ZebraLink<sup>™</sup> programs; Element Energy Equalizer<sup>®</sup> Circuit; E<sup>3®</sup>; and Monotype Imaging fonts. Software © ZIH Corp. All rights reserved worldwide.

ZebraLink and all product names and numbers are trademarks, and Zebra, the Zebra logo, ZPL, ZPL II, Element Energy Equalizer Circuit, and E<sup>3</sup> Circuit are registered trademarks of ZIH Corp. All rights reserved worldwide.

All other brand names, product names, or trademarks belong to their respective holders. For additional trademark information, please see "Trademarks" on the product CD.

**Proprietary Statement** This manual contains proprietary information of Zebra Technologies Corporation and its subsidiaries ("Zebra Technologies"). It is intended solely for the information and use of parties operating and maintaining the equipment described herein. Such proprietary information may not be used, reproduced, or disclosed to any other parties for any other purpose without the express, written permission of Zebra Technologies Corporation.

**Product Improvements** Continuous improvement of products is a policy of Zebra Technologies Corporation. All specifications and designs are subject to change without notice.

**Liability Disclaimer** Zebra Technologies Corporation takes steps to ensure that its published Engineering specifications and manuals are correct; however, errors do occur. Zebra Technologies Corporation reserves the right to correct any such errors and disclaims liability resulting therefrom.

**Limitation of Liability** In no event shall Zebra Technologies Corporation or anyone else involved in the creation, production, or delivery of the accompanying product (including hardware and software) be liable for any damages whatsoever (including, without limitation, consequential damages including loss of business profits, business interruption, or loss of business information) arising out of the use of, the results of use of, or inability to use such product, even if Zebra Technologies Corporation has been advised of the possibility of such damages. Some jurisdictions do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

# Contents

Introduction
About this Manual
Technical Support       6         Additional Links       6
Zebra Kiosk Printer Driver Installation7
Zebra Kiosk Printer Driver Installation       7         Step 1: Uninstall the Old Kiosk Drivers (if applicable)       7         Step 2: Pre-install the New Kiosk Drivers Before Connecting Printer       14
Zebra Kiosk Printer Driver Functionality 20
Zebra Kiosk Printer Driver Properties 21
General
Sharing
Ports
Advanced
Color Management
Security
Device Settings
Tools
Printer Information
Import/Export settings 46
About
Printer Status Retrieval 49
The Language Monitor
Windows APIs for Communication with the Printer
Status Update in Windows "Printers and Faxes" or "Devices and Printer"

### 4 | Contents

Windows Statuses
Windows Compatible Status       51         Statuses Defined in winspool.h       51         Windows Incompatible Status       53
GetPrinterData Key Values 55
GetPrinterData Key Values
Status Monitoring & Programming Examples
Status Monitoring57Implementation in Calling Application58Implementation in Monitor Thread59WMI Script to get Basic Status61
Print Forms
Setup Print Forms in Windows XP and Vista       65         Viewing and Creating Print Forms       66         Setup Print Forms in Windows 7       67         Additional References       69
Index

# 1

# Introduction

Contents	
About this Manual	

# **About this Manual**

This manual is updated from time to time when printer functions and features are added or amended. You can find the latest edition on our website at <u>www.zebra.com</u>. If you require functions not found in this manual edition, please contact <u>Technical Support</u> for your region or the Zebra partner from which you purchased the printer.

# Contacts

## **Technical Support**

Technical Support is available via Internet 24 hours per day, 365 days per year at <u>www.zebra.com</u>. You can also email or call us using the following contact information.

The Americas - <u>kiosksupport@zebra.com</u> Europe, Middle East, and Africa (EMEA) - <u>tseurope@zebra.com</u> China - <u>tschina@zebra.com</u> Asian Pacific (except China) and India - <u>tsasiapacific@zebra.com</u>

#### Zebra Technologies Corporation

Zebra Technologies Corporation 475 Half Day Road, Suite 500 Lincolnshire, IL 60069 USA T: +1 847 634 6700 Toll-free +1 866 230 9494 F: +1 847 913 8766

#### Zebra Technologies Europe Limited

Dukes Meadow Millboard Road Bourne End Buckinghamshire, SL8 5XF, UK T: +44 (0)1628 556000

F: +44 (0)1628 556001

#### Zebra Technologies Asia Pacific, LLC

120 Robinson Road #06-01 Parakou Building Singapore 068913 T: +65 6858 0722 F: +65 6885 0838

# Additional Links

To find	go to
Support & Downloads	http://www.zebra.com/support
Customer Service and General Inquires	http://www.zebra.com/howtobuy
Knowledge Base	http://km.zebra.com
Repair Order (RO) Request and Repair Services	http://www.zebra.com/repair
Technical Training	http://www.zebra.com/training

# Zebra Kiosk Printer Driver Installation

Contents	
Zebra Kiosk Printer Driver Installation	7
Zebra Kiosk Printer Driver Functionality	20
Zebra Kiosk Printer Driver Properties	

# Zebra Kiosk Printer Driver Installation

The **Zebra Kiosk Printer Driver Installer** installs the driver files on your hard disk and preinstalls the drivers for the KR203, TTP 2000 series, TTP 2100 series, TTP 7030, and TTP 8000 series printers. This enables you to easily setup your Zebra Kiosk printer!

The Zebra Kiosk Printer Driver Installer procedure requires the following steps:

- Step 1: Uninstall the Old Kiosk Drivers (if applicable)
- Step 2: Pre-install the New Kiosk Drivers Before Connecting Printer

# Step 1: Uninstall the Old Kiosk Drivers (if applicable)

If you have any old Zebra Kiosk printer drivers installed on your system, you need to uninstall those drivers prior to installing the new drivers. If you do not have any old drivers installed, go to <u>Step 2: Pre-install the New Kiosk Drivers Before Connecting Printer</u>.

If you have old drivers installed, follow the appropriate procedure to uninstall those drivers.

- <u>Windows XP Uninstall</u>
- <u>Windows 7 Uninstall</u>

#### Windows XP Uninstall

If you are running Windows XP, you can use the Windows Driver Uninstaller to remove the old drivers prior to installing the new drivers or you can manually uninstall the old drivers.

#### **Using the Windows Driver Uninstaller**

The **zebra**\**kiosk**\**WindowsDriver**\**TTP** folder contains a shortcut to the Windows Driver Uninstaller.



**Note** • You can also download the Windows Driver Uninstaller from <u>www.zebra.com/support</u>. Select the printer model from the **Printer Support** list, click the **Software Utilities** tab, and click **Download** next to Windows Driver Uninstaller.

1. Double-click windows-driver-uninstall.exe.

The Driver Un-Install Program dialog appears.

🔶 Driver Un-Install Program	ı			? <b>- X</b>
Printer Zebra TTP 8200 Microsoft XPS Document Writ Fax Status	Driver Zebra TTP 8200 Microsoft XPS Document Writ Microsoft Shared Fax Driver	Paper forms Letter Legal A4 A4 Plus A5 Rotated A4 1/3 Statement Rotated Ticket ATB1 Ticket Rotated	Select your printer or driver here and then press un-install	quit un-install Help
			O popup windows	

- 2. In the Printer list, select the printer that you want to uninstall.
- 3. In the Driver list, select the driver that you want to uninstall.
- 4. In the Paper forms list, select all of the paper forms for that driver.
- 5. Click un-install.

 Restart required.
 S3

 Do you want to restart now?
 Yes

The following dialog appears asking if you want to restart your computer.

6. Click Yes to restart your computer. This is required prior to installing the new driver.

#### **Using the Manual Uninstall Procedure**

- 1. Click Start, and then click Printers and Faxes.
- 2. Right-click the printer that you want to uninstall, and click Delete.



3. On the File menu, click Server Properties.

🖕 Printers and Faxe	IS	
File Edit View Fav	rorites Tools Help	
Add Printer Server Properties	🔊 🔎 Search 🌔 Folders	
Set Up Faxing	Faxes	🗸 🄁 Go
Create Shortcut Delete Rename Properties	(€) A microsoft XPS Zebra TTP Document 8200 Writer	
Close		
See Also	۲	
<ul> <li>Troubleshoot prin</li> <li>Get help with prin</li> </ul>	hting	

The Server Properties dialog appears.

**4.** Click the **Forms** tab.

🌢 Print Server Properties 🔹 🕐 🔀
Forms Ports Drivers Advanced
Eorms on: 01WXP
A3 Rotated A3 Transverse
A4 A4 1/3 Save Form
Form <u>name</u> : A4 1/3 Create a new form Define a new form by editing the existing name and measurements. Then click Save Form. Form description (measurements)
Units: OMetric ⓒ English
Paper size: Printer area margins:
<u>W</u> idth: 8.28in <u>L</u> eft: 0.00in <u>I</u> op: 0.00in
Height: 3.90in Bight: 0.00in Bottom: 0.00in
OK Cancel Apply

**5.** In the **Forms on** list, scroll down to locate a form that is specific to the Kiosk printer and is not a system form (for example, A4 1/3).

The **Delete** button becomes available indicating that it is not a system form.

- **6.** Click the form, and then click **Delete**. Repeat this step for each form in the list that is not a system form.
- 7. Click the Drivers tab.

💩 Print Server Properties	? 🗙
Forms Ports Drivers Advanced	
01WXPJWILEYVM	
Installed printer drivers:	
Name Environment Version	
TP Output Gateway PS Intel Windows 2000 or XP TP Output Gateway Intel Windows 2000 or XP Microsoft XPS Documen Intel Windows 2000 or XP	
Add <u>Remove</u> Replace Prop <u>e</u> rtie	==
Close Cancel As	pply

8. Click the driver that you want to uninstall, and then click Remove.

- 9. Close the Server Properties dialog.
- **10.** In Windows Explorer, open the C:\Windows\inf folder.
- **11.** Click the **Search** button.

Search by any or all of the criteria below.
All or part of the file name:
OEM*.inf
A word or phrase in the file:
Swecoin
Look in:
😼 My Computer 🛛 👻
When was it 🛛 😵
What size is it? 🛛 😵
More advanced 🛛 📎
Back Search

- 12. In the All or part of the file name box, type OEM\*.inf.
- 13. In the A word or phrase in the file box, type Swecoin, and click Search. The Search Results show the oem\*.inf file(s) that need to be deleted.



**14.** In Windows Explorer, open the C:\Windows\inf folder and select the resulting oem\*.inf file(s) and the matching oem\*.PNF file(s), then right-click your selection and click **Delete**.



**Note** • The PNF files are precompiled versions of the INF files and must also be deleted.

#### Windows 7 Uninstall

If you are running Windows 7 Professional or Ultimate (32-bit or 64-bit), use the **Print Management** dialog to uninstall the old drivers.



Note • You must be signed in as an Administrator to use Print Management.

 Click Start, and in the search box type printmanagement.msc, and then press Enter. The Print Management dialog appears.

语 Print Management						
File Action View Help						
🗢 🔿 🖄 📰 🗶 🗟 🛛						
🔚 Print Management	Printer Name	Queue Status	Jobs In	Server Name	D	Actions
Custom Filters	💼 Zebra TTP 8200	Ready	0	01W7JWILEYV	Z	All Printers (5)
All Drivers (8)	📑 Zebra TTP 2010	Ready		01W7JWILEYV	Z	More Actions
<ul> <li>Printers Not Ready</li> <li>Printers With Jobs</li> </ul>	E Microsoft XPS Document Wri	Pause Printing	0	7JWILEYV	Z N	Selected Items
Print Servers     Deployed Printers	Han Fax	Resume Printing Cancel All Jobs		7JWILEYV	N	More Actions
		List in Directory				
		Delete	ectory			
		Help				
	٠				Þ	
Deletes the current selection.	, 					

- 2. In the left pane, click All Printers to display the printer list.
- **3.** In the printer list, select each of the Zebra printers, right-click your selection, and click **Delete**.

The following message appears asking you to confirm the deletion.



4. Click Yes to confirm the deletion and return to the Print Management dialog.



- 5. In the left pane, click All Drivers to display the driver list.
- **6.** Right-click the Zebra driver that you want to uninstall, and click **Remove Driver Package**.

This removes all of the Zebra drivers in this package (i.e., KR203, TTP 2000 series, TTP 2100 series, TTP 7030, and TTP 8000 series).



**Note** • This only works if all of the printers have been uninstalled first. If you have not uninstalled the printers, you will receive a message indicating that the driver cannot be deleted. Uninstall the printers as described above and then repeat this step.

The following Print Management message appears asking you to confirm the deletion.

Print Management	
Driver package information collected.	
The following package(s) will be deleted:	*
kiosk.inf (x64)	
The following driver(s) will be deleted:	
Zebra KR203 (x64) Zebra TTP 2010 (x64) Zebra TTP 8200 (x64)	
	-
Delete	Cancel

7. Click Delete.

The following **Print Management** message appears indicating that the driver package was deleted, and shows which drivers were removed.

Print Management	
Driver package deleted.	
Driver Zebra KR203 was removed. Driver Zebra TTP 2010 was removed. Driver Zebra TTP 8200 was removed. Package kiosk.inf was removed.	*
	Ŧ
Delete	ОК

- 8. Click OK to complete the uninstall.
- 9. Close the Print Management dialog.

### Step 2: Pre-install the New Kiosk Drivers Before Connecting Printer

After <u>Step 1: Uninstall the Old Kiosk Drivers (if applicable)</u> is complete, use the **Zebra Kiosk Printer Driver 1.3.510.83 Installer** to pre-install the new drivers.

To download the Kiosk Printer Driver version 1.3.510.83 from the Zebra website

- 1. Go to <u>www.zebra.com/support</u>.
- 2. Select your printer from the Printer Support list.
- **3.** Click the **Drivers** tab.
- 4. Click **Download** to download the **Kiosk Printer Driver** to your computer. The **Zebra Kiosk Printer Driver Installer** icon appears on your Desktop.



#### To run the Kiosk Printer Driver version 1.3.510.83 installation

1. On the Desktop, double-click the Zebra Kiosk Printer Driver Installer icon to start the InstallAware Wizard.



After the contents of the setup package are verified the Welcome screen appears.

🗱 Zebra Kiosk Printer Driver 1.3.510.83 Installer - InstallAware Wizard 📃 🗉 😢			
<b>EEBRA</b> TECHNOLOGIES	Welcome to the InstallAware Wizard for Zebra Kiosk Printer Driver 1.3.510.83 Installer The InstallAware Wizard will install Zebra Kiosk Printer Driver 1.3.510.83 Installer on your computer.		
	WARNING: This program is protected by copyright law and international treaties. To continue, dick Next.		
	< Back Next > Cancel		

2. Click Next.



**Notes** • If you have previously installed the driver package a different **Welcome** dialog appears. Select **Repair Installation**, and then click **Next**.

You will not see the **End User License Agreement** or the **Important Information** dialogs shown on the following page.



The End User License Agreement appears.



**3.** Select the **I accept the terms of the license agreement** check box, and click **Next**. The following **Important Information** appears. This information contains the Zebra Kiosk Printer Windows driver release notes.

Zebra Kiosk Printer Driver 1.3.510.83 Installer - InstallAware Wizard	8
Important Information Please carefully read the following program information.	GIES
Zebra Kiosk Printer Windows driver	
Build 07/09/2012	
Installation	
Typically you need to use the Windows Add Printer wizard to install the driver but after using the Driver Install program the INF file is preinstalled in the INF directory and you can pursue a PnP installation with Windows finding the driver for your printer. On Windows 7 x64 the pre-installation of the driver requires Administrative rights and a shortcut to pre-install the driver is created in the Program Folder. Run this as Administrator and the driver will be pre-installed. Non plug and play printer IO's have to be installed manually with the Add Printer wizard.	-
InstallAware	

4. Read the information, and then click Next.



**Note** • The Readme file also contains the Zebra Kiosk Printer Windows driver release notes. To open the Readme file, click **Start > All Programs > Zebra Technologies > Zebra Kiosk Printer Driver 1.3.510.83 > Readme**. The application starts copying the driver files to the driver directory.

🌆 Zebra Kiosk	Printer Driver 1.3.510.83 Installer - InstallAware Wizard	23
Installing Z The progra	Zebra Kiosk Printer Driver 1.3.510.83 Installer ram features you selected are being configured.	s
12	Please wait while the InstallAware Wizard installs Zebra Kiosk Printer Driver 1.3.510.83 Installer. This may take several minutes.	
	Status: File: TTPUI21.dll, Directory: C:\zebra\kiosk\WindowsDriver\TTP\amd64 Size: 64208	
InstallAware —	< <u>B</u> ack <u>N</u> ext > Cancel	



**Note** • If you are running Windows XP, a **Files Needed** message may appear asking you to locate a particular .GPD file. Locate the file and click **OK** to continue the installation.

After the files are copied, the following dialog appears indicating that the installation is completing. The copied files are located in C:\Zebra\kiosk\WindowsDriver\TTP.

Zebra Kiosk Printer Driver 1	🖉 Zebra Kiosk Printer Driver 1.3.510.83 Installer - InstallAware Wizard 📃 🗉 🔀		
TECHNOLOGIES	Completing the InstallAware Wizard for Zebra Kiosk Printer Driver 1.3.510.83 Installer		
0	< Back Finish Cancel		

5. Click Finish to complete the driver package installation.

Now all of the drivers for the KR203, TTP 2000 series, TTP 2100 series, TTP 7030, and TTP 8000 series printers are pre-installed and ready to use with your printer.



#### Note •

In Windows 7 (64-bit), due to security restrictions, the drivers must be pre-installed manually. To manually pre-install the drivers, click **Start > All Programs > Zebra Technologies > Zebra Kiosk Printer Driver 1.3.510.83**, and then right-click **Pre-install driver** and select **Run as administrator**.





**Note** • If the printer drivers do not successfully pre-install, or if you have a non Plug and Play printer with parallel or serial ports, you will need to use the **Windows Add Printer Wizard** to install your printer.

- 6. Plug your printer into the USB or serial port.
- 7. Power on the printer.



#### Note •

If you are installing the printer drivers on a **Windows Embedded** operating system (e.g., Windows Embedded XPe and Windows Embedded POSReady 7), use the following Microsoft links for instructions on how to create an image and it's driver components.

• The following link opens the Installation Guide.

http://msdn2.microsoft.com/en-us/library/aa460432.aspx

• The TTP.inf file should be installed into the Component Manager. The link below provides instructions on how to componentize a third-party driver. This is where the TTP.inf file should be imported.

http://msdn2.microsoft.com/en-us/embedded/aa731220.aspx

- The following link provides instructions on how to create the run-time image. http://msdn2.microsoft.com/en-us/library/ms940811.aspx
- When the XPe image is fully booted up on the client box and the printer wizard appears, you are prompted to install the following .DLLs.
  - TTPRES.DLL points the printer install wizard to the path where the driver install folder is put
  - UNIDRIV.DLL located at C:\Windows\System32\spool\drivers\W32X86\3
  - UNIRES.DLL located at C:\Windows\System32\spool\drivers\W32X86\3

The printer appears in the **Printers and Faxes** area of the Device and Printers dialog and is now ready for use.



# Zebra Kiosk Printer Driver Functionality

The Zebra Kiosk Printer Windows driver is based on the Microsoft Unidriver architecture for raster based printers. Zebra provides two OEM libraries (UI and Rendering) to enable specific printer functionalities within the driver. In addition to the standard Microsoft driver, Zebra provides a bi-directional interface through a Language Monitor DLL.

Due to the function compatibility of the different printer families (KR203, TTP 2000, TTP 2100, TTP 7030, and TTP 8000) the drivers share many functions in the UI and Rendering DLL as well as the Language Monitor. All of the OEM features are described below.



**Note** • If you are uploading firmware via the Zebra Toolbox program you need to ensure that the **Enable bidirectional support** check box is cleared and the spooler is restarted. If you do not restart the spooler the change will not take effect!

# **Zebra Kiosk Printer Driver Properties**

The KR203, TTP 2000 series, TTP 2100 series, TTP 7030, and TTP 8000 series have the same basic **Properties** dialog. The **Properties** dialog tabs are described in the following sections. Windows 7 dialogs are used for these descriptions.

- General
- <u>Sharing</u>
- <u>Ports</u>
- <u>Advanced</u>
- <u>Color Management</u>
- <u>Security</u>
- Device Settings
- <u>Tools</u>
- Printer Information
- Import/Export settings
- <u>About</u>



#### Note •

In Windows 7, you MUST use the **Print Management** dialog to make changes to the **Properties** dialog **Device Settings** tab. This is because you must have Administrative rights. To open the **Print Management** dialog, click **Start**, and in the search box type **printmanagement.msc**, and then press **Enter**.

# General

The **General** tab shows the name, location, and features of the printer. It also enables you to set preferences and print a test page.

Device Settings Tools Prin	ter Information	Import/Export settings	Abou
General Sharing Ports	Advanced	Color Management	Securi
			_
Zebra TTP 8200			
			_
Location:			
Comment:			
Model: Zebra TTP 8200			
Color: Yes	Paper avail	able:	
Double-sided: No	Letter	*	
Staple: No			
Speed: Unknown			
Maximum resolution: 203 dpi		-	
Pr	eferences	Print <u>T</u> est Page	

• On the **General** tab, click **Preferences** to open your printer's **Printing Preferences** dialog.

#### **Printing Preferences**

The Printing Preferences dialog has two tabs: Layout and Paper/Quality.

• On the Layout tab, you can select the orientation and the page order.

🖶 Zebra TTP 8200 Printing Preferences	
Layout Paper/Quality	
Orientation:	
A Portrait	
Page O <u>r</u> der:	
Front to Back 🔹	
	Ad <u>v</u> anced
	OK Cancel Apply

• On the **Paper/Quality** tab, you can select the paper source and color.

🖶 Zebra TTP 2030 Printi	ng Preferences		×
Layout Paper/Quality			
Tray Selection			
Paper <u>S</u> ource:	Automatically Select		•
Color			
	◎ Bla <u>c</u> k & White	© C <u>o</u> lor	
			Ad <u>v</u> anced
		OK Canc	el <u>A</u> pply

• Click **Advanced** to open the **Advanced Options** dialog where you can set your paper size and count, graphic scaling, and document options as described in the following sections. The options that are available depend on your printer.

#### **TTP 8200**

#### **TTP 2030**

Zebra TTP 8200 Advanced Options	Zebra TTP 2030 Advanced Options
Zebra TTP 8200 Advanced Document Settings         Paper/Output         Copy Count: 1 Copy         Graphic         Scaling: 100         Document Options         Advanced Printing Features: Enabled         Pages per Sheet Layout: Right then Down         Color Printing Mode: OEM Color Quality	Zebra TTP 2030 Advanced Document Settings         Paper/Output         Paper Size:       80 mm Roll Paper         Copy Count: 1 Copy         Graphic         Scaling: 100         Document Options         Advanced Printing Features: Enabled         Pages per Sheet Layout: Right then Down         Color Printing Mode: OEM Color Quality         Printer Features         Vertical Mount: Off         Low Temperature Compensation: Off
OK Cancel	OK Cancel

#### Paper/Output

#### Paper Size

The printer series have different **Paper Size** choices.

KR203	TTP 2000	TTP 2100	TTP 7030	TTP 8200	TTP 8300
58 mm x 400 mm Roll Paper	58 mm Roll Paper	50.8 mm Ticket	112 mm Roll Paper	A4	A4
60 mm x 400 mm Roll Paper	60 mm Roll Paper	54 mm Ticket	80 mm Roll Paper	A4 1/3	A4 1/3
80 mm x 150 mm Roll Paper	80 mm Roll Paper	60 mm Ticket	· · · · · ·	A4 Plus	A4 Plus
80 mm x 250 mm Roll Paper	82.5 mm Roll Paper	66 mm Ticket		A5 Rotated	A5 Rotated
80 mm x 400 mm Roll Paper		80 mm Ticket		ATB1 Ticket Rotated	Legal
82.5 mm x 127 mm Roll Paper(BM)		82.5 mm Ticket		Legal	Letter
82.5 mm x 254 mm Roll Paper(BM)		Airline Bag Tag 16in		Letter	Statement Rotated
82.5 mm x 400 mm Roll Paper		Airline Bag Tag 19in		Statement Rotated	Ticket
		Airline Bag Tag 21in		Ticket	
		Asian Games Ticket			
		ATB1 Ticket			
		ISO Ticket			

#### **Copy Count**

The Copy Count option enables you to specify the number of copies to print.

#### Graphic

#### Scaling

The **Scaling** option enables you to change the size of your printable area. When you scale down, you can print larger pages on smaller paper. When you scale up, you can print smaller pages on larger paper.

#### **Document Options**

#### **Advanced Printing Features**

This is a Microsoft Unidriver setting and should always be set to Enabled.

#### Page per Sheet Layout

This is a Microsoft Unidriver setting and should always be set to **Right then Down**.

#### **Color Printing Mode**

This OEM setting allows you to select one of two currently available dithering modes.

- **OEM Color Quality** mode is the default and does a dithering similar to a Riemersma dither algorithm with a gray scaling effect.
- **B/W Quality** mode uses a Threshold dithering algorithm that only displays black and white areas.

#### **Printer Features**

#### **Vertical Mount**

The Vertical Mount option enables you to select which way you want to mount the printer. The default is **Off**. Select **On** if you want to mount your printer in the vertical position.

#### Low Temperature Compensation

If the printer is located in a cold area, set the Low Temperature Compensation option to **On**. The default is **Off**.

# Sharing

The **Sharing** tab enables you to share your printer with other computers on a Network. The **Sharing** tab also enables you to install additional drivers for users that are running different versions of Windows.

nter a tre series and the series of the seri	operties	
Device Settings General Shari	Tools Printer Information	Import/Export settings About Color Management Security
If you sh and pass be availa use the	are this printer, only users on you word for this computer can print ble when the computer sleeps. T Network and Sharing Center	Ir network with a username to it. The printer will not o change these settings,
Share this p	inter	
S <u>h</u> are name:	Zebra TTP 8200	
Drivers If this printe Windows, you users do not shared print	jobs on client computers r is shared with users running diff ou may want to install additional have to find the print driver whe er.	ferent versions of drivers, so that the n they connect to the
		A <u>d</u> ditional Drivers
-	0	K Cancel Apply

### Ports

The Ports tab shows to which port the printer is connected. The Ports tab also enables you to
add, delete, and configure ports. The Ports tab is the same for all printer series.

Zebra TTP 820	0 Properties				<b>_</b>
Device Setting General	s Tools Sharing Por	Printer I rts	Information Advanced	Import/Export settings Color Management	About Security
and Ze	bra TTP 8200				
Print to the fo checked port.	llowing port(s).	Documer	nts will print t	to the first free	
Port	Description		Printer		<u>^</u>
LPT1:	Printer Port		Zebra TTP	8200	
LPT2:	Printer Port				=
LPT3:	Printer Port				
COM1:	Serial Port				
COM2:	Serial Port				
COM3:	Serial Port				
COM4:	Serial Port				-
Add Po	or <u>t</u>	<u>D</u> elet	e Port	<u>C</u> onfigure Port	
<mark>▼ E</mark> nable bidi ■ E <u>n</u> able prir	rectional suppo Iter pooling	л			

- Select the **Enable bidirectional support** check box to control the functionality of the Language Monitor.
- Clear the Enable printer pooling check box. This feature is not used for Kiosk printing.



**Note** • If you are uploading firmware via the Zebra Toolbox program you need to ensure that the **Enable bidirectional support** check box is cleared and the spooler is restarted. If you do not restart the spooler the change will not take effect!

# Advanced

The **Advanced** tab enables you to specify when the printer is available, select the printer driver, and set spooling options. In addition you can open **Printing Defaults**, **Print Processor**, and **Separator Page** dialogs from this tab.

Zebra TTP 8200 Properties	X
Device Settings         Tools         Printer Information         Import/Export settings         About           General         Sharing         Ports         Advanced         Color Management         Security	,
Always available     Available from 12:00 AM To 12:00 AM	
Priorit <u>y</u> : 1	
Driver: Zebra TTP 8200	
<ul> <li>Start printing after last page is spooled</li> <li>Start printing immediately</li> <li>Print <u>d</u>irectly to the printer</li> </ul>	
<u>H</u> old mismatched documents     P <u>r</u> int spooled documents first     Keep printed documents	
Enable advanced printing features	
Printing Defaults Print Processor Separator Page	
OK Cancel Apply	_

# **Color Management**

General         Sharing         Ports         Advanced         Color Management         Securities           Image: To adjust color management settings, click Color Management.         Color Management         Color Management         Color Management	Device 3	ettings	Tools	Printer	Information	Import/Export se	ettings	About
To adjust color management settings, click Color Management.         Color Management	General	Sharir	ng Po	orts	Advanced	Color Managen	nent S	ecurity
Color Management	1	To adjust c	olor manag	ement set	tings, click Cold	or Management.		
			Color Man	agement				

The **Color Management** tab settings are specific to Microsoft Universal Printer Drivers (UniDrv). The default settings should be used.

# Security

The **Security** tab enables you to set the access control of specific system users for your printer. In some cases where you need to lock down your user account (e.g., in Kiosk applications) you need to grant the Kiosk user full administrator access to the printer. Typically a "normal" user has only **Print** rights but in order to get status from the printer the user also needs **Manage Printer** and **Manage Documents** permissions.

🚽 Zebra TTP 8200 P	roperties			×	
Device Settings General Sha	Tools	Printer Information	Import/Export settings	About Security	
General Sha Group or user name & Everyone & CREATOR OV & zebra & Administrators	ring Ports s: VNER	Advanced	Color Management	Security	
Permissions for Eve Print Manage this print Manage docume Special permissio	ryone er nts ns		Add Allow V V	Remove Deny	
For special permissions or advanced settings, click Advanced. Advanced					
		0	K Cancel	Apply	

## **Device Settings**

The **Device Settings** tab enables you to set various printer, document, presenter, and driver settings. These settings are similar between printer series, although some differences do apply.

The <u>Minimum</u>, <u>Maximum</u>, and <u>Default Settings</u> table shows minimum, maximum, and default settings for each printer family.

The following sections describes each of the **Device Settings**.

- Form To Tray Assignment
- Printer Settings
- Document Settings
- <u>Presenter Settings</u>
- Driver Settings

# Minimum, Maximum, and Default Settings

The following table shows minimum and maximum (where applicable), and default printer settings for each printer family. The default value is shown in **bold** font.

Printer Setting	KR203	TTP 2000	TTP 2100	TTP 7030	TTP 8200	TTP 8300
Form To Tray Assignment (see Form To <u>Tray</u> Assignment for options)	Default: 80 mm x 400 mm Roll Paper	Default: 80 mm Roll Paper	Default: 80 mm Ticket	Default: 112 mm Roll Paper	Default: Letter	Default: <b>Letter</b>
Darkness	Default: <b>20</b> Min: 0 Max: 30	Default: <b>15</b> Min: 1 Max: 15	Default: <b>15</b> Min: 1 Max: 15	Default: <b>15</b> Min: 1 Max: 15	Default: <b>15</b> Min: 1 Max: 15	Default: <b>15</b> Min: 1 Max: 15
Max Print Speed	Default: <b>152</b> Min: 75 Max: 152	Default: <b>150</b> Min: 47 Max: 150	Default: <b>123</b> Min: 47 Max: 123	Default: <b>75</b> Min: 21 Max: 75	Default: <b>100</b> Min: 20 Max: 100	Default: <b>67</b> Min: 13 Max: 67
Media Tracking	Default: Variable length	Default: Variable length	Default: Continuous	Default: Variable length	Default: Continuous	Default: Continuous
Top Margin	Default: <b>9</b> Min: 2 Max: 12	Default: <b>9</b> Min: 2 Max: 9	Default: <b>9</b> Min: 2 Max: 9	Default: <b>14</b> Min: 2 Max: 14	Default: <b>19</b> Min: 2 Max: 19	Default: <b>19</b> Min: 2 Max: 19
Bottom margin	Default: <b>0</b> Min: 0 Max: 9	Default: <b>0</b> Min: 0 Max: 19	Default: <b>0</b> Min: 0 Max: 19	Default: <b>0</b> Min: 0 Max: 19	Default: <b>0</b> Min: 0 Max: 19	Default: <b>0</b> Min: 0 Max: 19
Cutter mode	Default: Cut Per Page	Default: Cut Per Page	Default: Cut Per Page	Default: Cut Per Page	Default: Cut Per Page	Default: Cut Per Page
Partial Cut Width	Default: <b>0</b> Min: 0, 10 Max: 60	Default: <b>0</b> Min: 0, 10 Max: 40	Default: <b>0</b> Min: 0, 10 Max: 40	N/A	N/A	N/A
Presenter loop length	Default: <b>400</b> Min: 0 Max: 600	Default: <b>480</b> Min: 96 Max: 8160	N/A	Default: <b>480</b> Min: 96 Max: 8160	Default: <b>480</b> Min: 96 Max: 8160	Default: <b>480</b> Min: 96 Max: 8160
Eject Length	Default: <b>50</b> Min: 1 Max: 600	Default: <b>50</b> Min: 1 Max: 600	Default: <b>50</b> Min: 1 Max: 600	Default: <b>50</b> Min: 1 Max: 600	Default: <b>50</b> Min: 1 Max: 600	Default: <b>50</b> Min: 1 Max: 600
Present Length Addition	Default: <b>0</b> Min: 0 Max: 255	Default: <b>0</b> Min: 0 Max: 255	Default: <b>0</b> Min: 0 Max: 255	Default: <b>0</b> Min: 0 Max: 255	Default: <b>0</b> Min: 0 Max: 255	Default: <b>0</b> Min: 0 Max: 255
Presenter mode	N/A	Default: Eject	N/A	Default: Eject	Default: Eject	Default: Eject

Printer Setting	KR203	TTP 2000	TTP 2100	TTP 7030	TTP 8200	TTP 8300
Presenter timeout	Default: <b>0</b> Min: 0 Max: 300	Default: <b>0</b> Min: 0 Max: 300	N/A	Default: <b>0</b> Min: 0 Max: 300	Default: <b>0</b> Min: 0 Max: 300	Default: <b>0</b> Min: 0 Max: 300
Clear presenter	Default: No	Default: No	Default: No	Default: No	Default: No	Default: No
Page hold	Default: No	Default: No	Default: No	Default: No	Default: No	Default: No
lmage Adjustment	N/A	N/A	N/A	N/A	Default: No	Default: No
Contrast	N/A	N/A	N/A	N/A	Default: <b>0</b> Min: -100 Max: 100	Default: <b>0</b> Min: -100 Max: 100
Brightness	N/A	N/A	N/A	N/A	Default: <b>0</b> Min: -100 Max: 100	Default: <b>0</b> Min: -100 Max: 100

### Form To Tray Assignment

The **Form To Tray Assignment** setting shows the currently selected paper form. You can select from a variety of paper forms and custom forms generated in **Server Properties** dialog (see <u>Print Forms</u>). Set this setting the same as set in the <u>Printing Preferences</u> dialog.

Zebra TTP 8200 (Copy 1) Properties							
General Shar	General Sharing Ports Advanced Color Management						
Device Settings	Device Settings Tools Printer Information Import/Export settings						
Zebra TTP 82     Form To     Form To     Printer Set     Darkm     Max p     Media     Top n     Botto     Fresenter     Cutte     Presenter     Presente	200 Device S Tray Assign ettings ness: <u>15</u> print speed nt Settings a Tracking: margin (mm m margin ( m margin ( r Settings er mode: <u>Cu</u> nter loop le Length (mr nt Length A nter mode: nter timeou presenter: <u>1</u> hold: <u>No</u> ttings e Adjustme rast (in %): <u>9</u>	Settings (mm/s): <u>100</u> <u>Variable Length</u> n): <u>19</u> (mm): <u>0</u> ength (mm): <u>480</u> m): <u>50</u> Addition (mm): <u>0</u> <u>Eject</u> ut (10 s): <u>0</u> No					

The following sections show the available forms for each printer family.

#### KR203



The following forms are available for the KR203. The pre-defined forms have a length of 40.64 cm or 16 inch.

#### **TTP 2000**

The following forms are available for the TTP 2000 series. The pre-defined forms have a length of 40.64 cm or 16 inch.



#### **TTP 2100**



The following forms are available for the TTP 2100 series. The pre-defined forms have a length of 15 cm or 5.91 inch or the specific form length of the bag tag or ticket.

#### TTP 7030

The following forms are available for the TTP 7030. The pre-defined forms have a length of 40.6 cm or 16 inch.



#### TTP 8200

The following forms are available for the TTP 8200 series. The pre-defined forms have a length of the specific form length.



#### **TTP 8300**

The following forms are available for the TTP 8300 series. The pre-defined forms have a length of the specific form length.


### **Printer Settings**

General Sharing	Ports	Advanced	Color Management	Security		
Device Settings	Tools F	rinter Information	Import/Export settings	About		
Zebra TTP 8200 Device Settings						
	iy Assignmer	IT				
- 08 Distance Catt	tter					
Printer Setti	ngs 1 E					
Darknes	s: <u>10</u> 	(-), 100				
	it speed (mm	/s): <u>100</u>				
Media T	racking: Vari:	ble Length				
Top ma	racking, <u>vana</u> rain (mm): 10	i <u>ble Length</u>				
Bottom	margin (mm): <u>13</u>			-		
Presenter Se	ttings	<u>. o</u>		=		
Cutter n	node: Cut eve	erv page				
Presente	r loop length	(mm): 480				
Eiect Ler	nath (mm): 5	)				
Present	Length Addit	- ion (mm): 0				
Presente	r mode: Ejec	t				
Presenter timeout (10 s); 0						
Clear pr	esenter: <u>No</u>					
Page ho	ld: <u>No</u>					
Driver Settin	igs					

The **Printer Settings** enable you to set the **Darkness** and the **Max print speed (mm/s)**.

#### • Darkness

The **Darkness** setting affects Printer Parameter 7 each time a print job is issued. The minimum value is 1, the maximum value is 15, and the default value is 15.

• Max print speed

The **Max print speed** affects Printer Parameter 8 each time a print is issued. The minimum, maximum, and default values are shown in the <u>Minimum, Maximum, and</u> <u>Default Settings</u> table.



Note • See the *Technical Manual* for your printer for more information on these settings.

### **Document Settings**

The **Document Settings** enable you to set the **Media Tracking**, **Top margin**, and **Bottom margin** as described in the following sections.

Zebra TTP 8200 (0	Copy 1) Prop	oerties			<b>—</b> ×
General Sha	ring Po	rts Adva	anced	Color Management	Security
Device Settings	Tools	Printer Infom	nation	Import/Export settings	About
Zebra TTP 82 Form To Darkr Max 1 Darkr Max 1 Darkr Max 1 Docume Medi Top r Botto Docume Prese Eject Prese Prese Prese Clear Page Driver Se Imag	200 Device S Tray Assign ettings hess: <u>15</u> orint speed ( <u>nt Settings</u> ) a Tracking: <u>1</u> margin (mm m margin (m m margin (m m margin (m r Settings r mode: <u>Cu</u> nter loop lei Length (mn nt Length A nter mode: <u>n</u> nter timeou presenter: <u>N</u> hold: <u>No</u> ttings e Adjustmei rast (in %): <u>0</u>	ettings ment / <u>ariable Lengt</u> ): <u>19</u> mm): <u>0</u> : every page ngth (mm): <u>48</u> odition (mm): <u>Eject</u> t (10 s): <u>0</u> <u>lo</u> mt: <u>No</u>	<u>ь</u> 0 0		

#### • Media Tracking

The **Media Tracking** setting determines how the media is delimited. The possible values are Continuous, Variable length, and Mark sensing.

- Continuous always prints a whole page
- Variable length cuts white space at the end
- Mark sensing syncs with black marks

The default values are shown in the Minimum, Maximum, and Default Settings table.

• Top margin

The **Top margin** setting affects the physical distance between the top of the paper and the cutter. Due to the mechanical design, the printer will always have a top margin depending on the printer family. This distance between the cutter and the print head can be reduced by reversing the paper. The value entered in this setting determines the amount the printer has to reverse paper (see the *Technical Manual* description of the ESC j command). The minumum, maximum, and default values are shown in the <u>Minimum, Maximum, and</u> <u>Default Settings</u> table.



**Note** • The physical distance for a TTP 2000 is 9 mm, for a TTP 2100 is 9 mm, for a TTP 7030 is 14 mm and for a TTP 8200 and TTP 8300 is 19 mm.

#### • Bottom margin

The **Bottom margin** setting affects the physical distance between the bottom of the paper and the cutter. This setting is an addition to the actual page length in Variable mode and restricts the printable page in Continuous mode and Black Mark mode.

The minimum, maximum, and default values are shown in the <u>Minimum, Maximum, and</u> <u>Default Settings</u> table.

#### **Presenter Settings**

The **Presenter Settings** enable you to set various presenter settings depending upon your printer family as described in the following sections.

Zebra TTP 8200	(Copy 1) Pro	perties		-
General Sh	aring P	orts Advanced	Color Management	Security
Device Settings	Tools	Printer Information	Import/Export settings	About
Zebra TTP Form T Dar Dar Max Docum Met Top Bot Cut Present Cut Present Cut Present Cut Present Cut Present Cut Present Cut Present Cut Present Cut Present Cut Cut Present Cut Cut Cut Cut Cut Cut Cut Cut Cut Cu	8200 Device : o Tray Assign Settings kness: <u>15</u> c print speed ent Settings dia Tracking: o margin (mn tom margin ( com ma	Settings ment (mm/s): <u>100</u> <u>Variable Length</u> n): <u>19</u> (mm): <u>0</u> <u>it every page</u> ength (mm): <u>480</u> n): <u>50</u> Addition (mm): <u>0</u> <u>Eject</u> tr (10 s): <u>0</u> <u>No</u> nt: <u>No</u>		

#### • Cutter mode

The **Cutter mode** setting is a driver only setting and does not affect any Printer Parameters. The possible values are **Cut every page**, **Cut at the document end**, and **No Cut** (not advisable).

- Cut every page driver issues a cut command after every page of a document
- Cut at the document end driver issues a cut only at the end of a document
- No Cut driver does not issue any cut commands and paper is fed through the presenter until a cut is issued

The default values are shown in the Minimum, Maximum, and Default Settings table.



#### Notes •

- If you are printing a multipage document with the setting **Cut at the document end** you get one long printout without a separation between each page.
- If you are printing a multipage document with the **Cut every page** setting each page is ejected with an ENQ (Clear Presenter) command after a cut if **Clear Presenter** is set to **Yes**.
- Use the **Cut at the document end** in connection with the **Partial Cut Width** setting to enable a document to be cut partially between pages and full at the end of a document.

#### • Partial cut width

The **Partial cut width** setting affects the Printer Parameter 60 each time a print is issued. The possible values are between 1 and 40. The default value is 0. You need to set this value according to the print width of your printer (see the *Technical Manual* for more information on Parameter 60).



#### Notes •

- The **Partial cut width** setting is only available for KR203, TTP 2000 and TTP 2100 series printers.
- Use the **Cut at the document end** in connection with the **Partial Cut Width** setting to enable a document to be partially cut between pages and fully cut at the end of a document.
- The **Partial cut width** setting cannot be used when the **Clear presenter** option is set to **Yes**.

#### **Example** • Partial cut width

You have a two page receipt that should be cut partially between the first and the second page. You are using an 80 mm paper and decide to cut 10 mm each side into the paper. You need to set the **Cutter mode** to **Cut at the document end** to indicate to the driver that you want only one full cut at the end of the document. Then select a **Partial cut width** of 10 allowing the printer to cut 10 mm into each side of the paper, and set the **Clear Presenter** to **No**. When you print your document the printer will print the first page, do a partial cut, print the second page, and do another partial cut, followed by a full cut. This is an expected behavior since neither the driver nor the printer knows the end of the document.

#### • Presenter loop length

The **Presenter loop length** setting affects Printer Parameter 9 each time a print is issued. The possible values are 96 to 8160. The default value is 480. A value of 0 disables the presenter loop.

#### • Eject length

The **Eject length** setting is affecting the physical length a ticket or receipt is ejected out of the presenter after a cut. The possible values are between 1 and 600 and represent the amount of media ejected in mm. (See the *Technical Manual* for more information on the ESC FF command.)

#### • Present Length Addition

The **Present Length Addition** setting adds an additional amount to how far the paper is ejected during a present cycle. The possible values are between 1 and 255 and represent the amount of media ejected in mm. The default value is 0. (See the *Technical Manual* for more information on Parameter <u>47</u>, Wall compensation.

#### • Presenter mode

The **Presenter mode** setting along with the **Presenter timeout** setting controls the Printer Parameter 45. The two possible values are **Eject** (the default) and **Retract**. This takes effect when a new page is printed. (See the *Technical Manual* for further information on the Parameter 45.)

Note • This setting is not available for the KR203 or the TTP 2100 printer family.

#### • Presenter timeout

The **Presenter timeout** setting along with the **Presenter mode** setting controls the Printer Parameter 45. The possible values range from 0 to 300 and represent timeout delays in 10 second steps (e.g., a value of 3 is a 30 second timeout before the page is retracted into the waste bin).

**Note** • Setting this value to 0 keeps the receipt in the presenter until the Kiosk user takes the receipt.

#### Clear presenter

The **Clear presenter** setting has two possible values and issues an ENQ (Clear Presenter) command if it is set to **Yes** or does nothing if it is set to **No** after the printer has cut and ejected a page. You can use this feature to fully eject a page from the presenter after it is printed.

#### • Page hold

The **Page hold** setting has two possible values. The driver holds a page in the presenter when printing a multipage document if the setting is set to **Yes**. Pages will not be held if the setting is set to **No**.



#### Notes •

- This feature only works if the **Enable bidirectional support** check box is checked in the **Ports** tab and the Language Monitor is running.
- This feature works together with the **Presenter mode** and **Presenter timeout** setting. If you do not allow retraction by setting the **Presenter timeout** value to **0** the print process hangs until the current page is taken out of the presenter because the driver does not send any new pages until the presenter has been cleared. If you allow retraction and the current page retracts due to the timeout period expiring while in hold mode the driver terminates the current print and no further pages print.
- Print jobs are held when the **Delete Print Job on Error** check box is cleared on the **Tools** tab. When printing one document multiple times it will still be looked at as one document in the print queue and deleted on error.

#### Example • Page hold

For this example, you want to print a multipage document and have **Presenter mode** set to **Retract**, **Presenter timeout** to 30 seconds (3), and the **Page hold** option to **Yes**.

When printing your document and taking every page out of the presenter before the timeout period expires, the driver sends each following page until the document is fully printed.

If printing your document and not taking a page and the timeout period expires the printer retracts this page and clears the presenter and also sends an error code to the driver indicating that a "retract" has occurred. The driver then stops printing and deletes the current print job.

### **Driver Settings**

Zebra TTP	8200 (Copy 1)	) Properties			×	
General	Sharing	Ports	Advanced	Color Management	Security	
Device Set	tings Too	ls Print	er Information	Import/Export settings	About	
	Forme To Tony Antinene ant					
Form To Tray Assignment						
	Darkness 15					
	May print cr	2 beed (mm/s)	100			
	ocument Setti	ings	. 100			
	Media Tracl	rigs ving: Variabl	e l enath			
	Top margin	(mm): 10	ellengtn			
	Bottom mai	(1111): <u>13</u>				
	ecenter Settin	igin (min). <u>o</u>				
· · · ·	. Cutter mod	e: Cut everv	nage			
	Presenter lo	op length (n	nm): 480			
	- Eiect Length	(mm): 50			=	
	Present Len	ath Additior	(mm): 0			
	Presenter m	ode: Eiect	. (). <u>-</u>			
	Presenter tir	meout (10 s)	: 0			
	Clear preser	nter: No	-			
	Page hold: [	No O				
- <b>P</b> D	river Settings	_				
	Image Adju	stment: <u>No</u>				
	- Contrast (in	%): <u>0</u>				
	- Brightness (	in %): 0			-	

The **Driver Settings** enable you to adjust the contrast and brightness of the image. This feature is only available for the TTP 8000 series printers.

#### • Image Adjustment

The **Image Adjustment** setting has two values: **Yes**, and **No**. If the value is set to Yes, the Contrast and Brightness settings are available. The default value is **No**.

• Contrast

The **Contrast** settings minimum value is **-100**, the maximum value is **100**, and the default is **0**.

• Brightness

The **Brightness** settings minimum value is **-100**, the maximum value is **100**, and the default is **0**.

## Tools

The **Tools** tab allows you to clear the Kiosk Presenter, send a PRN file to the printer, feed a blank receipt, and print a configuration label that shows you the printer settings. You can also apply changes to various printer controls as described below.

General Sharing	Ports Advanced	Color Management Security
Device Settings Tools	Printer Information	Import/Export settings About
Printer Commands		
Action Command		
Clear Kiosk Presenter	Clears the Kiosk Presen	ter
Send PRN File	Sends a PRN file to the	printer.
- Print Command		
Print Command		
Print Command Feed One Receipt	Feed one blank receipt.	
Print Command Feed One Receipt	Feed one blank receipt.	
Print Command Feed One Receipt Print Config Label	Feed one blank receipt. Prints one configuration	label.
Print Command Feed One Receipt Print Config Label	Feed one blank receipt. Prints one configuration	label.
Print Command Feed One Receipt Print Config Label Printer Controls	Feed one blank receipt. Prints one configuration After changing the [	label. Delete Job property Apply the change
Print Command Feed One Receipt Print Config Label Printer Controls Delete Print Job on Error	Feed one blank receipt. Prints one configuration After changing the I and Restart the spo	label. Delete Job property Apply the change oler.
Print Command Feed One Receipt Print Config Label Printer Controls Delete Print Job on Error Send Printer Parameter	Feed one blank receipt. Prints one configuration After changing the I and Restart the spo Always sending print	label. Delete Job property Apply the change oler. ter parameter with the print stream or
Print Command Feed One Receipt Print Config Label Printer Controls Delete Print Job on Error Send Printer Parameter Set vertical home position f	Feed one blank receipt. Prints one configuration After changing the f and Restart the spo Always sending prin disabling this feature	label. Delete Job property Apply the change oler. ter parameter with the print stream or a.
Print Command Feed One Receipt Print Config Label Printer Controls Delete Print Job on Error Send Printer Parameter Set vertical home position t	Feed one blank receipt. Prints one configuration After changing the f and Restart the spo Always sending print disabling this feature o zero	label. Delete Job property Apply the change oler. ter parameter with the print stream or a.
Print Command Feed One Receipt Print Config Label Printer Controls Delete Print Job on Error Send Printer Parameter Set vertical home position t Apply Apply	Feed one blank receipt. Prints one configuration After changing the I and Restart the spo Always sending prin disabling this feature o zero he changes in Printer Is.	Delete Job property Apply the change oler. ter parameter with the print stream or a.
Print Command Feed One Receipt Print Config Label Printer Controls Delete Print Job on Error Send Printer Parameter Set vertical home position t Apply Apply t	Feed one blank receipt. Prints one configuration Prints one configuration After changing the I and Restart the spo Always sending prin disabling this feature o zero	Delete Job property Apply the change oler. ter parameter with the print stream or a.
Print Command Feed One Receipt Print Config Label Printer Controls Delete Print Job on Error Send Printer Parameter Set vertical home position t Apply Apply	Feed one blank receipt. Prints one configuration After changing the I and Restart the spo Always sending prin disabling this feature o zero	Delete Job property Apply the change oler. ter parameter with the print stream or a.
Print Command Feed One Receipt Print Config Label Printer Controls Delete Print Job on Error Send Printer Parameter Set vertical home position t Apply Apply Contro	Feed one blank receipt. Prints one configuration  After changing the I and Restart the spo Always sending prin disabling this feature o zero the changes in Printer ls.	Delete Job property Apply the change oler. ter parameter with the print stream or a.

• Delete Print Job on Error

Print jobs are held when the **Delete Print Job on Error** check box is cleared on the **Tools** tab. When printing one document multiple times it will still be looked at as one document in the print queue and deleted on error. If you change this setting, you must click **Apply** and restart the spooler.

#### • Send Printer Parameter

Select the **Send Printer Parameter** check box to send the driver settings from the **Device Settings** dialog to the printer. If you want to set your printer parameters manually without the driver overwriting them, clear the **Send Printer Parameter** check box.

#### • Set vertical home position to zero

Select the **Set vertical home position to zero** to move the top margin of the printed image to the current print line location so that the printer is able to print the full image without cutting off the top portion of the image.



#### Notes •

- This does not affect the mechanical top margin of the printer, only the **Top margin** setting in the **Device Settings** dialog physically reverses the media.
- Click **Apply** for the changes to take effect.

## **Printer Information**

The Printer Information tab shows the printer status for the selected printer.

General Sh	aring Ports Advanced	Color Management Security
Device Settings	Tools Printer Information	Import/Export settings About
Printer status		
Windows Error	00000000 Rea	dy
	Printer error in Printers and Faxes	Dialog
Printer Error	ОК	
	Printer error listed under ESC ENC Technical Manual	) 1 in the
Description Press th	ne Refresh button to update the cum	ent view. Refresh
Description Press th	ne Refresh button to update the cum	ent view. Refresh
Description Press th	ne Refresh button to update the cum	ent view. Refresh



**Note** • When you click **Refresh**, the Windows and Printer Error values are updated with the current status values. See <u>Windows Statuses</u> for a reference of the values.

## Import/Export settings

The **Import/Export settings** tab enables you to export the driver settings to a file, import previously saved driver settings, and restore the printer to the factory default settings.

General Device Setting Export Settin Exc	Sharing   gs Tool ngs cport button s	Ports s Print aves the driv	Advanced ter Information	Color Management Import/Export settings n external file. Export	Security About
Export Setting Export Settin Ex	is   Tool ngs xport button s ngs	s   Print	ver settings into ar	n external file.	About
Import Settin	ngs				
dri	iver (if possib	viously saved le/compatible	l driver settings fro e).	om a file and applies them t	o the
Default Sett	tings efaults the dri	iver settings t	to factory default.	Defau	It
Import/Expo Printer settin back into co	ort Descriptio ngs can be e ompatible prir	n xported from nter driver. Yo	the driver to an eo ou need to add th	demal file and later import e .XML extension to the file	əd ə.

• Import

Enables you to load a previously saved XML driver settings file. You should save the imported file in the C:\Zebra folder.

• Export

Enables you to **Export** driver settings in a XML file. You can select which folder you want to use to save the file.

• Default

Click **Default** to return the driver settings to the factory default.



**Note** • In Windows 7 Professional/Ultimate you need to start **Print Management** as an Administrator and select the printer that you want to Export, Import, or Default the Device Properties from.

If you default to the factory device settings you need to click **Cancel** to exit the **Printer Properties** dialog and reopen it to see the changes in the **Device Settings** tab. The values do not automatically refresh when you switch to the Device Setting tab.

🕞 Print Management						- • ×
File Action View Help						
🔚 Print Management	Printer Name	Queue Status	Jobs In	Server Nam	Actions	
Custom Filters	🖷 Fax	Ready	0	MW-WIN-7	Printers	•
All Drivers (5)	👼 Microsoft XPS Document Wri	ter Ready	0	MW-WIN-7	More Actions	•
Printers Not Ready	Open Pri	nter Queue		MW-WIN-7	Zebra TTP 2030	<b>^</b>
Print Servers	Pause Pr	nting			More Actions	•
▲ BW-WIN-7-TEST (local) ▶ B Drivers	Deploy v	Deploy with Group Policy				
Forms	Set Printi	ng Defaults				
Printers	Manage Sh	Sharing				
Deployed Printers	Print Tes	t Page				
	Properti	es				
	Delete					
	Rename					
	Help					



**Note** • Click **Apply** for the changes to take effect.

## About

The About tab shows the printer model and the driver version.

🖶 Zebra TTP 8200 Properties	<b>—</b>					
General Sharing Ports Advanced	Color Management Security					
Device Settings Tools Printer Information	Import/Export settings About					
Windows Printer Driver						
TTP 8200						
Copyright (c)2012 ZIH Corp. Version:						
1.3.510.83						
Contact:						
Zebra Technologies International LLC www.zebra.com						
	K Cancel Apply					

## **Printer Status Retrieval**

Contents		
The Language Monitor	4	19
Windows APIs for Communication with the Printer	4	19
Status Update in Windows "Printers and Faxes" or "Devices and Printer"	5	50
-		

## The Language Monitor

The Language Monitor is part of the Windows driver and is located between the Driver UI and the Port Monitor. The Language Monitor (LM) takes care of the direct communication with the selected port.

The Language Monitor has a Windows API interface through the **GetPrinterData** and **GetPrinter** functions.

All of the default Windows status responses can also be scripted with WMI scripts. See a description and a programming example in <u>Status Monitoring & Programming Examples</u>.

## Windows APIs for Communication with the Printer

In order to make bi-directional communication easier and also compatible to more than one printer of the same kind on a specific PC, we implemented the LM **GetPrinterData** function. This is a Windows API described in Windows documentation. To retrieve immediate printer status from the Spooler you can also use the **GetPrinter** function. The **GetPrinterData** function is preferred over **GetPrinter** due to the fact that with **GetPrinterData**, all statuses and errors display, while with **GetPrinter**, only printer errors display.

#### • GetPrinterData

The **GetPrinterData** function retrieves configuration data for the specified printer or print server. See *Microsoft* documentation (<u>http://msdn.microsoft.com/en-us/library/dd144912(VS.85).aspx</u>) for more information on how to use this function.



#### Note •

• See GetPrinterData Key Values for available keywords.

#### • GetPrinter

The **GetPrinter** function retrieves information about the specified printer. See *Microsoft* documentation (<u>http://msdn.microsoft.com/en-us/library/dd144911(VS.85).aspx</u>) for more information on how to use this function.



#### Notes •

- Zebra Printer status: It is recommended to use the PRINTER\_INFO\_3 structure to inquire for the printer status presented by the LM.
- The spooler status is changed by SetPort. When using SetPort with custom messages, you cannot set these to be displayed or used by the spooler. This is a known bug;
   "SetPort doesn't work with custom status messages." (Microsoft) Therefore, all custom messages will be declared as PRINTER\_STATUS\_NOT\_AVAILABLE and a KPL value is placed in the ExternalError key. The custom messages are only accessible through the GetPrinterData function.

## Status Update in Windows "Printers and Faxes" or "Devices and Printer"

In the case that the printer is not printing the status will be checked every 1.5 seconds (depending on the setting of the READ\_THREAD\_IDLE\_SLEEP key in the LM registry setting). During printing and on error the status will be checked more frequently.

The same status that can be gathered with the **GetPrinterData** or **GetPrinter** API will be displayed in the Printer folder.



**Note** • In some cases it may be possible that the PnP ping is not properly executed on the system and therefore the idle thread of the LM is not activated after a power off situation of the printer. In this case the LM is reactivated the next time a print job is executed.

# A

## Windows Statuses

Contents	
Windows Compatible Status 51	1
Windows Incompatible Status	3

## Windows Compatible Status

These statuses appear in the Printers and Faxes dialog and are stored in the printer ERROR key in the Registry. They can be extracted with **GetPrinterData**.

## Statuses Defined in winspool.h

PRINTER_STATUS_PAPER_JAM	Paper jam (ESC ENQ 1 = NAK 1)
PRINTER_STATUS_USER_INTERVENTION	Cutter not home (ESC ENQ $1 = NAK 2$ )
PRINTER_STATUS_PAPER_OUT	Out of paper (ESC ENQ 1 = NAK 3)
PRINTER_STATUS_DOOR_OPEN	Print head lifted (ESC ENQ 1 = NAK 4)
PRINTER_STATUS_PAPER_PROBLEM	Paper feed problem (ESC ENQ 1 = NAK 5)
PRINTER_STATUS_NOT_AVAILABLE	Temperature error (ESC ENQ 1 = NAK 6)
PRINTER_STATUS_ERROR	Presenter jam (ESC ENQ 1 =NAK 7), check ExternalError
PRINTER_STATUS_PAPER_JAM	Retract jam (ESC ENQ 1 = NAK 8), check ExternalError
PRINTER_STATUS_NOT_AVAILABLE	Black mark not found (ESC ENQ 1 = NAK 10), check ExternalError
PRINTER_STATUS_NOT_AVAILABLE	Black mark calibration error (ESC ENQ 1 = NAK 11), check ExternalError
PRINTER_STATUS_NOT_AVAILABLE	Index error (ESC ENQ 1 = NAK 12), check ExternalError

Table 1 • Windows Status Compared to Zebra Status

PRINTER_STATUS_NOT_AVAILABLE	Checksum error (ESC ENQ 1 = NAK 13), check ExternalError
PRINTER_STATUS_NOT_AVAILABLE	Wrong firmware (ESC ENQ 1 = NAK 14), check ExternalError
PRINTER_STATUS_NOT_AVAILABLE	Retract occurred (ESC ENQ 1 = NAK 16), check ExternalError
PRINTER_STATUS_NOT_AVAILABLE	Paused (ESC ENQ 1 = NAK 17), check ExternalError
PRINTER_STATUS_TONER_LOW	Paper near end (ESC ENQ 6)
PRINTER_STATUS_NO_TONER	Weekend paper status (ESC ENQ 6) (only for TTP 7030 and TTP 8000 with special hardware)
PRINTER_STATUS_OUTPUT_BIN_FULL	Paper in presenter (ESC ENQ 6)

#### Table 1 • Windows Status Compared to Zebra Status

#### Table 2 • Status definition in Winspool.h

#define PRINTER_STATUS_ERROR	0x00000002
#define PRINTER_STATUS_PAPER_JAM	0x0000008
#define PRINTER_STATUS_PAPER_OUT	0x00000010
#define PRINTER_STATUS_PAPER_PROBLEM	0x00000040
#define PRINTER_STATUS_OFFLINE	0x0000080
#define PRINTER_STATUS_OUTPUT_BIN_FULL	0x00000800
#define PRINTER_STATUS_NOT_AVAILABLE	0x00001000
#define PRINTER_STATUS_TONER_LOW	0x00020000
#define PRINTER_STATUS_NO_TONER	0x00040000
#define PRINTER_STATUS_USER_INTERVENTION	0x00100000
#define PRINTER_STATUS_DOOR_OPEN	0x00400000



**Note** • In order to indicate the Kiosk printer status of Paper-near-end or Weekend-paperstatus Zebra is using two Microsoft status codes that are not used by thermal printers, as they do not need any toner. The codes used are PRINTER\_STATUS\_TONER\_LOW for Papernear-end and PRINTER\_STATUS\_NO\_TONER for Weekend-paper-status. These statuses are only informative and do not block printing. The Weekend-paper-status is only present with printers that have the option of two sensors on their roll holder. (See the *Technical Manual* for your printer for more information on the available options.)

## **Windows Incompatible Status**

If a printer status doesn't have a corresponding Windows status the Error key will have PRINTER\_STATUS\_NOT\_AVAILABLE set and you need to evaluate the **ExternalError** key.

Statuses that have a representation within the Windows status may also have an ESC ENQ 1 NAK value (see Table 4) and will be stored in the printer **ExternalError** key in the registry and can be extracted with **GetPrinterData** using the **ExternalError** key.

For the meanings of these NAK responses see the appropriate *Technical Manual* for your printer, under the ESC ENQ 1 section.



**Note** • Any other Windows status may be used in the future, so mask away undefined bits in your application!

**N** 

Notes •	 	 	
	 	 · · · · · · · · · · · · ·	

# B

# **GetPrinterData Key Values**

Contents			
GetPrinterData Key Va	lues	 	

## **GetPrinterData Key Values**

		i	İ
Printer	DsMonitor Key Explanation	Туре	Note
Error	Printer Error or Status in Windows 16-bit format	REG_DWORD	
ErrorEvent	Error event name for error event trigger	REG_SZ	only in Windows XP
ExternalError	Extended status according to Appendix B	REG_DWORD	
Firmware	Firmware version	REG_BINARY	only for USB connection
PageCount	Page counter for cut pages	REG_DWORD	
PCB_REV	Printers PCB revision number	REG_BINARY	
PCB_SN	Printers PCB serial number	REG_BINARY	
StatusEvent	Status event name for status event trigger	REG_SZ	only for Windows XP
RetractCount	Retract counter for retracted pages	REG_DWORD	
DeleteJob	Flag to delete print jobs on error	REG_DWORD	
Head_Temp	Head temperature (ESC ENQ B)	REG_DWORD	

#### Table 3 • GetPrinterData Key Values

**J** 


# С

# Status Monitoring & Programming Examples

#### Contents

Status Monitoring	57
Implementation in Calling Application	58
Implementation in Monitor Thread	59
WMI Script to get Basic Status.	61

## **Status Monitoring**

In order to incorporate the new way of status monitoring you need some background on what happens in a Kiosk when you print and when you should monitor your status.

Status monitoring can be handled in two different ways.

- Monitor in your printing application
- Monitor in a separate application

When you monitor in your printing application you would commonly look at the printer before sending a print job to see if the printer is OK and then send your print job. After the print job is signaled as being printed you would check status again to see if the printer has any errors or if the paper has been taken, etc.

Monitoring in a separate application usually doesn't allow direct interaction with the printed job so you are trying to poll the printer as often as you can to get the most accurate information on what the printer is doing. This is usually a very time consuming task and you have to care for synchronizing with a current print job.

Since monitoring in a separate application is most commonly used for status monitoring, we have incorporated an event notification into the Language Monitor (LM) to allow a monitoring application to do other tasks and have a separate thread listening for the printer status or error event change. When this occurs the thread is simply getting the status and reporting this back to the main program or doing any other kind of reporting.

To accommodate this notification for all error and status changes we incorporated two mechanisms in the LM.

#### · Monitoring while printing

We implemented status monitoring in the internal printing structure of the LM. When you open a Document, print it and close the Document again the LM will check the printer status before and after printing and will also react to write errors if such occur. Then it will set the printer status and raise the error event.

• Monitoring while idle

We implemented an internal status thread which polls the printer when it is idle in a predefined cycle and provides changed status information in the same manner. It will set the status and raise an error or status event. Therefore, it is not necessary to implement your own monitoring loop. You can simply wait for an event in your application's idle loop.

## **Implementation in Calling Application**



Note • The following example is not applicable for Windows 7 and above.

1. Open the Printer.

The first step of your implementation is to open the printer you want to monitor and get the Error event and Status event name.

```
bRet = OpenPrinter(m_csPrinter.GetBuffer(1), &hPrinter, &pd);
```

```
•••
```

```
if ((dRet = GetPrinterData(hPrinter, "ErrorEventName", &dType, (LPBYTE)cTmp, 100, &dNeeded))!=ERROR_SUCCESS)
```

```
•••
```

```
if ((dRet = GetPrinterData(hPrinter, "StatusEventName", &dType, (LPBYTE)cTmp, 100, &dNeeded))!=ERROR_SUCCESS)
```

•••

**2.** Open the Event Handles.

Open the two event handles and fill these handles into a structure you will pass on to the new thread.

```
typedef struct _CStatusThreadInfo
{
    HWNDmyHwnd;
    DWORDdSleepTime;
    HANDLEhPrinter;
    HANDLEhError;
    HANDLEhStatus;
    BOOLm_hStatusEventKillThread;
} CStatusThreadInfo;
....
```

if ((cTi.hError = OpenEvent(SYNCHRONIZE, TRUE, m\_csErrorEvent))==NULL)

•••

if ((cTi.hStatus = OpenEvent(SYNCHRONIZE, TRUE, m\_csStatusEvent))==NULL)
Step: Start Monitoring

When all this is done you can start your monitoring thread.

m\_StatusThread = AfxBeginThread( StatusThreadProc, &cTi, THREAD\_PRIORITY\_NORMAL,0,0,NULL);

## Implementation in Monitor Thread



Note • The following example is not applicable for Windows 7 and above.

**1.** Fill Event Arrays

In the monitoring thread you create and fill an array of handles with the error and status event handle.

myHandle[0] = pInfo->hError; myHandle[1] = pInfo->hStatus;

2. Start the Waiting Loop

Then you are ready to start the waiting loop.

```
for (;;)
{
    if (pInfo->m hStatusEventKillThread)
    {
           OutputDebugStringA("### [Thread msg.] Kill thread...\n");
           pInfo->m hStatusEventKillThread = FALSE;
           AfxEndThread(1);
           return 1;
    }
    if ((dwRet = WaitForMultipleObjects(2, myHandle, FALSE, pInfo-
>dSleepTime))!=WAIT FAILED)
    ł
           if (dwRet==WAIT OBJECT 0 || dwRet==WAIT OBJECT 0+1)
                 if ((dwRet = GetPrinterData(hPrinter, "Error", &dType, (LPBYTE)&dwResult,
sizeof(dwResult), &dNeeded))!=ERROR SUCCESS)
                        sprintf( str, "### [Status Thread error %d] read [%08X]\n", dwRet,
dwResult);
                        OutputDebugStringA(str);
                 sprintf( str, "### [Status Thread] read [%08X]\n", dwResult);
                 OutputDebugStringA(str);
                 SendMessage(GetDlgItem((HWND)pInfo->myHwnd, IDC Status),
WM_SETTEXT, 0, (LPARAM)(str));
                 if (dwResult & 0x0000000)
```

SendMessage(GetDlgItem((HWND)pInfo->myHwnd, IDC\_Status), WM\_SETTEXT, 0, (LPARAM)("PRINTER\_STATUS\_OK"));

if (dwResult & PRINTER\_STATUS\_ERROR)

SendMessage(GetDlgItem((HWND)pInfo->myHwnd, IDC\_Status), WM\_SETTEXT, 0, (LPARAM)("PRINTER\_STATUS\_ERROR"));

if (dwResult & PRINTER STATUS PENDING DELETION)

SendMessage(GetDlgItem((HWND)pInfo->myHwnd, IDC\_Status), WM\_SETTEXT, 0, (LPARAM)("PRINTER\_STATUS\_PENDING\_DELETION"));

if (dwResult & PRINTER STATUS PAPER JAM)

SendMessage(GetDlgItem((HWND)pInfo->myHwnd, IDC\_Status), WM\_SETTEXT, 0, (LPARAM)("PRINTER\_STATUS\_PAPER\_JAM"));

if (dwResult & PRINTER\_STATUS\_PAPER\_OUT)

SendMessage(GetDlgItem((HWND)pInfo->myHwnd, IDC\_Status), WM\_SETTEXT, 0, (LPARAM)("PRINTER\_STATUS\_PAPER\_OUT"));

if (dwResult & PRINTER\_STATUS\_PAPER\_PROBLEM)

SendMessage(GetDlgItem((HWND)pInfo->myHwnd, IDC\_Status), WM\_SETTEXT, 0, (LPARAM)("PRINTER\_STATUS\_PAPER\_PROBLEM"));

if (dwResult & PRINTER STATUS OFFLINE)

SendMessage(GetDlgItem((HWND)pInfo->myHwnd, IDC\_Status), WM\_SETTEXT, 0, (LPARAM)("PRINTER\_STATUS\_OFFLINE"));

if (dwResult & PRINTER\_STATUS\_IO\_ACTIVE)

SendMessage(GetDlgItem((HWND)pInfo->myHwnd, IDC\_Status), WM\_SETTEXT, 0, (LPARAM)("PRINTER\_STATUS\_IO\_ACTIVE"));

if (dwResult & PRINTER\_STATUS\_BUSY)

SendMessage(GetDlgItem((HWND)pInfo->myHwnd, IDC\_Status), WM\_SETTEXT, 0, (LPARAM)("PRINTER\_STATUS\_BUSY"));

if (dwResult & PRINTER\_STATUS\_PRINTING)

SendMessage(GetDlgItem((HWND)pInfo->myHwnd, IDC\_Status), WM\_SETTEXT, 0, (LPARAM)("PRINTER\_STATUS\_PRINTING"));

if (dwResult & PRINTER STATUS OUTPUT BIN FULL)

SendMessage(GetDlgItem((HWND)pInfo->myHwnd, IDC\_Status), WM\_SETTEXT, 0, (LPARAM)("PRINTER\_STATUS\_OUTPUT\_BIN\_FULL"));

if (dwResult & PRINTER\_STATUS\_PROCESSING)

SendMessage(GetDlgItem((HWND)pInfo->myHwnd, IDC\_Status), WM\_SETTEXT, 0, (LPARAM)("PRINTER\_STATUS\_PROCESSING"));

if (dwResult & PRINTER\_STATUS\_USER\_INTERVENTION)

SendMessage(GetDlgItem((HWND)pInfo->myHwnd, IDC\_Status), WM\_SETTEXT, 0, (LPARAM)("PRINTER\_STATUS\_USER\_INTERVENTION"));

if (dwResult & PRINTER\_STATUS\_DOOR\_OPEN)

SendMessage(GetDlgItem((HWND)pInfo->myHwnd, IDC\_Status), WM\_SETTEXT, 0, (LPARAM)("PRINTER\_STATUS\_DOOR\_OPEN"));

if (dwResult & PRINTER STATUS TONER LOW)

SendMessage(GetDlgItem((HWND)pInfo->myHwnd, IDC\_Status), WM\_SETTEXT, 0, (LPARAM)("PRINTER\_STATUS\_PAPER\_NEAR\_END"));

#### if (dwResult & PRINTER\_STATUS\_NO\_TONER)

SendMessage(GetDlgItem((HWND)pInfo->myHwnd, IDC\_Status), WM\_SETTEXT, 0, (LPARAM)("PRINTER\_STATUS\_PAPER\_WEEKEND"));

if (dwResult & PRINTER\_STATUS\_NOT\_AVAILABLE)

SendMessage(GetDlgItem((HWND)pInfo->myHwnd, IDC\_Status), WM\_SETTEXT, 0, (LPARAM)("PRINTER\_STATUS\_EXTERNAL\_ERROR"));

if ((dwRet = GetPrinterData(hPrinter, "ExternalError", &dType, (LPBYTE)dwResult, sizeof(dwResult), &dNeeded))!=ERROR\_SUCCESS)

```
sprintf( str, "### [Status Thread error %d] read [%08X]\n",
dwRet, dwResult);
                                OutputDebugStringA(str);
                         }
                         sprintf( str, "### [Status Thread External Error] read [%08X]\n",
dwResult);
                         OutputDebugStringA(str);
                         SendMessage(GetDlgItem((HWND)pInfo->myHwnd, IDC_Status),
WM SETTEXT, 0, (LPARAM)(str));
                  ł
           else
                  SendMessage(GetDlgItem((HWND)pInfo->myHwnd, IDC_Status),
WM_SETTEXT, 0, (LPARAM)("Timeout"));
    else
     ł
           dwRet = GetLastError();
           sprintf( str, "### Wait function failed! [%d]\n", dwRet);
           OutputDebugStringA(str);
    3
3
```

When an event occurs you need to get the status with GetPrinterData using the "Error" key and decode the result according to the sample or any way you feel necessary. In any case you can send a message or do any form of status reporting you want to do.

## WMI Script to get Basic Status

```
'VBScript source code
ttpname=""
strComputer = "."
Set objWMIService = GetObject("winmgmts:"
  & "{impersonationLevel=impersonate}!\\" & strComputer & "\root\cimv2")
Set wbemObjectSet = objWMIService.ExecQuery("SELECT * FROM Win32 Printer")
For Each wbemObject In wbemObjectSet
  if wbemObject.Default = TRUE then
    ttpname = wbemObject.Caption
    Wscript.Echo "Printer " & ttpname
    Select Case wbemObject.PrinterStatus
    Case 1
           strPrinterStatus = "Other"
      strExtendedPrinterStatus = wbemObject.ExtendedPrinterStatus
        Case 2
      strPrinterStatus = "Unknown"
        Case 3
      strPrinterStatus = "Idle"
        Case 4
```

strPrinterStatus = "Printing" Case 5 strPrinterStatus = "Warmup" Case 6 strPrinterStatus = "Stopped printing" Case 7 strPrinterStatus = "Offline" End Select Wscript.Echo "Printer Status: " & strPrinterStatus Select Case wbemObject.DetectedErrorState Case 0 Wscript.Echo "DetectedErrorState: " & wbemObject.DetectedErrorState & " Unknown" case 1 Wscript.Echo "DetectedErrorState: " & wbemObject.DetectedErrorState & " Other" case 2 Wscript.Echo "DetectedErrorState: " & wbemObject.DetectedErrorState & " No Error" case 3 Wscript.Echo "DetectedErrorState: " & wbemObject.DetectedErrorState & " Low Paper" case 4 Wscript.Echo "DetectedErrorState: " & wbemObject.DetectedErrorState & " No Paper" case 5 Wscript.Echo "DetectedErrorState: " & wbemObject.DetectedErrorState & " Low Toner" case 6 Wscript.Echo "DetectedErrorState: " & wbemObject.DetectedErrorState & " No Toner" case 7 Wscript.Echo "DetectedErrorState: " & wbemObject.DetectedErrorState & " Door Open" case 8 Wscript.Echo "DetectedErrorState: " & wbemObject.DetectedErrorState & " Jammed" case 9 Wscript.Echo "DetectedErrorState: " & wbemObject.DetectedErrorState & " Offline " case 10 Wscript.Echo "DetectedErrorState: " & wbemObject.DetectedErrorState & " Service Requested" case 11 Wscript.Echo "DetectedErrorState: " & wbemObject.DetectedErrorState & " Output Bin Full" End Select Select Case wbemObject.ExtendedDetectedErrorState

Case 0 Wscript.Echo "ExtendedDetectedErrorState: " & wbemObject.ExtendedDetectedErrorState & "Unknown" case 1 Wscript.Echo "ExtendedDetectedErrorState: " & wbemObject.ExtendedDetectedErrorState & " Other" case 2 Wscript.Echo "ExtendedDetectedErrorState: " & wbemObject.ExtendedDetectedErrorState & "No Error" case 3 Wscript.Echo "ExtendedDetectedErrorState: " & wbemObject.ExtendedDetectedErrorState & " Low Paper" case 4 Wscript.Echo "ExtendedDetectedErrorState: " & wbemObject.ExtendedDetectedErrorState & "No Paper" case 5 Wscript.Echo "ExtendedDetectedErrorState: " & wbemObject.ExtendedDetectedErrorState & " Low Toner" case 6 Wscript.Echo "ExtendedDetectedErrorState: " & wbemObject.ExtendedDetectedErrorState & "No Toner" case 7 Wscript.Echo "ExtendedDetectedErrorState: " & wbemObject.ExtendedDetectedErrorState & "Door Open" case 8 Wscript.Echo "ExtendedDetectedErrorState: " & wbemObject.ExtendedDetectedErrorState & "Jammed" case 9 Wscript.Echo "ExtendedDetectedErrorState: " & wbemObject.ExtendedDetectedErrorState & "Service Requested" case 10 Wscript.Echo "ExtendedDetectedErrorState: " & wbemObject.ExtendedDetectedErrorState & "Output Bin Full" case 11 Wscript.Echo "ExtendedDetectedErrorState: " & wbemObject.ExtendedDetectedErrorState & "Paper Problem" case 12 Wscript.Echo "ExtendedDetectedErrorState: " & wbemObject.ExtendedDetectedErrorState & " Cannot Print Page" case 13 Wscript.Echo "ExtendedDetectedErrorState: " & wbemObject.ExtendedDetectedErrorState & "User Intervantion Required" case 14 Wscript.Echo "ExtendedDetectedErrorState: " & wbemObject.ExtendedDetectedErrorState & "Out of Memory" case 15 Wscript.Echo "ExtendedDetectedErrorState: " & wbemObject.ExtendedDetectedErrorState & "Server Unknown"

End Select

#### 64 | Status Monitoring & Programming Examples WMI Script to get Basic Status

end if Next Wscript.Echo "Printer" & ttpname

# D

## **Print Forms**

Contents	
Setup Print Forms in Windows XP and Vista	65
Setup Print Forms in Windows 7	67
Additional References	69

## **Setup Print Forms in Windows XP and Vista**

Windows XP and Vista allows you to control global settings for print servers by using the **Print Server Properties** dialog. You can access this dialog by doing the following:

- 1. Double-click on the printer's icon in the **Control Panel** or select **Settings** in the **Start** menu and then choose the **Printers** option.
- 2. In the Printers window, select Server Properties from the File menu.

🎍 Print Server Properties 🛛 💽 🗙
Forms Ports Drivers Advanced
Eorms on: 14LXPMWILNER1
66 mm Ticket
80 mm Ticket 82.5 mm Roll Paper
Form <u>n</u> ame: 80 mm Roll Paper
Create a new form
Define a new form by editing the existing name and measurements. Then click Save Form.
Form description (measurements)
Units: O <u>Metric</u> O <u>E</u> nglish
Paper size: Printer area margins:
<u>W</u> idth: 8.01cm <u>L</u> eft: 0.00cm <u>I</u> op: 0.00cm
Height: 40.64cm Bight: 0.00cm Bottom: 0.00cm
OK Cancel Apply

3. Use the Forms tab of the Print Server Properties dialog to view printer forms.

## **Viewing and Creating Print Forms**

Forms are used by the print server to define the standard sizes for paper, envelopes, and transparencies. To view the current settings for a printer form, follow these steps:

- **1.** Open the **Print Server Properties** dialog and then click on the **Forms** tab as shown above.
- 2. Use the Forms On list box to select the form you want to view.

The form settings are shown in the **Measurements** area. You can't change or delete the default system forms.

#### To create a new form, follow these steps:



**Note** • You must give the form you create a new name to ensure that the original form remains usable.

- 1. Access the Forms tab of the Print Server Properties dialog.
- **2.** Use the **Forms On** list box to select the existing form on which you want to base the new form.
- 3. Select the Create A New Form check box.
- 4. Enter a new name for the Form in the Form Description For field.

- 5. Use the fields in the Measurements area to set the paper size and margins.
- 6. Click the Save Form button to save the form. Give the form a new name to ensure that the original form remains usable.

## **Setup Print Forms in Windows 7**

You can use **Print Management** to manage print forms.



Note • You must be signed in as an Administrator to use Print Management.

1. To open Print Management, type **printmanagement.msc** in the search box, and then press **Enter**.



2. Open Print Management.

**3.** In the left pane, click **Print Servers**, click the applicable print server, right-click **Forms**, and then click **Manage Forms**.

🕞 Print Management					
<u>File Action View H</u> elp					
<⇒   2 □ × ≥   2 □					
🕞 Print Management	Form Name	Туре	Width (0.1mm u	He 🔺	Actions
Custom Filters	🚽 10x11	Built In	2540	27!	Forms 🔺
All Printers (3)	🚽 10x14	Built In	2540	35!	More Actions
All Drivers (5)	🚽 11x17	Built In	2794	431	
Printers Not Ready Printers With John	🚽 12x11	Built In	3049	27! =	80 mm Roll Paper 🔺
Print Servers	🚽 15x11	Built In	3810	27!	More Actions
MW-WIN7-TEST (local)	🚽 58 mm Roll Paper	Printer	580	40(	
Drivers	🚽 6 3/4 Envelope	Built In	920	16!	
- Forms	🚽 60 mm Roll Paper	Printer	600	40(	
Ports	🛃 80 mm Roll Paper	Printer	800	400	
Printers	🚽 82.5 mm Roll Paper	Printer	824	40(	
Deployed Printers	9x11	Built In	2286	27!	
	A2	Built In	4200	59¢	
	A3	Built In	2970	42(	
	A3 Extra	Built In	3220	44!	
	🚽 A3 Extra Transverse	Built In	3220	44!	
	A3 Rotated	Built In	4200	29:	
	🚽 A3 Transverse	Built In	2970	42(	
	A4	Built In	2100	29:	
	🚽 A4 Extra	Built In	2354	32	
	🚽 A4 Plus	Built In	2100	33(	
	A4 Rotated	Built In	2970	21(	
	🚽 🗛 Small	Built In	2100	29:	
	🚽 A4 Transverse	Built In	2100	29:	
	🚽 A5	Built In	1480	21(	
	🚽 A5 Extra	Built In	1740	23!	
	A5 Rotated	Built In	2100	14	
	A5 Transverse	Built In	1480	21(	
	🚽 A6	Built In	1050	14	
	A6 Rotated	Built In	1480	10!	
	🚽 B4 (ISO)	Built In	2500	35: 🔻	
	<			•	

In the **Print Server Properties** dialog, do the following steps.

**4.** To create a new form, select an existing form, select the **Create a new form** check box, change the printer measurement units, paper size, and printer area margins as needed, click **Save Form**, and then click **OK**.

**Note** • You must give the form you create a new name to ensure that the original form remains usable.

Print Server P	roperties	ourity Adv	anaad		<b>-</b> ×
Forms on:	MW-WIN	7-TEST	anceu		
80 mm Roll P 82.5 mm Roll 9x11 A2	aper Paper			• •	<u>D</u> elete Save Form
Form <u>n</u> ame:	80 m	ım Roll Pap	er		
Define a new	ew form	iting the evi	sting name an	d	
Form descri	ts. Then clic	:k Save Forr	n.	u	
Units:	© <u>M</u> et	ric	<u>English</u>		
Paper size:		Printer ar	ea margins:		
<u>W</u> idth:	3.15in	Left:	0.00in	<u>T</u> op:	0.00in
<u>H</u> eight:	16.00in	<u>R</u> ight:	0.00in	Bottom:	0.00in
L			ОК	Cancel	Apply

5. To delete a form, select the form, click Delete, and then click OK.

## **Additional References**

• How to find PaperSize for custom print sizes under Windows NT and later versions by using Windows API functions

http://support.microsoft.com/kb/304639

Article ID: 304639 - Last Review: February 2, 2005 - Revision: 4.4

- Manage Forms in Windows 7 and Server 2008 R2 http://technet.microsoft.com/en-us/library/dd759110.aspx
- Configuring Print Server Properties in Windows XP and Vista http://technet.microsoft.com/en-us/library/cc722527.aspx

**J** 


# Index

## Α

About tab, 48 APIs, 49

## В

Bottom margin, 38, 39 Brightness, 43

## С

Clear presenter, 41 continuous, 38 Contrast, 43 copy count, 24 Cut at the document end, 39 Cut every page, 39 Cutter mode, 39

## D

Darkness, 37 Default, 46 Delete Print Job on Error, 44 Document Settings, 38 driver installation, 14 Driver Settings, 43

## Ε

Eject length, 41 Export, 46

## F

Form To Tray Assignment, 33

### G

General tab, 22

Image Adjustment, 43 Import, 46 Import/Export settings tab, 46

## L

Language Monitor, 49 Layout tab, 23 liability, 2

## Μ

mark sensing, 38 Max print speed, 37 Media Tracking, 38

## Ν

No Cut, 39

## 0

OEM, 20

## Ρ

Page hold, 42 paper size, 24 Paper/Quality tab, 23 Partial cut width, 40 Present Length Addition, 41 Presenter loop length, 40 Presenter mode, 41 Presenter Settings, 39 Presenter timeout, 41 Print Management, 12 Printer Information tab, 45 Printer Settings, 37 Properties dialog, 21

## S

Send Printer Parameter, 44 Set vertical home position to zero, 45

## Т

Tools tab, 44 Top margin, 38

## U

uninstall, 7

## V

variable length, 38

## W

Windows 7, 12 Windows XP, 8


## Zebra Technologies Corporation

Zebra Technologies Corporation 475 Half Day Road, Suite 500 Lincolnshire, IL 60069 USA T: +1 847 634 6700 Toll-free +1 866 230 9494 F: +1 847 913 8766

## Zebra Technologies Europe Limited

Dukes Meadow Millboard Road Bourne End Buckinghamshire, SL8 5XF, UK T: +44 (0)1628 556000 F: +44 (0)1628 556001

## Zebra Technologies Asia Pacific, LLC

120 Robinson Road #06-01 Parakou Building Singapore 068913 T: +65 6858 0722 F: +65 6885 0838

http://www.zebra.com

© 2012 ZIH Corp.

P1006873-004 Rev. A