



Zebra XML-Enabled Printer

Reference Guide



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About This Document



This section provides you with contact information, document structure and organization, and additional reference documents.

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Who Should Use This Document

This Reference Guide is intended for use by any person who is going to use Zebra XML-Enabled printers.

How This Document Is Organized

The Zebra XML-Enabled Printer Reference Guide is set up as follows:

Section	Description
<i>Introduction</i>	This chapter provides a high level overview of Zebra's XML-Enabled printer, along with detailed information about what Zebra has enabled with XML printing and how to use those capabilities to print bar code labels.
<i>ZebraDesigner for XML</i>	This chapter details how to create XML-Enabled ZPL [®] label formats with ZebraDesigner for XML.
<i>Compliance Label Formats</i>	This appendix provides a high-level overview of the Zebra XML-Enabled Printer.
<i>Glossary</i>	This section contains a list of terms and their definitions for your reference.

Contacts

You can contact Zebra Technologies at the following:

Web Site

<http://www.zebra.com>

Technical Support via the Internet is available 24 hours per day, 365 days per year. Go to <http://www.zebra.com/support>.

The Americas

Regional Headquarters	Technical Support	Customer Service Dept.
Zebra Technologies International, LLC 333 Corporate Woods Parkway Vernon Hills, Illinois 60061.3109 U.S.A T: +1 847 793 2600 Toll-free +1 800 423 0422 F: +1 847 913 8766	T: +1 877 ASK ZEBRA (275 9327) F: +1 847 913 2578 Hardware: ts1@zebra.com Software: ts3@zebra.com	For printers, parts, media, and ribbon, please call your distributor, or contact us. T: +1 877 ASK ZEBRA (275 9327) E: clientcare@zebra.com

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Document Conventions

The following conventions are used throughout this document to convey certain information.

Alternate Color (online only) Cross-references contain hot links to other sections in this guide. If you are viewing this guide online in .pdf format, you can click the cross-reference (blue text) to jump directly to its location.

LCD Display Examples Text from a printer’s Liquid Crystal Display (LCD) appears in **Bubbledot ICG** font.

Command Line Examples Command line examples appear in **Courier New** font. For example, type `ZTools` to get to the Post-Install scripts in the `bin` directory.

Files and Directories File names and directories appear in **Courier New** font. For example, the `Zebra<version number>.tar` file and the `/root` directory.

Icons Used



Identifies features that are available in printers with firmware version V60.15.x, V50.15.x, or later.



Identifies features that are available in printers with firmware version v60.14, v50.14, or later.



Important • Advises you of information that is essential to complete a task.



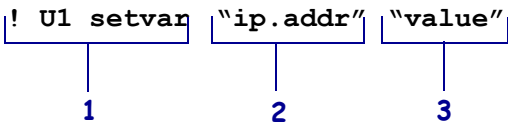
Note • Indicates neutral or positive information that emphasizes or supplements important points of the main text.



Example • Provides an example, often a scenario, to better clarify a section of text.

Illustration Callouts Callouts are used when an illustration contains information that needs to be labeled and described. A table that contains the labels and descriptions follows the graphic. [Figure 1](#) provides an example.

Figure 1 • Sample Figure with Callouts



1	Command—always preceded with an exclamation point (!). A space resides between the ! and <code>U1</code> and between <code>U1</code> and the command (<code>setvar</code> or <code>getvar</code>).
2	Attribute—always in double quotes.
3	Chosen value—always in double quotes. Only applicable for <code>setvar</code> .

Related Documents

The following documents might be helpful references:

ZebraDesigner for XML User Guide

Applicable Zebra printer User Guide

Oracle Warehouse Management User's Guide 11i (A86607-05)

Oracle Warehouse Management Implementation Guide Release 11i (A90844-03)



Introduction

This chapter provides a high level overview of Zebra's XML-Enabled printers, along with information about the Document Type Definition (DTD) in the Zebra XML-Enabled printers. It also reviews the XML data stream expected to print labels and the role of stored label formats in the XML-Enabled printing solution.

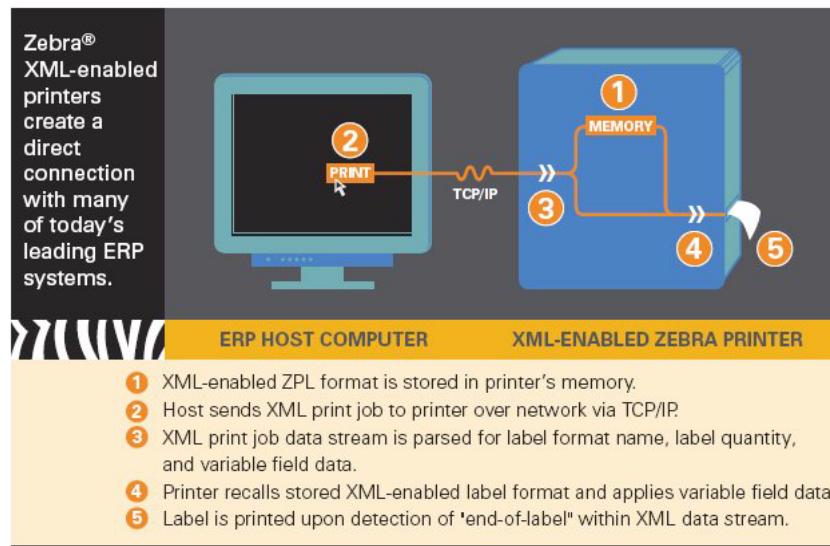
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Overview

Zebra's XML-Enabled printers provide a direct-connect solution for bar code label printing into many of today's leading supply chain management and manufacturing system applications. This illustration shows you the direct-connect solution using XML.

Figure 2 • XML-Enabled Printer Pictorial Overview



Zebra XML Integrated Solutions

To simplify bar code label printing, the Zebra XML-Enabled and RFID printers and encoders provide bar code output from these systems:

- Oracle
- SAP
- IBM
- Microsoft®

This gives you the ability to quickly and easily integrate complex printing solutions into your enterprise systems.

For easy integration to the back end ERP systems, use Zebra Designer for XML to design your labels.

For more details on available enterprise printing solutions, visit:

<http://www.zebra.com/oracle>

<http://www.zebra.com/erp>

<http://www.zebra.com/ibm>

<http://www.zebra.com/xml>

<http://www.zebra.com/rfid>

<http://rfid.zebra.com/biztalk>

Requirements

Printer and Firmware

These are the supported Zebra XML-Enabled printers and firmware versions:

Printer	Firmware Version
105SL™	V60.15.8Z
110XilllPlus™	V60.15.8Z
140XilllPlus™	V60.15.8Z
170XilllPlus™	V60.15.8Z
220XilllPlus™	V60.15.8Z
QL Plus™ series	SHSTH10z
R110Xi™	R60 - all firmware versions
R170Xi™	R60 - all firmware versions
R110PAX4™	R62 - all firmware versions, R63 - all firmware versions
R110Xi™ HF	R65.15.8Z
R4Mplus™	SP994, SP999, SP1027, SP1056, SP1082 - all firmware versions
RW™ series	SHSTH10z
S4M™	V53.15.8Z
Z4Mplus™	V60.15.8Z
Z6Mplus™	V60.15.8Z
ZM400™	V53.15.8Z
ZM600™	V53.15.8Z

Document Type Definition

An XML DTD defines the XML tags that are used in the XML file. The host system generates XML files according to this DTD, and the Zebra XML-Enabled printer translates the XML according to this DTD.

➔ **Example** • This example shows the XML DTD that is used to form the XML understood by the Zebra XML-Enabled printer. It defines the elements that are used in the XML data stream and a list of their attributes and the next level elements.



Note • Following the example is a table that identifies the bold lines in the example:

```

<!ELEMENT labels (label)*>
<!ATTLIST labels _FORMAT CDATA #IMPLIED> ← 1
<!ATTLIST labels _JOBNAME CDATA #IMPLIED>
<!ATTLIST labels _QUANTITY CDATA #IMPLIED> ← 2
<!ATTLIST labels _DUPLICATES CDATA #IMPLIED>
<!ATTLIST labels _PAGES CDATA #IMPLIED>
<!ATTLIST labels _PRINTERNUMBER CDATA #IMPLIED>
<!ATTLIST labels _PRINTERNAME CDATA #IMPLIED>

<!ELEMENT label (variable)*>
<!ATTLIST label _FORMAT CDATA #IMPLIED>
<!ATTLIST label _JOBNAME CDATA #IMPLIED>
<!ATTLIST label _QUANTITY CDATA #IMPLIED>
<!ATTLIST label _DUPLICATES CDATA #IMPLIED>
<!ATTLIST label _PAGES CDATA #IMPLIED>
<!ATTLIST label _PRINTERNUMBER CDATA #IMPLIED>
<!ATTLIST label _PRINTERNAME CDATA #IMPLIED>

<!ELEMENT variable (#PCDATA)>
<!ATTLIST variable name CDATA #IMPLIED> ← 3

```

1	If the XML stream follows the DTD semantics, it contains <labels> elements that identify default attributes used by the printer to create the label. The _FORMAT attribute identifies the appropriate stored label format.
2	Other attributes can be processed as well; for instance, the _QUANTITY attribute can be used to set the print quantity of the label.
3	If the XML stream follows the DTD semantics, it contains <variable> elements that have “name” attributes. The “name” attribute contains the variable name that corresponds to the variable field in the label format. The <variable> element text contains the data that is placed in the variable field in the label format.

Expected XML Data Stream

The content of the XML data stream lies between `<labels>` and `</labels>`, which correspond to all labels to be printed. The content between `<label>` and `</label>` has the information to print one label. Each `<variable>` and `</variable>` pair gives the value of one variable on the label.



Note • In this example, notice the bold lines.

```
<?xml version="1.0" standalone="no"?>
<!DOCTYPE labels SYSTEM "label.dtd">
<labels _FORMAT="E:SERIAL.ZPL" _QUANTITY="1"
PRINTERNAME="Printer 1" _JOBNAME="LBL101">
  <label>
    <variable name="organization">611</variable>
    <variable name="item">Nuts</variable>
    <variable name="lot">1234</variable>
    <variable name="serial_number">12345</variable>
    <variable name="revision">V2</variable>
    <variable name="lot_status">1234</variable>
    <variable name="serial_number_status">Active</ variable>
  </label>
</labels>
```



Example • The XML data stream contains the `<labels>` element that defines the format, quantity, printer name, and job name. The Zebra XML-enabled printer uses the `_FORMAT` element to recall the stored XML-Enabled ZPL format from memory, and also the `_QUANTITY` element to determine the number of labels to be printed. Also, notice that the `serial_number` is one of several defined variable data fields, and 12345 is the variable data to be printed on the label.

Stored XML-Enabled ZPL Formats

To reduce the amount of customization required to implement enterprise printing, the Zebra XML-Enabled printing solution uses stored XML-Enabled ZPL formats. The format is stored in the printer’s memory and recalled by the XML data stream. Multiple formats may be stored in printer memory, limited only to the size of the format and the amount of memory in the printer. Graphic files are generally larger and take up more memory.

ZebraDesigner for XML is used to create the XML-Enabled ZPL formats.

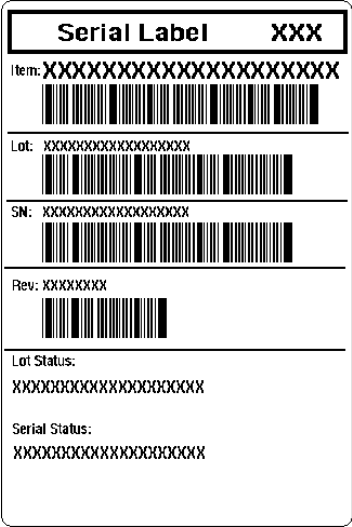
Send Files to Printer

There are multiple ways to send XML files to the printer, such as:

- ZebraNet Bridge
- FTP
- Telnet
- hyper terminal

Serial Label

➡ **Example** • This is an example of a XML-Enabled ZPL format for a serial label. Following this example is the XML-Enabled ZPL format for this serial label:



XML-Enabled ZPL Format for the Serial Label

The difference is that the ^FD (field data) statement following the standard ^FN (field name) definition identifies the XML variable field to the printer. The printer then matches the variable field name to the XML data. In this case, the `serial_number` variable field data is matched to the format.



Note • As shown below, the ^FD statements and the information immediately following them represent the names of the variable data fields in this format. During label printing, these strings are replaced with the user's variable data.

```

^XA
^DFE:SERIAL.ZPL^FS
^MCY

^LRN^FWN^CFD,24^LH0,0
^CI0^PR2^MNY^MTT^MMT^MD0^JJ0,0^PON^PMN
^LT0

^FO28,49^GB786,106,10^FS
^A0N,54,72^FO143,83^CI0^FDSerial Label^FS
^FO21,652^GB787,5,5^FS
^FO21,844^GB787,5,5^FS
^FO27,335^GB787,5,5^FS
^A0N,34,34^FO38,861^FR^CI0^FDLot Status:^FS
^A0N,34,34^FO38,1020^FR^CI0^FDSerial Status:^FS
^A0N,34,34^FO36,177^FR^CI0^FDItem:^FS
^A0N,34,34^FO36,355^FR^CI0^FDLot:^FS
^A0N,34,34^FO36,509^FR^CI0^FDSN:^FS
^FO24,495^GB787,5,5^FS
^A0N,34,34^FO38,683^FR^CI0^FDRev:^FS
^A0N,54,72^FO635,82^CI0^FN999^FDorganization^FS
^A0N,54,62^FO109,171^CI0^FN998^FDitem^FS
^BY2,2.7^FO108,223^B3N,N,95,N,N^FN998^FDitem^FS
^A0N,34,34^FO109,354^FR^CI0^FN997^FDlot^FS
^BY2,2.7^FO108,388^B3N,N,95,N,N^FN997^FDlot^FS
^A0N,34,34^FO107,510^FR^CI0^FN996^FDserial_number^FS
^BY2,2.7^FO108,549^B3N,N,95,N,N^FN996^FDserial_number^FS
^A0N,34,34^FO108,682^FR^CI0^FN995^FDrevision^FS
^BY2,2.7^FO108,724^B3N,N,95,N,N^FN995^FDrevision^FS
^A0N,40,40^FO36,918^FR^CI0^FN994^FDlot_status^FS
^A0N,40,40^FO40,1072^FR^CI0^FN993^FDserial_number_status^FS
^PQ1,0,1,Y
^XZ

```

XML Data Stream for the Serial Label

The XML data stream specifies the label format name and quantity to be printed. The printer recalls the correct label format, based on that information. Then the XML data stream defines the variable field data. The printer matches the variable field attributes and data to the attributes defined in the stored XML-Enabled ZPL format. The data that follows the attribute is then merged with the XML-Enabled format and printed.

```
<?xml version="1.0" standalone="no"?>
<!DOCTYPE labels SYSTEM "label.dtd">
<labels _FORMAT="E:SERIAL.ZPL" _QUANTITY="1" _PRINTERNAME="Printer 1"
 _JOBNAME="LBL101">
  <label>
    <variable name="organization">611</variable>
    <variable name="item">Nuts</variable>
    <variable name="lot">1234</variable>
    <variable name="serial_number">12345</variable>
    <variable name="revision">V2</variable>
    <variable name="lot_status">1234</variable>
    <variable name="serial_number_status">Active</variable>
  </label>
</labels>
```



Notes •



ZebraDesigner for XML

This section details how to create XML-Enabled ZPL label formats with ZebraDesigner for XML.

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Overview

A demonstration copy of ZebraDesigner for XML is provided on the Zebra XML-Enabled Printers CD included with each printer. The demonstration version can be fully enabled by entering a serial number available with the purchase of the fee-based product, available from your Zebra Authorized Reseller.

System and Software Requirements

These are the minimum requirements needed to run ZebraDesigner for XML:

- Pentium®-based computer with at least 64 MB of RAM
- One of the 32-bit Windows operating system: Windows 98 SE, Windows NT 4.0, Windows ME, Windows 2000, Windows XP, and Windows Server 2003
- Hard disk with 75 MB of free disk space
- CD-ROM drive
- Administrator rights to the local computer during installation

Install Overview for ZebraDesigner for XML

When you put the ZebraDesigner for XML CD in your CD-ROM drive, the installation/demonstration program automatically starts. You can browse the directory of the CD and look at the brochures, technical documentation, sample files, and other documents on the CD.



Note • If you are using Windows NT, Windows 2000, Windows XP, or Windows Server 2003 you have to log on with Administrator rights to perform the installation.

Close All Software Applications

Before you start installing ZebraDesigner for XML, close all other software applications. This ensures a complete installation of ZebraDesigner for XML.

Run Installation

To install ZebraDesigner for XML on your desktop PC, do the following:

1. Insert the ZebraDesigner for XML CD into your CD-ROM drive. The *Setup Wizard* dialog box opens.



Note • If the Setup Wizard does not start automatically, go to the main CD directory of your ZebraDesigner for XML CD and double-click START.EXE.

2. Click Next.
3. Follow the prompts and make your selections accordingly.
4. Click Install.
5. Click Finish.

Define Setup Options

To continue the installation, do the following:

1. Click Next.
2. Specify the program group you want to use for ZebraDesigner for XML.
3. Specify if shortcuts to ZebraDesigner for XML should be created on the desktop or in the Quick Launch area.
4. To finish the installation, click Install.
After installation you are asked to install a printer driver. You must install a ZebraDesigner driver. If you do not install a printer driver while installing the software, you are asked to install one the first time you run the program.
5. After the installation is complete, the Start menu in Windows shows a new program group for ZebraDesigner for XML. The program group contains shortcuts for all ZebraDesigner for XML applications.

Install Printer Driver

To install the ZebraDesigner printer driver on your computer, do the following:

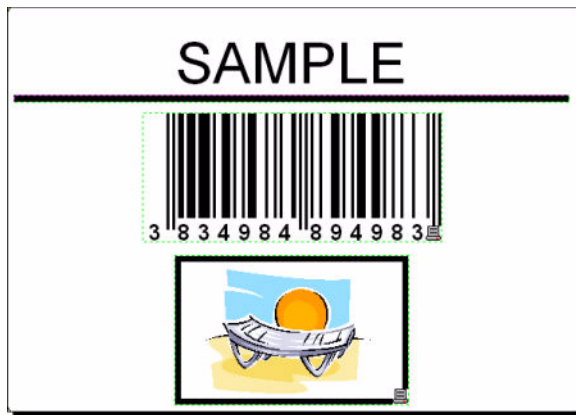
1. Click Start > Programs > ZebraDesigner for XML.
2. In the group ZebraDesigner for XML, click the shortcut Add printer. The printer installation wizard starts.
3. Follow the prompts.

Design Labels

This section shows you how to design a label file with fixed and variable objects. The variable objects get values from several sources. You learn how to:

- Place objects on the label
- Link objects to the variables
- Preview the label on the screen

The label you create will look like this:



Create a Basic label

Each time you create a new label, the Label Setup Wizard starts to help you set up the label and connect to the printer.

To create a basic label, do the following:

1. Open ZebraDesigner for XML.
2. In the Standard toolbar, click . The *Label Setup Wizard* dialog box opens.

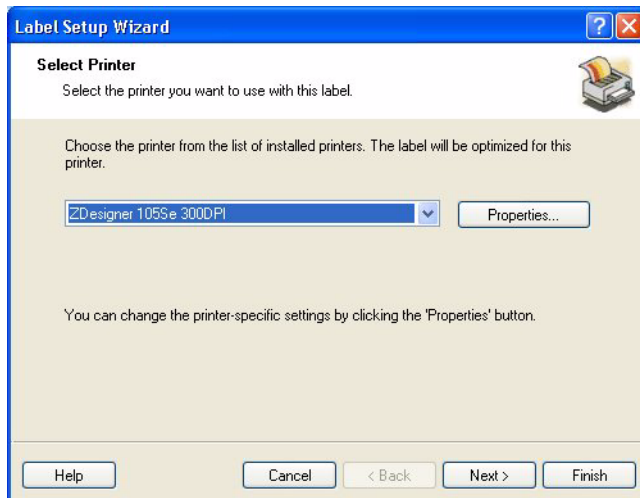


Note • To exit the Label Setup Wizard dialog box, click Finish.

3. Select a Printer

To select a printer, do the following:

4. From the menu, select File > Label Setup.
5. Select the printer you want to use for label printing.

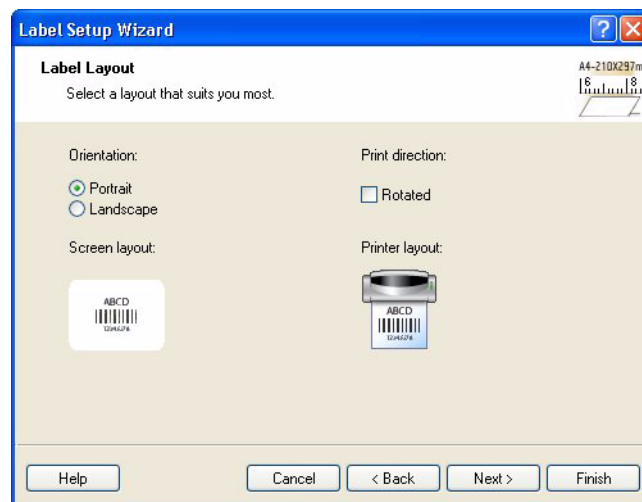


6. Click Next.

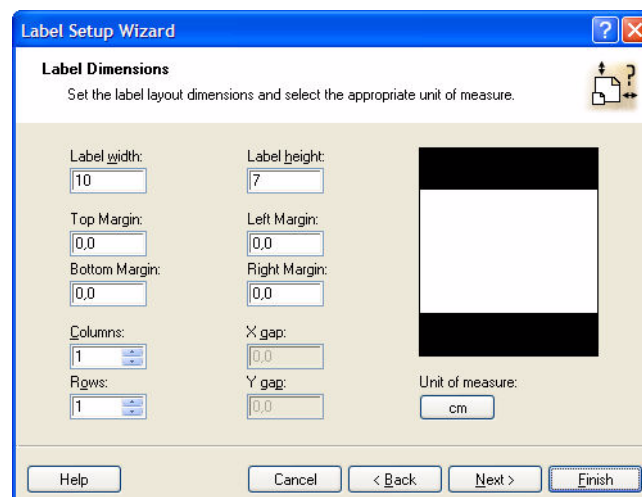
Define Label and Page Dimensions

To define the label dimensions, do the following:

1. If you want to use label stock, make your selections in the Select Stock dialog box.
2. Click Next. The *Page Size* dialog box opens to define the label dimensions.
3. Leave the Page size option at User defined default, and check Automatic Sizing.
4. Click Next. The *Label Layout* dialog box opens.



5. Select label orientation and print direction.
6. Click Next. The *Label Dimensions* dialog box opens.



Note • The Label Dimensions dialog box differs for thermal and office printers.

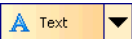
7. Enter 10 for label width and 7 for label height.

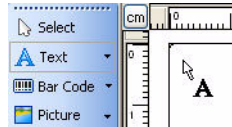


Note • To change the unit of measure from centimeters to inches or other supported units, click Unit of measure below the label preview.

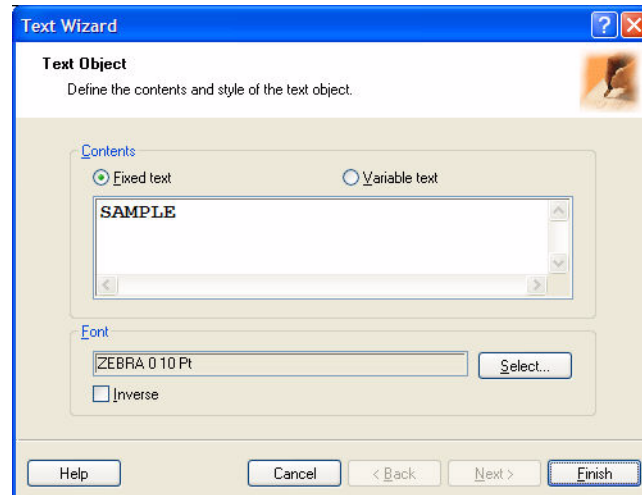
8. Click Finish. A new empty label opens.

Enter Fixed Text

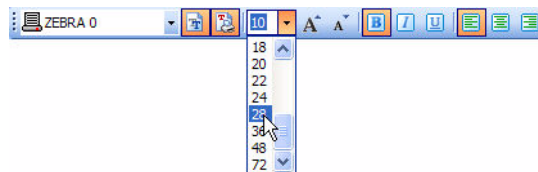
1. In the Toolbox, click . The text cursor appears on the screen.



2. Move the cursor to the location on the label where you want to place the text object, and click the mouse button. The *Text Object* dialog box opens.



3. In the text box, type SAMPLE.
4. Click Finish.
5. To select the object, click it.
6. Using the Text toolbar, change the font for the text object. Choose Arial font, 28 point size, and bold style.




7. To change the position and size of the text object, select the text object and drag it with your mouse to the position you want.

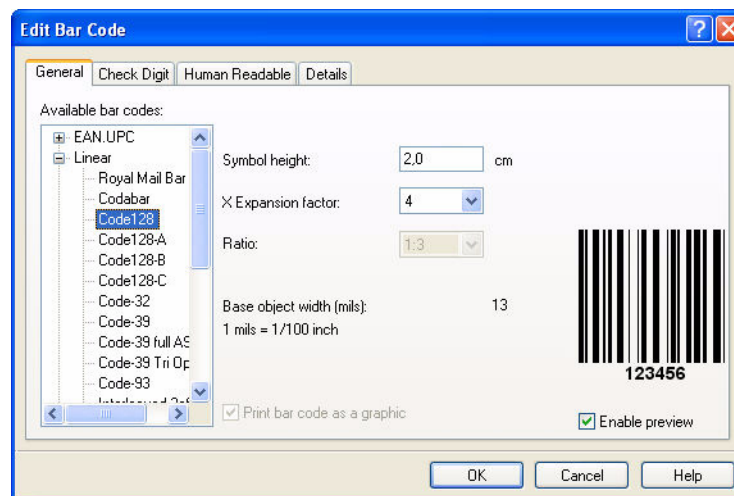
The screen should show the following:



Insert Bar Codes

To add a non-changeable Code128 bar code on the label, do the following.

1. In the Toolbox, click .
2. Move the cursor to the desired position on the label and then click the mouse button. The dialog box with object properties opens.
3. Enter the value 1234567890 for the bar code contents.
4. Click Define. The *Edit Bar Code* dialog box opens.



5. In the Available bar codes list, select bar code Code128 and then click OK.
6. To return to the label, click Finish.
7. To change the position of the bar code, select the bar code and drag it to the desired position.
8. To change the object size, drag the object handles. The handles are small rectangles surrounding the object when it is selected.


The screen should show the following:



Save a Label

Always save your label during the design process.

To save a label, do the following:

1. In the Standard toolbar, click .
2. Type in the name of the label. For example, type label for the name of the label.

Add Variable Fields

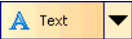
If you want to print a label on which the data changes for each label, ZebraDesigner for XML offers different variable fields (date/time fields, link to the variables) that you can use with text, picture, and bar code objects.

For this example, a new label was created. The steps in the following topics explain how to create a label that contains a variable field and date/time fields.

Create Variable Fields linked to Variables

The object on the label that is linked to the variable can have a different value for each printed label.

To create a text object linked to the variable, do the following:

1. In the Toolbox, click  .
2. Click the label where you want to place the text object. The *Text Wizard* dialog box opens.
3. For the Contents, select Variable text.
4. Click Next.
5. Select Variable Field.
6. Click Next.
7. Select one of the existing variables in the list. If no variable is available in the list, you must create some.
8. Click Finish. The text object is placed on the label and linked to the selected variable.




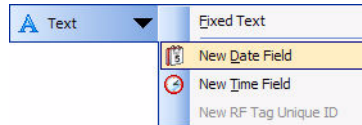
Note • This example shows how to create a text field linked to the variable. You can use the same approach to create and link a variable to the bar code object.

Create Date and Time Variable Fields

Content of the variable field can be filled automatically with the date or time stamp from the computer clock or printer clock (for supported printer models).

To place a date field on the label, do the following:

1. In the Toolbox, click the arrow .
2. From the list, select New Date Field.

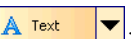


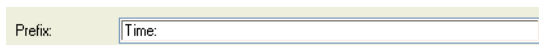
3. Click on the label where you want to place the object. The *Date* dialog box opens.
4. Leave everything as default. The date is used on the label using the selected format.
5. Follow the prompts.

Use Prefix or Suffix Options

You can add a prefix and suffix to each variable field on the label. Both are added to the value when you preview and print the label.

To add the prefix to the variable field on the label, do the following:

1. In the Toolbox, click the arrow .
2. From the list, select New Time Field.
3. On the label, click where you want to place the object. The *Text Wizard* dialog box opens.
4. Click Next.
5. Enter Time: for the Prefix option.



6. Click Finish. The text object is placed on the label and linked to the new variable. When you print the label, the prefix Time: will be appended to the time value on the left side.

Export to Printer

During the label design make sure the label prints correctly. To verify the printout of your label, from the menu, select File > Test Print. When you are satisfied with the designed label, you can export the label to the printer. During the export process, ZebraDesigner for XML runs the XML Format Generation Wizard and converts the label format to a supported Zebra printer.

The generated file includes commands from the Zebra Programming Language (ZPL) and is ready to be used in the printer for off-line printing.

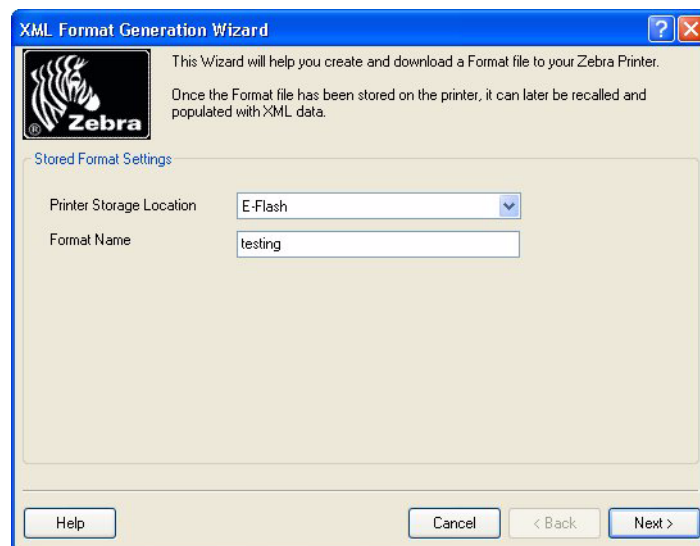


Note • Off-line printing is a term that describes the type of label printing where the label design application is not available at print time. Usually the label format is stored in the memory of the printer and can be recalled. Off-line printing support is great for print requirements where the PC computer cannot be included in the label printing process either because of unacceptable working conditions or logistic issues.

Off-line printing also provides faster label printing because all variable objects on the label use internal printer functionality.

To export the label to printer, do the following:

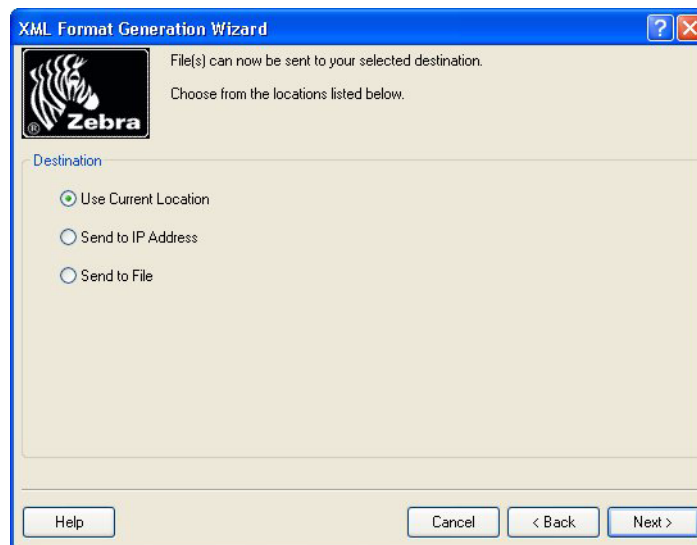
1. From the menu, select File > Export to Printer. The *Stored Format Settings* dialog box opens.



2. Fill in the Printer Storage Location and Format Name fields, and then click **Next**. The *Test XML File Settings* dialog box opens.



3. Make your selections and then click **Next**. This confirmation dialog box opens: *File(s) created successfully*.
4. Click **OK**. The *Destination* dialog box opens.



Your destination choices include:

- Use Current Location
- Send to IP Address
- Send to File

5. From the Destination dialog box, enable your desired destination and then click **Next**.

Use Current Location

If you chose Use Current Location, this confirmation dialog box opens: *The format has been transferred. The XML test file can now be sent.*

To send the files to the printer using the port that the ZebraDesigner driver is using, do the following:

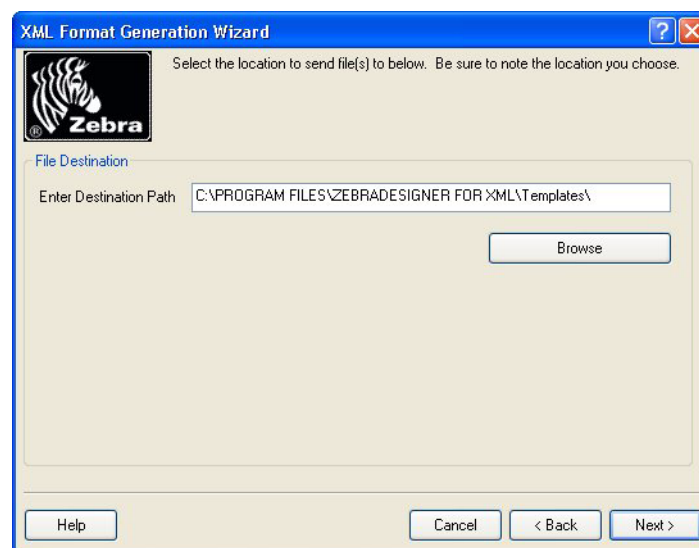
1. To send, click Send File.

Send to File

If you chose Send to File, the *File Destination* dialog box opens.

To send a file to a specific destination, do the following:

1. From the File Destination dialog box, click Browse and navigate to the location you want the file to go.



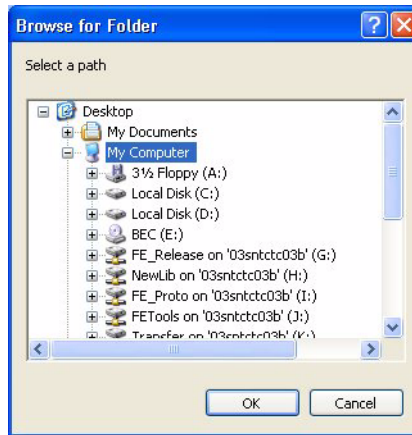
2. Click Next. This confirmation dialog box opens: *The Format has been saved.*
3. Click OK.

File Destination

If you enable Send to File from the Destination dialog box, the *File Destination* dialog box opens.

To choose a file destination, do the following:

1. Click Browse. The *Browse for Folder* dialog box opens.



2. Navigate to the path where you want the file sent.

3. Click OK.

The Browse for Folder dialog box closes and you return to the File Destination dialog box. The Enter Destination Path text-box is populated with the destination you selected in the Browse for Folder dialog box.

4. Click Next. The *Format has been saved* dialog box opens.

5. Click OK.

The Browse button in the File Destination dialog box allows you to navigate to the location you want the file sent.



Compliance Label Formats

This section provides a high-level overview of the Zebra XML-enabled printer.

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Overview

These compliance label formats are included with the Zebra XML-enabled printer:

Table 1 • Compliance Label Formats

Label Type	Zebra Format Name
GM1724a Compliance Labeling	GM1724A.ZPL
IAEA Compliance Labeling	IAEA.ZPL
KMART Compliance Labeling	KMART.ZPL
KMART UCC Compliance Labeling	KMARTUCC.ZPL
WALMART Compliance Labeling	WALMART.ZPL

To assist in the implementation of compliance label printing applications, this appendix provides detailed descriptions of each of the compliance label formats, the label format names, examples of the label design, the default XML-enabled label format code, and sample XML data to populate the label format.

GM1724a Compliance Label

This is an example of how the GM1724a compliance label looks:

Format File Name	GM1724A.ZPL
Label Design	<p>The diagram shows a rectangular label with various fields and segments. Numbered callouts point to the following elements:</p> <ul style="list-style-type: none"> 1: FROM_ADDRESS_1 2: FROM_ADDRESS_2 3: FROM_ADDRESS_3 4: FROM_CITY_STATE_ZIP 5: From_Phone_No 6: ASY_IN_XXX 7: TO_ADDRESS_1 8: TO_ADDRESS_2 9: TO_ADDRESS_3 10: TO_CITY_STATE_ZIP 11: PLANT_DOCK 12: QUANTITY 13: MAT_HAND_CODE 14: REFERENCE 15: PART_NUMBER 16: LICENSE_PLATE 17: LICENSE_PLATE_HR 18: DATE 19: CONTAINER_TYPE 20: GROSS_WEIGHT 21: PCI_SEGMENT_13 22: PCI_SEGMENT_14 23: PCI_SEGMENT_15 24: PCI_SEGMENT_16 25: PCI_SEGMENT_17

1	FROM_ADDRESS_1
2	FROM_ADDRESS_2
3	FROM_ADDRESS_3
4	FROM_CITY_STATE_ZIP
5	From_Phone_No
6	ASY_IN_XXX
7	TO_ADDRESS_1
8	TO_ADDRESS_2
9	TO_ADDRESS_3
10	TO_CITY_STATE_ZIP
11	PLANT_DOCK
12	QUANTITY
13	MAT_HAND_CODE

14	REFERENCE
15	PART_NUMBER
16	LICENSE_PLATE
17	LICENSE_PLATE_HR
18	DATE
19	CONTAINER_TYPE
20	GROSS_WEIGHT
21	PCI_SEGMENT_13
22	PCI_SEGMENT_14
23	PCI_SEGMENT_15
24	PCI_SEGMENT_16
25	PCI_SEGMENT_17

XML-Enabled GM1724A Format Code

This is how the GM1724a compliance label format code looks:

```

^XA
^DFE:GM1724A.ZPL^FS
^MCY

^LRN^FWN^CFD,24^LH0,0
^CI0^PON^PMN
^LT0

^FO456,7^GB4,1204,4^FS
^FO356,12^GB3,1204,3^FS
^FO556,7^GB4,1204,4^FS
^FO456,413^GB100,4,4^FS
^FO557,360^GB248,4,4^FS
^FO185,885^GB170,4,4^FS
^FO457,721^GB4,493,4^FS
^FO556,933^GB248,4,4^FS
^FO454,818^GB100,4,4^FS
^FO186,8^GB3,1204,3^FS
^FO1,788^GB186,4,4^FS
^A0R,20,20^FO213,902^CI0^FDGROSS WEIGHT:^FS
^A0R,20,20^FO771,377^CI0^FDTO:^FS
^A0R,20,20^FO578,377^CI0^FDPLANT/DOCK:^FS
^A0R,20,20^FO518,19^CI0^FDQUANTITY:^FS
^A0R,20,20^FO520,427^CI0^FDMATERIAL HANDLING CODE:^FS
^A0R,20,20^FO518,836^CI0^FDREFERENCE:^FS
^A0R,20,20^FO422,19^CI0^FDPART^FS
^A0R,20,20^FO402,19^CI0^FDNUMBER^FS
^A0R,20,20^FO320,17^CI0^FDLICENSE PLATE (1J)^FS
^A0R,20,20^FO327,902^CI0^FDSHIPMENT DATE:^FS
^A0R,20,20^FO274,900^CI0^FDCONTAINER TYPE:^FS
^A0R,20,20^FO768,33^CI0^FDFROM:^FS
^A0R,23,24^FO741,39^CI0^FN999^FDFROM_ADDRESS_1^FS
^A0R,23,24^FO702,40^CI0^FN998^FDFROM_ADDRESS_2^FS
^A0R,23,24^FO666,39^CI0^FN997^FDFROM_ADDRESS_3^FS
^A0R,23,24^FO631,40^CI0^FN996^FDFROM_CITY_STATE_ZIP^FS
^A0R,23,24^FO595,39^CI0^FN995^FDFrom_Phone_No^FS
^A0R,23,24^FO562,39^CI0^FN994^FDASY_IN_XXX^FS
^A0R,33,32^FO760,420^CI0^FN993^FDTO_ADDRESS_1^FS
^A0R,23,24^FO631,40^CI0^FN996^FDFROM_CITY_STATE_ZIP^FS
^A0R,23,24^FO595,39^CI0^FN995^FDFrom_Phone_No^FS
^A0R,23,24^FO562,39^CI0^FN994^FDASY_IN_XXX^FS
^A0R,33,32^FO760,420^CI0^FN993^FDTO_ADDRESS_1^FS
^A0R,35,32^FO719,420^CI0^FN992^FDTO_ADDRESS_2^FS
^A0R,35,32^FO674,423^CI0^FN991^FDTO_ADDRESS_3^FS
^A0R,35,32^FO629,420^CI0^FN990^FDTO_CITY_STATE_ZIP^FS
^A0R,57,58^FO556,509^CI0^FN989^FDPLANT_DOCK^FS

```


Continuation of the *GM1724a Compliance Label* on page 39.

```
^A0R,56,56^FO459,127^CI0^FN988^FDQUANTITY^FS
^A0R,56,56^FO461,493^CI0^FN987^FDMAT_HAND_CODE^FS
^A0R,56,56^FO461,919^CI0^FN986^FDREFERENCE^FS
^A0R,69,70^FO362,127^CI0^FN985^FDPART_NUMBER^FS
^BY3^FO234,52^BCR,83,N,N,N^FN984^FDLICENSE_PLATE^FS
^A0R,44,44^FO183,50^CI0^FN983^FDLICENSE_PLATE_HR^FS
^A0R,28,28^FO298,901^CI0^FN982^FDDATE^FS
^A0R,33,34^FO234,901^CI0^FN981^FDCONTAINER_TYPE^FS
^A0R,31,32^FO184,895^CI0^FN980^FDGROSS_WEIGHT^FS
^A0R,28,36^FO148,809^CI0^FN979^FDPCI_Segment_13^FS
^A0R,28,36^FO114,808^CI0^FN978^FDPCI_Segment_14^FS
^A0R,28,36^FO40,812^CI0^FN977^FDPCI_Segment_16^FS
^A0R,30,36^FO75,810^CI0^FN976^FDPCI_Segment_15^FS
^A0R,28,36^FO8,812^CI0^FN975^FDPCI_Segment_17^FS
^PQ1,0,1,Y
```

GM1724A Format XML Data Stream

This is the expected XML data stream for the GM1724a compliance label:

```
<?xml version="1.0" standalone="no"?>
<!DOCTYPE labels SYSTEM "label.dtd">
<labels _FORMAT="GM1724A.ZPL" _QUANTITY="1" _PRINTERNAME="Printer 1"
_JOBNAME="LBL101">
  <label>
    <variable name="FROM_ADDRESS_1">Zebra Technologies</variable>
    <variable name="FROM_ADDRESS_2">333 Corporate Woods</variable>
    <variable name="FROM_ADDRESS_3"></variable>
    <variable name="FROM_CITY_STATE_ZIP">Vernon Hills,
60061</variable>
    <variable name="From_Phone_No">(847) 793-2626</variable>
    <variable name="ASY_IN_XXX">123</variable>
    <variable name="TO_ADDRESS_1">Label Incorporated</variable>
    <variable name="TO_ADDRESS_2">123 N.W. 132 ST</variable>
    <variable name="TO_ADDRESS_3">Suite 1900</variable>
    <variable name="TO_CITY_STATE_ZIP">Miami, FL 33183</variable>
    <variable name="PLANT_DOCK">1234</variable>
    <variable name="QUANTITY">10</variable>
    <variable name="MAT_HAND_CODE">1234</variable>
    <variable name="REFERENCE">123456</variable>
    <variable name="PART_NUMBER">123456789</variable>
    <variable name="LICENSE_PLATE">12345678989</variable>
    <variable name="LICENSE_PLATE_HR">124450598585</variable>
    <variable name="DATE">09FEB2004</variable>
    <variable name="CONTAINER_TYPE">BOX</variable>
    <variable name="GROSS_WEIGHT">100 LBS</variable>
    <variable name="PCI_Segment_13">1233434535</variable>
    <variable name="PCI_Segment_14">2332434534</variable>
    <variable name="PCI_Segment_15">4565434534</variable>
    <variable name="PCI_Segment_16">2343265244</variable>
    <variable name="PCI_Segment_17">4534534534</variable>
  </label>
</labels>
```

IAEA Compliance Label

This is an example of how the IAEA compliance label looks:

Format File Name	IAEA.ZPL
Label Design	<p>The diagram shows a label design with the following fields and callouts:</p> <ul style="list-style-type: none"> 1: Points to the PART NO. field, which contains a barcode. 2: Points to the QUANTITY field, which contains a barcode. 3: Points to the P.O. NO. field, which contains a barcode. 4: Points to the SUPPLIER field, which contains a barcode. 5: Points to the SERIAL field, which contains a barcode. 6: Points to the IC-DIP field, which contains the text IC-DIP, REV., and UNITS.

1	PRTNUM
2	QUANTY
3	PONUMB

4	BAR008
5	SERIAL
6	REV

XML-Enabled IAEA Format Code

This is how the IAEA compliance label format code looks:

```
^XA
^DFE:IAEA.ZPL^FS
^MCY
^LRN^FVN^CFD,24^LH0,0
^CI0^PON^PMN
^LT0
^FO301,7^GB4,1204,4^FS
^FO155,12^GB3,1204,3^FS
^FO559,7^GB4,1204,4^FS
^FO300,615^GB257,4,4^FS
^FO34,719^GB266,4,4^FS
^FO30,941^GB194,4,4^FS
^A0R,29,30^FO742,23^CI0^FDPART NO.^FS
^A0R,29,30^FO507,24^CI0^FDQUANTITY^FS
^A0R,29,30^FO514,627^CI0^FDP.O. NO.^FS
^A0R,29,30^FO254,24^CI0^FDSUPPLIER^FS
^A0R,29,30^FO107,24^CI0^FDSERIAL^FS
^A0R,64,56^FO218,761^CI0^FDIC-DIP^FS
^FO223,721^GB4,493,4^FS
^A0R,39,40^FO163,766^CI0^FDREV.^FS
^A0R,39,40^FO160,971^CI0^FDUNITS^FS
^A0R,99,86^FO28,1003^CI0^FDEA^FS
^A0R,79,80^FO699,198^CI0^FN999^FDPRTNUM^FS
^BY5,2.7^FO580,65^B3R,N,97,N,N^FN999^FDPRTNUM^FS
^A0R,79,80^FO451,181^CI0^FN998^FDQUANTY^FS
^BY4,2.7^FO333,67^B3R,N,104,N,N^FN998^FDQUANTY^FS
^A0R,79,80^FO453,753^CI0^FN997^FDPONUMB^FS
^BY4,2.7^FO335,677^B3R,N,104,N,N^FN997^FDPONUMB^FS
^A0R,51,52^FO236,186^CI0^FN996^FDBAR008^FS
^BY4,2.7^FO170,67^B3R,N,65,N,N^FN996^FDBAR008^FS
^A0R,51,52^FO95,183^CI0^FN995^FDSERIAL^FS
^BY4,2.7^FO22,66^B3R,N,67,N,N^FN995^FDSERIAL^FS
^A0R,79,80^FO48,806^CI0^FN994^FDREV^FS
^PQ1,0,1,Y
^XZ
```

IAEA Format XML Data Stream

This is the expected XML data stream for the IAEA compliance label format:

```
<?xml version="1.0" standalone="no"?>
<!DOCTYPE labels SYSTEM "label.dtd">
<labels _FORMAT="E:IAEA.ZPL" _QUANTITY="1" _PRINTERNAME="Printer 1"
_JOBNAME="LBL101">
  <label>
    <variable name="PRTNUM">611611123345</variable>
    <variable name="QUANTY">000512</variable>
    <variable name="PONUMB">100123</variable>
    <variable name="BAR008">123456</variable>
    <variable name="SERIAL">1010121</variable>
    <variable name="REV">9</variable>
  </label>
</labels>
```

KMART Compliance

This is how the KMART compliance label looks:

Format File Name	KMART . ZPL
Label Design	<div><div><div><div><div>1</div><div>2</div><div>3</div><div>4</div></div><div><div>FROM: XXXXXXXXXXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXX</div><div>5</div></div><div><div>TO: XXXXXXXXXXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXX</div><div>6</div><div>7</div></div><div><div>8</div><div>XXXX</div><div>XXXX</div><div>9</div></div><div><div>XXXX</div><div>XXXX</div></div><div><div>CARRIER: XXXXXXXXXXXXXXXX</div><div>10</div></div><div><div>B/L: XXXXXXXXXXXXXXXX</div><div>11</div></div><div><div>PRD: XXXXXXXXXXXXXXXX</div><div>12</div></div><div><div>APPOINTMENT NUMBER: XXXXXXXXXXXXXXXX</div><div>13</div></div><div><div>ORDER TYPE: XX</div><div>14</div></div><div><div>ITEM: XXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXX</div><div>15</div><div>16</div></div><div><div>XXXXXXXXXXXXXXXXXXXXXXXXXXXX</div><div>17</div></div><div><div>XXXX</div><div>XXXX</div></div><div><div>XXXXXXXXXXXXXXXXXXXX</div><div>18</div></div></div></div></div>

1	COMP_NAME
2	FROM_ADDRESS1
3	FROM_ADDRESS2
4	FROM_CITY_STATE_ZIP
5	SHPTO1
6	SHPTO2
7	SHPTO3
8	SHPTO4
9	ZIPBAR

10	CARRYR
11	BILLAD
12	PRONUM
13	APPOIN
14	POTYPE
15	ITEM
16	CASQTY
17	CONCNT
18	BARCOD

XML-Enabled KMART Format Code

This is how the KMART compliance label format code looks:

```
^XA
^DFE:KMART.ZPL^FS
^MCY
^LRN^FWN^CFD,24^LH0,0
^CI0^PON^PMN
^LT0
^FO22,178^GB777,4,4^FS
^FO18,470^GB777,4,4^FS
^FO18,678^GB777,4,4^FS
^FO16,908^GB777,6,6^FS
^FO16,1004^GB777,4,4^FS
^FO456,468^GB2,212,2^FS
^A0N,29,36^FO36,33^CI0^FDFROM:^FS
^A0N,29,36^FO24,193^CI0^FDTO:^FS
^A0N,29,36^FO20,486^CI0^FDCARRIER:^FS
^A0N,29,36^FO20,827^CI0^FDITEM:^FS
^A0N,20,24^FO38,705^CI0^FDAPPOINTMENT^FS
^A0N,20,24^FO38,725^CI0^FDNUMBER:^FS
^A0N,20,24^FO490,707^CI0^FDORDER^FS
^A0N,20,24^FO490,727^CI0^FDTYPE:^FS
^A0N,20,24^FO24,574^CI0^FDB/L:^FS
^A0N,20,24^FO21,630^CI0^FDPRO:^FS
^A0N,30,36^FO180,30^CI0^FN999^FDCOMP_NAME^FS
^A0N,22,26^FO196,70^CI0^FN998^FDFROM_ADDRESS1^FS
^A0N,22,26^FO194,107^CI0^FN997^FDFROM_ADDRESS2^FS
^A0N,22,26^FO194,145^CI0^FN996^FDFROM_CITY_STATE_ZIP^FS
^A0N,33,36^FO99,191^CI0^FN995^FDSHPT01^FS
^A0N,26,30^FO115,237^CI0^FN994^FDSHPT02^FS
^A0N,26,30^FO115,279^CI0^FN993^FDSHPT03^FS
^A0N,26,30^FO147,325^CI0^FN992^FDSHPT04^FS
^BY3,2.7^FO249,349^B3N,N,107,N,N^FN991^FDZIPBAR^FS
^A0N,26,30^FO579,323^CI0^FN991^FDZIPBAR^FS
^A0N,26,30^FO24,523^CI0^FN990^FDCARRYR^FS
^A0N,26,30^FO97,572^CI0^FN989^FDBILLAD^FS
^A0N,26,30^FO97,626^CI0^FN988^FDPRONUM^FS
^A0N,37,30^FO196,709^CI0^FN987^FDAPPOIN^FS
^A0N,37,30^FO617,707^CI0^FN986^FDPOTYPE^FS
^A0N,52,42^FO137,816^CI0^FN985^FDITEM^FS
^A0N,52,42^FO539,816^CI0^FN984^FDCASQTY^FS
^A0N,52,38^FO42,934^CI0^FN983^FDCONCNT^FS
^BY4,2.7^FO167,1026^B2N,155,Y,N,N^FN982^FDBARCOD^FS
^PQ1,0,1,Y
^XZ
```

KMART Format XML Data Stream

This is the expected XML data stream for the KMART compliance label:

```
<?xml version="1.0" standalone="no"?>
<!DOCTYPE labels SYSTEM "label.dtd">
<labels _FORMAT="KMART.ZPL" _QUANTITY="1" _PRINTERNAME="Printer 1"
_JOBNAME="LBL101">
  <label>
    <variable name="COMP_NAME">Zebra Technologies</variable>
    <variable name="FROM_ADDRESS1">333 Corporate Woods
PKWY</variable>
    <variable name="FROM_ADDRESS2">CTC Bldg</variable>
    <variable name="FROM_CITY_STATE_ZIP">Vernon Hills, IL
60061</variable>
    <variable name="SHPT01">Ink Corporation</variable>
    <variable name="SHPT02">South Street Plaza</variable>
    <variable name="SHPT03">Miami, FL</variable>
    <variable name="SHPT04">33183</variable>
    <variable name="ZIPBAR">12345</variable>
    <variable name="CARRYR">12345</variable>
    <variable name="BILLAD">12345</variable>
    <variable name="PRONUM">12C12</variable>
    <variable name="APPOIN">12345679</variable>
    <variable name="POTYPE">35346354</variable>
    <variable name="ITEM">CAR REMOVERS</variable>
    <variable name="CASQTY">12</variable>
    <variable name="CONCNT">12</variable>
    <variable name="BARCOD">1243543</variable>
  </label>
</labels>
```


KMART UCC Compliance

This is how the KMART UCC compliance label looks:

Format File Name	KMARTUCC.ZPL
Label Design	<p>The diagram shows a Kmart shipping label with the following fields and callouts:</p> <ul style="list-style-type: none"> 1: FROM: (top left) 2: (barcode below FROM) 3: (barcode below FROM) 4: (barcode below FROM) 5: CARRIER: (top right) 6: PRO NUMBER: (middle right) 7: B/L NUMBER: (bottom right) 8: TO: KMART STORE # XXXX (center) 9: (barcode below TO) 10: (barcode below TO) 11: (barcode below TO) 12: SHIP TO POSTAL CODE: (400) XXXXX (bottom left) 13: PD #: XXXXXXXX (bottom right) 14: ORDER TYPE: XXX (bottom right) 15: DEPT: XXX (bottom right) 16: SERIAL SHIPPING CONTAINER (bottom)

1	FROM1
2	FROM2
3	FROM3
4	FROM4
5	CARRIER
6	PO_NUMBER
7	BLNUM
8	STORENUM

9	SHIP_ZIP
10	TO_1
11	TO_2
12	POSTALCODE
13	PONUM
14	ORDERTYPE
15	DEPT
16	BARCODE

XML-Enabled KMART UCC Format Code

This is how the KMART UCC compliance label format code looks:

```

^XA
^DFE:KMARTUCC.ZPL^FS
^MCY

^LRN^FWN^CFD,24^LH0,0
^CI0^PON^PMN
^LT0

^FO0,337^GB805,4,4^FS
^FO4,594^GB805,4,4^FS
^FO0,754^GB805,4,4^FS
^FO0,943^GB805,4,4^FS
^FO402,8^GB4,331,4^FS
^A0N,26,26^FO34,25^CI0^FDFROM:^FS
^A0N,26,26^FO425,27^CI0^FDCARRIER:^FS
^A0N,26,26^FO421,128^CI0^FDPRO NUMBER:^FS
^A0N,26,26^FO423,220^CI0^FDB/L NUMBER:^FS
^A0N,26,26^FO36,360^CI0^FDTO:^FS
^A0N,22,20^FO19,611^CI0^FDSHIP TO POSTAL CODE:^FS
^A0N,69,70^FO97,358^CI0^FDKMART STORE^FS
^A0N,69,70^FO561,360^CI0^FD#^FS
^A0N,22,20^FO488,615^CI0^FDPO #:^FS
^A0N,22,20^FO488,666^CI0^FDORDER TYPE:^FS
^A0N,22,20^FO490,716^CI0^FDDEPT:^FS
^FO457,593^GD3,163,4,B,L^FS
^A0N,22,20^FO144,636^CI0^FD(400)^FS
^A0N,22,20^FO12,953^CI0^FD SERIAL SHIPPING CONTAINER^FS
^A0N,35,24^FO28,74^CI0^FN999^FDFROM1^FS
^A0N,35,24^FO30,133^CI0^FN998^FDFROM2^FS
^A0N,35,24^FO30,194^CI0^FN997^FDFROM3^FS
^A0N,35,24^FO30,256^CI0^FN996^FDFROM4^FS
^A0N,35,24^FO438,74^CI0^FN995^FDCARRIER^FS
^A0N,35,24^FO439,170^CI0^FN994^FDPO_NUMBER^FS
^A0N,35,24^FO438,267^CI0^FN993^FDBLNUM^FS
^A0N,62,62^FO634,363^CI0^FN992^FDSTORENUM^FS
^A0N,23,24^FO212,636^CI0^FN991^FDSHIP_ZIP^FS
^A0N,34,30^FO74,438^CI0^FN990^FDTO_1^FS
^A0N,32,30^FO68,495^CI0^FN989^FDTO_2^FS

```

Continuation of the *XML-Enabled KMART UCC Format Code* on page 50

```

^BY3^FO36,664^BCN,81,N,N,N^FN988^FDPOSTALCODE^FS
^A0N,40,30^FO567,607^CI0^FN987^FDPONUM^FS
^A0N,40,30^FO613,657^CI0^FN986^FDORDERTYPE^FS
^A0N,40,30^FO560,707^CI0^FN985^FDDEPT^FS
^BY3^FO45,1024^BCN,182,N,N,N^FN984^FDBARCODE^FS
^A0N,40,30^FO266,982^CI0^FN984^FDBARCODE^FS
^PQ1,0,1,Y

^XZ

```

KMART UCC Format XML Data Stream

This is the expected XML data stream for the KMART UCC compliance label:

```
<?xml version="1.0" standalone="no"?>
<!DOCTYPE labels SYSTEM "label.dtd">
<labels _FORMAT="KMARTUCC.ZPL" _QUANTITY="1" _PRINTERNAME="Printer
1" _JOBNAME="LBL101">
  <label>
    <variable name="FROM1">Zebra Technologies</variable>
    <variable name="FROM2">333 Corporate Woods PKWY</variable>
    <variable name="FROM3">Vernon Hills</variable>
    <variable name="FROM4">IL, 60061</variable>
    <variable name="CARRIER">MAX</variable>
    <variable name="PO_NUMBER">123456</variable>
    <variable name="BLNUM">12233</variable>
    <variable name="STORENUM">1221</variable>
    <variable name="SHIP_ZIP">33183</variable>
    <variable name="TO_1">Kmart Plaza Salt Lake</variable>
    <variable name="TO_2">Salt Lake, UT 33109</variable>
    <variable name="POSTALCODE">33109</variable>
    <variable name="PONUM">1232</variable>
    <variable name="ORDERTYPE">231</variable>
    <variable name="DEPT">12321</variable>
    <variable name="BARCODE">(401) 234 432434</variable>
  </label>
</labels>
```

WALMART Compliance

This is how the WALMART compliance label looks:

Format File Name	WALMART . ZPL																										
Label Design	<div> <p>The diagram shows a rectangular label with a double border. It is divided into several sections. The top-left section contains 'SHIP FROM:' followed by 'ZEBRA TECHNOLOGIES', '333 CORPORATE WOODS PARKWAY', and 'VERNON HILLS, IL 60061'. The top-right section contains two lines of 'XXXXXXXXXXXXXXXXXXXX'. The middle-left section contains 'SHIP TO:' followed by three lines of 'XXXXXXXXXXXXXXXXXXXX'. The middle-right section contains a barcode and 'XXXXXXXXXX'. The bottom-left section contains 'SHIP FOR:' followed by three lines of 'XXXXXXXXXXXXXXXXXXXX'. The bottom section contains 'CARRIER:' followed by 'XXXXXXXXXXXXXXXXXXXX', 'PD/ LINE', and 'XXXXXXXXXXXXXXXXXXXX'. A large barcode is at the bottom. Numbered callouts point to: 1 (top-right text line 1), 2 (top-right text line 2), 3 (middle-right barcode), 4 (left margin), 5 (SHIP TO line 1), 6 (SHIP TO line 2), 7 (SHIP FOR line 1), 8 (SHIP FOR line 2), 9 (SHIP FOR line 3), 10 (CARRIER line), 11 (PD/ LINE), 12 (bottom barcode), and 13 (bottom text line).</p> </div>																										
	<table> <tr><td>1</td><td>PRONUM</td></tr> <tr><td>2</td><td>BILLAD</td></tr> <tr><td>3</td><td>SMLBAR</td></tr> <tr><td>4</td><td>SHIPT1</td></tr> <tr><td>5</td><td>SHIPT2</td></tr> <tr><td>6</td><td>SHIPT3</td></tr> <tr><td>7</td><td>SHIPF1</td></tr> </table> <table> <tr><td>8</td><td>SHIPF2</td></tr> <tr><td>9</td><td>SHIPF3</td></tr> <tr><td>10</td><td>CARRYR</td></tr> <tr><td>11</td><td>POLINE</td></tr> <tr><td>12</td><td>BIGBAR</td></tr> <tr><td>13</td><td>INTERP</td></tr> </table>	1	PRONUM	2	BILLAD	3	SMLBAR	4	SHIPT1	5	SHIPT2	6	SHIPT3	7	SHIPF1	8	SHIPF2	9	SHIPF3	10	CARRYR	11	POLINE	12	BIGBAR	13	INTERP
1	PRONUM																										
2	BILLAD																										
3	SMLBAR																										
4	SHIPT1																										
5	SHIPT2																										
6	SHIPT3																										
7	SHIPF1																										
8	SHIPF2																										
9	SHIPF3																										
10	CARRYR																										
11	POLINE																										
12	BIGBAR																										
13	INTERP																										

XML-Enabled WALMART Format Code

This is how the WALMART compliance label format code looks:

```
^XA
^DFE:WALMART.ZPL^FS
^MCY

^LRN^FWN^CFD,24^LH0,0
^CI0^PR2^MNY^MTT^MMT^MD0^PON^PMN

^FO32,55^GB769,1177,4^FS
^FO596,55^GB5,1173,5^FS
^FO407,830^GB389,5,5^FS
^FO410,830^GB5,400,5^FS
^A0R,27,32^FO740,75^CI0^FDSHIP FROM:^FS
^A0R,24,26^FO716,300^CI0^FDZEBRA TECHNOLOGIES^FS
^A0R,24,26^FO623,302^CI0^FDVERNON HILLS, IL 60061^FS
^A0R,24,26^FO669,300^CI0^FD333 CORPORATE WOODS PARKWAY^FS
^A0R,27,32^FO542,78^CI0^FDSHIP TO:^FS
^A0R,27,32^FO369,74^CI0^FDSHIP FOR:^FS
^A0R,27,32^FO224,69^CI0^FDCARRIER:^FS
^A0R,23,24^FO213,751^CI0^FDPO/ Line^FS
^A0R,26,28^FO712,871^CI0^FN999^FDPRONUM^FS
^A0R,26,28^FO633,870^CI0^FN998^FDBILLAD^FS
^BY2^FO492,903^BCR,80,N,N,N^FN997^FDSMLBAR^FS
^A0R,26,28^FO448,969^CI0^FN997^FDSMLBAR^FS
^A0R,23,24^FO545,225^CI0^FN996^FDSHIPT1^FS
^A0R,28,28^FO483,225^CI0^FN995^FDSHIPT2^FS
^A0R,28,28^FO432,227^CI0^FN994^FDSHIPT3^FS
^A0R,27,32^FO370,227^CI0^FN993^FDSHIPF1^FS
^A0R,27,32^FO321,227^CI0^FN992^FDSHIPF2^FS
^A0R,27,32^FO272,229^CI0^FN991^FDSHIPF3^FS
^A0R,23,28^FO212,230^CI0^FN990^FDCARRYR^FS
^A0R,23,24^FO212,876^CI0^FN989^FDPOLINE^FS
^BY3^FO85,154^BCR,120,N,N,N^FN988^FDBIGBAR^FS
^A0R,23,24^FO48,354^CI0^FN987^FDINTERP^FS
^PQ1,0,1,Y

^XZ
```

WALMART Format XML Data Stream

This is the expected XML data stream for the WALMART compliance label:

```
<?xml version="1.0" standalone="no"?>
<!DOCTYPE labels SYSTEM "label.dtd">
<labels _FORMAT="E:WALMART.ZPL" _QUANTITY="1" _PRINTERNAME="Printer
1" _JOBNAME="LBL101">
  <label>
    <variable name="PRONUM">00000890753490812456</variable>
    <variable name="BILLAD">10000123561276700000</variable>
    <variable name="SMLBAR">1235ABCD0</variable>
    <variable name="SHIPT1">Toy Corporation</variable>
    <variable name="SHIPT2">900 Troy 32 ST</variable>
    <variable name="SHIPT3">Bolton, IL 60501</variable>
    <variable name="SHIPF1">ATTN: Anderson Jerry</variable>
    <variable name="SHIPF2">100 units palstic models </variable>
    <variable name="SHIPF3">Central Facility 1234</variable>
    <variable name="CARRYR">Delivery Corp.</variable>
    <variable name="POLINE">0000789767894567</variable>
    <variable name="BIGBAR">30006123987612349876</variable>
    <variable name="INTERP">000030006123987612349876</variable>
  </label>
</labels>
```



Notes •

Glossary



API The acronym for Application Program Interface. API is a set of standards or conventions by which programs call the specific operating system or network services.

Common Gateway Interface (CGI) A common gateway interface (CGI) is a standard way for a Web server to pass a Web user's request to an application program and to receive data back to forward to the user. When the user requests a Web page (for example, by clicking on a highlighted word or entering a Web site address), the server sends back the requested page.

data stream In data communications, this is a flow of undifferentiated data transmitted byte by byte.

DTD The acronym for **D**ocument **T**ype **D**efinition. A DTD is a specification that accompanies a document and identifies what the markups are that separate paragraphs, identify topic headings, and so forth and how each is to be processed.

firmware Software routines that are stored in ROM (Read Only Memory). This is typically part of a device, such as a printer or PSII.

Flash memory A type of memory that allows read-and-write operations, and permanently stores data when the power is turned off. Useful for storing firmware because it can be easily updated by downloading new code.

parse The process of breaking down components into smaller pieces.

stored format A format that is stored in the printer's memory. This format can be recalled and used to print out a label.

TCP/IP Transmission Control Protocol/Internet Protocol, the de facto standard for Internet communications and widely used on local area networks.

UNIX A general-purpose computer operating system used on many different kinds of computers.

XML The acronym for eXtensible Markup Language. XML is a language that creates markup language regulated by the World Wide Web Consortium (W3C).

ZebraDesigner for XML A bar code design and printing software application.

ZebraNet PrintServer II An Ethernet connectivity solution.

ZebraLink® Allows you to connect and control your bar code printers anywhere and anytime.

ZPL II Zebra Programming Language II is a powerful label-definition and printer-control language.

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