

White Paper

What's New in BarTender 7.10

An In-Depth Look at the
New Features in BarTender 7.10

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BarTender 7.10 introduces new features to assist with bar code label design and integration, including:

- Bar Code Symbologies:
 - Reduced Space Symbology (RSS)
 - EAN.UCC Composite
 - Aztec
 - Telepen
- Printer Code Template generation
- Auto sizing for text objects with multiple fonts
- Ordering database query prompts
- New VB Script Functions and Objects
- White Papers
 - Using Foreign Text on BarTender Labels
 - Commander Examples
- New Sample Formats

New Bar Code Symbolologies

Several new bar code symbolologies have been added to BarTender 7.10. These are:

- Reduced Space Symbology
- EAN.UCC Composite Symbology
- Aztec
- Telepen

Reduced Space Symbology (RSS) and EAN.UCC Composite Symbology

Today, there are many industries like healthcare and pharmaceuticals that have items that are too small for current standards. Moreover, there is often a need to capture additional information in a limited space. BarTender 7.10 now supports the Reduced Space Symbology (RSS) and EAN.UCC Composite Symbology which are specifically designed to solve the space constrained problem.

The following types of RSS and Composite symbolologies are supported in BarTender 7.1:

RSS-14	Composite RSS-14
RSS-14 Truncated	Composite RSS-14 Truncated
RSS-14 Stacked	Composite RSS-14 Stacked
RSS-14 Stacked Omni-Directional	Composite RSS-14 Stacked Omni-Directional
RSS Limited	Composite RSS Limited
RSS Expanded	Composite RSS Expanded
RSS Expanded Stacked	Composite RSS Expanded Stacked
	Composite UCC/EAN-128 CC-A/CC-B
	Composite UCC/EAN-128 CC-C
	Composite UPC-A
	Composite EAN/JAN-8
	Composite EAN/JAN-13

Below are some examples.

RSS-14



Composite RSS-14 Stacked



More information can be found about RSS and EAN.UCC Composite symbologies at the following web link:

<http://www.uc-council.org/rss14/>

Aztec Code

BarTender 7.10 supports the Aztec Code as a 2-dimensional matrix bar code symbology. It is characterized by square symbols built around a square bullseye at the center. The Aztec Code can encode small or large amounts of numeric, text, or binary data.



Aztec Code was created by Andy Longacre
and Rob Hussey at Welch Allyn

More information can be found about the Aztec symbology at the following link:

http://www.handheldproducts.co.uk/asktheexpert/article_details.php?article_id=21

Telepen

BarTender 7.10 supports the Telepen linear symbology. Telepen encodes the full ASCII character set and is very compact (Up to 8 ASCII characters or 16 digits per inch).



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Print Systems

For many applications portable devices and terminals are used to print labels. These portable devices and terminals typically take printer code created from a label program and fill in user input information, like lot number and expiration date, and send the completed printer code directly to the printer. An example is the Datamax Passport device. Passport is a small hand held portable device that can easily connect to a printer for printing pre-defined labels. The Passport takes uploaded Datamax printer code files, inserts user input information, and prints the label.

Other systems may use software printing applications that insert user information into the printer code for a label. An example of such a system is SAP/R3 that uses SAPScript-ITF files. A SAPScript-ITF file is composed mostly of printer code, but has extra field information for data input substitution and system processing. The SAP/R3 system software uses the SAPScript ITF-file, comprised of printer code and extra fields, fills in user information, and sends it to the printer.

Collectively, these devices, terminals, and printing applications are called print systems.

Printer Code Templates

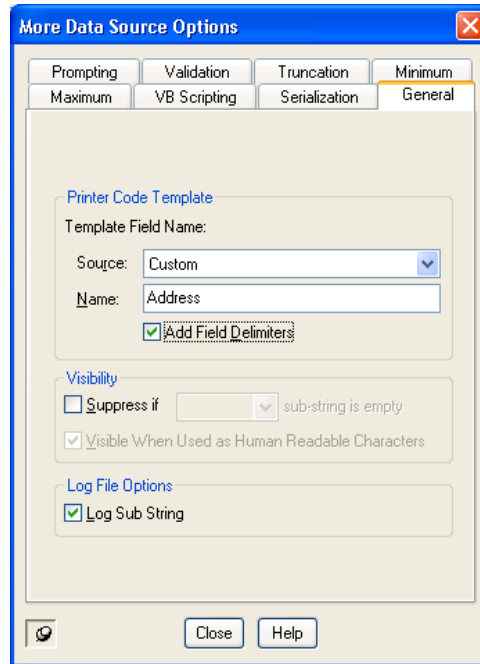
To support various print systems, BarTender 7.10 provides Printer Code Template generation. A Printer Code Template (you can think of it as a file) contains mostly native printer code, but it also contains special fields that a print system can recognize and use to fill in user input information.

A Seagull printer driver that supports printer code template generation must be installed before you can export a Printer Code Template using BarTender. Reference the Seagull printer driver version information dialog for support information.

Template Field Names

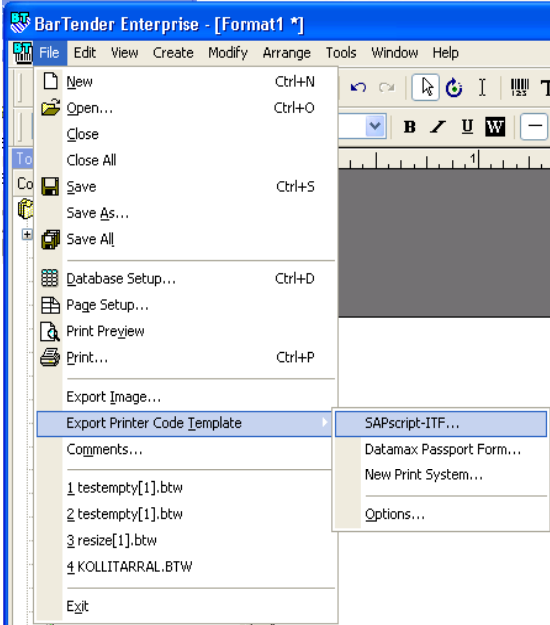
To export a Printer Code Template, you must first add to your label objects template field names that identify the text or bar code that the print system uses to insert user information. BarTender “Prompts” and “Database Fields” will automatically generate Template Field names when a label is exported to a Printer Code Template. For example, turning on prompting for an object will automatically generate a Template Field when exporting a

Printer Code Template. You can also specify a custom name for a Template Field from the General tab in the More Data Source Options dialog.

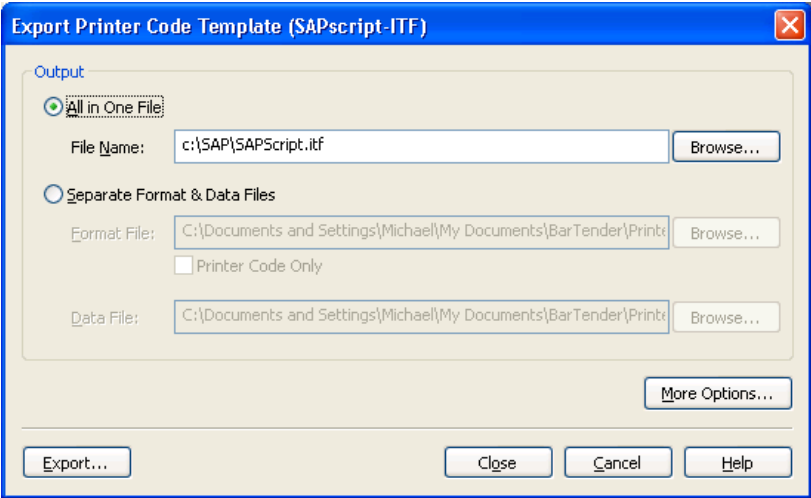


Exporting a Printer Code Template

BarTender 7.10 comes with predefined print systems for Datamax Passport and SAPScript ITF. To export a Printer Code Template using your label, select Export Printer Code Template from the File menu. Either SAPScript ITF or a Datamax Passport Form can be selected.



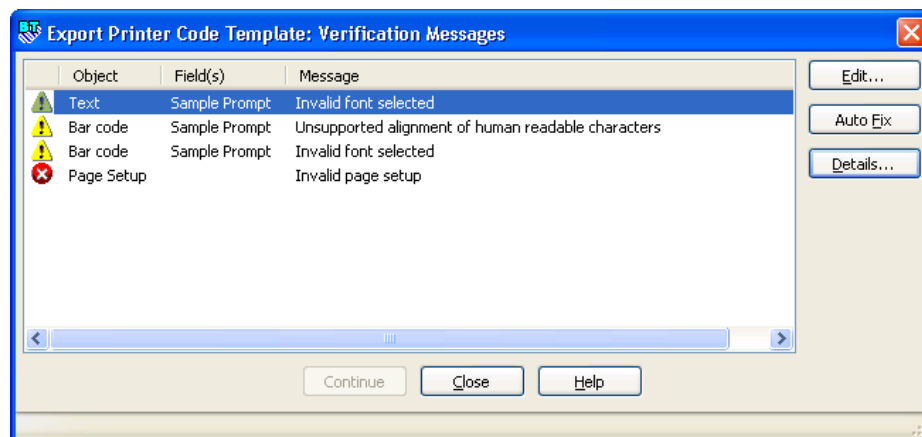
You can export a Printer Code Template as one file or you can break it up into format and data printer code.

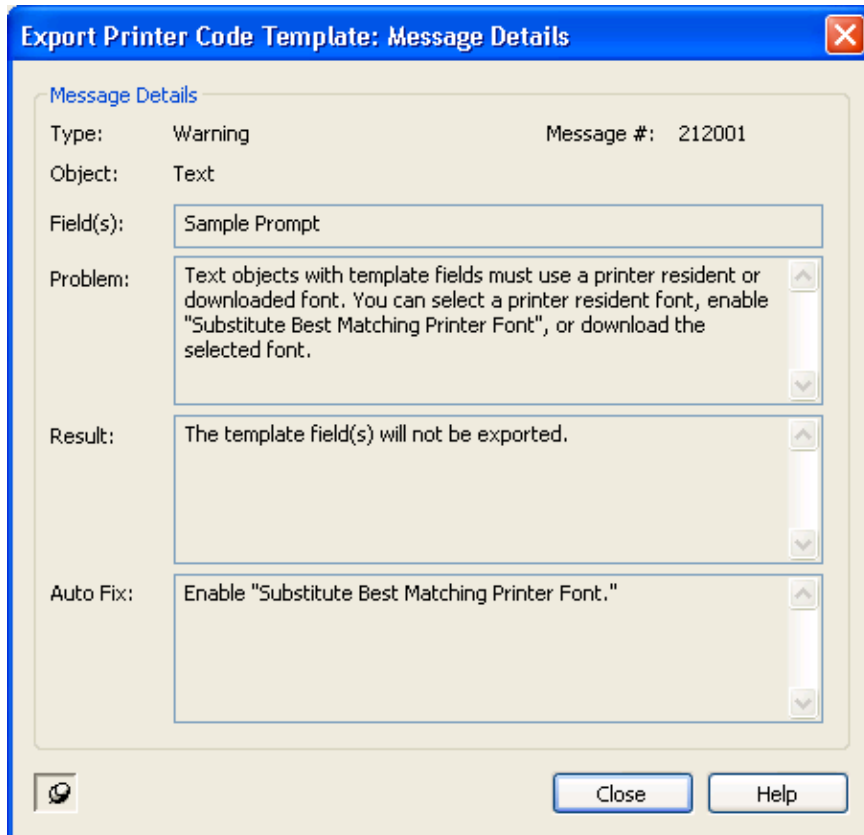


Printer Code Template Validation

BarTender can very easily perform advanced label printing and do things such as control the centering of text, perform advanced serialization, and create fancy paragraph text where needed because BarTender controls the entire print job. A print system, like Datamax Passport or SAP/R3 typically does not have this level of control, however. The print system typically uses the raw printer code and can only substitute user input information. Centering of text, for example, can not be adjusted because the print system does not change the printer code x and y position of text. Only the field variables are replaced with user input data. Thus, the design of the label becomes very important.

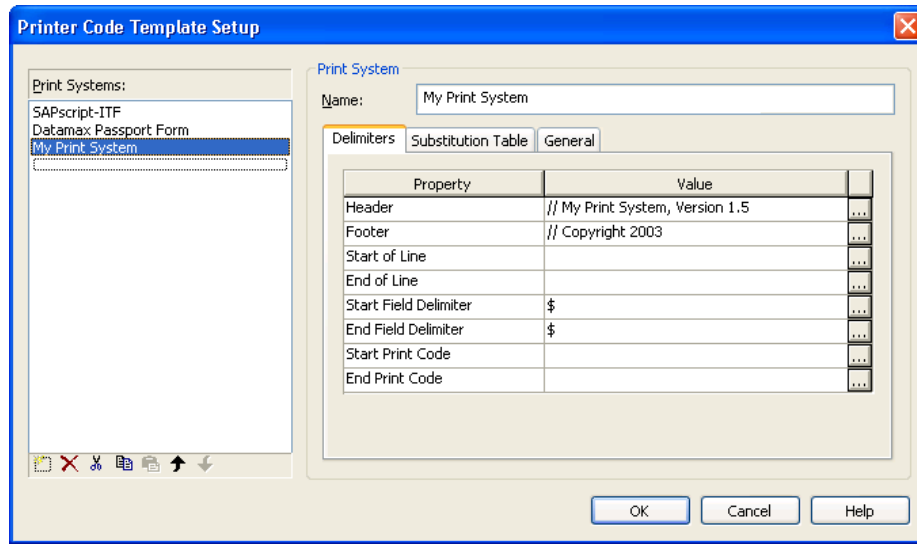
When a Printer Code Template is exported BarTender 7.10 performs validation on the label, and reports on numerous label design issues to help improve printing success using the selected print system. Each issue reported can be automatically fixed, or the user can make a manual adjustment of the label design.





Customize your own Print Systems

BarTender 7.10 comes with predefined print systems for the Datamax Passport and SAPScript ITF files. You are not limited to these print systems, however. You can create your own custom print system using the Printer Code Template Setup dialog. Any number of print systems can be defined. Each new print system defined will be added to the File | Export Printer Code Template menu for selection.



Sizing Multiple Font Sub-Strings

BarTender 7.0 had a limitation that if a text object had two or more sub-strings with different fonts you could not size the text on the screen. BarTender 7.10 now allows the user to size text objects using different fonts using the green sizing handles.



Auto Size for Multiple Font Sub-Strings

BarTender 7.10 now supports auto sizing for multiple font sub-strings. The auto sizing applies to the whole object and not individual sub-strings. For example, let's say you have a text object with the first substring using 50% scaling and the second using 120% scaling:

50% 120%

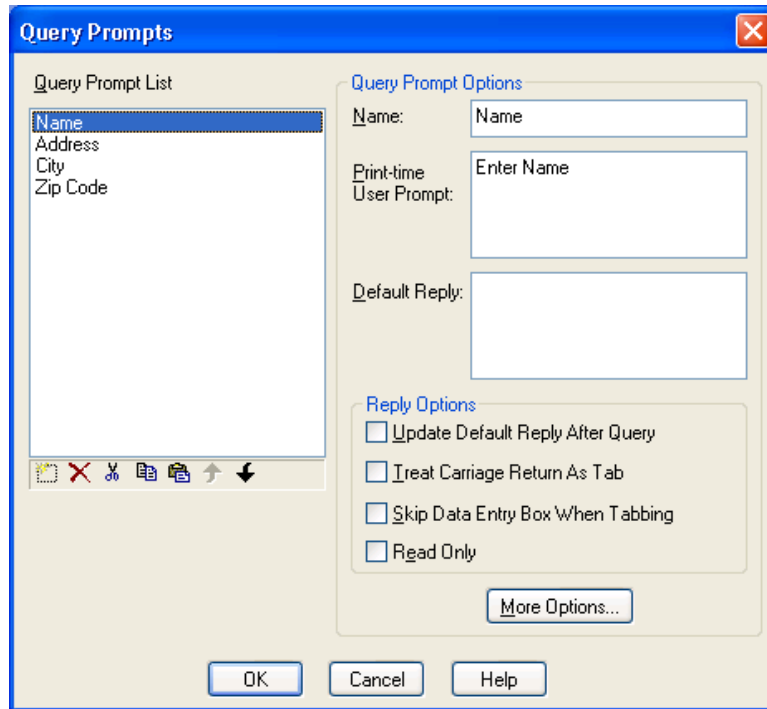
If you turn on auto size with a stretch range of 50% to 120%, the object would look like this:

50% 120%

This is because BarTender starts with the minimum point size and minimum stretch factor for all sub-strings and then determines the best point size. BarTender then increases the stretch factor as much as possible

Query Prompt Ordering

BarTender 7.10 has enhanced the user's ability to set the order for query prompts using the Query Prompt dialog. BarTender 7.00 and earlier versions supported setting the query prompt order using the query prompt tab in the database wizard. Using BarTender 7.10's Query Prompt dialog makes ordering the prompts much easier.



The Query Prompt dialog allows you to add, delete, cut, copy, and paste query prompts using the toolbar buttons. The prompts order is arranged using the up/down buttons.

BarTender 7.10 supports new Visual Basic script functions that can be utilized by various objects on a label format.

UCC Application Identifiers

An application identifier is a prefix used to identify the meaning and the format of the data that follows it (i.e. a data field).

Application identifiers have been defined for identification, traceability data, dates, quantity, measurements, locations, and many other types of information. The data presented can be alphanumeric or numeric.

Typically application identifiers are presented using parenthesis. For example, the following application identifier data string

01912345678901213101000355

is typically represented as

91234567890121 (3101) 000355

BarTender has always supported the human readable formatting of application identifier data automatically when using an EAN.128 enabled Code 128 bar code. Sometimes, however, the application identifier text needs to be custom formatted or placed at other locations on the label.

BarTender 7.10 supports a new `UCCApplicationIdentifier` function that can be used in BarTender VB script objects for formatting application identifier data strings. The `UCCApplicationIdentifier` function supports formatting application identifiers using parentheses, spaces, and splitting of data fields.

The following VB Script example

```
Value = UCCApplicationIdentifier("01123456789012317021212",  
btAiParenSpace)
```

will return

(01) 12345678 90123 1 (17) 021212

Email Object

BarTender 7.10 provides a new VB Script Email object that can be used to send an e-mail message to a designated recipient every time you execute a print job with a label format. Its properties include things like the “To” property for the recipient's e-mail address, and the “Message” property containing the message contents.

You can use the Email object, for example, to send a "Your label printed successfully" e-mail message. Simply create a text object (configured to not print, if you like) using a Visual Basic Script data source configured as an Event Control Script. For the OnPrintEnd event add the following:

```
Email.MailServer = "mail.YourDomain.com"  
Email.From = "smith@YourDomain.com"  
Email.To = "Joe@AnotherDomain.com"  
Email.Subject = "Successful Print"  
Email.Message = "Your label " + Format.FileName + " has  
printed successfully!"  
Email.Send
```

The Email object can be used for many applications. One application is to keep track of label inventory by sending email notification messages when label stock is getting low. BarTender supports a Format.PageSetup object to give rich access to label properties. Combined with tracking the number of labels printed a simple label inventory manager can be created.

For more information on the Email object see the “Using the Email Object” topic in BarTender’s help.

Packaged with the BarTender 7.10 are two new white papers.

Printing Foreign Text Using BarTender

This white paper explains how you can include on your label text virtually any of the world's languages and writing systems. The paper talks about choosing a font typeface and script, entering foreign text, reading data from a foreign database, and configuring the Windows operating system for foreign text.

Commander Examples

This paper provides step-by-step instructions for how to use Commander in a variety of common scenarios. The paper talks about how to print labels using a trigger file, a database trigger, a Commander script file, and a SAP/R3 IDoc file.

Available Seagull White Papers

General White Papers

- The Advantage of Drivers by Seagull
- Choosing the Right BarTender Edition
- Printing Foreign Text Using BarTender

Integration White Papers

- Integration Overview
- Getting Started with ActiveX Automation
- Commander
- Commander Examples
- Exporting Printer Code Templates

SAP Integration White Papers

- SAP Integration Methods
- Reading SAP IDocs

Licensing White Papers

- BarTender Enterprise Licensing

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