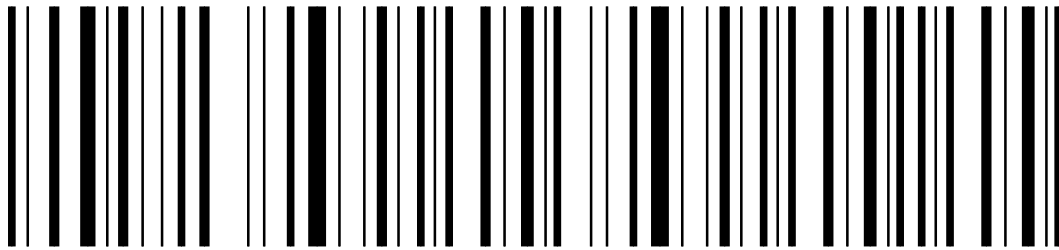


# BAR-ONE<sup>®</sup> *for mySAP<sup>™</sup> Business Suite*

*Bar code label design solutions from Zebra<sup>®</sup>*



APPLICATION WHITE PAPER

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**Zebra Technologies**



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## BAR-ONE<sup>®</sup> *for mySAP<sup>™</sup> Business Suite*

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mySAP<sup>™</sup> Business Suite helps organizations manage comprehensive financial, manufacturing, human resources, sales, and distribution functions that are essential to their operations. The capability to leverage the data integrity provided by mySAP Business Suite modules can now be realized by directly integrating bar code labeling into many common business processes.

While dynamic documents and reports are the predominant printed output from mySAP Business Suite modules, customers also want to output high-quality bar code labels with graphics, directly within mySAP Business Suite, for applications such as manufacturing, shipping, item tracking, and stock control. Such labels require the use of specialty bar code label printers.


Today, customers who wish to integrate bar code label printers within mySAP Business Suite are presented with the option to either upload the printer programming language into an SAPscript layout (upload method) or use label design software in combination with an external service (middle-ware typically on an NT or Unix server). SAP documentation, located on SAPnet, describes how label printers can be driven direct from mySAP Business Suite.

In choosing the upload method over the external service approach, mySAP Business Suite users can leverage existing SAP print services and eliminate the need to purchase, set up, and maintain the application for every server at every separate site location. This approach can greatly decrease equipment costs, reduce implementation time, and improve process throughput.

To take full advantage of the mySAP Business Suite upload method, Zebra Technologies, with assistance from SAP's development team and global mySAP Business Suite end users, has developed a special version of its BAR-ONE<sup>®</sup> label design software. BAR-ONE<sup>®</sup> *for mySAP<sup>™</sup> Business Suite* helps users integrate bar coding into any existing mySAP<sup>™</sup> Business Suite application.

Zebra's BAR-ONE<sup>®</sup> *for mySAP<sup>™</sup> Business Suite* software provides easy-to-use label design capabilities that support all of the Zebra printers' functionality and high performance. Below are a few of the benefits available from the combination of Zebra printers and BAR-ONE<sup>®</sup> *for mySAP<sup>™</sup> Business Suite*:

- No need to manually write SAPscript. All label design and object manipulation are done graphically (minutes instead of days)!
- All Zebra resident bar code symbologies are supported, including UCC/EAN 128, PDF417, Datamatrix, and Maxicode. Resident bar codes provide maximum performance and accuracy.
- All Zebra resident fonts, including Windows and TrueType fonts, are supported. TrueType fonts can be used for variable data, including serial numbers, with no degradation to label throughput. Support is also included for seven optional Zebra resident scalable fonts (CG Triumvirate and CG Triumvirate Condensed family).
- Dynamic text formatting of mySAP<sup>™</sup> Business Suite variable data is supported, including automatic word wrapping, left, right, and center justification at any orientation for all fonts.
- Any bar code, text, or graphic field can be linked to any mySAP Business Suite database field or system variable (i.e., *&tablename-fieldname&* or *&SY-UNAME&*) via a simple point-and-click selection.

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- Variable graphic images such as logos and symbols can be printed, depending on the contents of an mySAP Business Suite variable field.
  - Smart printer wizards make it easy to store graphics, fonts, and formats on printer-based PC cards and Flash memory. This provides zero download time for fast “first-label-out” and reduces network traffic to a minimum.
  - BAR-ONE® for mySAP™ Business Suite automatically generates SAPscript for Zebra printers in mySAP™ Business Suite Internal Text Format (ITF). No manual modifications need to be made to these commands.
  - All variable fields, including graphics, support advanced SAPscript programming. This is required for controlling the contents of a field based on SAPscript IF/ELSEIF conditioning or using SAPscript INCLUDE commands. This is done directly within BAR-ONE® for mySAP™ Business Suite. It does not require any further editing within mySAP Business Suite and allows for simple future label design modifications.
  - Maximum control and performance of all Zebra printer features are guaranteed.

## How It Works


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Excluding middle-ware and BAR-ONE® for mySAP™ Business Suite, forms would traditionally be designed by manually writing SAPscript commands. SAPscript then requires that you have a proprietary mySAP Business Suite printer driver loaded for your target device. This approach does not work for bar code label printing due to the following:

- mySAP Business Suite has drivers for mainstream office printers but not bar code label printers.
- mySAP Business Suite drivers are designed for forms and report printing, not bar code labels.
- SAPscript bar code commands are complex, support few symbologies, and have basically been built as fonts. They also provide poor support for rotation, check-digits, narrow bar width, ratio, and are not supported by any specialty bar code label printer (other than via emulation such as PCL).

mySAP Business Suite also supports printing with Windows drivers via the SAPWin device type and SAPIpd. This approach does not work for bar code label printing and specialty bar code label printers due to the following:

- SAPWin device type has no support for bar code label printer features such as bar codes, cutter, Flash memory, print speeds, and darkness.
- SAPWin device type and bar code label Windows printer drivers may send the entire label down as a graphic and need to do this for every label with variable data (slow printing and heavy network traffic).
- SAPscript bar codes are not supported with the SAPwin device type unless you source a third-party bar code DLL. These bar codes are downloaded as bitmap objects via Windows drivers. This can reduce performance and bar code accuracy (it is also expensive).
- SAPWin does not support printing directly from the server to the printer (SAPIpd must be used).



BAR-ONE® *for mySAP™ Business Suite* is a graphical bar code label design tool that generates SAPscript for use with Zebra printers. This means the user does not need to program SAPscript manually to design or print labels. SAP has built Zebra device types for mySAP Business Suite. These drivers are optimized for use with BAR-ONE® *for mySAP™ Business Suite*.

After the label is designed graphically in BAR-ONE® *for mySAP™ Business Suite*, it can easily and quickly be uploaded into mySAP Business Suite via the mySAP Business Suite Windows client. Once uploaded, the label can be printed from any other mySAP Business Suite client, anywhere in the world, to any Zebra printer without the need to purchase, set up, or maintain any additional software. The printing is done directly from the mySAP Business Suite server. The only requirement is that each server must have the Zebra device driver installed. The Zebra device driver for mySAP Business Suite is free and available from the SAP FTP site or directly from Zebra ([ftp://ftp.zebra.com/pub/barone\\_sapr3/b1sap.zip](ftp://ftp.zebra.com/pub/barone_sapr3/b1sap.zip)). The installation of this driver takes only a few minutes and does not need to be maintained or modified.

Move, change, add, or delete formatting attributes easily using the BAR-ONE® *for mySAP™ Business Suite* WYSIWYG label design tool. No SAPscript programming is required to make formatting changes. Label size, font types, bar code symbology, line spacing, justification, logos, lines, boxes, circles, ellipses, and variable data are all specified within the label design. A label can easily be modified at any time and uploaded again into mySAP Business Suite without the need to make **any manual modifications** in SAPscript.

Complex labeling applications may require writing some SAPscript (for example, filling in variable fields based on the contents of other fields). This SAPscript can be written and stored within variable fields directly in BAR-ONE® *for mySAP™ Business Suite*. This allows for label designs to be easily modified multiple times and eliminates the need to manually modify or rewrite SAPscript.

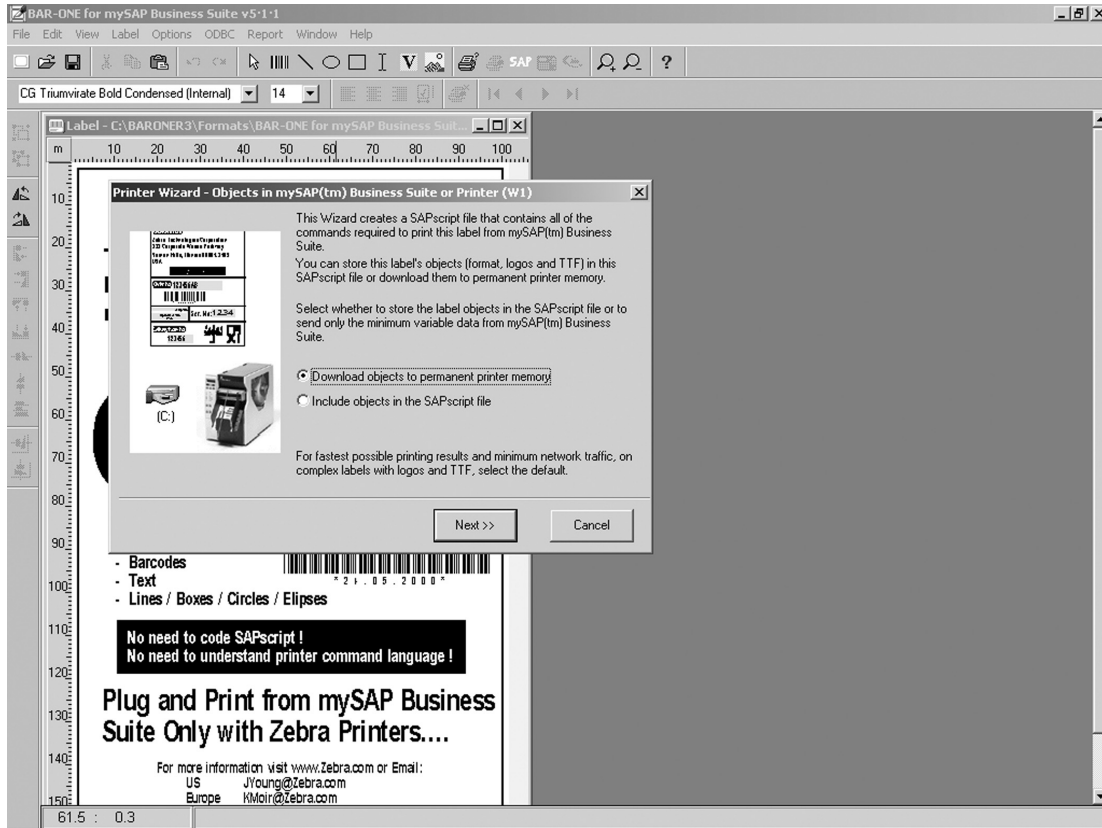
BAR-ONE® *for mySAP™ Business Suite* is already installed in some of the world's largest mySAP Business Suite sites, including a chemical company with 150 locations worldwide that prints HAZchem labels.

## C r e a t i n g   A   L a b e l

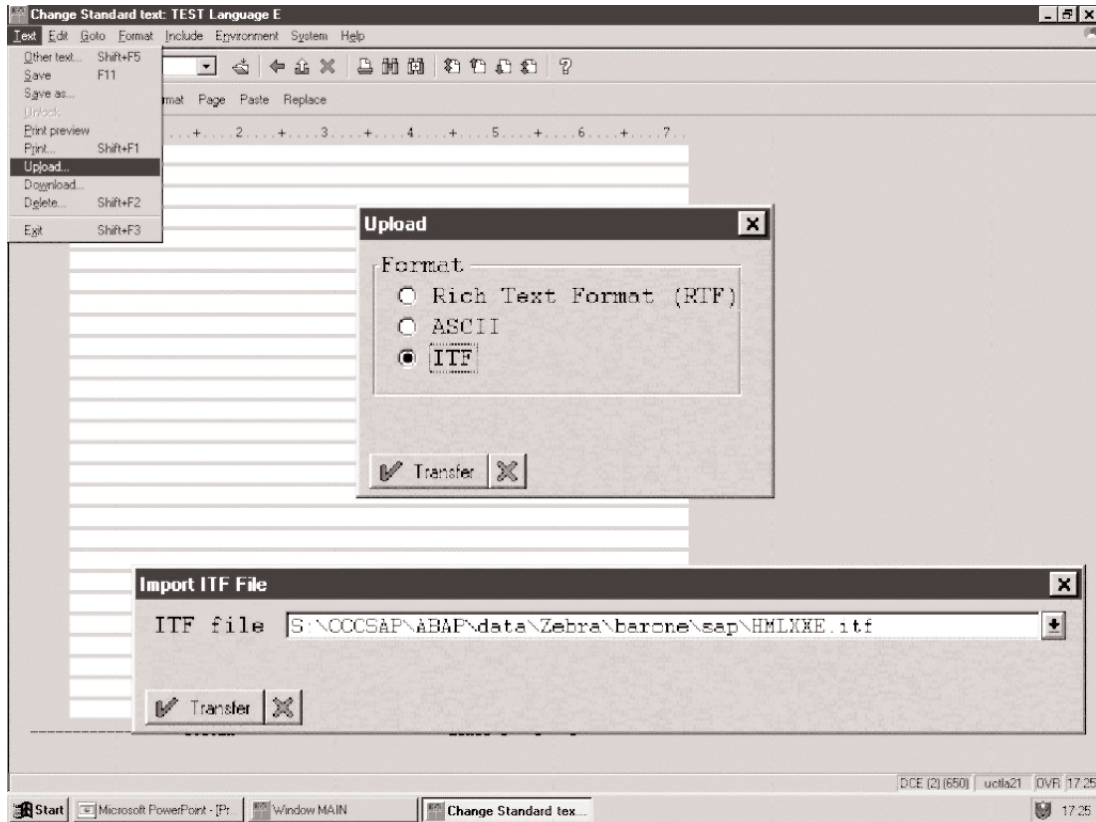
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**Step 1**—Design the label graphically using BAR-ONE® *for mySAP™ Business Suite*. Place fixed or variable objects on the label, including text, bar codes, logos, lines, boxes, and circles.

**Step 2**—Press the mySAP Business Suite icon and use the Smart Printer Wizard to help decide if you wish to download logos and fonts from mySAP Business Suite or store them in Flash memory inside the printer. When completed, this saves the label design in a format that can be uploaded into mySAP Business Suite (SAPscript Internal Text Format).



**Step 3**—Upload the ITF file, generated by BAR-ONE® for mySAP™ Business Suite, using the mySAP Business Suite Windows Client. This is uploaded into the standard editor and then pasted into a Form Window.



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**Step 4**—Configure SAP to use this modified layout set, attach the Zebra printer, and start printing labels.

## The Benefits

Zebra BAR-ONE® for mySAP™ Business Suite provides an easy, fast way to print complex bar code labels on demand from mySAP Business Suite. Users can count on complete data integrity as label data is generated directly from mySAP Business Suite.

Labels are easier to design and maintain because no modifications need to be made manually to the SAPscript generated by BAR-ONE® for mySAP™ Business Suite. Labels can be printed on almost any native platform, directly from the server or via SAPIpd, while still maintaining the features and performance found in PC-based labeling software. The SAPscript composer saves processing time because the layout set is simpler. Downloading the labels only once and storing them on the printer reduces the amount of data transferred across the network and speeds up printing. Achieve fast “first-label-out” by storing label formats, graphics, and TrueType fonts in printer-based non-volatile memory. Zebra printers support PC cards and Flash memory.

The major features and benefits customers see when they use BAR-ONE® for mySAP™ Business Suite are listed below

Feature	Benefit
Easy-to-use WYSIWYG bar code label design tool.	No SAPscript programming is required to implement. SAPscript is all generated automatically (minutes rather than days to design labels).
BAR-ONE® for mySAP™ Business Suite is optimized for Zebra printers.	Provides full functionality and maximum performance with Zebra printers, including maximum print speed, word wrapping, text justification, serialization, and variable graphics.
Non-programmers can modify labels.	Easy and inexpensive to maintain.
Print directly from any mySAP Business Suite print server.	No need to use PCs, or SAP/Id, as print servers. This reduces cost and improves print speed.
Take advantage of existing mySAP Business Suite print services and SAPscript.	No new learning curve, enabling faster implementation. <b>This significantly reduces cost</b> —thousands of dollars.
Print directly from mySAP Business Suite. No need to purchase, implement, set up, or maintain middle-ware.	This significantly reduces costs in a <b>multisite implementation</b> . This also provides the fastest possible live implementation. Multinational companies could see <b>savings of up to \$100,000 or more</b> .
Zebra's mySAP Business Suite knowledge, support, and training.	Working directly with SAP and major mySAP Business Suite end users, Zebra has gained invaluable working knowledge of bar code printing within mySAP Business Suite. Zebra's own Software Engineers can help you, or your solution provider, with implementation and training.



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