TBarCode/Direct

Barcode Printing for SAP ERP without Middleware

Version 2.2

White Paper

Bar-coding for SAP® without Middleware

Platform and Printer Independent Barcode Printing…

TBarCode/Direct enables SAP® ERP to print barcodes in perfect quality. All PostScript® compatible output devices and all operating systems are supported.

TBarCode/Direct generates all major linear barcode symbologies and integrates seamlessly into the SAP® printing process.
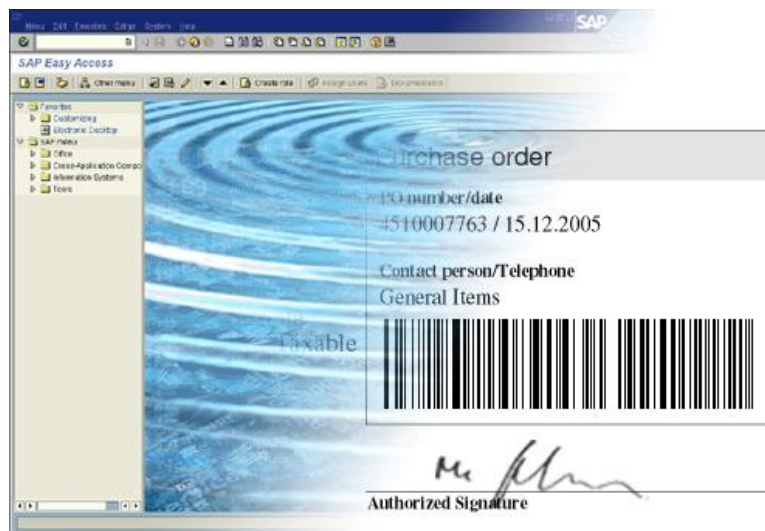
…without Middleware…

TBarCode/Direct is a "customize only" solution. No programming is required within SAP®.

The usual way for printing barcodes within SAP® (R/3®, mySAP, ECC) is to adjust so-called print-controls for the output devices in question. *TBarCode/Direct* works in exactly the same way.

The barcodes are embedded during printing and are generated in the output device. No computations are performed within SAP® ERP. Besides optimal barcode quality this solution results in outstanding throughput.

…for all PostScript® compatible Printers and OMS

TBarCode/Direct works with any PostScript® compatible output device or Output Management System.

PostScript® is a well-known page description language. Most of the printers available on the market support PostScript®.

- Device independent Barcodes for SAP R/3
- Smart Solution without Middleware
- Platform independent
- All linear Barcodes
- Saves Money
- Saves Time

WWW.TEC-IT.COM

TEC-IT Datenverarbeitung GmbH, A-4400 Steyr, Wagnerstrasse 6
office@tec-it.com   T ++43 (0)7252 72720
www.tec-it.com   F ++43 (0)7252 72720 77

Highlights

No Middleware

TBarCode/Direct is installed completely within SAP®. External software is not required. *TBarCode/Direct* generates all barcodes within the output device itself, thus it is the ideal bar-coding solution without consuming any resources on application or spool servers.

Existing Printers

Costly printer replacements are obsolete. *TBarCode/Direct* works with all printers and output management systems (OMS) compatible with PostScript® Level 2 or higher.

No Additional Hardware

Upgrading printers with specialized and expensive barcode modules is not required. *TBarCode/Direct* generates barcodes on all PostScript® devices in common use.

Zero Deployment

TBarCode/Direct is installed within the SAP® ERP server only. No additional software roll-out is required. If *TBarCode/Direct* works with one printer – it will work with all others too. This unique feature of *TBarCode/Direct* simplifies maintenance dramatically.

Seamless Integration

TBarCode/Direct works with SAPscript®, SmartForms® and ABAP™ and utilizes standard SAP® ERP or R/3® customization features.

- Works with existing Hardware

- No forced Printer Upgrades

- No special Printer initialization required

- Works even if Printers are Off between Jobs

- High Throughput

- Outstanding Stability

Perfect Stability

The elimination of any 3rd party software like middleware or additional hardware increases overall stability. *TBarCode/Direct* is ideally suited for shop-floor or high availability applications.

Independence

Customers can choose between printer models and printer manufacturers at any time. Beside this *TBarCode/Direct* is completely operating system independent. The platforms on server-side as well as on client-side are irrelevant.

WWW.TEC-IT.COM

TEC-IT Datenverarbeitung GmbH, A-4400 Steyr, Wagnerstrasse 6
office@tec-it.com   T ++43 (0)7252 72720
www.tec-it.com   F ++43 (0)7252 72720 77

Installation

TBarCode/Direct is installed by importing predefined device types. The complete installation is done from a central location. Deployment efforts are eliminated completely.

Only a few transactions are needed within SAP® R/3® to customize *TBarCode/Direct*. Adjusting the parameters of the product follows standard SAP® guidelines.

Import Device Type
Import device type ZTECPOST provided by TEC-IT
Transaction: **SPAD**

Assign Device Type
Assign the imported device type to your output device(s)
Transaction: **SPAD**

Adjust Print-Controls
Maintain the Print-Controls to meet your bar-code requirements
Transaction: **SPAD** or **SE73**

Maintain SAPScript
If required, maintain the repsective SAPScript, SmartForm or ABAP.
Transaction: **SE71**

Use It!
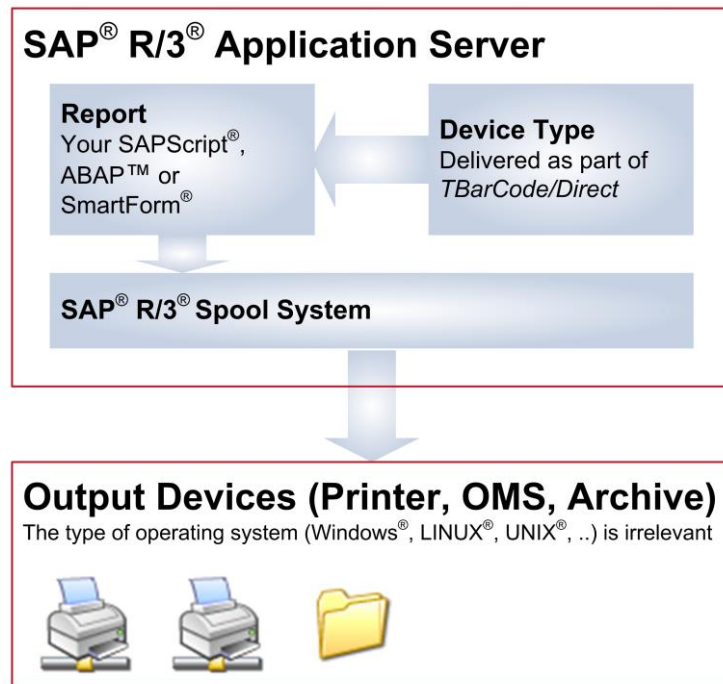Print bar-codes on all PostScript® compatible printers.

- Central Installation
- No Programming
- No ABAP skills
- Configuration conforms to SAP Standard Procedures
- No Printer Upgrades
- No special Skills required
- Works even with 3rd Party Software

The Printing Process

Straight Forward

TBarCode/Direct is a smart extension of the standard SAP® R/3® and ECC device type architecture.

Archive-Ready due to Embedded Barcodes

- Barcodes are computed within the Output Device

- No Server Resources required

- High Throughput

- Unmatched Stability

- Barcodes are Part of the Document

- Archive-Ready

All barcode related information is embedded into each printed document[1]. The barcodes are stored as part of the data-stream. It does not matter when and where documents are printed; the barcodes are always part of the output. This unique feature excels *TBarCode/Direct* especially in combination with archiving solutions.

Usable Devices

All PostScript® Level 2 compatible printers connected via network or connected locally to the spool server can be utilized with *TBarCode/Direct*.

Aside from this *TBarCode/Direct* also works with Document Archive Solutions or Output Management Systems (OMS) compatible with PostScript®.

Extra printer initialization tasks or barcode fonts are not required. Switching off printers between print-jobs does not influence barcode functionality.

---

[1] The bar code image is available in the print job (PostScript format), not in the OTF data stream.

WWW.TEC-IT.COM

TEC-IT Datenverarbeitung GmbH, A-4400 Steyr, Wagnerstrasse 6
office@tec-it.com   T ++43 (0)7252 72720
www.tec-it.com   F ++43 (0)7252 72720 77

Datasheet

- Automatic Check-Digits
- Perfect Output Quality
- Extendable

General	
SAP R/3 4.6 B or higher, mySAP ERP 2004 or higher	✓
SAP ERP 6.0 (ECC 6.0)	✓
Completely platform independent	✓
Costs per printer	None
Costs per user	None
Computing resources required (server CPU-time)	None
Additional programming required	None
Additional software (like SAPlpd/SAPsprint) required	None
Additional hardware required	None
Operating system dependencies	None

Output Devices	
PostScript compatible printers (Level 2 or higher)	✓
PostScript compatible Output Management Systems (OMS)	✓

Barcode Types	
Code 2 of 5 Interleaved	✓
Code 39	✓
Code 93 Standard	✓
Code 128 A	✓
Code 128 B	✓
Code 128 C	✓
Code 128 Auto compress (Subset B+C)	✓
GS1-128 (Subset B+C)	✓
EAN-13 / EAN-8	✓
UPC-A / UPC-E	✓
Postnet-9	✓
Data Matrix (ECC200), ASCII and Base256 Encoding Mode	✓
QR Code (Model 2), Binary Encoding Mode	✓
MaxiCode™ (Mode 2,3,4,5,6)	✓

Adjustable Parameters	
Module width (narrow bar width)	✓
Symbol height / Symbol size	✓
Human readable text: Code 39, 128B, 93, 2/5, EAN-13/8, UPC-A/E	✓
Rotation: Code 2/5	✓

Check-Digit Computation	
MOD 10 (Modulo 10 for 2 of 5 Interleaved)	✓
MOD 43 (Modulo 43 for Code39)	✓
Code 128 / GS1-128 Check Digit (Modulo 103)	✓
EAN-13 / EAN-8 Check Digit	✓
UPC-A / UPC-E Check Digit	✓

TEC-IT

TBarCode/Direct

Licenses

Demo License

A demo-license for evaluation purposes is available on request. The demo-license is free of cost and is supported by TEC-IT.

Server License

TBarCode/Direct is available as server-triple license (a server-triple covers the usual test-, quality- and production scenario). The number of printers / users / clients is irrelevant.

For multi-server or enterprise licenses contact TEC-IT.

Pricing

Please contact TEC-IT.

- No Costs per User
- No Costs per Printer
- Simple Licensing

Contact Information

TEC-IT Datenverarbeitung GmbH

Address:	Wagnerstr. 6 AT-4400 Steyr Austria/Europe
Phone:	+43 / (0)7252 / 72 72 0
Fax:	+43 / (0)7252 / 72 72 0 – 77
Email:	mailto:sap@tec-it.com
Web:	http://www.tec-it.com

WWW.TEC-IT.COM

TEC-IT Datenverarbeitung GmbH, A-4400 Steyr, Wagnerstrasse 6
office@tec-it.com   T ++43 (0)7252 72720
www.tec-it.com   F ++43 (0)7252 72720 77