



**TEC-IT**

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# TBarCode/Direct

Bar-Code Printing for SAP R/3 without  
Middleware

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Version 1.8

## White Paper

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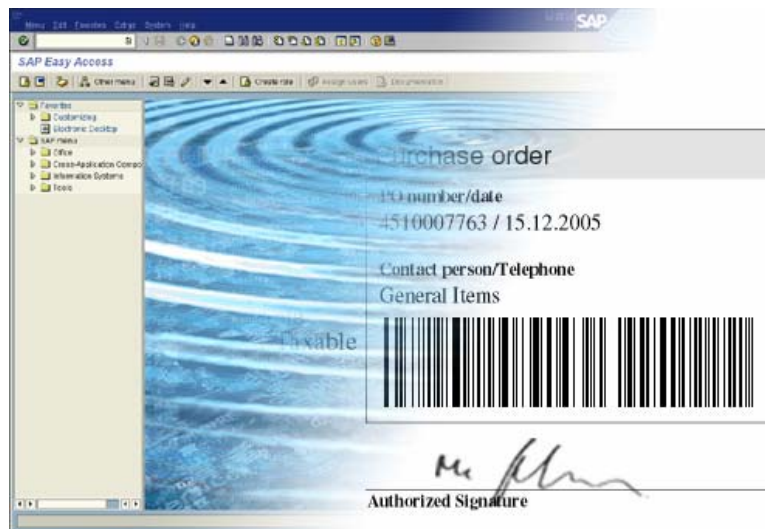
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## Bar-coding for SAP® without Middleware

### Platform and Printer Independent Bar-Code Printing...

*TBarCode/Direct* enables SAP® R/3® to print bar-codes in perfect quality. All PostScript® compatible output devices and all operating systems are supported. *TBarCode/Direct* generates all major linear bar-code symbologies and integrates seamlessly into the SAP® printing process.



### ...without Middleware

*TBarCode/Direct* is a "customize only" solution. No programming is required within SAP® R/3®.

The usual way for printing bar-codes within R/3® is to adjust so-called print-controls for the output devices in question. *TBarCode/Direct* works in exactly the same way.

The bar-codes are generated within the output device. No computations are performed within SAP® R/3®. Besides optimal bar-code 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 Bar-codes for SAP R/3
  - Smart Solution without Middleware
- Platform independent
- All linear Bar-codes
  - Saves Money
  - Saves Time

## Highlights

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### No Middleware

*TBarCode/Direct* is installed completely within SAP® R/3®. External software is not required. *TBarCode/Direct* generates all bar-codes 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 bar-code modules is not required. *TBarCode/Direct* generates bar-codes on all PostScript® devices in common use.

### Zero Deployment

*TBarCode/Direct* is installed within the SAP® R/3® 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® R/3® customization features. No unwanted side-effects like disturbed duplex printing occur.

### 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.

- 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



## 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 respective SAPScript, SmartForm or ABAP.  
Transaction: SE71

### Use It!

Print bar-codes on all PostScript® compatible printers.



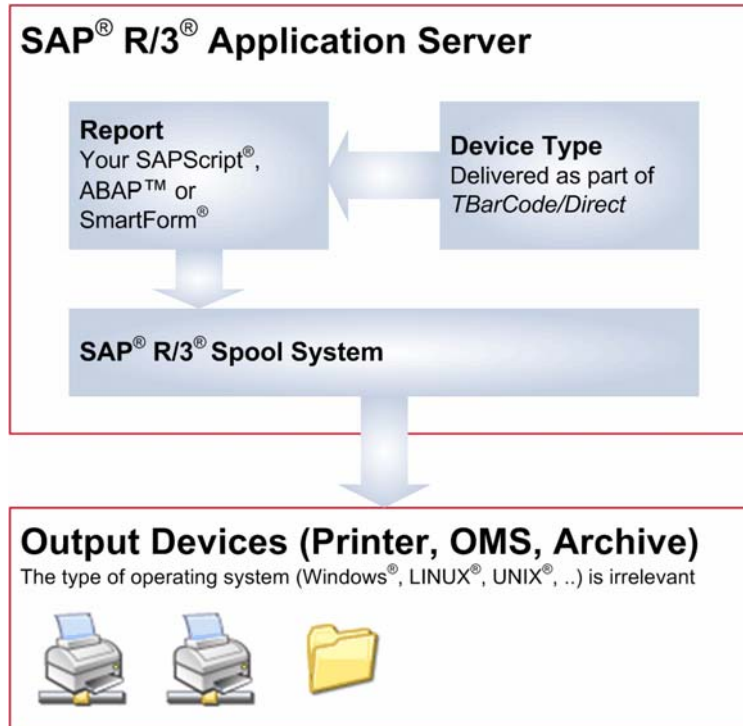
- Central Installation
  - No Programming
  - No ABAP skills
- Configuration conforms to SAP standard procedures
- No Printer Upgrades
  - No special Skills required
- Works even with 3<sup>rd</sup> Party Software



## The Printing Process

### Straight Forward

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



### Archive-Ready due to Embedded Bar-codes

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

- Bar-codes are computed within the Output Device
  - No Server Resources required
    - High Throughput
  - Unmatched Stability
- Bar-codes are part of the document
  - Archived ready

### 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 bar-code fonts are not required. Switching off printers between print-jobs does not influence bar-code functionality.

## Datasheet

General	
SAP R/3 4.6 B or higher	✓
Completely platform independent	✓
Costs per printer	None
Costs per user	None
Computing resources required (e.g. CPU-time on the SAP application server)	None
Additional programming required	None
Additional software (like SAPlpd) 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)	✓

Bar-code Types	
Code 2 of 5 Interleaved	✓
Code 39	✓
Code 39 extended	on request
Code 93	✓
Code 128 A	on request
Code 128 B	✓
Code 128 C	✓
Code 128 auto compress (Subset B+C)	✓
UCC/EAN 128 (Subset B+C)	✓
EAN-8	✓
EAN-13	✓
UPC-A / UPC-E	✓
Postnet-9	✓

Adjustable Parameters	
Module width (narrow bar width)	✓
Symbol height / Symbol size	✓
Human readable text (EAN-13/8, UPC-A/E)	✓
Rotation	✓

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

- Automatic Check-Digit calculation
- Perfect Output Quality
  - Extendable

## Licenses

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### Demo License

A demo-license for evaluation purposes is available on request. The demo-license is free 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.

## Contact Information

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- No Costs per Printer
- Simple Licensing