

# IBM Printing Systems

## IBM LP+/SAP DEVICE TYPE: ZIBM64XX

This document describes ZIBM64XX, a new SAP Compatible IBM DEVICE TYPE. Appendix 1 provides step-by-step instructions for installing ZIBM64XX into the list of DEVICE TYPES in the SAP R/3 spooling system. The ZIBM64XX DEVICE TYPE is designed for use on the SAP R/3. The procedures outlined below specifically pertain to SAP version 3.1H. However, if your SAP R/3 system version is 3.0 or higher, the procedures are identical. The IBM LP+/SAP DEVICE TYPE is also compatible with other versions of SAP, including SAP R/2.

ZIBM64XX is a DEVICE TYPE designed by IBM specifically for **IBM 64xx printers** and is compliant with all requirements for SAP R/3 compatible DEVICE TYPES. Once installed in an R/3 system's list of DEVICE TYPES, ZIBM64XX can be assigned to IBM 64xx printers by the SAP System Administrator. ZIBM64XX functions entirely within the host's SAP R/3 software system. ZIBM64XX allows SAP system users to print SAP application documents, which contain IBM Line Printer Plus (LP+) bar codes and its set of fixed and scalable fonts conveniently from their SAP standard toolbars and transaction menus.

Familiarity with the SAP System Administration screens (SPAD), will be needed. We recommend reading the SAP Basis Component Printing Guide on the online SAP help system, as well as the "The SAP R/3 Handbook", J. A. Hernandez, McGraw-Hill, 1997.

### Operation of the SAP R/3 Printing System

The SAP R/3 Printing System has a proprietary spooling system to receive, process, schedule, print, and distribute documents requested for printing by SAP users. The SAP spooling system performs two major functions: (1) formatting the document according to the parameters of the DEVICE TYPE assigned to the OUTPUT DEVICE (printer) and (2) communicating the formatted output data to the spooling system of the host computer system, where the OUTPUT DEVICE is physically connected.

Basically, SAP system users working on data within a SAP application module can request the printing of a displayed document by clicking on the print button in any SAP transaction screen that presents a standard toolbar or by choosing the Print function from the transaction's List menu. This step presents the user with a Print Screen List, which allows the user to enter an OUTPUT DEVICE name and results in the transaction generating a SPOOL REQUEST.

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The SPOOL REQUEST starts a SAP spool work process to handle the SPOOL REQUEST for the user-named OUTPUT DEVICE, which is a printer in this case. To do that, the OUTPUT DEVICE works with a System Administrator-assigned DEVICE TYPE , which is available in a list of DEVICE TYPES within the SAP spooling system. The DEVICE TYPE provides all necessary spool processing information via a command translation table for the OUTPUT DEVICE. As a result, the spool work process is able to translate the SAP native output control commands contained in the SAP application's print controls into the command language of the named OUTPUT DEVICE.

## **SAP R/3 LIST OF DEVICE TYPES**

In SAP, a DEVICE TYPE is a printer parameter interface between an OUTPUT DEVICE and set of logical information components that define how that printer prints documents. These logical information components are a collection of printer-specific control properties.

The standard SAP system “out-of-the-box” supplies an extensive list of resident DEVICE TYPES to enable printing with a variety of commercially available OUTPUT DEVICES. SAP assures that these resident DEVICE TYPES will work properly with the SAP R/3. In the SAP SPOOL ADMINISTRATION (SPAD) screens, SAP provides System Administrators the capability to define new DEVICE TYPES and append them to the resident list of available DEVICE TYPES. However, the creator of such a new DEVICE TYPE is responsible for its accuracy, performance, and support, not SAP.

Note: Any of the resident DEVICE TYPES, regardless of origin, can be used “as is” or modified by the System Administrator. Depending on the specific SAP system environment, a DEVICE TYPE, such as ZIBM64XX, may be customized to meet OUTPUT DEVICE specific requirements. Typically, the list of resident DEVICE TYPES provides a good starting set of templates to create custom DEVICE TYPES. A simple way to create a custom DEVICE TYPE is to copy the definition and then change it as necessary to meet system OUTPUT DEVICE requirements. Modifications to the DEVICE TYPES can be made easily by using the fill-in-the-box tables in the SAP SPOOL ADMINISTRATION screens.

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## **SAPscript Printer Drivers**

The SAP system provides a list of “out-of-the-box” SAPscript printer drivers, which are assigned to various DEVICE TYPES in the SAP list of available DEVICE TYPES. The purpose of these SAPscript printer drivers is to make the conversion from the output format of SAPscript to the print format of the DEVICE TYPE assigned with the OUTPUT DEVICE. The list below identifies five of the most common of the SAPscript printer drivers.

Each of these SAPscript printer drivers is named in the SAP system with unique four character code, such as STN2.

1. HPL2: HP PCL4/PCL5 (LJ 3, 4, 5, 6)
2. POST: PostScript (Adobe)
3. PRES: Prescribe(Kyocera)
4. SWIN: Windows (SAPlpd/SAPWIN)
5. STN2: SAP Standard Line Printer Driver

System Administrators, who create DEVICE TYPES, specify one of these SAPscript printer drivers in the Driver field of the SPAD “Create Device Type” screen.

Note: The ZIBM64XX Device type is intended to be used with the STN2 Printer Driver

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## **Printing to an OUTPUT DEVICE**

For a SAP transaction to print a document, it must deliver an output data stream to an OUTPUT DEVICE connected to the R/3 system. To prepare the data for that output stream, the SAP spooling system needs a substantial amount of information about the physical device represented by the OUTPUT DEVICE. In SAP R/3, each OUTPUT DEVICE is assigned a specific DEVICE TYPE that provides for the storage of the details about the physical device and other required data within the spooling system. The information contained in each DEVICE TYPE is organized as a collection of tables that define the attributes of a specific OUTPUT DEVICE.

A printer is a common example of an OUTPUT DEVICE. When R/3 has multiple printers connected, it requires separate OUTPUT DEVICE (printer) definitions, each of which has been assigned the proper printer-specific DEVICE TYPE definition.

## **Creation of an OUTPUT DEVICE**

In SAP, an OUTPUT DEVICE is a unique four character system name for the physical device. This OUTPUT DEVICE name is registered in the SAP spooling system and is specified each time a print request is made to print a document to the device. The SPAD Create Output Device screen is used to specify the OUTPUT DEVICE definition, which includes the four character OUTPUT DEVICE name, the DEVICE TYPE, and other essential system information about the physical device to the SAP spooling system.

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## **Description of ZIBM64XX:**

ZIBM64XX contains all the IBM 64XX printer-specific information required for the SAP spooling system to respond to a user's print request and deliver a properly prepared output data stream to the IBM64XX printers as an assigned OUTPUT DEVICE.

ZIBM64XX has the following logical components:

### **SAPSCRIPT DRIVER**

This component contains the SAPscript printer driver, which makes the conversion from the output format of SAPscript to the print format of the DEVICE TYPE assigned to the OUTPUT DEVICE. This driver uses the properties and attributes resident in the DEVICE TYPE definition to translate SAPscript forms into an output data stream that can be printed by the physical printer.

### **CHARACTER SETS**

This component is a collection of character sets, or code pages, that are available in the OUTPUT DEVICE. The SAP spooling system uses this collection of character sets to translate SAP code values in its own system character set into an output data stream of code values understood by the OUTPUT DEVICE.

### **PRINT CONTROLS**

This component contains the command set of the OUTPUT DEVICE and makes it possible for the SAP spooling system to translate its system print controls used ABAP/4 programs and in SAPscript forms into the escape sequences required by the OUTPUT DEVICE.

### **FORMATS**

This component determines how the output will appear on the paper and primarily specifies paper sizes, such as Letter and DINA4. It allows SAPscript forms to construct a layout and portrait or landscape orientation in the printable area of the page.

### **DEVICE INITIALIZATION**

This component is a group of escape sequences used to configure the OUTPUT DEVICE for the requirements of the specific document in the print request. These configuration escape sequences, containing information such as cpi, lpi and fonts, are sent to the printer prior the initiation of an output data stream for the document.

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## ZIBM64XX Bar Code And Font Support

IBM LP+/SAP DEVICE TYPE, ZIBM64XX, provides SAP system users the ability to print documents utilizing the bar codes and serif and sans serif fonts that are resident in Line Printer Plus (LP+), which is standard firmware in every IBM 64XX printer.

The printer emulations available for selection in LP+ are IBM Proprinter XL III, Epson FX 1050, IBM P-series and serial matrix. . The ZIBM64XX DEVICE TYPE is designed to be used with the LP+ emulation selected as P-Series in the LP+ menu. The LP+ Superset Command Set (SSCS) incorporated in ZIBM64XX makes “out-of-the-box” SAP bar codes and IBM resident bar codes available to SAP report programmers. These SSCS/SAP/IBM bar codes are shown in Table 1 below.

The LP+ serif and sans serif font sets contain the fonts that are standard in the emulated printers, along with a number of additional popular fonts that are provided by IBM. ZIBM64XX is designed with these LP+ bar codes and the LP+ font set as part of the DEVICE TYPE definition.

When ZIBM64XX has been specified in the OUTPUT DEVICE (printer) definition, all the LP+ bar codes and fonts are immediately available for use by SAP report programmers, who write SAP reports in either SAPscript or ABAP/4 programming language. All standard SAPscript bar codes are automatically mapped to the equivalent device-specific escape sequences that represent the bar codes in the OUTPUT DEVICE.

ZIBM64XX is thus very convenient for the SAP report programmer. To insert either LP+ bar codes in reports generated by SAPscript and/or ABAP/4 programs, it is only necessary to write the name of the bar code type and the bar code data at the proper location on the page of the report.

When the SAP System Administrator has assigned ZIBM64XX to the IBM 64XX OUTPUT DEVICE, SAP system users will be able to print SAP documents containing LP+ bar codes and fonts by simply using their SAP standard toolbars and transaction menus.

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**Table 1: Bar code symbologies supported by ZIBM64XX**

SSCS Barcode Types	SAP Names	Names Assigned by
Code 39	BC_CD39	SAP (out-of-the-box)
Code 39C	BC_CD39C	SAP (out-of-the-box)
EAN 13	BC_EAN13	SAP (out-of-the-box)
EAN 8	BC_EAN8	SAP (out-of-the-box)
EAN 8 (für Schulung)	EAN8	SAP (out-of-the-box)
Interleaved 2/5	BC_I25	SAP (out-of-the-box)
Interleaved 2/5	BC_125C	SAP (out-of-the-box)
POSTNET 5	BC_PSN5	SAP (out-of-the-box)
POSTNET 9	BC_PSN9	SAP (out-of-the-box)
MSI no check sum	BC_MSI	SAP (out-of-the-box)
MSI mod10 check sum	BC_MSIC	SAP (out-of-the-box)
MSI mod10 mod10 check sum	BC_MSII	SAP (out-of-the-box)
MSI mod11 mod11 check sum	BC_MSI2	SAP (out-of-the-box)
Code 128 (A, B, C, or D)	ZPTXC128	IBM
Codabar	ZPTXCBAR	IBM
Code 93	ZPTXCD93	IBM
FIM A, B, C, or D	ZPTXFIM	IBM
GermanI-25 11 digit	ZPTXGERB	IBM
GermanI-25 13 digit	ZPTXGERD	IBM
Maxicode	ZPTXMAXI	IBM
Postbar	ZPTXPBAR	IBM
PDF 417	ZPTXPDF	IBM
Royal Mail	ZPTXRBAR	IBM
Telepen	ZPTXTPEN	IBM
UCC 128	ZPTXUCC	IBM
UPC-A	ZPTXUPCA	IBM
UPC-E	ZPTXUPCE	IBM
UPC Shipping	ZPTXUPCS	IBM
UPS 11	ZPTXUPSB	IBM

ZIBM64XX supports SAP “out-of-the-box” bar codes and IBM resident bar codes shown in Table 1 above by including them in its DEVICE TYPE definition. However, the addition of other bar code types into the SAP system may be done by using the System Administration Spool menu, which provides this capability in its “SAPscript Font Maintenance: Initial Screen”. Detailed instructions for adding IBM bar codes to SAP using this method are provided on pp. 11-16.

**Note:** When a report programmer designs a form in SAP, we suggest that the programmer examine the actual printout (hard copy) of the form at the printer rather than view the print preview mode of the document in SAP. The reason is that the printed page image of a bar code will appear in exactly the same position as designed into the document’s SAP program. Specifically, the upper left hand corner of the bar code image box generated by the document programmer is automatically placed at the cursor position of the programmer’s source code editor. This places the bar code box below the cursor position on the printed page. However, in a

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SAP transaction's Print Preview function, the lower left hand corner of the bar code image box is placed at the cursor position in the Print Preview display. This places the box above the screen cursor position and may interfere with the display of text or other material that has been written above the cursor position in the program.

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## How to install the ZIBM64XX DEVICE TYPE

For the ZIBM64XX to be available to SAP R/3 applications, it must be imported into the SAP spooling system. R/3 provides two import utilities in SAP transaction SA38 to store the DEVICE TYPE information in the proper places within the spooling system. One utility is used to import the ZIBM64XX character sets. The other is used for the remaining components of ZIBM64XX.

Briefly, the ZIBM64XX installation steps are:

- **Test** the printer outside SAP R/3 to verify its printing operation.
- **Import** the PDT files using the two SA38 utilities.
- **Create** an OUTPUT DEVICE for the SAP spooling system. This makes a logical connection between the OUTPUT DEVICE, the DEVICE TYPE, and the COMMUNICATION PATH to the printer (physical device).
- **Print** a test document selected in a user's SAP application transaction screen. Specify the OUTPUT DEVICE name in the Print List screen and the list printing of the test document should take place at the printer.

Successful implementation of these steps will verify correct installation of ZIBM64XX.

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## **Appendix 1**

### **Installation of the IBM LP+/SAP Device Type: ZIBM64XX**

The following procedures detail the use of the SAP R/3 System to install the IBM LP+/SAP DEVICE TYPE in the list of available DEVICE TYPES in the spool system of SAP R/3. The outlined procedures below is specifically pertain to SAP version 3.1H. If your SAP R/3 system version is 3.0 or higher, the procedures are similar and the LP+/SAP DEVICE TYPE is also compatible with other versions of SAP.

#### **Preliminary Printer Verification Stage: print Non-SAP documents in Non-SAP environment**

This is to confirm that the host OS/printer attachment works properly outside of SAP. This enhances the assurance that the host operating system and the printer are correctly configured prior to creating the IBM printer as an OUTPUT DEVICE to the SAP R/3 internal spool system.

SAP R/3 documentation strongly advises that the printer should be thoroughly pre-tested in printing Non-SAP documents in the host OS system without SAP. Typically, the host OS could be any one of these platforms: UNIX systems, Windows or Windows NT, AS/400, or IBM mainframe platforms.

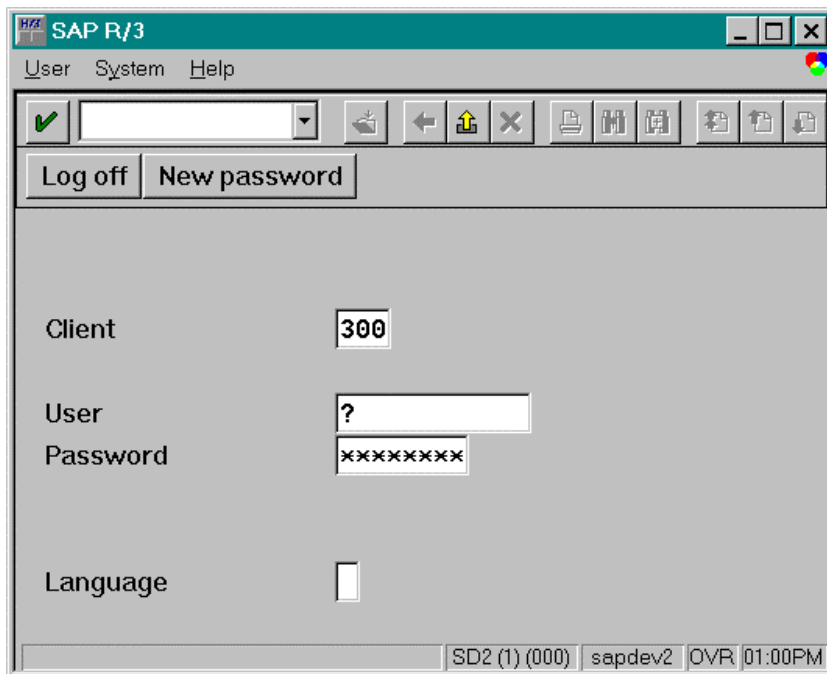
After the "Printer's Requirements" above are satisfied, generate a few printouts to the IBM printers from any non-SAP applications such as MS Word or any ASCII text editor. If no printouts were generated, check all connections to and from the printers. If all else failed, contact IBM Support Group to resolve it. ***Do not proceed any further!***

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## PROCEDURE ONE:

### Add IBM bar code definitions to SAP R/3 System


1. To utilize IBM bar codes in SAP R/3 applications, SAP R/3 requires the definitions of these bar codes to be incorporated into the naming space of SAP R/3 System. All non-standard (not “out-of-the-box”) bar code names begin with the letter Z to conform with SAP naming convention for non-system objects.
2. Start the SAP R/3 front-end client GUI. Log into the central instance of SAP Server with administrator rights. Type in your User name and Password at the appropriate text box. Press the <ENTER> key to continue to the next screen. The screen should look very much like the illustration below.



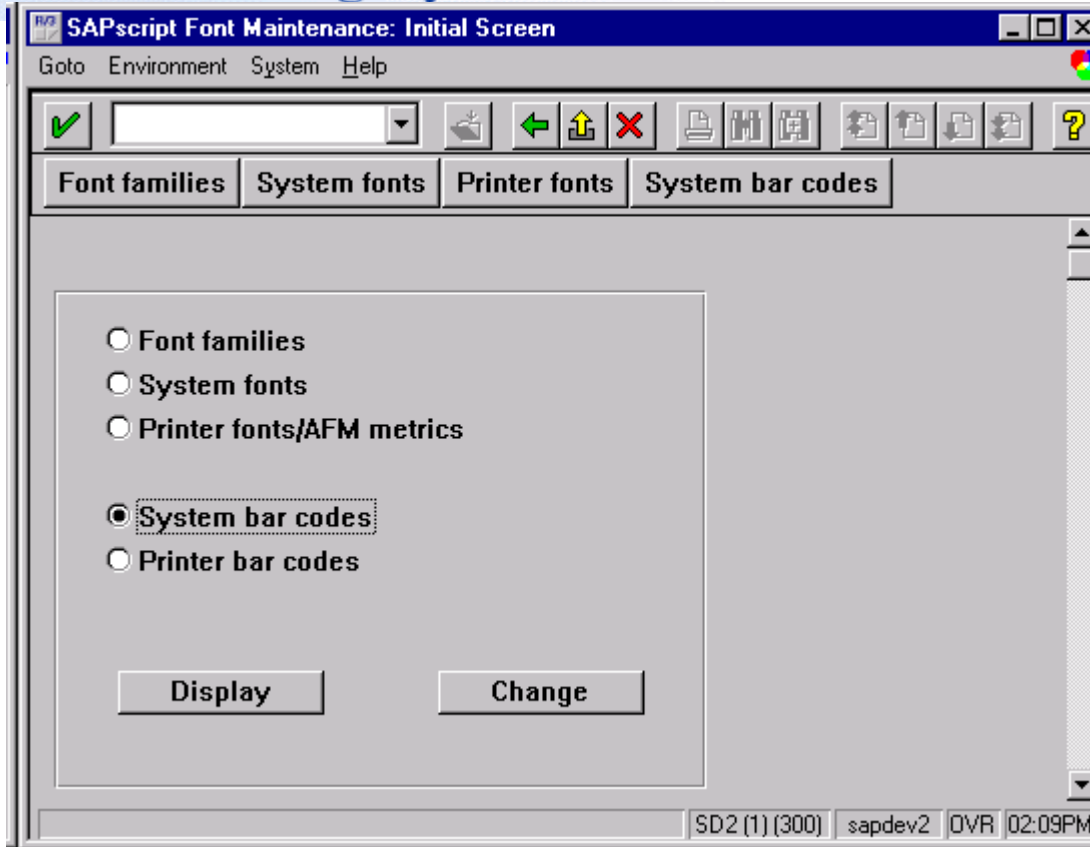
### SAP R/3 Login Screen

3. Start the *SAPscript Font Maintenance* transaction SE73 by entering */nse73* in the command line text box located just below the menu bar of the SAP R/3 System screen



Press the <Enter> key or click once on the  box adjacent to the command line text box. Alternate method is to use the menu bar by selecting *Tools->Administration->Spools->Font maintenance*. The “SAPscript Font Maintenance” screen should look very much like the illustration below.

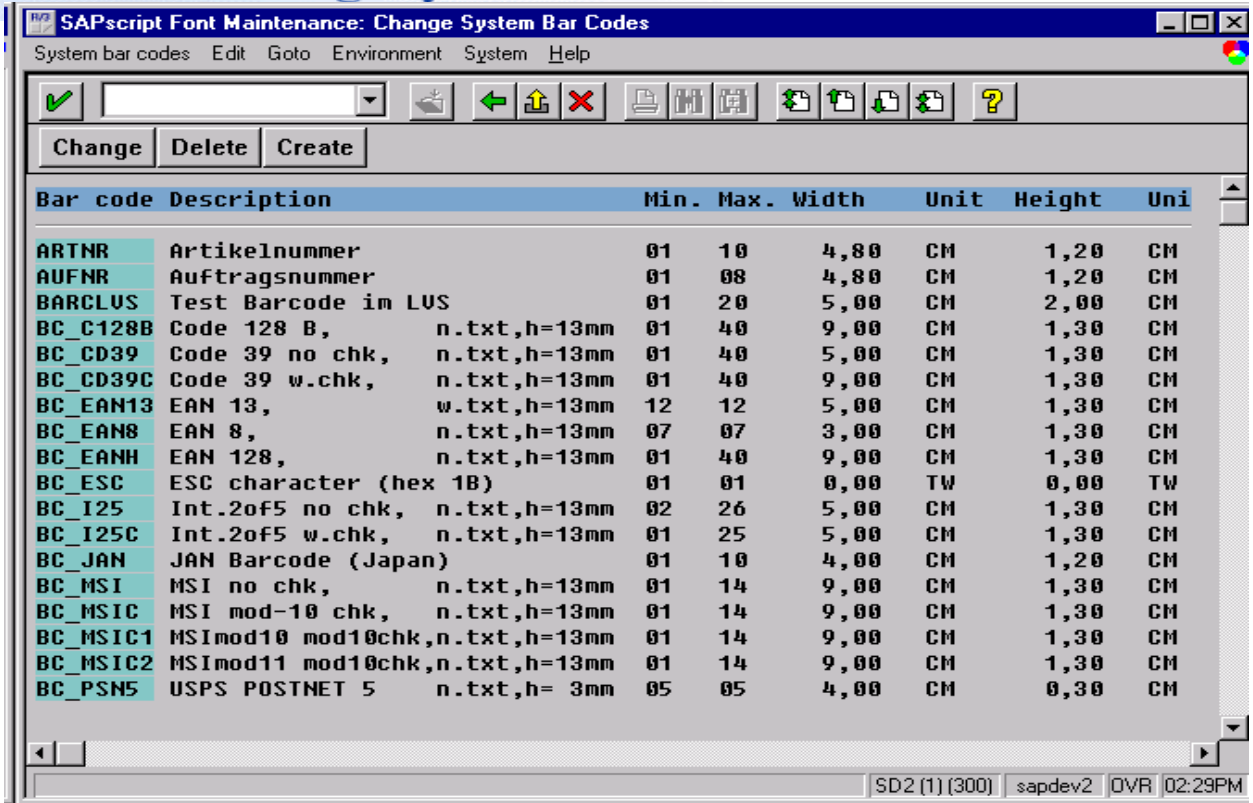
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## SAPscript Font Maintenance: Initial Screen

4. At the “*SAPscript Font Maintenance: Initial Screen*”, select **System bar codes** option by clicking on the radio button to activate it. Click the **Change** command button to enter the “*SAPscript Font Maintenance: Change System Bar Codes*” screen.
5. At the “*SAPscript Font Maintenance: Change System Bar Codes*” screen shown below, click **Create** command button located just below the Formatting toolbar to define a new bar code.

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## SAPscript Font Maintenance: Change System Bar Codes Screen

6. At the “SAPscript Font Maintenance: Create/Change System Bar Code” screen, enter the appropriate entries for each field of the ZPTXC128 bar code as indicated in the table below.

Click  when all the entries are entered.

<u>Field Name</u>	<u>Field Entry</u>
<i>Bar code</i>	<i>ZPTXC128</i>
<i>Description</i>	<i>IBM: Code 128 A, B, or C</i>
<i>Min. character number</i>	<i>1</i>
<i>Max. character number</i>	<i>50</i>
<i>Bar code width</i>	<i>9</i>
<i>Unit of measurement</i>	<i>CM</i>
<i>Bar code height</i>	<i>1,30</i>
<i>Unit of measurement</i>	<i>CM</i>

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The screenshot shows a dialog box titled "SAPscript Font Maintenance: Create/Change System Bar Code". It contains several input fields and two buttons. The fields are: "Bar code" (empty), "Description" (empty), "Min. character number" (empty), "Max. character number" (empty), "Bar code width" (empty), "Unit of measurement" (set to "CM"), "Bar code height" (empty), and "Unit of measurement" (set to "CM"). At the bottom, there are "Continue" and "Cancel" buttons.


## SAPscript Font Maintenance: Create/Change System Bar Code Screen

7. When making changes or defining new objects in the SAP R/3 system, an object is assigned a request number so that SAP R/3 system can track its profile as to when, who, what, and how that object was created. In this case, it is appropriate to request a new number since you are about to create a new bar code definition object. To obtain a new request number, at the pop-up dialog "Change Request Query" windows shown below, simply click on the

 command button.


The screenshot shows a dialog box titled "Change Request Query". It contains a text field for "SAPscript printer definition" with the value "ZPTXLPP". Below it is a "Request" section with a "Number" field containing "SD2K900207" and a dropdown arrow. At the bottom, there are four buttons: a green checkmark, a yellow floppy disk icon, "Own requests", and "Create request" with a red X icon.

## Change Request Query Screen

8. Type in the description for the newly created request at the "Create Request" screen very much like the illustration below. Key in the description such as "IBM: Create new bar code ZPTXC128 to work with ZIBM64XX". Click the save button  to continue.

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## Create Request Screen

9. Notice that a new request number is placed in the *Number* field entry text box of the **Change Request Query Screen** and that the description of the request that you have just entered in the “ Create Request ” screen, is displayed just below the request number. Next, click the enter button  located at the lower left corner of the current active window.

10. Repeat steps 5 through 9 of **PROCEDURE ONE** above for the following bar codes:

<i>Bar code</i>	<i>Description</i>	<i>Min. character number</i>	<i>Max. character number</i>	<i>Bar code width</i>	<i>Unit of measurement</i>	<i>Bar code height</i>	<i>Unit of measurement</i>
<i>ZPTXCBAR</i>	IBM: Codabar	1	32	1,30	CM	1,30	CM
<i>ZPTXCD93</i>	IBM: Code 93	1	50	1,67	CM	1,30	CM
<i>ZPTXFIM</i>	IBM: FIM A, B, C, or D	1	1	1,30	CM	1,30	CM
<i>ZPTXGERB</i>	IBM: GermanI-25 11digit	11	11	1,30	CM	1,30	CM
<i>ZPTXGERD</i>	IBM: GermanI-25 13digit	13	13	1,30	CM	1,30	CM
<i>ZPTXMAXI</i>	IBM: Maxicode	1	50	1,30	CM	1,30	CM
<i>ZPTXPBAR</i>	IBM: Postbar	1	50	1,30	CM	1,50	CM
<i>ZPTXPDF</i>	IBM: PDF417	1	50	5,00	CM	1,30	CM
<i>ZPTXRBAR</i>	IBM: Royl Mail	1	50	1,30	CM	1,50	CM

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<i>Bar code</i>	<i>Description</i>	<i>Min. character number</i>	<i>Max. character number</i>	<i>Bar code width</i>	<i>Unit of measurement</i>	<i>Bar code height</i>	<i>Unit of measurement</i>
<i>ZPTXPEN</i>	IBM: Telepen	1	50	1,30	CM	1,30	CM
<i>ZPTXUCC</i>	IBM: UCC 128	1	50	1,30	CM	1,30	CM
<i>ZPTXUPCA</i>	IBM: UPC-A	11	11	1,30	CM	1,30	CM
<i>ZPTXUPCE</i>	IBM: UPC-E (6 digit)	6	6	1,30	CM	1,30	CM
<i>ZPTXUPCS</i>	IBM: UPC Shipping	1	50	1,30	CM	1,30	CM
<i>ZPTXUPSB</i>	IBM: UPS 11 (10 digits)	10	10	1,30	CM	1,30	CM

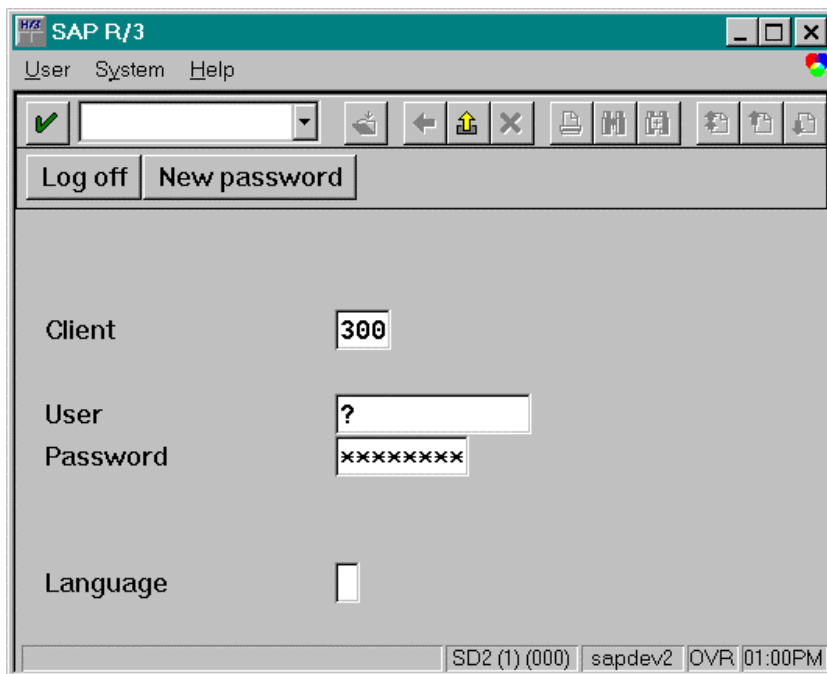


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## PROCEDURE TWO:

### Install the ZIBM64XX DEVICE TYPE to an existing SAP R/3 System

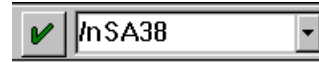
1. Set the printer emulation to IBM Proprinter III XL from the printer's panel. The printer emulation should already be set in IBM Proprinter III XL mode when powered ON. Next, print the printer's configuration from the printer's panel to make sure that the firmware is loaded correctly and the Flash-RAM and DRAM installed memory satisfied the printer's memory requirement.
2. Save the current printer's configuration so that whenever the printer is turn OFF and ON the same settings will be loaded into the memory. Refer to the User's Reference Manual of the IBM printer for a complete procedure on how to accomplish step 1 and 2.
3. Double-click the self-extracting ZIBM64XX DEVICE TYPE file *353914.exe*. Two files named as *S9210.CPA* and *ZIBM64XX.PRI* will be required during the installation of the ZIBM64XX DEVICE TYPE. Note the path where these files are located because you will be asked to specify the path during the import process of the ZIBM64XX DEVICE TYPE.
4. Start the SAP R/3 front-end client GUI. Log into the central instance of SAP Server with administrator rights. Type in your User name and Password at the appropriate text box. Press the <ENTER> key to continue to the next screen. The screen should look very much like the illustration below.




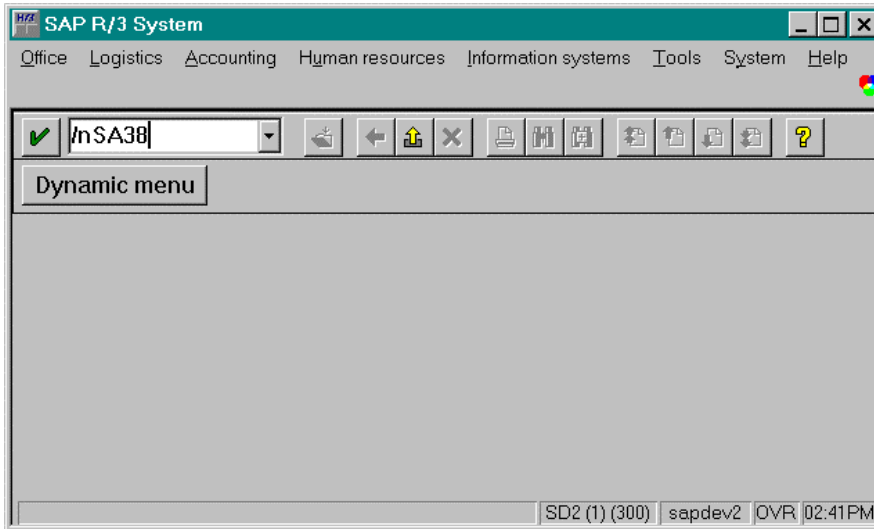
**SAP R/3 Login Screen**

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5. Start the *Program Execution* transaction SA38 by enter `/nSA38` in the command line text box located just below the menu bar of the SAP R/3 System screen

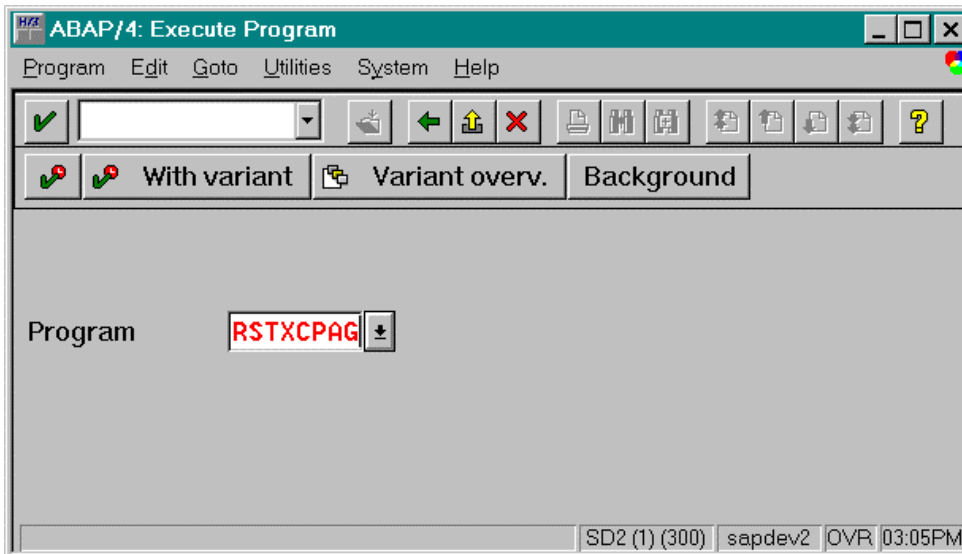


Press the `<Enter>` key or click once on the  box adjacent to the command line text box. The screen should look very much like the illustration below.




## SAP R/3 System Screen

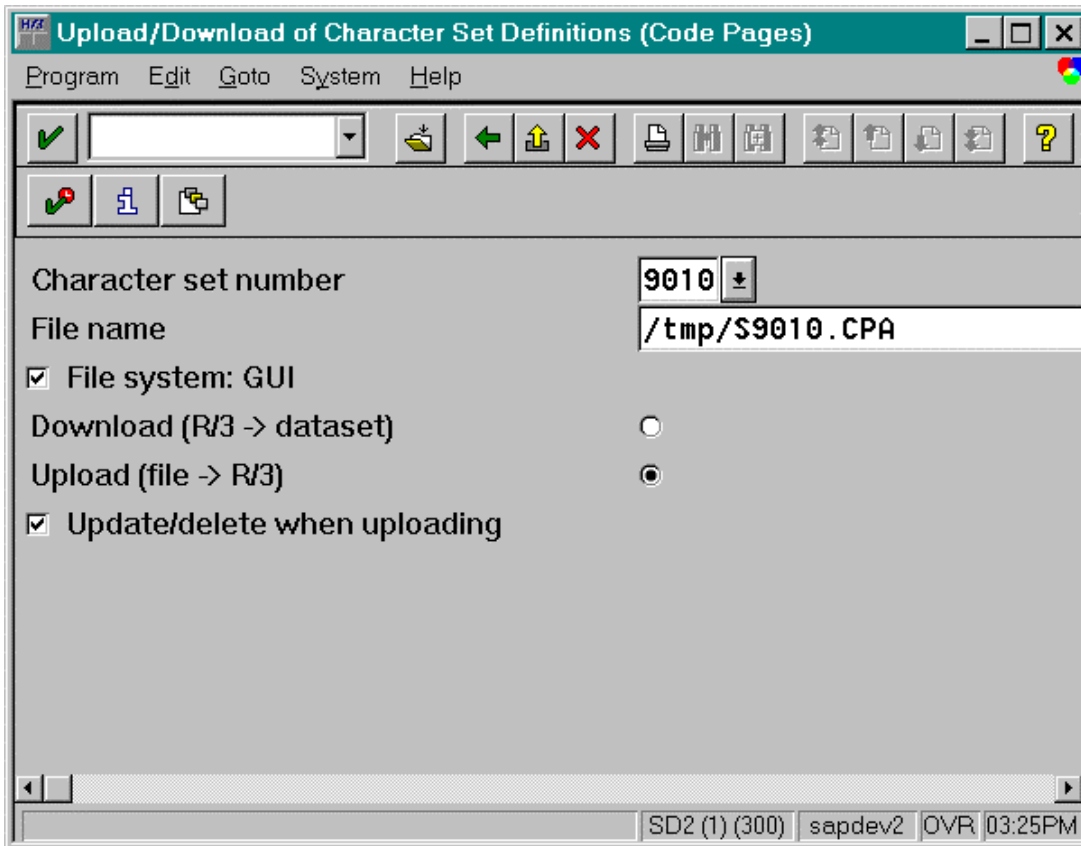
6. At the “ ABAP/4: Execute Program ” screen shown below, key in `RSTXCPAG` in the *Program* field to upload the `S9210.CPA` file into the SAP printing system. Next, click the execute button  when done.



## ABAP/4: Execute Program Screen



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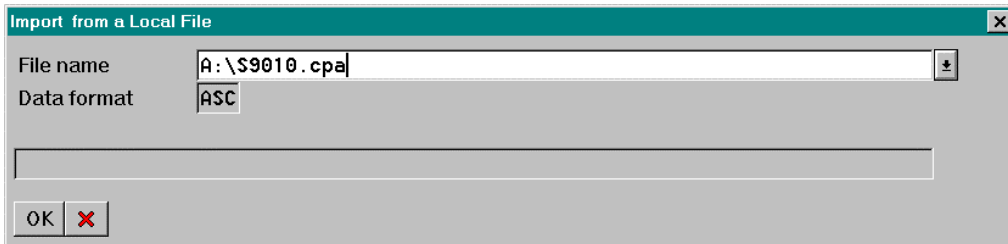
- Next, at the window titled “*Upload/Download of Character Set Definitions (Code Pages)*”, enter the appropriate entries for each field as indicated by the illustration screen below. Key in 9210 for **Character set number** field and /tmp/S9210.CPA for **File name** field. Next, select the **File system: GUI** field by clicking on the check box adjacent to the field, select **Upload (file → R/3)** option by clicking on the radio button to turn it ON, select the **Update/delete when uploading** option by place a check inside the check box. When all the entries are entered correctly, click on the execute button  to continue.






Upload/Download Character Set Definition Screen

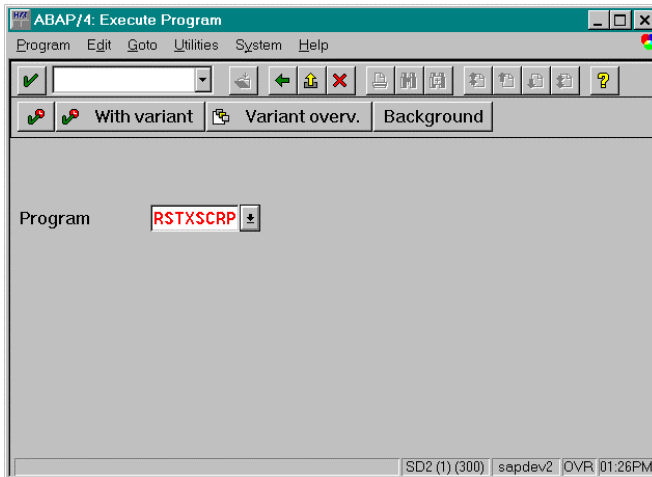
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8. A pop-up dialog text box labeled “*Import from a Local File*” prompts for character set filename and the its location. Use the browse button  to located *S9210.CPA* file in the **File name** entry text box. Click the  button to continue. The screen should look very much like the illustration below.




## Import from a Local File dialog

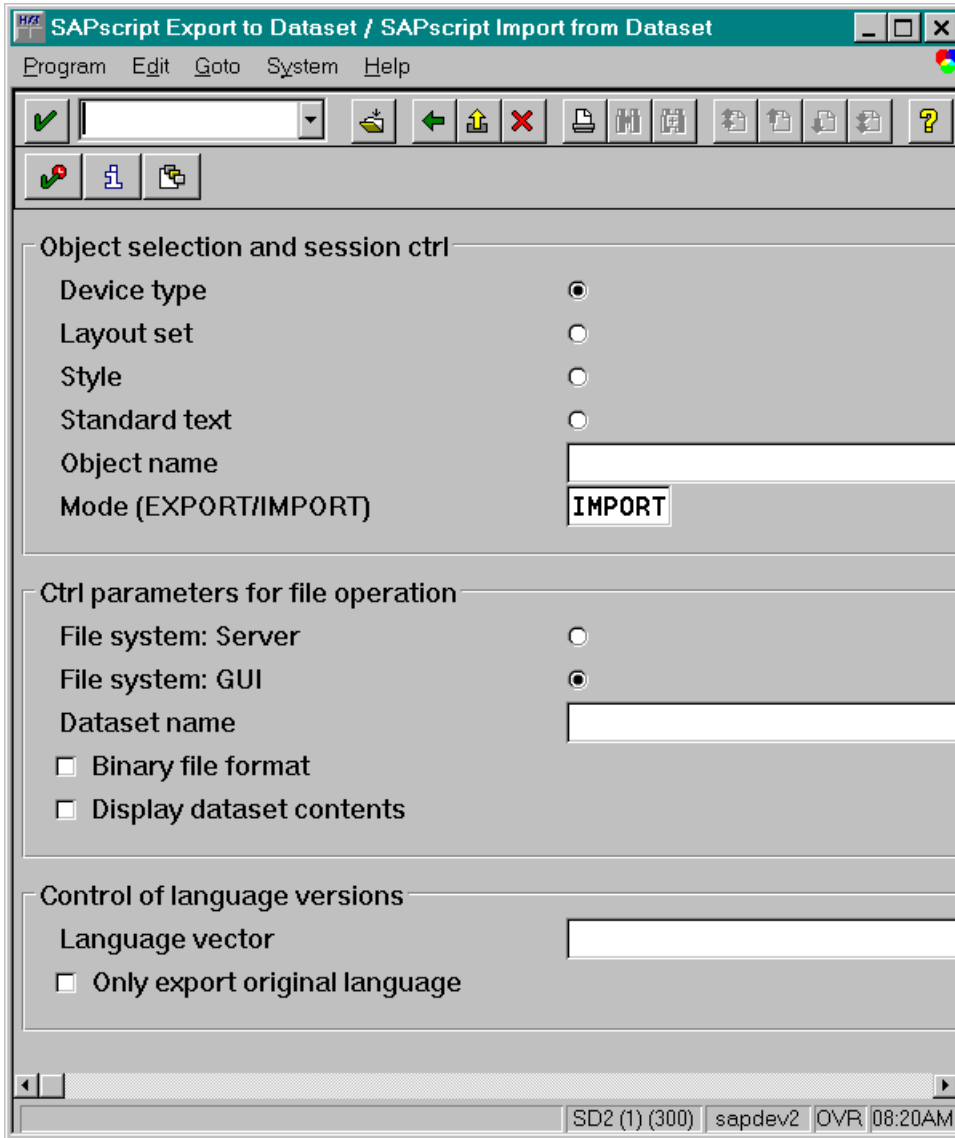
9. If no error occurs, the SAP R/3 system will display upload result messages inside the “*Upload/Download Character Set Definition*” screen. Otherwise a pop-up error message dialog box will appear on the screen. Repeat steps 5-7 and make sure all the entries are correct before continuing to the next screen.
10. The next series of steps outline the import procedure of the device type definition file *ZIBM64XX.PRI* from the floppy disk to the SAP R/3 printing system. First, execute the Program Execution transaction SA38 by keying in */nSA38* at the command line entry text box located just below menu bar of the current screen  */nSA38* . At the window screen “*ABAP/4: Execute Program*”, very much like the illustration below, key in *RSTXSCR***P** in the **Program** text entry box then click  execute button to launch the device type definition import program.



## ABAP/4 Execute Program Screen

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11. At the next window titled “ *SAPscript Export to Dataset / SAPscript Import from Dataset* ” shown below, select **Device type** option, key in *ZIBM64XX* for **Object name** text box, enter *IMPORT* for **Mode (EXPORT/IMPORT)** option, select **File system: GUI** option, and key in */tmp/ZIBM64XX.PRI* in the **Dataset name** text box. When the entries for all the requirement fields are entered correctly, click on  execute button to start the import process. Ignore all other options.

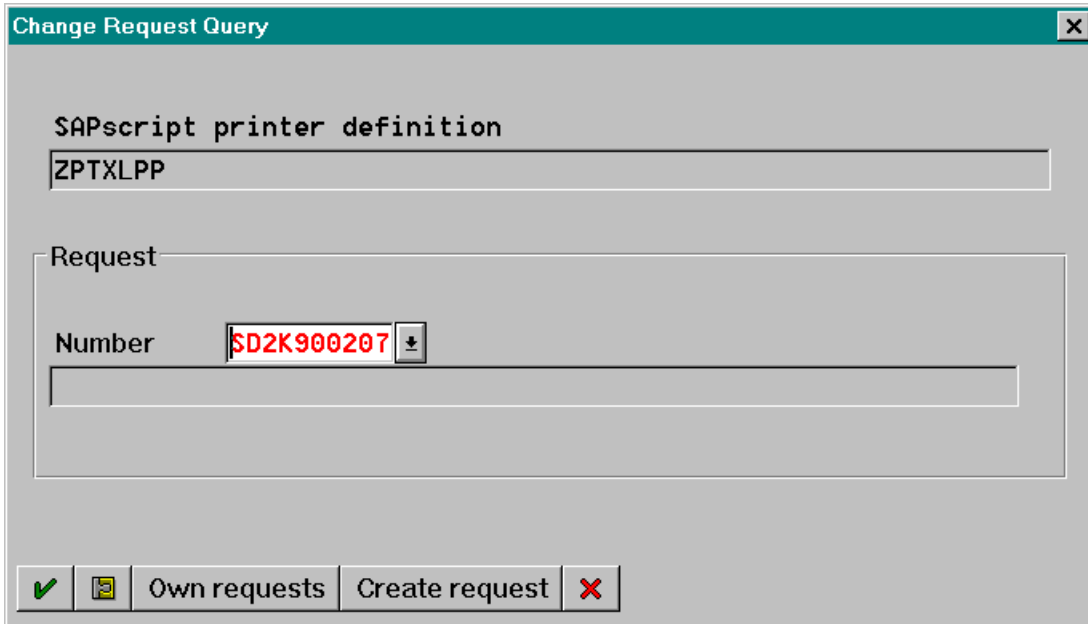


## SAPscript Import from Dataset Screen

# IBM Printing Systems


12. When making changes or defining new objects in the SAP R/3 system, an object is assigned a request number so that SAP R/3 system can track its profile as to when, who, what, and how that object was created. In this case it is appropriate to request a new number since you are about to create a new printer definition object. To obtain a new request number, at the pop-up dialog “*Change Request Query*” windows shown below, simply click on the

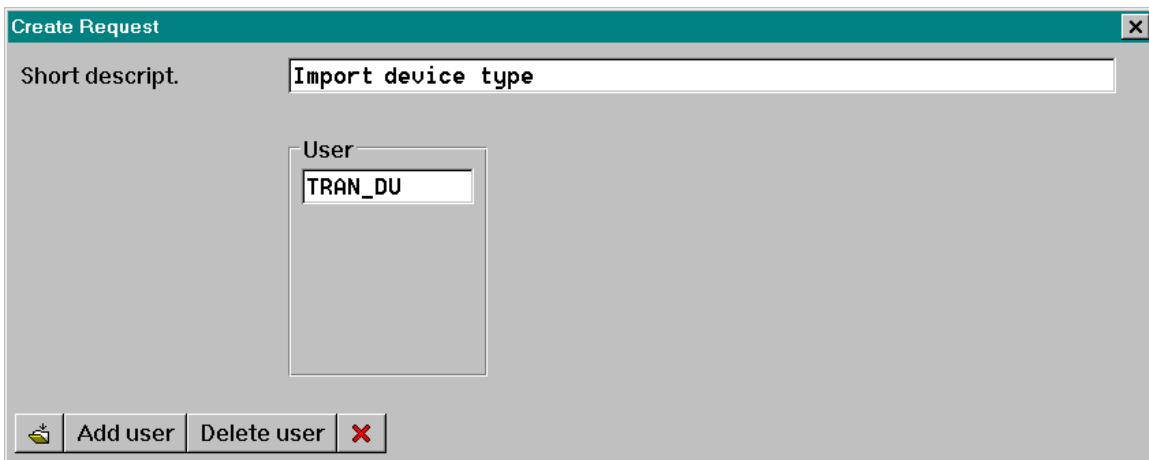
 command button.



The screenshot shows a dialog box titled "Change Request Query". It has a teal header bar with a close button (X) on the right. The main area is light gray. At the top, it says "SAPscript printer definition" above a text field containing "ZPTXLPP". Below that is a "Request" section with a "Number" field containing "SD2K900207" and a dropdown arrow. At the bottom, there is a toolbar with four buttons: a green checkmark, a printer icon, "Own requests", and "Create request" with a red X.

## Change Query Request Screen




13. Next, type in the description for the newly created request at the “*Create Request*” screen very much like the illustration below. Next click the save button  to continue.

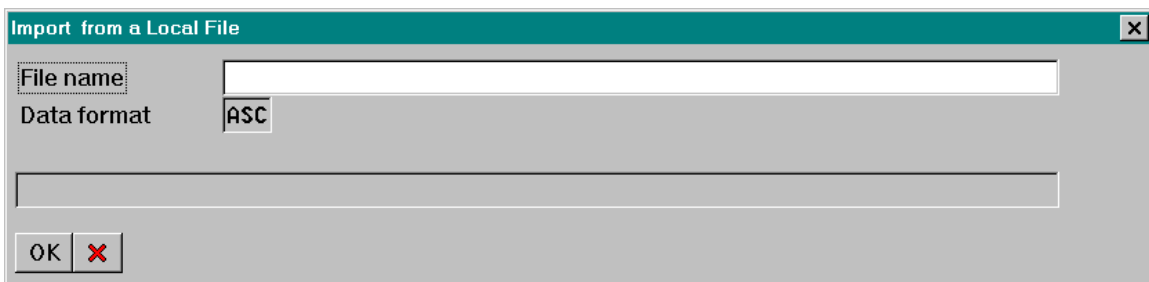


The screenshot shows a dialog box titled "Create Request". It has a teal header bar with a close button (X) on the right. The main area is light gray. It has a "Short descript." field containing "Import device type". Below that is a "User" field containing "TRAN\_DU". At the bottom, there is a toolbar with three buttons: a printer icon, "Add user", and "Delete user" with a red X.

## Create Request Screen

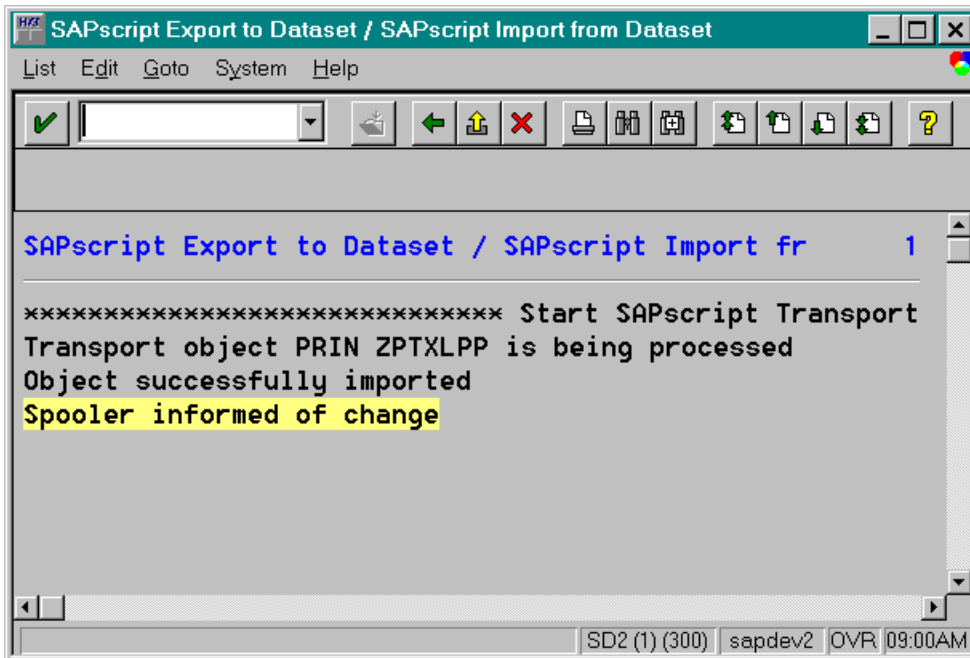
# IBM Printing Systems

14. Notice that a new request number is placed in the **Number** field entry text box and the description of the request that you have just entered in the “ Create Request ” screen, is displayed just below the request number. Next, click the enter button  located at the lower left corner of the current active window.
15. A pop-up dialog text box labeled “ *Import from a Local File* ” prompts for the device type definition file and the its location. Use the browse button  to locate the *ZIBM64XX.PRI* in the **File name** entry text box and then click the  command button to start the upload process. The screen should look very much like the illustration below.



## Import from a Local File dialog

16. When the import process is finished, update messages will be displayed in the current active window very much like the illustration below.




# IBM Printing Systems

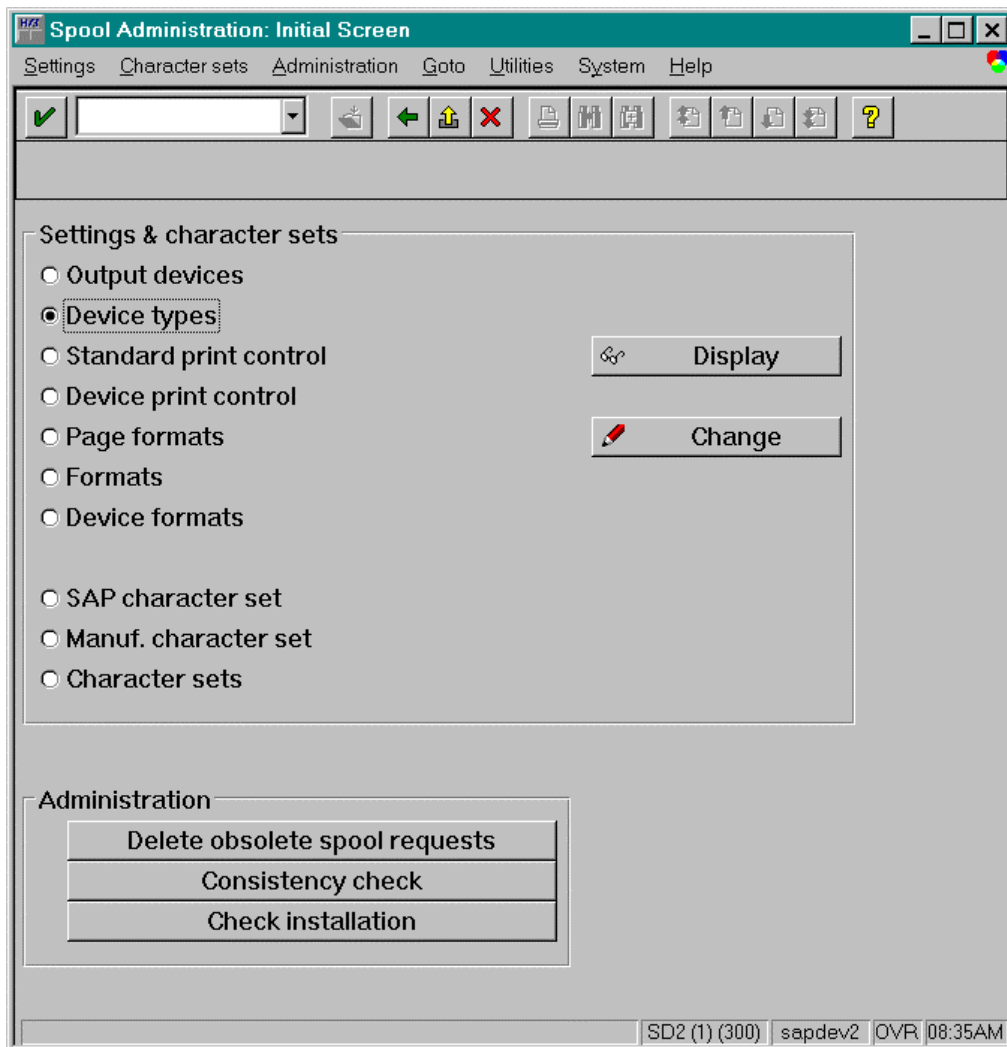
## PROCEDURE THREE:

### Verify the import of ZIBM64XX DEVICE TYPE in the SAP R/3 System

1. Start the Spool Administration transaction program SPAD by enter `/nSPAD` in the command line text box located just below the menu bar of the current active window of SAP R/3 system. Press the `<Enter>` key or click on the check box adjacent to the command line text box entry.



2. At the “*Spool Administration Initial Screen*” very much like the illustration below, select **Device type** option so that the radio button is ON and then click the  button.

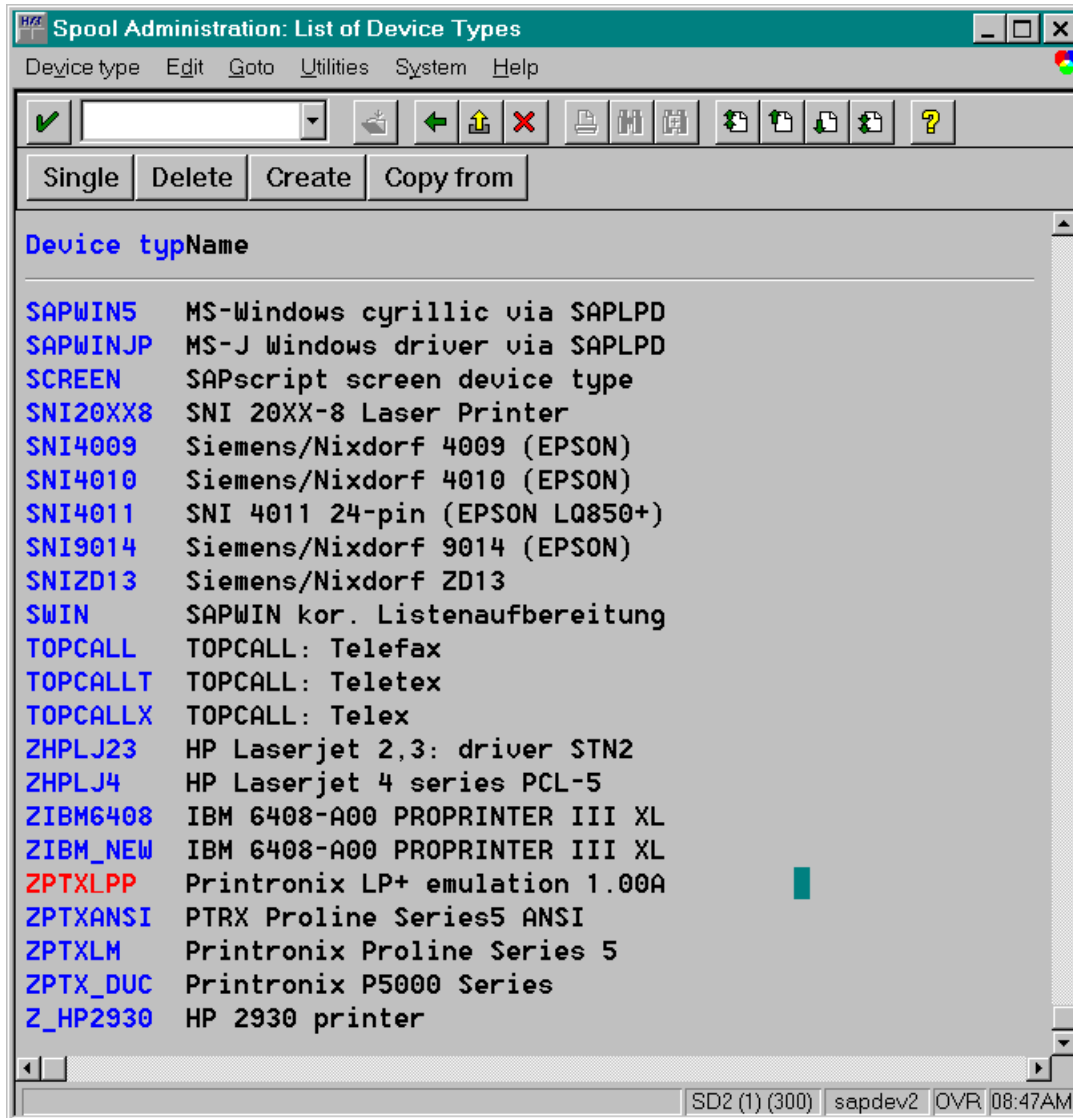


### SPAD Initial Screen



# IBM Printing Systems

3. Scroll down the “*List of Device Types*” screen shown below, if you don’t see *ZIBM64XX* on the list. The IBM device type should be listed as **ZIBM64XX IBM LP+ emulation 1.00A**. If the device type is not listed, repeat PROCEDURE ONE again.



## SPAD List of Device Types Screen


# IBM Printing Systems

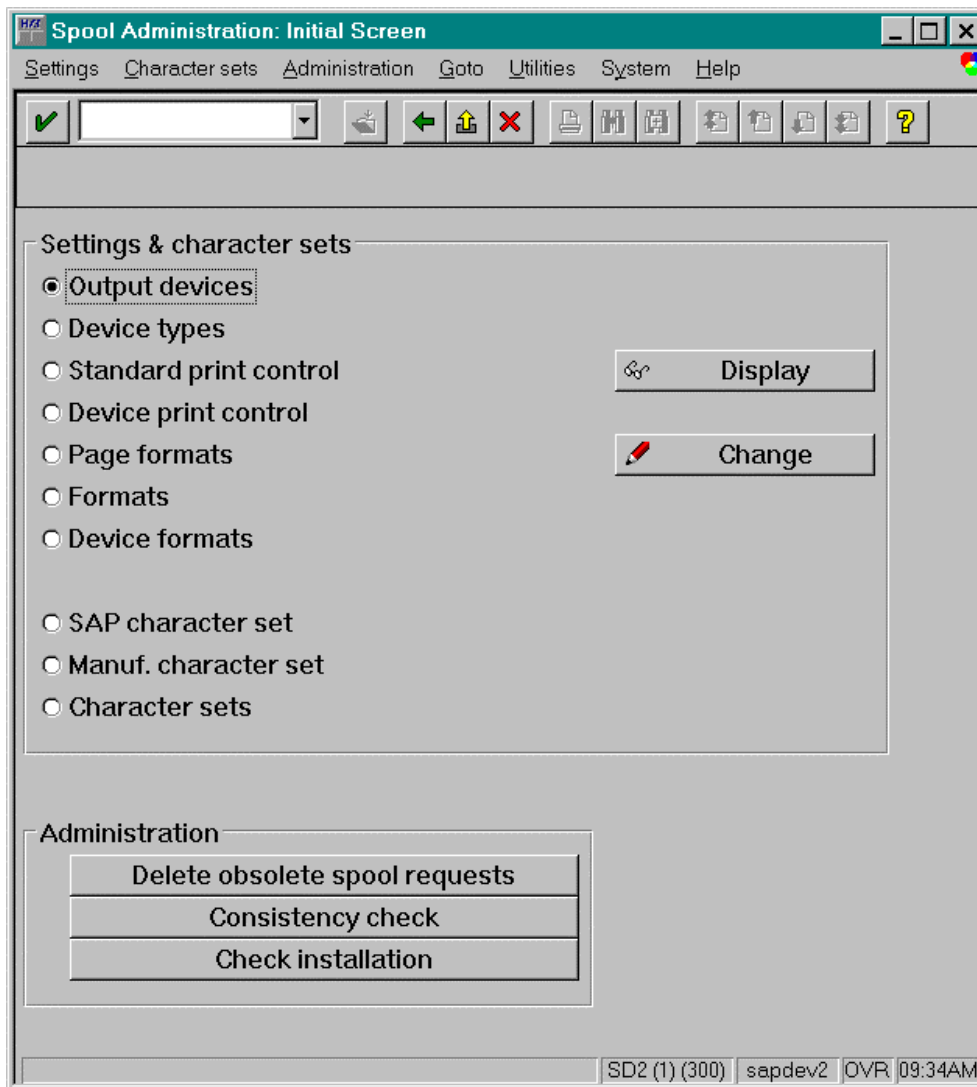
## Using the IBM ZIBM64XX DEVICE TYPE

### Create an “Output Device” in SAP for the IBM 64XX printer

1. From the current active SAP R/3 system window enter the “*System Administration*” screen by keying in */nSPAD* at the command line text box entry located just below the menu bar



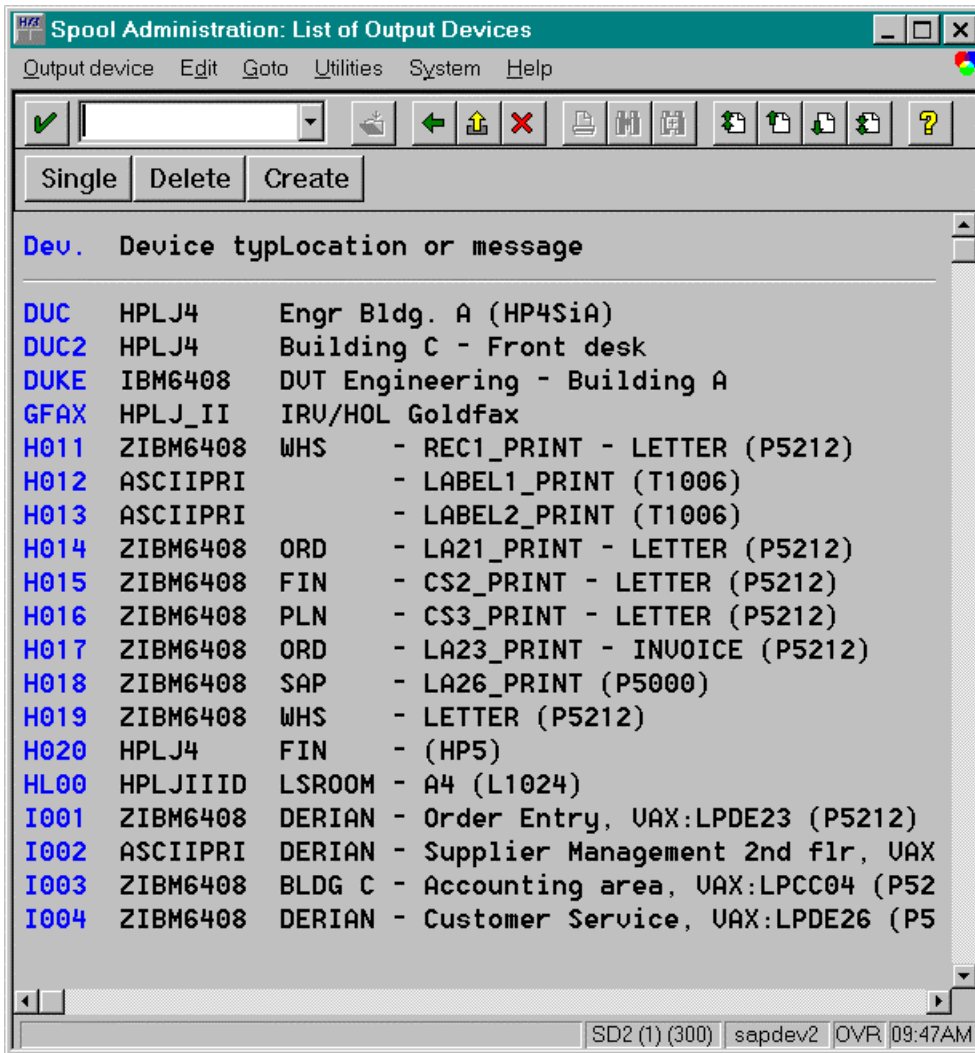
2. At the “*Spool Administration : Initial Screen*” very much like the one shown below, select the *Output devices* option and then click the  **Change** command button to define a IBM output device.



### SPAD Initial Screen

# IBM Printing Systems

- At the “*Spool Administration: List of Output Devices*” screen very much like the illustration below, click on the **Create** command button located just below the formatting toolbar, to enter the create output device screen.



**SPAD List of Output Devices Screen**

# IBM Printing Systems

- Next, at the “*Spool Administration: Create Output Device*” screen shown below, two fields on this screen are the most important for you to create the printer as an output device in SAP: (1) **Output device** field, which names the printer within the SAP system and (2) **Device type** field, which specifies the internal SAP driver and other properties of the printer within the SAP system. Key in four alphanumeric characters in the **Output device** text box entry field. Next, click anywhere on the text entry box of the **Device type** field to get a list of available device types. Select *ZIBM64XX IBM LP+ emulation 1.00A* device type from the pick list. *ZIBM64XX* should be displayed inside the **Device type** text entry box. For other fields listed below:

**Spool Server:** The name of the SAP Spooler Server.

**Host:** The host operating system where the SAP Spooler Server is configured and installed.

**Host Printer:** The name of the printer where it is defined in the host operating system.

**Device class:** do not change.

**Access method:** Enter the following entries depending on the access method (connection method) between the SAP Server Spooler and the host operating system spool.

**LPQ format:** Enter *B* in the entry text box.

**Location:** Administrative information field to describe the physically location of the printer.

**Message:** Administrative information field for SAP administrator to display the message to users.

Consult the on-line help *BC Printing Guide* in SAP R/3 system for a complete description of each field and what options are available for it.

# IBM Printing Systems

Spool Administration: Create Output Device

Output device Edit Goto Utilities System Help

Next screen

Output device **PNTX**

Device type

Spool server Host

Host printer

Device class Printer

Access method L Print locally via LP/LPR with signal

LPQ format

Location Building A Front Desk


Message

SAP title page

Lock printer in R/3 System

SD2 (1) (300) sapdev2 OVR 10:55AM

## SPAD Create Output Device Screen

5. When all the fields are correctly enter with appropriate entries, save the output device definition by selecting from the menu bar *Output device* → *Save*. A shorter way to save is to click on the save button  on the formatting toolbar just below the menu bar of the “*Spool Administration: Create Output Device*” screen.
6. The “*Spool Administration: List of Output Devices*” screen now displays a list the output devices for the SAP R/3 system. Scroll up or down to find the output device that has just been named in the ***Output device*** field along with the text description of where the printer is located entered in the ***Location*** field of the “*Spool Administration: Create Output Device*” screen.


The IBM 64XX printer should now be ready for SAP document printing.

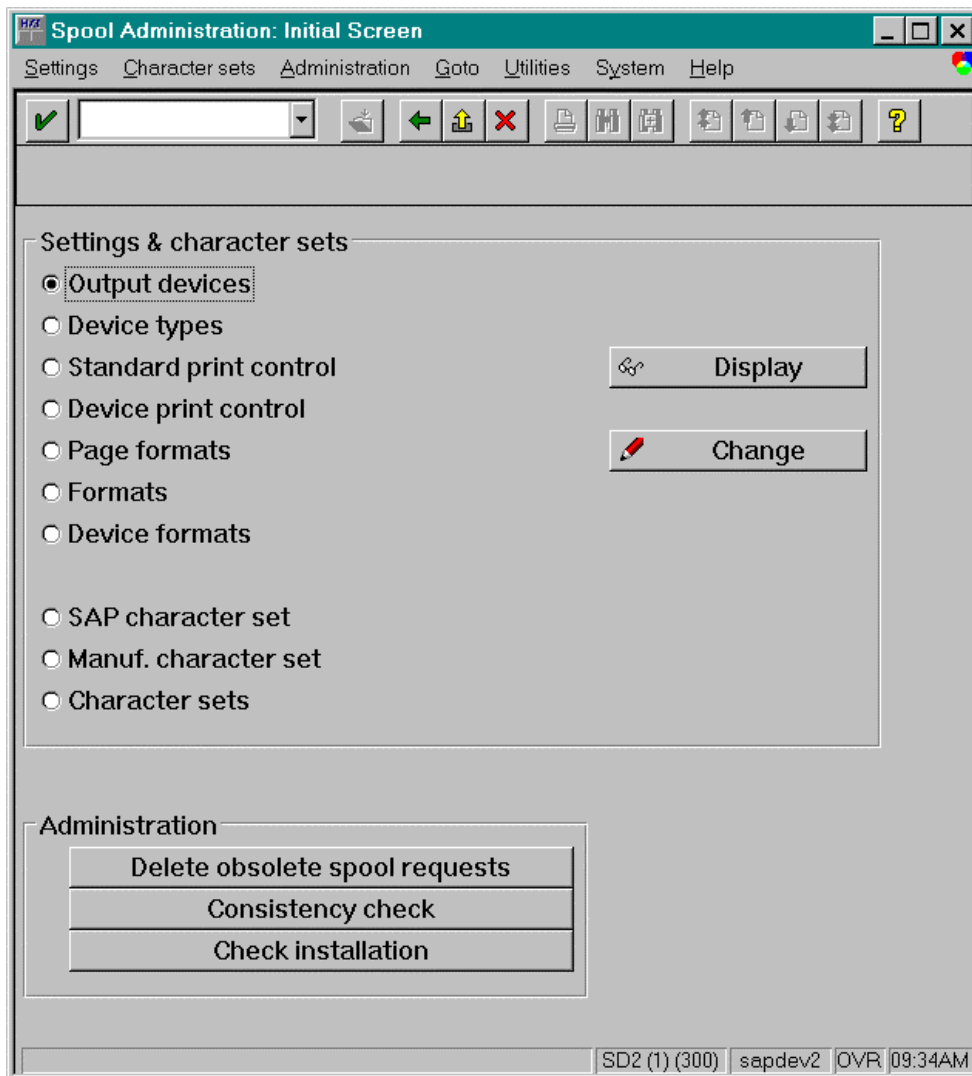
# IBM Printing Systems

## Reassign an existing “Output Device” in SAP for the IBM 64XX printer

1. From the current active SAP R/3 system window enter the “ *System Administration: Initial Screen*” screen by keying in */nSPAD* at the command line text box entry located just below the menu bar.



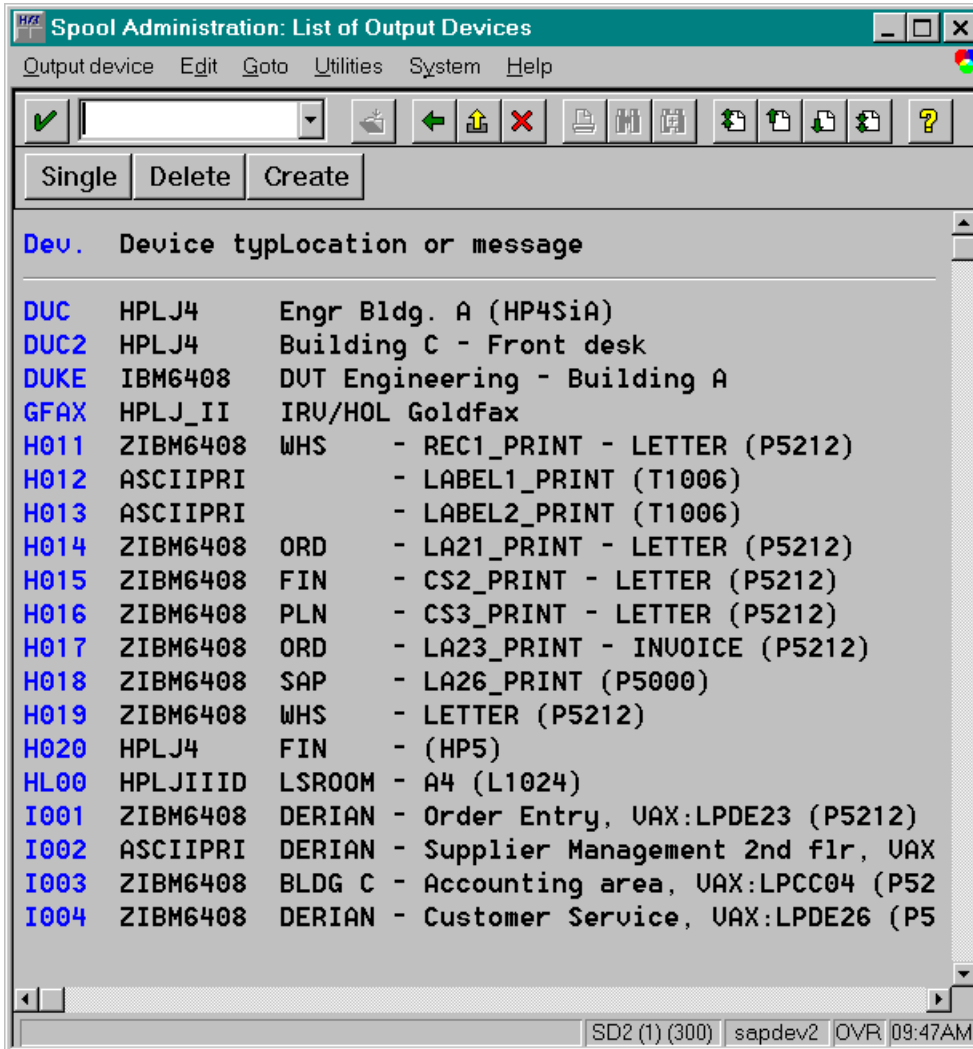
2. At the “ *Spool Administration : Initial Screen*” very much like the one shown below, select the **Output devices** option and then click the  **Change** command button to continue.



### SPAD Initial Screen

# IBM Printing Systems

3. At the “*Spool Administration: List of Output Devices*” screen shown below, double-click on the desired output device from the list of output devices.



**SPAD List of Output Devices Screen**

# IBM Printing Systems

4. At the “*Spool Administration: Change Output Device*” screen very much like the illustration below, click anywhere on the text entry box of the **Device type** field to get a list of available device types. Select *ZIBM64XX IBM LP+ emulation 1.00A* device type from the pick list. *ZIBM64XX* should be displayed inside the **Device type** text entry box. Note that the name displayed inside the **Output device** text box represents the output device name that you have selected in the previous screen. For other entries listed below:

**Spool Server:** The name of the SAP Spooler Server.

**Host:** The host operating system where the SAP Spooler Server is configured and installed.

**Host Printer:** The name of the printer where it is defined in the host operating system.

**Device class:** do not change.

**Access method:** Enter the following entries depending on the access method (connection method) between the SAP Server Spooler and the host operating system spool.

**LPQ format:** Enter *B* in the entry text box.

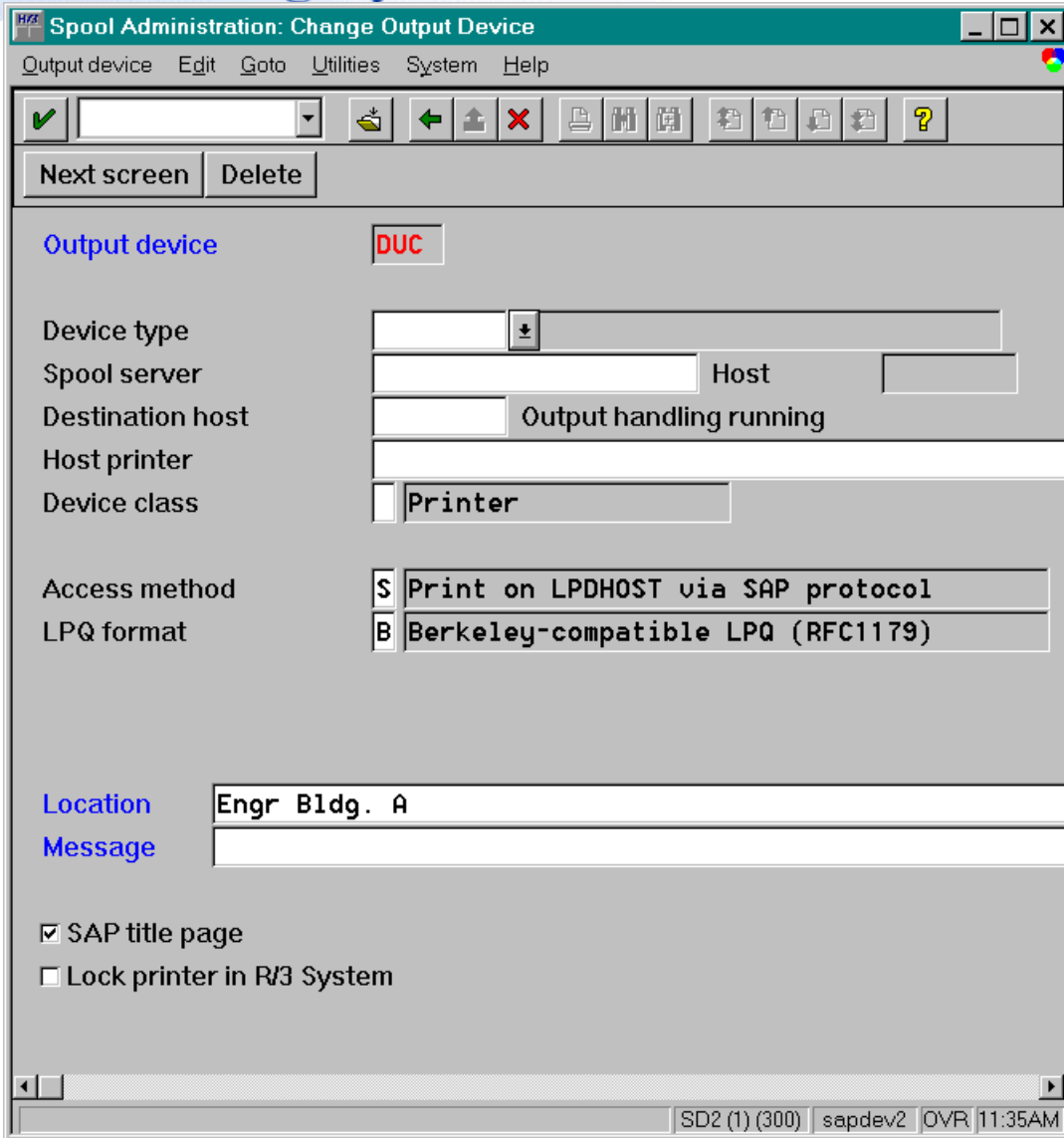
**Location:** Administrative information field to describe the physically location of the printer.

**Message:** Administrative information field for SAP administrator to display the message to users.


Consult the on-line help *BC Printing Guide* in SAP R/3 system for a complete description of each field and what options are available for it.



# IBM Printing Systems





## SPAD Change Output Device Screen

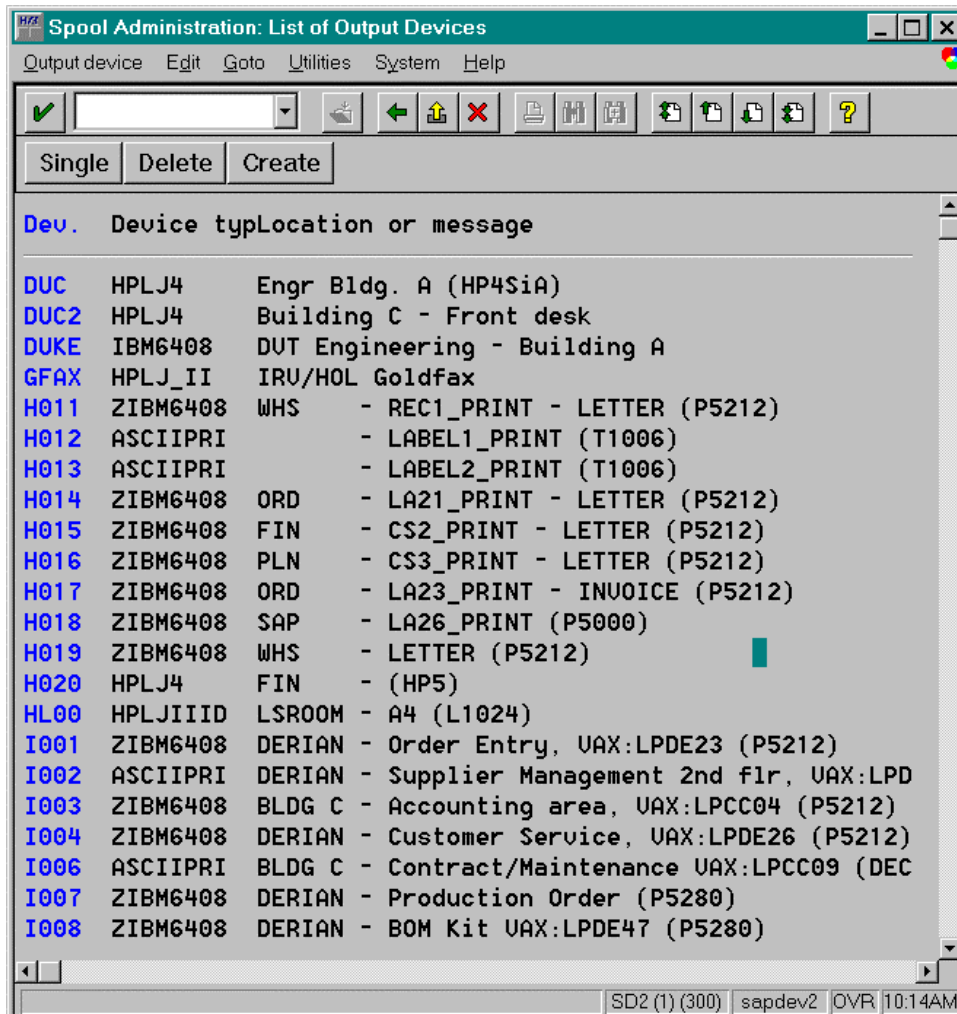
5. When all the fields are correctly enter with appropriate entries, save the output device definition by selecting from the menu bar *Output device* → *Save*. A shorter way to save is to click on the save button  on the formatting toolbar just below the menu bar of the “*Spool Administration: Change Output Device*” screen.
6. The “*Spool Administration: List of Output Devices*” screen now displays a list the output devices for the SAP R/3 system. One of which is the one you have just modified to use the *ZIBM64XX* device type.

The IBM 64XX printer should now be ready for SAP document printing.

# IBM Printing Systems


## Test the installed IBM ZIBM64XX DEVICE TYPE

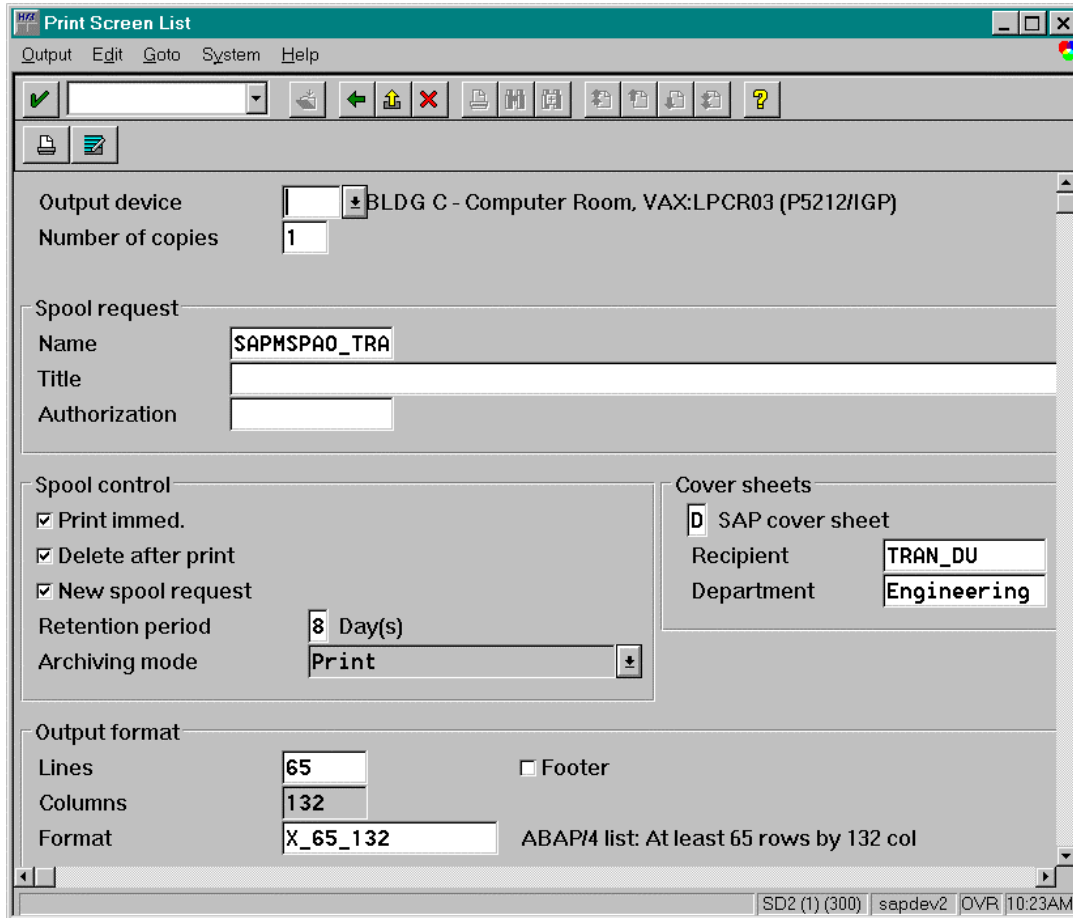
1. To test the newly installed IBM printer and the new ZIBM64XX Device Type in SAP R/3 System, many SAP transactions generate and display results in a list format at the current window. At any given screen, a print option can be selected to print the current list to the desired printer. To accomplish this, first, key in */nSPAD*  in the command text entry box located just below the menu bar of the current active window of SAP R/3 system. Next select  **Output devices** then click on the  **Display** command button. A list of available output device types will be displayed. The screen should look very much like the illustration below.



SPAD List of Output Devices Screen

# IBM Printing Systems

- Next select from the menu bar *Output device* → *Print this list*, a “Print Screen List” screen similar to the one shown below will be displayed. Key in the name for the *Output device* field which has been defined earlier in section “Using the IBM ZIBM64XX DEVICE TYPE” of this document. Check the *Print immed* and the *Delete after print* under the *Spool Control* area of the *Print Screen List*. Next click on the  command button to print.



**Print Screen List**

Output device: BLDG C - Computer Room, VAX:LPCR03 (P5212/IGP)  
Number of copies: 1

Spool request  
Name: SAPMSPA0\_TRA  
Title:   
Authorization:

Spool control  
 Print immed.  
 Delete after print  
 New spool request  
Retention period: 8 Day(s)  
Archiving mode: Print

Cover sheets  
 SAP cover sheet  
Recipient: TRAN\_DU  
Department: Engineering

Output format  
Lines: 65  
Columns: 132  
Format: X\_65\_132  
 Footer  
ABAP/4 list: At least 65 rows by 132 col

SD2 (1) (300) | sapdev2 | OVR | 10:23AM

## Print Screen List

- If there is no output from the printer, check to make sure that the printer is properly connected and able to print non-SAP applications from the host system where the printer is connected. Otherwise contact your SAP administrator for support.