

AS/400 PrintSuite



# SAP R/3 Advanced Function Printing: Printing on the AS/400



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### Second Edition (May 1998)

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## Chapter 1. Preface

Volume printing is essential for SAP R/3 users who print large amounts of data. This publication describes how to use Advanced Function Presentation (AFP) printers for volume printing AFP data from SAP® R/3®.

SAP R/3 has become a popular choice for medium to large companies that require an integrated software product to provide basic business automation. The R/3 client/server application provides businesses a series of integrated modules that span the major functions of manufacturing, finance, sales, distribution, and human resources. Each module accesses the processes of over 1000 different businesses and each process is based upon industry best practices.<sup>1</sup>

The Version 4 Release 3 SAP R/3 AFP PrintSuite feature provides OS/400 users the **CVTPRTDTA** or **Convert Print Data** command to enable them to use AFP high-speed printers. The **CVTPRTDTA** command provides a direct transform of SAP R/3 print data into AFP's native MO:DCA-P data stream. This MO:DCA-P data stream contains text records that you can print using fonts.

This publication is intended for the system administrator who must:

- Check system prerequisites for using the **CVTPRTDTA** command
- Install the **CVTPRTDTA** command
- Install the fonts needed to print data
- Define an AFP printer to SAP R/3
- Maintain the **CVTPRTDTA** command configuration files
- Install the appropriate R/3 printer device types
- Define AFP resources to SAP R/3
- Print Output Text Format (OTF) and ABAP files from SAP R/3 on printers driven by PSF/400

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1. from Nancy Bancroft's *Implementing SAP R/3*, Greenwich: Manning Publications Company, Inc., 1996, p. 5.



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## Chapter 2. System Requirements for Installing the CVTPRTDTA Command

This section describes the steps required to prepare the R/3 system and OS/400 to use the **CVTPRTDTA** command:

- R/3 requirements for the **CVTPRTDTA** command
- Supported printers
- Installing the **CVTPRTDTA** command and required fonts

---

### R/3 Requirements for the CVTPRTDTA Command

The **CVTPRTDTA** command requires an R/3 spool exit. SAP R/3 provides this spool exit on Version 3.0C GA and all subsequent releases. If your R/3 installation is not at this level, contact your systems support group to install the version of R/3 that supports the spool exit.

This documentation applies to SAP R/3 Version 3. If you are running SAP R/3 Version 4, refer to online documentation found on the AS/400 PrintSuite topic of the IBM Printing Systems Company homepage through the **software solutions** path.

SAP R/3 requires a Version 3 Release 6 Modification 0 OS/400 operating system and all subsequent releases running on a RISC processor.

PSF/400 (feature 5102 of product 5716SS1) is required to print the data that is generated by the **CVTPRTDTA** command.

Note that SAP R/3 procedures and documentation may change after the publication of this manual, resulting in different interface paths and other fields. Please refer to SAP R/3 documentation for the correct procedures and field names for your installed R/3 version and release.

---

### Supported Printers

The following topics describe the printers you can use to print output with the **CVTPRTDTA** command.

#### What Printers Are Supported for CVTPRTDTA with OS/400?

The **CVTPRTDTA** command of the SAP to AFP feature in PrintSuite/400 for Version 4 Release 3, enables you to print files containing OTF and ABAP report listings directly from SAP R/3 to an AFP printer. You can print output from the **CVTPRTDTA** command on any AFP printer supported by OS/400. For a complete list of the printers supported and detailed information about their attachment possibilities on the AS/400, refer to *AS/400 Guide to Advanced Function Presentation and Print Services Facility*, (S544-5319).

## What Bar Codes Are Supported for CVTPRTDTA with OS/400?

Some R/3 applications require that data is printed as a bar code. All the bar codes that can be specified in R/3 are printable in AFP. If OTF specifies bar code data, the **CVTPRTDTA** command converts it into Bar Code Object Content Architecture (BCOCA) data, which is understood directly as bar codes by the control unit of the AFP printer.

To print correctly, the SAP R/3 bar codes must conform to BCOCA standards. BCOCA is supported by the following printers:

- IBM 3112 Page Printer
- IBM 3116 Page Printer
- IBM 3130 Advanced Function Printer
- IBM 3160 Advanced Function Printer
- IBM 3812 Page Printer
- IBM 3816 Page Printer
- IBM 3900-0W1 Advanced Function Printer
- IBM 3900-0W3 Advanced Function Printer
- IBM 3900 Advanced Function Duplex Printing System, Models D01, D02
- IBM 3900 Advanced Function Wide Duplex Printing System, Models DW1, DW2
- IBM 3912 Page Printer
- IBM 3916 Page Printer
- IBM 3930 Page Printer
- IBM 3935 Advanced Function Printer
- IBM LaserPrinter 4028
- Network Printer 12 (NP12)
- Network Printer 17 (NP17)
- Network Printer 24 (NP24)

---

## Installing the CVTPRTDTA Command and Required Fonts

To install the **CVTPRTDTA** command, you must install PrintSuite for AS/400, SAP R/3 AFP Printing feature (program number 5798-AF3 option 4) for AS/400. To perform this task, see the *PrintSuite for AS/400* compact disk read-only memory (CD-ROM) disk.

The SAP R/3 AFP PrintSuite feature includes two types of files that you require:

- Some AFP resources, the **CVTPRTDTA** command and command processor, the message file, and product information in the **QPRRTOOL** library
- Configuration files that are installed in the **/QIBM/ProdData/PrintSuite** directory when the PrintSuite feature is installed.

To print output from the **CVTPRTDTA** command, you must install the appropriate fonts on the system from which you will print. The fonts that you need to install are found in the IBM AFP Font Collection (program number 5648113). To determine the fonts you require, see Table 1 on page 5. To avoid errors caused by missing fonts, install all the options specified for the printers that you are using.

For instructions on installing and using fonts with OS/400, see the *Installation Directory* that is provided with the IBM AFP Font Collection (program number

5648113).

Table 1. Deciding Which Fonts to Install for CVTPRTDTA

| PSF/400 Printing Tasks                          | Installation Libraries  |
|---|---|
| Printing OTF and ABAP files on 240-pel printers | QFNTCDEPAG Library<br>QFNT240LA1 Library<br>QFNTCF_LA1 Library<br>QFNT240BM Library<br>QFNT240OCR Library                       |
| Printing OTF and ABAP files on 300-pel printers | QFNT300CPL Library<br>QFNTCDEPAG Library<br>QFNT300LA1 Library<br>QFNTCF_LA1 Library<br>QFNT300BM Library<br>QFNT300OCR Library |

In order to use the fonts, these libraries must be included in the library list of the **CVTPRTDTA** command user. If the **CVTPRTDTA** command is used through the R/3 spool exit, you must create a **CL** program called **QGPL/R3STRUP** (see “Using a Startup Program to Add Resource Libraries”). This program must execute the **ADDLIBLE** command for each font library that you intend to use. If you omit the **ADDLIBLE** command for a particular font library, PSF/400 makes font substitutions at print time, causing you to receive incorrect output.

---

## Using a Startup Program to Add Resource Libraries

To ensure that your files print with the correct AFP resources, you must either modify your existing program (**QGPL/R3STRUP**) or create a program called **QGPL/R3STRUP** that does the following:

- Add library list entries for the following resource libraries:
  - fonts
  - form definitions
  - page definitions
  - page segments
  - overlays

For a sample **QGPL/R3STRUP** program, see Figure 1 on page 6.

```

Columns . . . :   1 71           Browse           QGPL/QCLSRC
SEU==>                               R3STRUP
FMT **.+. . . 1 ...+. . . 2 ...+. . . 3 ...+. . . 4 ...+. . . 5 ...+. . . 6 ...+. . . 7
***** Beginning of data *****
0001.00 PGM
0002.00     MONMSG     MSGID(CPF2103)
0003.00     ADDLIBLE   LIB(QPRTT00L)
0004.00     ADDLIBLE   LIB(QFNT300BM)
0005.00     ADDLIBLE   LIB(QFNT240BM)
0006.00     ADDLIBLE   LIB(QFNT300CPL)
0007.00     ADDLIBLE   LIB(QFNT300LA1)
0008.00     ADDLIBLE   LIB(QFNT240LA1)
0009.00     ADDLIBLE   LIB[QFNT300OCR]
0010.00     ADDLIBLE   LIB(QFNT240OCR)
0011.00     ADDLIBLE   LIB(QFNTCF_LA1)
0012.00     ADDLIBLE   LIB(QFNTCDEPAG)
0013.00 ENDPGM
***** End of data *****

```

Figure 1. R3STRUP Program Example

**Notes:**

1. Include the **ADDLIBLE CL** command for each AFP resource library that you need, such as the font libraries that you install from Table 1 on page 5. AFP resource libraries are the repositories for page overlays, form definitions, page definitions, page segments, and fonts.
  2. Include the **ADDLIBLE** command for the **QPRTT00L** library to process the **CVTPRTDTA** command and access SAP R/3 **CVTPRTDTA** message files.
  3. If you are running SAP R/3 Version 3.0E or higher, you must update the start profile of the instance where you want the **QGPL/R3STRUP** program to run. For example, if you have an R/3 System named E30 with instance number 00 and you want to add a list of libraries to the library list of the work process, the start profile, which would be named either **/usr/sap/E30/SYS/profile/START\_DVEBMGS00** or **/usr/sap/E30/SYS/profile/START\_D00**, must contain the following line:
 

```
Execute_nn=immediate CALL QGPL/R3STRUP
```

 where *nn* represents the next number available in the start profile.
- For more information, consult OSS note 71936.



---

## Chapter 3. Configuring SAP R/3 and OS/400

This section describes the steps required to prepare the R/3 system and OS/400 to use the **CVTPRTDTA** command:

- What is access method **Z**?
- Creating a printer under the R/3 application

---

### What Is Access Method **Z**?

SAP R/3 provides the **Z** Access Method to pass print files and print option parameters to the **CVTPRTDTA** command. Both OTF and ABAP list files can be printed using the **Z** Access Method. When you print a file using the **Z** Access Method, SAP R/3 puts a collection of print option parameters with the print data. Of these, the **CVTPRTDTA** command uses only five print option parameters.

### Print Option Parameters In The Input File That Are Used By **CVTPRTDTA**

When you print a file using the **Z** Access Method, R/3 puts a collection of parameters with the print data. Only the following five print option parameters are used by the **CVTPRTDTA** command:

|                   |   |
|-------------------|---|
| <b>*CODEPAGE=</b> | Specifies the code page used for formatting the output.<br><br>You must define this name in the <b>xxxxyyyy.tab</b> configuration file, where <b>xxxxyyyy</b> represents the code page used in printing.  |
| <b>*FORMAT=</b>   | Specifies a data format of either OTF or LIST.  |
| <b>*PRNAME=</b>   | Specifies the 1 to 4-character name of the OS/400 output queue.   |
| <b>*PJCOPIES=</b> | Specifies the number of copies for this print job.  |
| <b>*PJPAPER=</b>  | Specifies the name of the formatting (paper type).<br><br>For OTF data, only paper types starting with <b>Z</b> are mapped to user-specific form definitions. For paper types beginning with <b>Z</b> , characters two through seven are appended with <b>F1</b> to identify the form definition that PSF/400 uses to print the output. For example, a paper type of <b>ZABCDE</b> for an OTF file would result in the job being spooled using form definition <b>F1ABCDE</b> . For paper types that begin with characters other than <b>Z</b> , the <b>CVTPRTDTA</b> command uses the printer default form definition ( <b>*DEV D</b> ) to spool the OTF file. |

**Note:** This form definition must be in the library list of the job that is spooling the output as described in “Using a Startup Program to Add Resource Libraries” on page 5. Any **PJPAPER** parameter values that begin with a

character other than **Z** spool OTF output using the printer default form definition.

For ABAP list format data, the **CVTPRTDTA** command maps the **PJPAPER** parameter to an entry in the **/QIBM/UserData/PrintSuite/pagedef.tab** or the **/QIBM/ProdData/PrintSuite/pagedef.tab** configuration file. From this configuration file, the **CVTPRTDTA** command uses the name of a page definition and a form definition to use when spooling the print request.

## Activating Access Method Z

To activate the **Z** Access Method, use the following procedure:

**Note:** This step has to be executed only once.

1. Select the **Reporting** pull-down menu by:  
*System-> Services-> Reporting*  
or take the short path by using the **/nSA38** ok-Code-field.
2. From the **ABAP/4: Execute Program** panel, specify **RSPO0049** for the **Program** field.
3. Press the **Execute** push button one time and SAP R/3 saves the **RSPO0049** value.

This process makes the **Z** Access method available on R/3.

---

## Creating an SAP R/3 AFP Output Device

To define a SAP R/3 AFP printer, you must define a printer name and connect it with a device type. To perform this task, use the following procedure:

1. From the R/3 main menu,
  - a. Select the **System Administration** menu screen by selecting:  
*Tools-> Administration*
  - b. Select the **Spool Administration** menu screen by selecting:  
*Spool-> Spool Administration*

or type

**/nSPAD** ok-Code-field.

This step produces a list of all spool-related menus.

2. Select the **Output devices** field and click the **Change** push button to get to the **Spool Administration: List of Output Devices** panel.
3. From the **Spool Administration: List of Output Devices** panel, create an entry for the new output device by selecting **Create**.
4. From the **Spool Administration: Create Output Device** panel, specify the following:
  - a. In the **Output device** field, the four-character R/3 AFP printer to be created. You must begin this device name with a **Z**
  - b. In the **Device type** field, type **IBMEFP** for a 240-pel printer or **IBMEFP3** for a 300-pel printer.
  - c. In the **Host printer** field, specify an OS/400 output queue name, such as PRT01. This value specifies the output queue on the OS/400 operating

system. This value is used for **OUTQ(\*OBJ)** parameter of the **CVTPRTDTA** command when printing with the **Z** Access Method.

- d. In the **Access method** field, specify the access method (**Z**) from the pull down menu, and click on the check icon box. If you are modifying an existing SAP R/3 AFP output device, the system displays the **Spool Admin.: Back** panel with the accompanying message that asks whether or not you want to save the value first.  
If the **Z** Access Method is not located there, repeat the process described in “Activating Access Method Z” on page 8.
- e. Select the **SAVE** folder icon at the top of this panel before exiting both the panel and the interface.



---

## Chapter 4. Printing from SAP R/3 Using the CVTPRTDTA Command

This section describes how you can spool data for AFP printers using the **CVTPRTDTA** command from R/3. It describes how you can customize printing for both OTF and ABAP output data streams:

- Using the **CVTPRTDTA** command
- Using AFP resources in an R/3 environment
- Printing output text data
- Printing ABAP data

---

### Using The CVTPRTDTA Command

The following describes the **CVTPRTDTA** command.

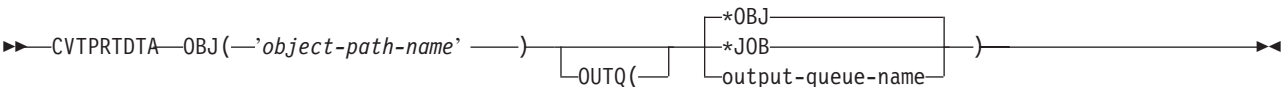
#### Description

The Convert Print Data (CVTPRTDTA) command converts an Integrated File System (IFS) stream file containing print data generated by R/3 and stores the converted data in a spooled file. The spooled file can then be printed on a printer configured to support Advanced Function Printing ("AFP(\*YES)" specified on the printer device description).

The **CVTPRTDTA** command is invoked automatically by R/3 when printing with access method **Z**. The output is spooled to the output queue in the SAP R/3 AFP output device. After the spooled file has been generated, the IFS stream file is unlinked.

dgroup opt.

Job: B,I Pgm: B,I REXX: B,I Exec



#### Restrictions

The following restrictions apply to the **CVTPRTDTA** command:

- The SAP R/3 AFP PrintSuite feature (program number 5798-AF3, option 4) is required to use this command.
- R/3 provides support to edit and display the configuration files shipped with the Convert Print Data feature.
- To submit this command, you must have both object management authority for the object to be spooled and add authority to the output queue specified. Execute authority is required for all path prefixes.
- Only objects that are a byte stream file type will be spooled.

## Parameter Description

### OBJ

Specifies the path name of the stream file that contains the R/3 source. The source object will be unlinked upon successful completion of the command.

*object-path-name*

The SAP R/3 source file is in the object specified. The path name may either be a simple name or qualified with the name of a directory in which PSF/400 stores the the object. If the name is qualified, it must be enclosed in apostrophes.

**Note:** This parameter is required.

### OUTQ

Specifies the output queue used for the spooled output.

**\*OBJ:** The output queue defined in the SAP R/3 source file (**PRNAME** print option parameter) identified in the OBJ parameter is used for the spooled output.

If you do not specify the **PRNAME** print option parameter and you do specify **\*OBJ**, the output is spooled to the defined output queue.

**\*JOB:** The output queue associated with this job is used for the spooled output.

*output-queue-name:* Specify the name and the output queue to which the output data is spooled. The library list locates the output queue.

**Note:** This parameter is not required.

## Examples.

### Example 1

This command prints direct output to a specific output queue named **PRT01**:

```
CVTPRTDTA OBJ('/mydir/otf1') OUTQ(PRT01)
```

You have specified the source to be in */mydir/otf1*. The generated spool file is directed to the PRT01 output queue, which is located through the job's library list.

### Example 2

This command uses the output queue indicated in the data stream file:

```
CVTPRTDTA OBJ('/mydir/otf1') OUTQ(*OBJ)
```

You have specified the source to be in */mydir/otf1*. The file is spooled to the output queue (which is located through the job's library list) specified in the **PRNAME** print option parameter inside the source data stream.

```

Convert Print Data (CVTPRTDTA)

Type choices, press Enter.

Object . . . . . _____
_____

Output queue . . . . . *OBJ          Name, *OBJ, *JOB

F3=Exit  F4=Prompt  F5=Refresh  F12=Cancel  F13=How to use this display
F24=More keys

```

Figure 2. Convert Print Data Display

---

## Using AFP Resources in an R/3 Environment

Printing in an R/3 application is controlled by the resources that are defined in R/3 spool administration. All resources are predefined in configuration files that consist of interconnected tables. The following sections describe the AFP resources that are defined in these configuration tables.

AFP resources provide a clear separation between data and resources. This separation enables installations to place reusable information, such as constant text or logos, into resources that are isolated from application data. The following information describes some standard AFP resources, examines their availability on the OS/400 operating system, and shows how they are predefined in SAP R/3 configuration files.

The first step in printing from SAP R/3 is to create the AFP resources that you must use to print.

### Using Form Definitions

A form definition specifies how the printer controls the processing of the physical sheets of paper. In a form definition, you can specify modifications that distinguish formatting one print job from another when both are derived from the same data.

Form definitions describe the physical medium for printing:

- Is it simplex or duplex?
- What bin does it come from?
- Does it contain an overlay?

Form definitions can be created on a OS/400 operating system (Version 3 Release 7 or higher) with the Page Printing Formatting Aid (PPFA) feature of AFP PrintSuite (either 5798AF3 or 5798AF4). For more information about creating form definitions, refer to "Print Control Objects" in *Data Stream and Object Architectures: Mixed Object Document Content Architecture Reference*, (SC31-6802).

## Using Overlays

An overlay is a collection of predefined data such as lines, shading, text, boxes, or logos that can be merged with variable data when printing on a page. Overlays can be created on an OS/400 operating system with Advanced Function Printing Utilities/400 (AFPU/400).

IBM recommends that you create new overlays with AFPU/400 and adjust SAPscript formatting to use existing overlays.

## Using Page Definitions

A page definition is a resource that defines the rules for converting line data into composed pages and text controls. If you want to use existing page definitions, restrict SAPscript formatting to an ASCII line printer and use a grid of fixed lines and print positions. Then place the variable data at the positions defined in the page definition. Because the SAP R/3 ASCII printer driver does not support channel codes, the available printing functions are limited.

---

## Printing SAP R/3 Data

SAPscript is the formatting program comparable to IBM's Document Composition Facility (DCF). SAPscript processing creates a data stream in Output Text Format (OTF) that contains records with the print options, fixed text, and variable data placed on the page by a particular printer. OTF is used in most of the commercial applications that comprise R/3, such as invoices, bills, reminders, and paychecks. Usually, OTF uses typographic fonts such as Times Roman or Helvetica.

The **CVTPRTDTA** command converts OTF into an AFP data stream. OTF is SAP's spooler data format for word processing. In addition, **CVTPRTDTA** transforms the traditional ABAP listing format into line data.

The following examines the two features of printing OTF through the **CVTPRTDTA** command:

- Defining device types, page formats, and paper types
- Printing with form definitions and overlays

## Defining Device Types, Page Formats, and Paper Types

A page format contains the information about the medium, such as its size and whether the medium is landscape or portrait. A paper type contains formatting information and print controls. Although the **IBMEFP** device type does not need formatting information, SAP requires paper types to print.

**Note:** During one of the upgrades to Version 3, SAP R/3 changed the term 'paper type' to 'format type'. Both terms are used interchangeably in this manual. Refer to your SAP R/3 interface and documentation for the term that is appropriate to your enterprise.

For OTF data, only paper types starting with **Z** are mapped to user-specific form definitions. For paper types beginning with **Z**, characters two through seven are appended with **F1** to identify the form definition that PSF/400 uses to print the output. For example, a paper type of **ZABCDE** for an OTF file would result in the job being spooled using form definition **F1ABCDE**. For paper types that begin



with characters other than **Z**, the **CVTPRTDTA** command uses the printer default form definition (**\*DEV D**) to spool the file.

## Connecting a New Device Type with User-Specified Definitions

Once the device type (either **IBMEFP** or **IBMEFP3**) is connected to the existing output device that is described on “Creating an SAP R/3 AFP Output Device” on page 8 , you can connect the device type with user-specific definitions, such as the page format and the paper type (or format type). **CVTPRTDTA** maps the paper type into the name of both a form definition and a page definition either the **/QIBM/UserData/PrintSuite/pagedef.tab** or the **/QIBM/ProdData/PrintSuite/pagedef.tab** configuration file for ABAP list format data.

To define a page format:

1. From the R/3 main menu,
  - a. Select the **System Administration** menu screen by selecting:  
*Tools-> Administration*
  - b. Select the **Spool Administration** menu screen by selecting:  
*Spool-> Spool Administration*or type  
**/nSPAD** ok-Code-field.
2. From the **Spool Administration** panel, select **Page formats** and click on the **Change** push button.
3. From the **Spool Administration: List of Page Formats** panel, select a format that matches the paper loaded in your printer, such as **DINA4** with a portrait presentation mode.
4. Press the **Create using copy** or **Copy from** button.
5. From the **Spool Administration: Copy Page Format from DINA4** panel, enter the name of a new page format in the **Page format** field. The first character must begin with a **Z** and match the paper type that you will create in “Creating a Paper Type or Format Type”, which follows this topic.
6. Click on the **save folder** icon.

A page format does not have any effect on the **CVTPRTDTA** command, but a paper type does. For output devices whose device types are something other than **IBMEFP** and **IBMEFP3**, both page format and paper type provide formatting information and specific print control through the paper type. For output devices whose device types are either **IBMEFP** or **IBMEFP3**, the print controls are empty because all formatting is done in OTF.

## Creating a Paper Type or Format Type

For OTF data, only paper types (or format types) starting with **Z** are mapped to user-specific form definitions. For paper types beginning with **Z**, characters two through seven are appended with **F1** to identify the form definition that PSF/400 uses to print the output. For example, a paper type of **ZMYLOGO** for an OTF file would result in the job being spooled using form definition **F1MYLOGO**. For paper types that begin with characters other than **Z**, the **CVTPRTDTA** command uses the printer default form definition (**\*DEV D**) to spool the OTF file.

This form definition must be in the library list of the job that is spooling the output, as described in “Using a Startup Program to Add Resource Libraries” on page 5 . Any **PJPAPER** parameter values that begin with a character other than **Z** spool OTF output using the printer default form definition.

For ABAP list format data, the **CVTPRTDTA** command maps the **PJPAPER** parameter to an entry in the **/QIBM/UserData/PrintSuite/pagedef.tab** or the **/QIBM/ProdData/PrintSuite/pagedef.tab** configuration file. From this configuration file, the **CVTPRTDTA** command uses the name of a page definition and a form definition to use when spooling the print request.

Assume that you have created an overlay named **O1LTRHED** that contains your company’s logo and business address. To place the overlay on the page, you have created a form definition named **F1MYLOGO**.

To create a paper type:

1. From the R/3 main menu,
  - a. Select the **System Administration** menu screen by selecting:  
*Tools-> Administration*
  - b. Select the **Spool Administration** menu screen by selecting:  
*Spool-> Spool Administration*

or type

**/nSPAD** ok-Code-field.

This step produces a list of all spool-related menus.

2. From the **Spool Administration** panel, select either **Paper types** or **Formats** and click the **Change** push button.
3. From the **Spool Administration: List of Formats** panel, select the same format that you selected in “Connecting a New Device Type with User-Specified Definitions” on page 15. In our example, it is **DINA4** portrait.
4. Press the **Create using copy** or **Copy from** button.
5. From the **Spool Administration: Copy Format from DINA4** panel, specify:
  - a. The name of a new paper type, using a **Z** as the first character, in the **Formatting Process** field (**ZMYLOGO**)
  - b. The name of the page format you just created in “Connecting a New Device Type with User-Specified Definitions” on page 15 in the **Page format** field  
Depending upon your SAP R/3 installation, an **Information** panel may appear to inform you that the new page format has been created successfully.
6. Click on the **save folder** icon.  
Add an entry for **ZMYLOGO** referencing the form definition **F1MYLOGO** to the **/QIBM/UserData/PrintSuite/pagedef.tab** configuration file. This step makes the **ZMYLOGO** paper type available for use with your ABAP list format data.
7. From the **Spool admin: Page format** panel is displayed with the message: “Create page format Landscape?”. Select the **Yes** push button and the system displays the Information panel.

## Connecting a New Paper Type (or Format Type) with a Device Initialization (or Device Format)

To connect the new paper type or format type with a device initialization:

1. From the **Spool Administration** panel, select either **Device initialization** or **Device Formats** and click on the **Change** push button.
2. From the **Spool Administration: Choose Format for Device Type** panel, type:
  - a. The name of the device type (either **IBMEFP** or **IBMEFP3**) in the **Device type** field.
  - b. The name of the paper type that you created in “Creating a Paper Type or Format Type” on page 15 (**ZMYLOGO**) in the **Format** or **Formatting Process** field.
3. Select **Execute**.

This produces a list of all device initialization parameters.
4. From the **Spool Administration: Maintain Format for Device Type** panel:
  - a. Select **Copy format**.
  - b. Type the name of an existing AFP device type (either **IBMEFP** or **IBMEFP3**) into the **Fr. Device type** field.
  - c. Type the name of a paper type (**DINA4**, for example) in the **Formatting process** field.
  - d. Click on the **Copy reference** or **Copy from** push button.
  - e. Click on the **save folder** icon.

Now you have made all the necessary definitions and connections to print with a page definition and a form definition.

## Printing with Form Definitions and Overlays

In AFP, the name of the overlay object must be contained in a form definition. Form definitions are created through a program product called Page Printer Formatting Aid (PPFA), which is available as a separately orderable feature of PrintSuite for Version 4 Release 3 of the OS/400 operating system. Also, you can create form definitions on either System/390 or AIX hosts using PPFA.

You can create overlays on AS/400 with AFPU/400.

To use a form definition from SAP R/3, you must perform two tasks:

- Test by manipulating spool requests
- Bring the overlay into production

### Testing by Manipulating Spool Requests

The following shows how to manipulate the attributes of a spool request. When you submit a print request, it is important that the spooled file not be deleted after the printing; the initial request will be handled with the normal setup routine.

1. Select the **Standard Text** menu screen by selecting:

*Tools-> Word Processing-> Standard Text*
2. Select the **Find** push button to access the **Find Standard Texts** panel.
3. From the **Find Standard Texts** panel, type **A** in the first text field and **Z** in the second text field.
4. Select the **Execute** push-button to access the standard text list.

5. From the **Find Standard Texts** panel, double-click on the file you would like to use.
6. From the **Standard Text: Request** panel, select the **Create/Change** push button.
7. From the **Change Standard text** panel, type in the text that you want to print.
8. Click on the **save folder** push button.
9. Select the green arrow push-button to back out of this panel.
10. From the **Standard Text: Request** panel, select the print push button.
11. Select the output device that you created in “Creating an SAP R/3 AFP Output Device” on page 8 for the **Output device** field.
12. On the **Output options** portion of the **Standard Text: Request** panel, select the **New Spool request** push button field.
13. Select the print push button to print the spool request.
14. After selecting **Print**, go back to the **SAP R/3** main menu to find the spool requests.
15. From the **R/3 Main Menu**,
  - Select the **System Administration** panel by selecting  
*Tools-> Administration->*
  - Select the **Spool: Requests Screen** panel by selecting  
*Spool->Output control*
 or take the short path by typing the **/nSP01** in the ok-code field.
16. Select the enter key to access the **Spool: Requests** panel.
17. The **Spool: Request** panel produces a list of all spool requests:
 

```

      Spool  Generation Output
      No.   Date Time Status Size Title
      11287 05/05/98 19:27 7 SCRIPT
      11285 05/05/98 19:10 in arb. 21 SCRIPT
      11283 05/05/98 16:85 Compl. 7 SCRIPT
      
```
18. From this list on the **Spool: Requests** panel, select your spool number and press the **Attributes** push button.  
This causes R/3 to display the attributes of the specified spool number on the **Spool: Attributes** panel.
19. From the **Spool: Attributes** panel, verify that the new output device from “Creating an SAP R/3 AFP Output Device” on page 8 is in the field of the same name and specify the paper type (or format type) created on “Creating a Paper Type or Format Type” on page 15 in the **Format** field and double-click on the value.  
  
**Note:** If your format is not listed, you must successfully run the procedures described in “Connecting a New Paper Type (or Format Type) with a Device Initialization (or Device Format)” on page 17.
20. Click on the **save folder** push-button.
21. Select the print push button to print the spool request.
22. From the **Spool: Output Requests** panel, select the print push button again.

## Bringing the Paper Type into Production

When you need to use the form definition for production printing, you must create a permanent connection between the layout set and the paper type. To accomplish this task, perform the following procedure:

1. From the **SAP R/3** main menu, select the **Layout Set Requests** panel screen by selecting:  
*Tools-> Word Processing-> Layout set*
2. Type on the layout set value that you would like to change in the available field.
3. Click on the **Create/Change** push button.
4. From the **Layout Set: Change Header** panel, update the **Page format** field with the page format that you created on “Connecting a New Device Type with User-Specified Definitions” on page 15.
5. Click on the **save folder** icon.

Now this layout set will always be printed with the paper type you have specified. For the example in this document, this layout set will be mapped into the form definition **F1MYLOGO** that calls out the overlay **OILTRHED**.

## Changing the Maximum Width of a Barcode in SAP R/3

To change the maximum width of a bar code in SAP R/3 so it will print, you must access transaction SE73, where the R/3 system defines maximum barcode width and height, and change the defaults. If you attempt to print a job that contains barcodes that are either too wide or too long, you will receive a message from the AFP printer driver, indicating that the bar code is not in the valid printable area for the printer.

To change the maximum width or height of a bar code in SAP R/3, use the following procedure:

1. From the **SAP R/3** main menu, select the **System Administration** menu screen by selecting:  
*Tools-> Administration*
2. Select the **SAPscript Font Maintenance** screen by selecting:  
*Spool-> Font Maintenance*  
or type /nSE73 in the ok-Code field.
3. From the **SAPscript Font Maintenance: Initial** screen, select the Change System Bar Codes option.
4. From the **SAPscript Font Maintenance: Change System Bar Codes** screen,  
Single click on the bar code name.  
Select the **Change** push button.
5. From the **SAPscript Font Maintenance: Create/Change System Barcodes** screen, change either bar code width or height to work correctly with your application.
6. Select the **Continue** push button.  
An informational message indicates that the table entry was included in the task.
7. Respool your bar code document.

---

## Printing ABAP List Data

ABAP is a classical computer listing that contains fixed characters, line positions, and fixed fonts, such as Courier. R/3 uses this format whenever you request a report. Some R/3 applications use report printing for outputting forms.

The following information describes features of printing with ABAP list format with the **CVTPRTDTA** command:

- Naming a paper type
- Printing reports

### Naming a Paper Type

For ABAP list format data, the **CVTPRTDTA** command determines a page definition or a form definition by looking for the paper type in the configuration file for a match. Some paper types provided by SAP already have an entry in the **/QIBM/ProdData/PrintSuite/pagedef.tab** configuration file. To add to or modify these entries, copy this file into the **/QIBM/UserData/PrintSuite/pagedef.tab** configuration file.

If **CVTPRTDTA** finds a match, it reads the form definition and page definition from that entry. The line data that the **CVTPRTDTA** command creates is transformed into MO:DCA-P, using the page definition. Then, the MO:DCA-P file is printed using the form definition in the **/QIBM/UserData/PrintSuite/pagedef.tab** configuration file or the **/QIBM/ProdData/PrintSuite/pagedef.tab** configuration file. If the configuration file contains no entry, OS/400 fails the command. To create a paper type, see “Creating a Paper Type or Format Type” on page 15.

### Printing Reports

ABAP reports are the second data format that the **CVTPRTDTA** command can process. In this case, you need to format the data through the paper type. All paper types are mapped to appropriate form definitions and page definitions through the **/QIBM/UserData/PrintSuite/pagedef.tab** and the **/QIBM/ProdData/PrintSuite/pagedef.tab** configuration files.

To create your own formatting on a report, you must provide a specific paper type that begins with **Z** and must have made a matching entry in the **/QIBM/UserData/PrintSuite/pagedef.tab**.

To view your own format in SAP, refer to the **Spool Administration: List of Formats** panel.

---

## Chapter 5. CVTPRTDTA Command Configuration Files

This section consists of examples for the following configuration files that are required for the **CVTPRTDTA** command:

- **barcode.tab**
- **defcp.tab**
- **xxxxyyyy.tab**
- **fonts.tab**
- **pagedef.tab**

### Notes:

1. All tables can contain comments (starting with // in column 1) and empty lines. These lines are ignored by the **CVTPRTDTA** command.
2. All table entries are case sensitive.
3. Master tables are provided in the **/QIBM/ProdData/PrintSuite** directory. To add to or modify these entries, copy the **/QIBM/ProdData/PrintSuite** files into the **/QIBM/UserData/PrintSuite** directory.

**Note:** Edit files only in the **UserData** directory. Versions of these tables that you have modified should be kept in the **/QIBM/UserData/PrintSuite** directory to avoid being overwritten if the configuration files are reloaded.

4. The ability to edit and display these files is part of the support available under AS/400 R/3. Use the command **QGPTOOLS/EDTF** to edit configuration files in the **/QIBM/UserData/PrintSuite** directory.
5. R/3 on the AS/400 operating system produces EBCDIC data, which is needed for the transform to the AFP data stream. Therefore, the code page tables (**defcp.tab**, and **xxxxyyyy.tab**) perform a one-to-one mapping in the AS/400 environment.

**Note:** The fonts **OCR-A** and **OCR-B** are passed to the **CVTPRTDTA** command in ASCII format. All ASCII to EBCDIC entries must appear in either the **40010000.tab** table for **OCR-A** or in the **40040000.tab** table for **OCR-B**.

---

### barcode.tab

This table describes the bar code mappings. SAP R/3 calls bar codes by names that must be mapped into the matching bar code types and modes that are available with BCOCA. The **CVTPRTDTA** command can accommodate 32 entries in this table.

To change the bar code lengths and widths for printing on SAP R/3, see “Changing the Maximum Width of a Barcode in SAP R/3” on page 19.

**barcode.tab** uses the following keyword-value pairs:

|                |  |
|----------------|--|
| <b>BarCode</b> | Specifies the OTF bar code names ( <b>SAPBARCODE</b> parameter of the <b>BC</b> OTF command). The maximum length of this field is 8 bytes; it can contain any value. |
|----------------|--|



|             |   |
|-------------|---|
| <b>Type</b> | Specifies the BCOCA bar code type as defined in the <i>Bar Code Content Object Content Architecture Reference</i> for the <b>Type</b> field of the <b>Barcode Symbol Descriptor</b> MO:DCA-P data structure. The content is numeric and is not validated until the spooled file is active to a writer. For the <b>Type</b> values that are currently supported, see Table 2.          |
| <b>Mode</b> | Specifies the BCOCA bar code modifier value as defined in the <i>Bar Code Content Object Content Architecture Reference</i> for the <b>MOD</b> field of the <b>Barcode Symbol Descriptor</b> MO:DCA-P data structure. The content is numeric and is not validated until the spooled file is active to a writer. For the <b>Mode</b> values that are currently supported, see Table 2. |
| <b>Flag</b> | Controls the printing of the Human Readable Interface ( <b>HRI</b> ) character. Specify one of the following values: <ul style="list-style-type: none"> <li><b>000</b> Causes the <b>HRI</b> character to be printed</li> <li><b>128</b> Causes the <b>HRI</b> character not to be printed</li> </ul>   |

**Notes:**

1. The system administrator is responsible for the values entered in the table. Invalid values are not verified and may result in Intelligent Printer Data Stream (IPDS) errors.
2. To add to or modify these entries, copy the files into the `/QIBM/UserData/PrintSuite/barcode.tab` configuration file.

**Note:** Edit files only in the **UserData** configuration file.
3. A font named **BARCODE** must appear in the `fonts.tab` configuration file when you are printing with HRI.

Table 2. BCOCA Bar Code Modifier Codes Required for Each Bar Code

| Bar Code Type                         | Mode            |
|---------------------------------------|-----------------|
| 001 Code 39 (3-of-9 Code), AIM USS-39 | 001 and 002     |
| 002 MSI (Modified Plessey code)       | 001 through 009 |
| 003 UPC/CGPC Version A                | 000             |
| 005 UPC/CGPC Version E                | 000             |
| 006 UPC - Two-digit Supplemental      | 000             |
| 007 UPC - Five-digit Supplemental     | 000             |
| 008 EAN 8 (includes JAN-short)        | 000             |
| 009 EAN 13 (includes JAN-standard)    | 000             |
| 010 Industrial 2-of-5                 | 001 and 002     |
| 011 Matrix 2-of-5                     | 001 and 002     |
| 012 Interleaved 2-of-5, AIX USS-I 2/5 | 001 and 002     |
| 013 Codabar,2-of-7, AIX USS-Codabar   | 001 and 002     |
| 017 Codabar,2-of-7, AIX USS-Codabar   | 002             |
| 022 EAN Two-digit Supplemental        | 000             |



Table 2. BCOCA Bar Code Modifier Codes Required for Each Bar Code (continued)

| Bar Code Type                   | Mode            |
|---------------------------------|-----------------|
| 023 EAN Five-digit Supplemental | 000             |
| 026 POSTNET                     | 001 through 009 |

Figure 3 provides a sample **barcode.tab** configuration file.

```
// Barcode table

// Format : Barcode=ARTNR Type=017 Mode=002 Flag = 128

BarCode = ARTNR      Type = 017 Mode = 002 Flag = 000
BarCode = AUFNR      Type = 017 Mode = 002 Flag = 000
BarCode = BARCLVS    Type = 001 Mode = 001 Flag = 000
BarCode = KUNAUNR    Type = 017 Mode = 002 Flag = 000
BarCode = KUNAUPS    Type = 017 Mode = 002 Flag = 000
BarCode = MBBARC     Type = 017 Mode = 002 Flag = 000
BarCode = MBBARC1    Type = 008 Mode = 000 Flag = 000
BarCode = RSNUM      Type = 017 Mode = 002 Flag = 000
BarCode = RSPOS      Type = 017 Mode = 002 Flag = 000
BarCode = RUECKNR    Type = 017 Mode = 002 Flag = 000

BarCode = BC_CD39    Type = 001 Mode = 001 Flag = 128
BarCode = BC_EAN8    Type = 008 Mode = 000 Flag = 128
BarCode = BC_EAN13   Type = 009 Mode = 000 Flag = 128
BarCode = BC_I25C    Type = 012 Mode = 002 Flag = 128
BarCode = BC_I25     Type = 012 Mode = 001 Flag = 128
BarCode = BC_CD39C   Type = 001 Mode = 002 Flag = 128
BarCode = BC_MSI     Type = 002 Mode = 001 Flag = 128
BarCode = BC_MSIC    Type = 002 Mode = 002 Flag = 128
BarCode = BC_MSIC1   Type = 002 Mode = 003 Flag = 128
BarCode = BC_MSIC2   Type = 002 Mode = 005 Flag = 128
BarCode = BC_C128B   Type = 017 Mode = 002 Flag = 128

BarCode = ARTNR      Type = 017 Mode = 002 Flag = 000
BarCode = AUFNR      Type = 017 Mode = 002 Flag = 000
BarCode = BARCLVS    Type = 001 Mode = 001 Flag = 000
BarCode = KUNAUNR    Type = 017 Mode = 002 Flag = 000
BarCode = KUNAUPS    Type = 017 Mode = 002 Flag = 000
BarCode = MBBARC     Type = 017 Mode = 002 Flag = 000
BarCode = MBBARC1    Type = 008 Mode = 000 Flag = 000
BarCode = RSNUM      Type = 017 Mode = 002 Flag = 000
BarCode = RSPOS      Type = 017 Mode = 002 Flag = 000
BarCode = RUECKNR    Type = 017 Mode = 002 Flag = 000

BarCode = BC_CD39    Type = 001 Mode = 001 Flag = 128
BarCode = BC_EAN8    Type = 008 Mode = 000 Flag = 128
BarCode = BC_EAN13   Type = 009 Mode = 000 Flag = 128
BarCode = BC_I25C    Type = 012 Mode = 002 Flag = 128
BarCode = BC_I25     Type = 012 Mode = 001 Flag = 128
BarCode = BC_CD39C   Type = 001 Mode = 002 Flag = 128
BarCode = BC_MSI     Type = 002 Mode = 001 Flag = 128
BarCode = BC_MSIC    Type = 002 Mode = 002 Flag = 128
BarCode = BC_MSIC1   Type = 002 Mode = 003 Flag = 128
BarCode = BC_MSIC2   Type = 002 Mode = 005 Flag = 128
BarCode = BC_C128B   Type = 017 Mode = 002 Flag = 128
```

Figure 3. Sample **barcode.tab** Configuration File

---

## defcp.tab

Figure 4 on page 25 is the **default** conversion table for the conversion of R/3 ASCII characters into EBCDIC. The **CVTPRTDTA** command uses this table for line data conversion or if no **CP OTF** command is found and the OS/400 code page is not the same as the R/3 code page (500).

| The left column consists of the R/3 EBCDIC code, and the right column contains  
| the corresponding EBCDIC value. The values are checked for a numeric value  
| between 0 and 255. In most cases, this mapping will be one-to-one. The actual  
| mapping is provided for all cases where the EBCDIC value is unique. The vertical  
| ellipsis between certain numbers indicates where the ASCII numbers match the  
| EBCDIC numbers.

| The **CVTPRTDTA** command uses code points 000 to 010 internally to map the box  
| characters in ABAP list data into the correct code points of code page **TIDxBASE**.  
| The umlaut characters from code page 500 are also provided.

```

// Linedata CodePage
//
// Format : Ascii=Ebcdic
//
000 = 172
001 = 171
002 = 188
003 = 187
004 = 191
005 = 250
006 = 235
007 = 236
008 = 203
009 = 204
010 = 143
011 = 011
012 = 012

:
066 = 066
067 = 192
068 = 068

:
098 = 098
099 = 074
100 = 100

:
203 = 203
204 = 106
205 = 205

:
219 = 219
220 = 208

:
221 = 221

:
235 = 235
236 = 224
237 = 237

:
251 = 251
252 = 090
253 = 253
254 = 254
255 = 255

```

Figure 4. Sample defcp.tab Configuration File

---

## xxxxyyyyy.tab

The code page for the R/3 system (**00000000.tab**) contains a one-to-one mapping of R/3 EBCDIC to AS/400 EBCDIC. For **OCR-A** and **OCR-B** fonts, these tables are used for the mapping of characters of an individual SAP R/3 ASCII code page into an EBCDIC codepage.

SAP R/3 uses two kinds of code pages: Input-Code page and Output-Code page.

SAP R/3 predefines four code pages:

- 0000, code page for the R/3 system
- 0012, code page for the R/3 system
- 4001, code page for OCR-A fonts
- 4004, code page for OCR-B fonts

The file names correspond to the 4-digit value of the **INPUTCODEPAGE** and **OUTPUTCODEPAGE** parameter of the **CP OTF** command (**00000000.tab**, **40010000.tab**, and **40040000.tab**).

```
// Inp CodePage 0000
// Out CodePage 0000

// Format : Ascii=Ebcdic

000 = 000
001 = 001
002 = 002
003 = 003
004 = 004
005 = 005
006 = 006
007 = 007
008 = 008
009 = 009
010 = 010

:
245 = 245
246 = 246
247 = 247
248 = 248
249 = 249
250 = 250
251 = 251
252 = 252
253 = 253
254 = 254
255 = 255
```

Figure 5. Sample 00000000.tab Configuration File

```
// Inp CodePage 400x
// Out CodePage 0000

// Format : Ascii=Ebdcic

000 = 064
001 = 064
002 = 064
003 = 064
004 = 055
005 = 045
006 = 046
007 = 204
008 = 206
009 = 236
010 = 037
011 = 011
012 = 012
013 = 013
014 = 014
015 = 015
016 = 016
017 = 017
018 = 018
019 = 019
020 = 060
021 = 061
022 = 050
023 = 038
024 = 024
025 = 025
026 = 063
027 = 039
028 = 028
029 = 029
030 = 030
031 = 031
032 = 064
033 = 079
034 = 127
035 = 123
036 = 091
037 = 108
038 = 080
039 = 188
040 = 077
041 = 093
042 = 092
043 = 078
044 = 107
045 = 096
```

*Figure 6. Sample 400x0000.tab Configuration File: 00 - 45*

046 = 075  
047 = 097  
048 = 240  
049 = 241  
050 = 242  
051 = 243  
052 = 244  
053 = 245  
054 = 246  
055 = 247  
056 = 248  
057 = 249  
058 = 122  
059 = 094  
060 = 076  
061 = 126  
062 = 110  
063 = 111  
064 = 181  
065 = 193  
066 = 194  
067 = 195  
068 = 196  
069 = 197  
070 = 198  
071 = 199  
072 = 200  
073 = 201  
074 = 209  
075 = 210  
076 = 211  
077 = 212  
078 = 213  
079 = 214  
080 = 215  
081 = 216  
082 = 217  
083 = 226  
084 = 227  
085 = 228  
086 = 229  
087 = 230  
088 = 231  
089 = 232  
090 = 233

*Figure 7. Sample 400x0000.tab Configuration File: 46 - 90*

```
091 = 099
092 = 236
093 = 252
094 = 064
095 = 109
096 = 187
097 = 129
098 = 130
099 = 131
100 = 132
101 = 133
102 = 134
103 = 135
104 = 136
105 = 137
106 = 145
107 = 146
108 = 147
109 = 148
110 = 149
111 = 150
112 = 151
113 = 152
114 = 153
115 = 162
116 = 163
117 = 164
118 = 165
119 = 166
120 = 167
121 = 168
122 = 169
123 = 067
124 = 204
125 = 220
126 = 064
127 = 007
128 = 172
129 = 171
130 = 188
131 = 187
132 = 191
133 = 250
134 = 235
135 = 236
```

*Figure 8. Sample 400x0000.tab Configuration File: 91 - 135*

136 = 203  
137 = 204  
138 = 143  
139 = 087  
140 = 086  
141 = 088  
142 = 074  
143 = 103  
144 = 113  
145 = 156  
146 = 158  
147 = 203  
148 = 106  
149 = 205  
150 = 219  
151 = 221  
152 = 223  
153 = 224  
154 = 090  
155 = 112  
156 = 177  
157 = 128  
158 = 191  
159 = 065  
160 = 069  
161 = 170  
162 = 176  
163 = 177  
164 = 159  
165 = 178  
166 = 204  
167 = 124  
168 = 205  
169 = 180  
170 = 154  
171 = 138  
172 = 186  
173 = 170  
174 = 175  
175 = 188  
176 = 144  
177 = 143  
178 = 234  
179 = 250  
180 = 125

*Figure 9. Sample 400x0000.tab Configuration File: 136 - 180*



181 = 160  
182 = 182  
183 = 179  
184 = 065  
185 = 218  
186 = 155  
187 = 139  
188 = 183  
189 = 184  
190 = 185  
191 = 171  
192 = 100  
193 = 101  
194 = 098  
195 = 102  
196 = 074  
197 = 103  
198 = 158  
199 = 066  
200 = 116  
201 = 113  
202 = 114  
203 = 115  
204 = 120  
205 = 117  
206 = 118  
207 = 119  
208 = 172  
209 = 105  
210 = 237  
211 = 238  
212 = 235  
213 = 239  
214 = 224  
215 = 191  
216 = 239  
217 = 253  
218 = 254  
219 = 251  
220 = 090

*Figure 10. Sample 400x0000.tab Configuration File: 181 - 220*

```

221 = 173
222 = 142
223 = 161
224 = 068
225 = 069
226 = 066
227 = 070
228 = 192
229 = 071
230 = 156
231 = 072
232 = 084
233 = 081
234 = 082
235 = 083
236 = 088
237 = 085
238 = 086
239 = 087
240 = 140
241 = 073
242 = 205
243 = 206
244 = 182
245 = 207
246 = 106
247 = 225
248 = 207
249 = 221
250 = 222
251 = 219
252 = 208
253 = 141
254 = 062
255 = 223

```

Figure 11. Sample 400x0000.tab Configuration File: 221 - 255

---

## fonts.tab

This table maps the fonts used in the OTF data stream to AFP fonts. The **CVTPRTDTA** command can accommodate 2000 entries in this table.

The following font families are predefined with R/3:

- COURIER
- HELVE
- LETGOTH
- LNPRINT
- TIMES
- OCRA
- OCRB

The following parameters in the **fonts.tab** configuration file set the format of the fonts you use to print with R/3:

|                    |   |
|--------------------|---|
| <b>DefCodePage</b> | Default code page if no <b>FC</b> OTF command is given or if the requested font is not found in the <b>fonts.tab</b> table. |
|--------------------|---|

|                   |   |
|-------------------|---|
| <b>DefCharSet</b> | Default character set used if no <b>FC OTF</b> command is given or if the requested font is not found in the <b>fonts.tab</b> table.  |
| <b>Font</b>       | Describes the font family ( <b>FONTFAMILY</b> parameter of the <b>FC OTF</b> command). Maximum size is 8 bytes, and content is not verified.  |
| <b>Size</b>       | Gives the font size in 1/10 of a point ( <b>FONT SIZE</b> parameter of the <b>FC OTF</b> command). The value must be numeric and is not verified.   |
| <b>Type</b>       | Defines the font type ( <b>BOLD</b> and <b>ITALIC</b> parameter of the <b>FC OTF</b> command). Type=0 is Normal, Type=1 is Italic, Type=2 is Bold, and Type=3 is Bold and Italic. Any other value is invalid. |
| <b>CodePage</b>   | Specifies the code page and requires a valid AFP code page name (8 bytes). The value is not verified. An invalid name might result in an IPDS error message.  |
| <b>CharSet</b>    | Specifies the AFP character set name. The content is not verified.  |

**Notes:**

1. A font named **BARCODE** must be defined for the **HRI** character of a bar code.
2. If no matching font is found (the *Font*, *Size* and *Type* combination), the **CVTPRTDTA** command uses the code page and charset from the **DefCodePage** and **DefCharSet** keywords and displays a warning message.

The device types **IBMEFP** and **IBMEFP3** support the three font families: Courier, Helvetica, and Times. These font families are also supported as IBM Expanded Core Fonts. ISO 8859-1 (Latin-1) is the default code page supported by SAP R/3. This code page is mapped in the **fonts.tab** initialization table of the **CVTPRTDTA** command into the International **T1V10500** code page. This code page must be modified for Non-Latin-1 R/3 installations.

Use the font Letter Gothic Latin1 from the coordinated font family for ABAP listings. If an installation does not want to install the coordinated font family and plans to use the traditional Gothic text fonts found within the IBM Compatibility fonts, the installation can adjust the font names in the **pagedef.tab** configuration file.

The following is an example of the **fonts.tab** configuration file.

```

// Fonts table

// Format : Font=COURIER Size=070 Type=0 CodePage=T1V10500 CharSet=C0420070
//          DefCodePage = T1V10500
//          DefCharSet   = C0420000

DefCodePage = T1V10500
DefCharSet  = C0420000

// Courier
Font=COURIER Size=070 Type=0 CodePage=T1V10500 CharSet=C0420070
Font=COURIER Size=070 Type=1 CodePage=T1V10500 CharSet=C0430070
Font=COURIER Size=070 Type=2 CodePage=T1V10500 CharSet=C0440070
Font=COURIER Size=070 Type=3 CodePage=T1V10500 CharSet=C0450070
Font=COURIER Size=080 Type=0 CodePage=T1V10500 CharSet=C0420080
Font=COURIER Size=080 Type=1 CodePage=T1V10500 CharSet=C0430080
Font=COURIER Size=080 Type=2 CodePage=T1V10500 CharSet=C0440080
Font=COURIER Size=080 Type=3 CodePage=T1V10500 CharSet=C0450080
Font=COURIER Size=100 Type=0 CodePage=T1V10500 CharSet=C0420000
Font=COURIER Size=100 Type=1 CodePage=T1V10500 CharSet=C0430000
Font=COURIER Size=100 Type=2 CodePage=T1V10500 CharSet=C0440000
Font=COURIER Size=100 Type=3 CodePage=T1V10500 CharSet=C0450000
Font=COURIER Size=120 Type=0 CodePage=T1V10500 CharSet=C04200B0
Font=COURIER Size=120 Type=1 CodePage=T1V10500 CharSet=C04300B0
Font=COURIER Size=120 Type=2 CodePage=T1V10500 CharSet=C04400B0
Font=COURIER Size=120 Type=3 CodePage=T1V10500 CharSet=C04500B0
Font=COURIER Size=140 Type=0 CodePage=T1V10500 CharSet=C04200D0
Font=COURIER Size=140 Type=1 CodePage=T1V10500 CharSet=C04300D0
Font=COURIER Size=140 Type=2 CodePage=T1V10500 CharSet=C04400D0
Font=COURIER Size=140 Type=3 CodePage=T1V10500 CharSet=C04500D0
Font=COURIER Size=200 Type=0 CodePage=T1V10500 CharSet=C04200J0
Font=COURIER Size=200 Type=1 CodePage=T1V10500 CharSet=C04300J0
Font=COURIER Size=200 Type=2 CodePage=T1V10500 CharSet=C04400J0
Font=COURIER Size=200 Type=3 CodePage=T1V10500 CharSet=C04500J0

```

Figure 12. Courier Portion of a Sample fonts.tab Configuration File

```

// LNPrint
Font=LNPRINT Size=070 Type=0 CodePage=T1V10500 CharSet=C0420070
Font=LNPRINT Size=070 Type=1 CodePage=T1V10500 CharSet=C0430070
Font=LNPRINT Size=070 Type=2 CodePage=T1V10500 CharSet=C0440070
Font=LNPRINT Size=070 Type=3 CodePage=T1V10500 CharSet=C0450070
Font=LNPRINT Size=080 Type=0 CodePage=T1V10500 CharSet=C0420080
Font=LNPRINT Size=080 Type=1 CodePage=T1V10500 CharSet=C0430080
Font=LNPRINT Size=080 Type=2 CodePage=T1V10500 CharSet=C0440080
Font=LNPRINT Size=080 Type=3 CodePage=T1V10500 CharSet=C0450080
Font=LNPRINT Size=100 Type=0 CodePage=T1V10500 CharSet=C0420000
Font=LNPRINT Size=100 Type=1 CodePage=T1V10500 CharSet=C0430000
Font=LNPRINT Size=100 Type=2 CodePage=T1V10500 CharSet=C0440000
Font=LNPRINT Size=100 Type=3 CodePage=T1V10500 CharSet=C0450000
Font=LNPRINT Size=120 Type=0 CodePage=T1V10500 CharSet=C04200B0
Font=LNPRINT Size=120 Type=1 CodePage=T1V10500 CharSet=C04300B0
Font=LNPRINT Size=120 Type=2 CodePage=T1V10500 CharSet=C04400B0
Font=LNPRINT Size=120 Type=3 CodePage=T1V10500 CharSet=C04500B0
Font=LNPRINT Size=140 Type=0 CodePage=T1V10500 CharSet=C04200D0
Font=LNPRINT Size=140 Type=1 CodePage=T1V10500 CharSet=C04300D0
Font=LNPRINT Size=140 Type=2 CodePage=T1V10500 CharSet=C04400D0
Font=LNPRINT Size=140 Type=3 CodePage=T1V10500 CharSet=C04500D0
Font=LNPRINT Size=200 Type=0 CodePage=T1V10500 CharSet=C04200J0
Font=LNPRINT Size=200 Type=1 CodePage=T1V10500 CharSet=C04300J0
Font=LNPRINT Size=200 Type=2 CodePage=T1V10500 CharSet=C04400J0
Font=LNPRINT Size=200 Type=3 CodePage=T1V10500 CharSet=C04500J0

```

Figure 13. Line Print Portion of a Sample fonts.tab Configuration File

```

// Helvetica
Font=HELVE Size=060 Type=0 CodePage=T1V10500 CharSet=C0H20060
Font=HELVE Size=060 Type=1 CodePage=T1V10500 CharSet=C0H30060
Font=HELVE Size=060 Type=2 CodePage=T1V10500 CharSet=C0H40060
Font=HELVE Size=060 Type=3 CodePage=T1V10500 CharSet=C0H50060
Font=HELVE Size=070 Type=0 CodePage=T1V10500 CharSet=C0H20070
Font=HELVE Size=070 Type=1 CodePage=T1V10500 CharSet=C0H30070
Font=HELVE Size=070 Type=2 CodePage=T1V10500 CharSet=C0H40070
Font=HELVE Size=070 Type=3 CodePage=T1V10500 CharSet=C0H50070
Font=HELVE Size=080 Type=0 CodePage=T1V10500 CharSet=C0H20080
Font=HELVE Size=080 Type=1 CodePage=T1V10500 CharSet=C0H30080
Font=HELVE Size=080 Type=2 CodePage=T1V10500 CharSet=C0H40080
Font=HELVE Size=080 Type=3 CodePage=T1V10500 CharSet=C0H50080
Font=HELVE Size=090 Type=0 CodePage=T1V10500 CharSet=C0H20090
Font=HELVE Size=090 Type=1 CodePage=T1V10500 CharSet=C0H30090
Font=HELVE Size=090 Type=2 CodePage=T1V10500 CharSet=C0H40090
Font=HELVE Size=090 Type=3 CodePage=T1V10500 CharSet=C0H50090
Font=HELVE Size=100 Type=0 CodePage=T1V10500 CharSet=C0H20000
Font=HELVE Size=100 Type=1 CodePage=T1V10500 CharSet=C0H30000
Font=HELVE Size=100 Type=2 CodePage=T1V10500 CharSet=C0H40000
Font=HELVE Size=100 Type=3 CodePage=T1V10500 CharSet=C0H50000
Font=HELVE Size=110 Type=0 CodePage=T1V10500 CharSet=C0H200A0
Font=HELVE Size=110 Type=1 CodePage=T1V10500 CharSet=C0H300A0
Font=HELVE Size=110 Type=2 CodePage=T1V10500 CharSet=C0H400A0
Font=HELVE Size=110 Type=3 CodePage=T1V10500 CharSet=C0H500A0
Font=HELVE Size=120 Type=0 CodePage=T1V10500 CharSet=C0H200B0
Font=HELVE Size=120 Type=1 CodePage=T1V10500 CharSet=C0H300B0
Font=HELVE Size=120 Type=2 CodePage=T1V10500 CharSet=C0H400B0
Font=HELVE Size=120 Type=3 CodePage=T1V10500 CharSet=C0H500B0
Font=HELVE Size=140 Type=0 CodePage=T1V10500 CharSet=C0H200D0

```

Figure 14. Helvetica A Portion of a Sample fonts.tab Configuration File

|            |          |        |                   |                  |
|------------|----------|--------|-------------------|------------------|
| Font=HELVE | Size=140 | Type=1 | CodePage=T1V10500 | CharSet=C0H300D0 |
| Font=HELVE | Size=140 | Type=2 | CodePage=T1V10500 | CharSet=C0H400D0 |
| Font=HELVE | Size=140 | Type=3 | CodePage=T1V10500 | CharSet=C0H500D0 |
| Font=HELVE | Size=145 | Type=0 | CodePage=T1V10500 | CharSet=C0H200D0 |
| Font=HELVE | Size=145 | Type=1 | CodePage=T1V10500 | CharSet=C0H300D0 |
| Font=HELVE | Size=145 | Type=2 | CodePage=T1V10500 | CharSet=C0H400D0 |
| Font=HELVE | Size=145 | Type=3 | CodePage=T1V10500 | CharSet=C0H500D0 |
| Font=HELVE | Size=160 | Type=0 | CodePage=T1V10500 | CharSet=C0H200F0 |
| Font=HELVE | Size=160 | Type=1 | CodePage=T1V10500 | CharSet=C0H300F0 |
| Font=HELVE | Size=160 | Type=2 | CodePage=T1V10500 | CharSet=C0H400F0 |
| Font=HELVE | Size=160 | Type=3 | CodePage=T1V10500 | CharSet=C0H500F0 |
| Font=HELVE | Size=180 | Type=0 | CodePage=T1V10500 | CharSet=C0H200H0 |
| Font=HELVE | Size=180 | Type=1 | CodePage=T1V10500 | CharSet=C0H300H0 |
| Font=HELVE | Size=180 | Type=2 | CodePage=T1V10500 | CharSet=C0H400H0 |
| Font=HELVE | Size=180 | Type=3 | CodePage=T1V10500 | CharSet=C0H500H0 |
| Font=HELVE | Size=200 | Type=0 | CodePage=T1V10500 | CharSet=C0H200J0 |
| Font=HELVE | Size=200 | Type=1 | CodePage=T1V10500 | CharSet=C0H300J0 |
| Font=HELVE | Size=200 | Type=2 | CodePage=T1V10500 | CharSet=C0H400J0 |
| Font=HELVE | Size=200 | Type=3 | CodePage=T1V10500 | CharSet=C0H500J0 |
| Font=HELVE | Size=240 | Type=0 | CodePage=T1V10500 | CharSet=C0H200N0 |
| Font=HELVE | Size=240 | Type=1 | CodePage=T1V10500 | CharSet=C0H300N0 |
| Font=HELVE | Size=240 | Type=2 | CodePage=T1V10500 | CharSet=C0H400N0 |
| Font=HELVE | Size=240 | Type=3 | CodePage=T1V10500 | CharSet=C0H500N0 |
| Font=HELVE | Size=300 | Type=0 | CodePage=T1V10500 | CharSet=C0H200T0 |
| Font=HELVE | Size=300 | Type=1 | CodePage=T1V10500 | CharSet=C0H300T0 |
| Font=HELVE | Size=300 | Type=2 | CodePage=T1V10500 | CharSet=C0H400T0 |
| Font=HELVE | Size=300 | Type=3 | CodePage=T1V10500 | CharSet=C0H500T0 |
| Font=HELVE | Size=360 | Type=0 | CodePage=T1V10500 | CharSet=C0H200Z0 |
| Font=HELVE | Size=360 | Type=1 | CodePage=T1V10500 | CharSet=C0H300Z0 |
| Font=HELVE | Size=360 | Type=2 | CodePage=T1V10500 | CharSet=C0H400Z0 |
| Font=HELVE | Size=360 | Type=3 | CodePage=T1V10500 | CharSet=C0H500Z0 |

Figure 15. Helvetica B Portion of a Sample fonts.tab Configuration File

```

// Times Roman
Font=TIMES      Size=060 Type=0 CodePage=T1V10500 CharSet=C0N20060
Font=TIMES      Size=060 Type=1 CodePage=T1V10500 CharSet=C0N30060
Font=TIMES      Size=060 Type=2 CodePage=T1V10500 CharSet=C0N40060
Font=TIMES      Size=060 Type=3 CodePage=T1V10500 CharSet=C0N50060
Font=TIMES      Size=070 Type=0 CodePage=T1V10500 CharSet=C0N20070
Font=TIMES      Size=070 Type=1 CodePage=T1V10500 CharSet=C0N30070
Font=TIMES      Size=070 Type=2 CodePage=T1V10500 CharSet=C0N40070
Font=TIMES      Size=070 Type=3 CodePage=T1V10500 CharSet=C0N50070
Font=TIMES      Size=080 Type=0 CodePage=T1V10500 CharSet=C0N20080
Font=TIMES      Size=080 Type=1 CodePage=T1V10500 CharSet=C0N30080
Font=TIMES      Size=080 Type=2 CodePage=T1V10500 CharSet=C0N40080
Font=TIMES      Size=080 Type=3 CodePage=T1V10500 CharSet=C0N50080
Font=TIMES      Size=090 Type=0 CodePage=T1V10500 CharSet=C0N20090
Font=TIMES      Size=090 Type=1 CodePage=T1V10500 CharSet=C0N30090
Font=TIMES      Size=090 Type=2 CodePage=T1V10500 CharSet=C0N40090
Font=TIMES      Size=090 Type=3 CodePage=T1V10500 CharSet=C0N50090
Font=TIMES      Size=100 Type=0 CodePage=T1V10500 CharSet=C0N20000
Font=TIMES      Size=100 Type=1 CodePage=T1V10500 CharSet=C0N30000
Font=TIMES      Size=100 Type=2 CodePage=T1V10500 CharSet=C0N40000
Font=TIMES      Size=100 Type=3 CodePage=T1V10500 CharSet=C0N50000
Font=TIMES      Size=110 Type=0 CodePage=T1V10500 CharSet=C0N200A0
Font=TIMES      Size=110 Type=1 CodePage=T1V10500 CharSet=C0N300A0
Font=TIMES      Size=110 Type=2 CodePage=T1V10500 CharSet=C0N400A0
Font=TIMES      Size=110 Type=3 CodePage=T1V10500 CharSet=C0N500A0
Font=TIMES      Size=120 Type=0 CodePage=T1V10500 CharSet=C0N200B0
Font=TIMES      Size=120 Type=1 CodePage=T1V10500 CharSet=C0N300B0
Font=TIMES      Size=120 Type=2 CodePage=T1V10500 CharSet=C0N400B0
Font=TIMES      Size=120 Type=3 CodePage=T1V10500 CharSet=C0N500B0
Font=TIMES      Size=140 Type=0 CodePage=T1V10500 CharSet=C0N200D0
Font=TIMES      Size=140 Type=1 CodePage=T1V10500 CharSet=C0N300D0
Font=TIMES      Size=140 Type=2 CodePage=T1V10500 CharSet=C0N400D0
Font=TIMES      Size=140 Type=3 CodePage=T1V10500 CharSet=C0N500D0
Font=TIMES      Size=160 Type=0 CodePage=T1V10500 CharSet=C0N200F0
Font=TIMES      Size=160 Type=1 CodePage=T1V10500 CharSet=C0N300F0

```

Figure 16. Times Roman A Portion of a Sample fonts.tab Configuration File

```

Font=TIMES      Size=160 Type=2 CodePage=T1V10500 CharSet=C0N400F0
Font=TIMES      Size=160 Type=3 CodePage=T1V10500 CharSet=C0N500F0
Font=TIMES      Size=180 Type=0 CodePage=T1V10500 CharSet=C0N200H0
Font=TIMES      Size=180 Type=1 CodePage=T1V10500 CharSet=C0N300H0
Font=TIMES      Size=180 Type=2 CodePage=T1V10500 CharSet=C0N400H0
Font=TIMES      Size=180 Type=3 CodePage=T1V10500 CharSet=C0N500H0
Font=TIMES      Size=200 Type=0 CodePage=T1V10500 CharSet=C0N200J0
Font=TIMES      Size=200 Type=1 CodePage=T1V10500 CharSet=C0N300J0
Font=TIMES      Size=200 Type=2 CodePage=T1V10500 CharSet=C0N400J0
Font=TIMES      Size=200 Type=3 CodePage=T1V10500 CharSet=C0N500J0
Font=TIMES      Size=240 Type=0 CodePage=T1V10500 CharSet=C0N200N0
Font=TIMES      Size=240 Type=1 CodePage=T1V10500 CharSet=C0N300N0
Font=TIMES      Size=240 Type=2 CodePage=T1V10500 CharSet=C0N400N0
Font=TIMES      Size=240 Type=3 CodePage=T1V10500 CharSet=C0N500N0
Font=TIMES      Size=300 Type=0 CodePage=T1V10500 CharSet=C0N200T0
Font=TIMES      Size=300 Type=1 CodePage=T1V10500 CharSet=C0N300T0
Font=TIMES      Size=300 Type=2 CodePage=T1V10500 CharSet=C0N400T0
Font=TIMES      Size=300 Type=3 CodePage=T1V10500 CharSet=C0N500T0
Font=TIMES      Size=360 Type=0 CodePage=T1V10500 CharSet=C0N200Z0
Font=TIMES      Size=360 Type=1 CodePage=T1V10500 CharSet=C0N300Z0
Font=TIMES      Size=360 Type=2 CodePage=T1V10500 CharSet=C0N400Z0
Font=TIMES      Size=360 Type=3 CodePage=T1V10500 CharSet=C0N500Z0

```

Figure 17. Times Roman B Portion of a Sample fonts.tab Configuration File

```

// OCR and BarCode
Font=OCRA      Size=100 Type=0 CodePage=T1000892 CharSet=C0L00A0A
Font=OCRA      Size=120 Type=0 CodePage=T1000892 CharSet=C0L00A0A
Font=OCRB      Size=100 Type=0 CodePage=T1000893 CharSet=C0L000AB
Font=OCRB      Size=120 Type=0 CodePage=T1000893 CharSet=C0L000AB
Font=BARCODE   Size=100 Type=0 CodePage=T1001300 CharSet=C0L00A0N

```

Figure 18. OCR and Bar Code Portion of a Sample fonts.tab Configuration File



```

// Letter Gothic
Font=LETGOTH Size=050 Type=0 CodePage=T1B00500 CharSet=C0B20050
Font=LETGOTH Size=070 Type=0 CodePage=T1B00500 CharSet=C0B20070
Font=LETGOTH Size=070 Type=1 CodePage=T1B00500 CharSet=C0B30070
Font=LETGOTH Size=070 Type=2 CodePage=T1B00500 CharSet=C0B40070
Font=LETGOTH Size=070 Type=3 CodePage=T1B00500 CharSet=C0B50070
Font=LETGOTH Size=080 Type=0 CodePage=T1B00500 CharSet=C0B20080
Font=LETGOTH Size=080 Type=1 CodePage=T1B00500 CharSet=C0B30080
Font=LETGOTH Size=080 Type=2 CodePage=T1B00500 CharSet=C0B40080
Font=LETGOTH Size=080 Type=3 CodePage=T1B00500 CharSet=C0B50080
Font=LETGOTH Size=090 Type=0 CodePage=T1B00500 CharSet=C0B20090
Font=LETGOTH Size=090 Type=1 CodePage=T1B00500 CharSet=C0B30090
Font=LETGOTH Size=090 Type=2 CodePage=T1B00500 CharSet=C0B40090
Font=LETGOTH Size=090 Type=3 CodePage=T1B00500 CharSet=C0B50090
Font=LETGOTH Size=100 Type=0 CodePage=T1B00500 CharSet=C0B20000
Font=LETGOTH Size=100 Type=1 CodePage=T1B00500 CharSet=C0B30000
Font=LETGOTH Size=100 Type=2 CodePage=T1B00500 CharSet=C0B40000
Font=LETGOTH Size=100 Type=3 CodePage=T1B00500 CharSet=C0B50000
Font=LETGOTH Size=110 Type=0 CodePage=T1B00500 CharSet=C0B200A0
Font=LETGOTH Size=110 Type=1 CodePage=T1B00500 CharSet=C0B300A0
Font=LETGOTH Size=110 Type=2 CodePage=T1B00500 CharSet=C0B400A0
Font=LETGOTH Size=110 Type=3 CodePage=T1B00500 CharSet=C0B500A0
Font=LETGOTH Size=120 Type=0 CodePage=T1B00500 CharSet=C0B200B0
Font=LETGOTH Size=120 Type=1 CodePage=T1B00500 CharSet=C0B300B0
Font=LETGOTH Size=120 Type=2 CodePage=T1B00500 CharSet=C0B400B0
Font=LETGOTH Size=120 Type=3 CodePage=T1B00500 CharSet=C0B500B0
Font=LETGOTH Size=140 Type=0 CodePage=T1B00500 CharSet=C0B200D0
Font=LETGOTH Size=140 Type=1 CodePage=T1B00500 CharSet=C0B300D0
Font=LETGOTH Size=140 Type=2 CodePage=T1B00500 CharSet=C0B400D0
Font=LETGOTH Size=140 Type=3 CodePage=T1B00500 CharSet=C0B500D0
Font=LETGOTH Size=160 Type=0 CodePage=T1B00500 CharSet=C0B200F0
Font=LETGOTH Size=160 Type=1 CodePage=T1B00500 CharSet=C0B300F0
Font=LETGOTH Size=160 Type=2 CodePage=T1B00500 CharSet=C0B400F0
Font=LETGOTH Size=160 Type=3 CodePage=T1B00500 CharSet=C0B500F0
Font=LETGOTH Size=180 Type=0 CodePage=T1B00500 CharSet=C0B200H0
Font=LETGOTH Size=180 Type=1 CodePage=T1B00500 CharSet=C0B300H0
Font=LETGOTH Size=180 Type=2 CodePage=T1B00500 CharSet=C0B400H0
Font=LETGOTH Size=180 Type=3 CodePage=T1B00500 CharSet=C0B500H0

```

Figure 19. Letter Gothic Portion of a Sample fonts.tab Configuration File

---

## pagedef.tab

The pagedef table provides a mapping of the R/3 **Paper type** to the **PAGEDEF** and **FORMDEF** values that are used with ABAP printed output. If an entry for the **\*PJPAPER** parameter does not appear in the table, SAP R/3 fails the command. Also, the **pagedef.tab** table provides the fonts that are used for line data.

|                |   |
|----------------|---|
| <b>Paper</b>   | Specifies the value of the OTF Infoline parameter <b>PJPAPER</b> . The value is not verified.   |
| <b>FormDef</b> | Specifies the name of the form definition to be used for printing both OTF and ABAP reports.  |
| <b>PageDef</b> | Name of the page definition to be used for printing of ABAP reports. The contents of both parameters are not verified and will result in an IPDS error if the <b>FORMDEF</b> or <b>PAGEDEF</b> is not found at print time. The <b>FontNorm</b> and <b>FontBold</b> keywords describe the fonts used for line data printing. The value is not checked. |

Figure 20 provides a possible **pagedef.tab** configuration file:

```
// PageDef table

// Notes:
// =====
// 1) the pagedefs apply to A4 paper. For letter size P1C09182 should be
//    replaced by P1A08682
// 2) ZUSRTST is a sample for a user specification

Paper=X_65_132 FormDef=F1A10111 PageDef=P1V06683 FontNorm = GT2A FontBold = GB2A
Paper=X_44_120 FormDef=F1A10111 PageDef=P1V06683 FontNorm = GT2A FontBold = GB2A
Paper=X_58_170 FormDef=F1A10111 PageDef=P1V06683 FontNorm = GT8A FontBold = GT8A
Paper=X_65_255 FormDef=F1A10111 PageDef=P1V06683 FontNorm = GT24 FontBold = GT24
Paper=X_65_80  FormDef=F1A10111 PageDef=P1C09182 FontNorm = GT2A FontBold = GB2A
Paper=X_90_120 FormDef=F1A10111 PageDef=P1C09182 FontNorm = GT5A FontBold = GT5A
Paper=X_PAPER  FormDef=F1SAPP  PageDef=P1SAPP  FontNorm = GT2A FontBold = GB2A
Paper=LEGAL   FormDef=F1SAPL  PageDef=P1SAPL  FontNorm = GT2A FontBold = GB2A
Paper=ZUSRTST FormDef=F1SAPT   PageDef=P1SAPT   FontNorm = GT2A FontBold = GB2A
```

*Figure 20. Sample pagedef.tab Configuration File*

---

## Appendix A. Elements of Printing in a SAP R/3 Application

The following elements of the spool administration affect printing in a SAP R/3 application environment.

- Output queues

A print request must be directed to an output queue. An output queue must be connected with the SAP R/3 output device that can be used for that printer.

- Output device

For printing, a particular device type must be connected with a particular device initialization and can be connected with a particular paper type. This combination is a user-defined device type.

- Page formats

Page formats describe the format of a page. Although page formats have no influence on either the SAPscript formatter or AFP printing, they must have the same name as the paper type when you change a layout set.

- Paper types

Paper types define how a page is formatted. For ABAP listings, they specify the number of characters per line and the number of lines per page. Because the formatting in OTF is done by the SAPscript formatter, the paper type has no effect. But the **CVTPRTDTA** command maps the paper type into the name of a form definition that can call out an overlay. The paper type is very important in AFP printing and must be connected with a device type.

- Device initialization

The device initialization contains parameters to control the individual printers. Users must copy the dummy device initializations of an **IBMEFP** device type for every paper type and cannot use the device initializations of a device type other than an **IBMEFP** device type.



---

## Appendix B. Messages from the CVTPRTDTA Command

All messages issued by the CVTPRTDTA command go into the job log of the calling job.

---

**PQS1627** An error was encountered while attempting to allocate \_\_\_ bytes for \_\_\_. Cause: An error was encountered while attempting to allocate \_\_\_ bytes for \_\_\_. Recovery: Contact IBM service and report the problem. Severity: SEV 50

---

**PQS1628** Parameter \_\_\_ missing from program call. Cause: The call to the SAP converter must have parameter \_\_\_. Recovery: Reissue the call with the correct parameters. Severity: SEV 50

---

**PQS1629** Missing value for parameter \_\_\_. Cause: The call to the SAP AFP converter must have a value for the parameter \_\_\_. Recovery: Reissue the call with the correct parameters and values. Severity: SEV 50

---

**PQS1630** Parameter incorrect or in the wrong place. Cause: The SAP AFP converter received parameter \_\_\_ and was not expecting this parameter. Recovery: Refer to the *SAP R/3 AFP: Printing on the AS/400* manual and reissue the call with the correct parameters and values in the right order. Severity: SEV 50

---

**PQS1631** An unsupported OTF command was found in the file. Cause: \_\_\_ is not a supported command in the OTF data stream. This command was found in line \_\_\_ of file \_\_\_. Recovery: Contact IBM service for support. Severity: SEV 50

---

**PQS1632** An error was found while opening a file. Cause: An error was found while opening file \_\_\_. The file cannot be opened. It is either locked by another process or does not exist. Recovery: Contact a system programmer. Severity: SEV 50

---

**PQS1633** An error was found on closing a file. Cause: File \_\_\_ cannot be closed. Recovery: Contact IBM service for support. Severity: SEV 50

---

---

**PQS1634** An error occurred while processing file \_\_\_. Cause: File \_\_\_ cannot be processed. Recovery: Contact IBM service for support. Severity: SEV 50

---

**PQS1635** A required keyword is missing from configuration file \_\_\_. Cause: Keyword \_\_\_ is missing from line \_\_\_ in configuration file \_\_\_. Recovery: Add keyword \_\_\_ to line \_\_\_ of configuration file \_\_\_. Severity: SEV 50

---

**PQS1636** A keyword is missing from configuration file \_\_\_. Cause: The required keyword \_\_\_ is not found in file \_\_\_. Recovery: Refer to *SAP R/3 AFP: Printing on the AS/400*. Edit file \_\_\_ and add keyword \_\_\_. Severity: SEV 50

---

**PQS1637** Data in file in wrong format. Cause: Line \_\_\_ in file \_\_\_ contains data that is not in the correct format. Recovery: Refer to the *SAP R/3 AFP Print user's guide* for the correct format of the lines in file \_\_\_. Correct the file and run the command again. Severity: SEV 50

---

**PQS1638** Configuration file \_\_\_ contains an incorrect value. Cause: An incorrect value was found in configuration file \_\_\_ on line \_\_\_. Recovery: Refer to *SAP R/3 AFP: Printing on the AS/400*. Edit configuration file \_\_\_ and correct the problem. Run the command again. Severity: SEV 50

---

**PQS1639** File contains extraneous information. Cause: Line \_\_\_ in input file \_\_\_ contains unexpected values. Recovery: Contact IBM service for support. Severity: SEV 50

---

**PQS1640** Configuration file contains too many entries. Cause: Configuration file \_\_\_ contains more than the maximum number of entries. The maximum number of entries for this configuration table is \_\_\_. Recovery: Refer to *SAP R/3 AFP: Printing on the AS/400*. Edit and remove excess entries from configuration file \_\_\_ and run the command again. Severity: SEV 50

---

|         |   |         |   |
|---------|---|---------|---|
| PQS1641 | Font _____ not found in configuration file. Cause: Font _____ not found in configuration file. The default font character set _____ and default code page _____ were used. Recovery: If the default font is not satisfactory, add font _____ to the /QIBM/UserData/PrintSuite/FONTS.TAB configuration file with a satisfactory font and run the command again. Severity: SEV 50                                       | PQS1648 | ___ API did not work. Cause: An error occurred in the ___ API. See additional message in job log. Recovery: Contact IBM service for support. Severity: SEV 50   |
| PQS1642 | A bar code entry for ___ not found in configuration file. Cause: Bar code ___ was not found in either the /QIBM/UserData/PrintSuite/FONTS.TAB or the /QIBM/ProdData/PrintSuite/FONTS.TAB configuration files. Recovery: Refer to <i>SAP R/3 AFP: Printing on the AS/400</i> . Add an entry in the /QIBM/UserData/PrintSuite/FONTS.TAB configuration file for bar code ___ and run the command again. Severity: SEV 50 | PQS1649 | PrtMgrSetOption API Error. Cause: PrtMgrSetOption API Error. Setting ___ could not be set to ___. Recovery: Contact IBM service for support. Severity: SEV 50   |
| PQS1643 | Error deleting file. Cause: File ___ does not exist or is read only. File was not deleted. Recovery: Contact IBM service for support. Severity: SEV 50  | PQS1650 | PrintManager API error occurred. Cause: error code = ___, severity code = ___. Recovery: Contact IBM service for support. Severity: SEV 50  |
| PQS1644 | Line data command ___ in file is not supported. Cause: Line data command ___ on line ___ in file _____ is not supported. Recovery: Contact IBM service for support. Severity: SEV 50  | PQS1651 | PrintManager API error occurred. Cause: error code = ___, severity code = ___. Recovery: Contact IBM service for support. Severity: SEV 50  |
| PQS1646 | Paper format ___ not found in configuration file. Cause: Paper format ___ not found in configuration file ___. Recovery: Add an entry for ___ containing information for the appropriate form definition and page definition to the configuration file /QIBM/UserData/PrintSuite/pagedef.tab. Severity: SEV 50  | PQS1653 | CVTPRTDTA command is not supported. Cause: This copy of the CVTPRTDTA command is supported on OS/400 ___. Recovery: Install the version of the CVTPRTDTA command intended. Severity: SEV 50   |
|         |   | PQS1654 | File spooled successfully. Cause: File ___ spooled successfully. Recovery: n/a Severity: SEV 00   |
|         |   | PQS1655 | File not spooled. Cause: File ___ not spooled. Recovery: Refer to previous messages in job log for details on errors. Severity: SEV 50  |
|         |   | PQS1656 | SAP R/3 AFP Print not installed Cause: The CVTPRTDTA command requires that product ID ___, product option ___ be installed on this operating system. Recovery: Order and install install product ID ___, product option ___ and try the command again. Severity: SEV 50 |

---

**PQS1657**    **Line too long. Cause: Line \_\_\_ of file  
\_\_\_ is too long. The maximum length of  
a line is \_\_\_. Recovery: Contact IBM for  
support. Severity: SEV 50**



---

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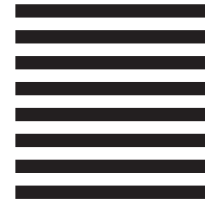
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