

TOSHIBA

TOSHIBA Bar Code Printer

SAP ABAP Printer Driver

Operating Manual

First Edition: Jun. 29, 2018

TOSHIBA TEC CORPORATION

TABLE OF CONTENTS

INTRODUCTION	3
LICENSE INFORMATION	4
1. GENERAL DESCRIPTION	5
1.1 SAP Environment.....	5
1.2 Solution Overview	5
1.3 Trademark.....	6
2. INSTALLATION PROCEDURE	7
2.1 Importing transport files to SAP system.....	7
2.2 Importing Device Type files.....	13
3. OUTPUT DEVICE CREATION	15
3.1 Accessing Device Types	17
4. TOSHIBA PDL DRIVER FUNCTIONS	18
4.1 Barcode.....	18
4.1.1 Defining Barcode.....	18
4.1.2 New Barcode Technology	19
4.1.3 Old Barcode Technology	21
4.1.4 Defining Printer Barcodes	24
4.1.5 Customized Barcode with UNDEF Barcodes.....	26
4.2 Fonts	30
4.3 Printer Parameter in Smart forms	34
4.3.1 Printer Parameter Descriptions	38
5. LIMITATIONS	44

Introduction

Thank you for purchasing the TOSHIBA bar code printer.

SAP PDL Driver for Toshiba Barcode printers is a SAP Smart Forms printing solution to Toshiba barcode printers. It allows users to use a driver for a Page Description Language (PDL) that is implemented in ABAP and resided in the SAP environment to print Toshiba printer without 3rd party solutions. With this device driver, TEC Printer Command Language (TPCL) is send to the Toshiba barcode printer directly from SAP – providing greater performance and efficiency.

TOSHIBA TEC CORPORATION

License information

Please carefully read the following License Agreement.

1. You may use this Software on a single TOSHIBA TEC bar-code printer acquainted from affiliated company, dealer or distributor of TOSHIBA TEC.
2. You shall not grant a sub-license, distribute, transfer, lend or otherwise dispose of this Software, in whole or in part, for the use of any third party other than you except as otherwise expressly provided herein.
3. You shall not, nor cause or permit any third party to, modify, adapt, merge, translate, reverse engineering, reverse compile or disassemble this Software, in whole or in part, except as otherwise expressly provided herein.
4. You shall not copy or make a duplicate (or backup copy) of this Software, in whole or in part, except as otherwise expressly provided herein.
5. All title and copyrights in and to this Software and related documentation are owned by TOSHIBA TEC or its licensor.
6. This Software is provided "AS IS" without warranty any kind, either express or implied, including, but not limited to, the implied warranties of merchantability, fitness for a particular purpose, title and non-infringement.
7. TOSHIBA TEC or its licensor makes no representation or warranty, expressed or implied, including but not limited to the correction of any error or failure, maintenance and support relating to this Software.
8. IN NO EVENT SHALL TOSHIBA TEC OR ITS LICENSOR BE LIABLE TO YOU OR ANY THIRD PARTIES FOR ANY DAMAGES, INCLUDING WITHOUT LIMITATION ANY LOST PROFITS, LOST DATA, LOST SAVINGS OR OTHER INCIDENTAL, SPECIAL OR CONSEQUENTIAL DAMAGE ARISING OUT OF THE USE OR INABILITY TO USE THIS SOFTWARE, EVEN IF TOSHIBA TEC OR ITS LICENSOR HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES, NOR FOR ANY CLAIMS BY A THIRD PARTY.
9. TOSHIBA TEC or its licensor will terminate this Agreement if you fail to comply with any of this terms and conditions. Upon the termination of this Agreement, you agree to have the Software un-installed and destroy it.
10. This Agreement shall become effective upon the installation or use of this Software by You. By installing or using this Software you hereby indicate your acceptance of these terms and conditions.

TOSHIBA TEC CORPORATION

1. General Description

1.1 SAP Environment

Please refer to the SAP Notes: 1097563 for the updated information about the overview of SAP PDL driver.

1.2 Solution Overview

This solution is primarily for Smart Forms printing for Toshiba Barcode printers. The solution is achieved by converting the SAP generic output formats to Toshiba printer specific commands using

- Device Type files
- ABAP Based PDL device driver
- Users define Smart Styles for printing items include
 - Fonts
 - Barcodes
- Use Smart Forms to design the form layout. Form layout shall contain
 - Embedded text,
 - Embedded images,
 - Barcodes.
- Define Output Device that points to the given Device Type
- Print the Smart Forms using the output device.

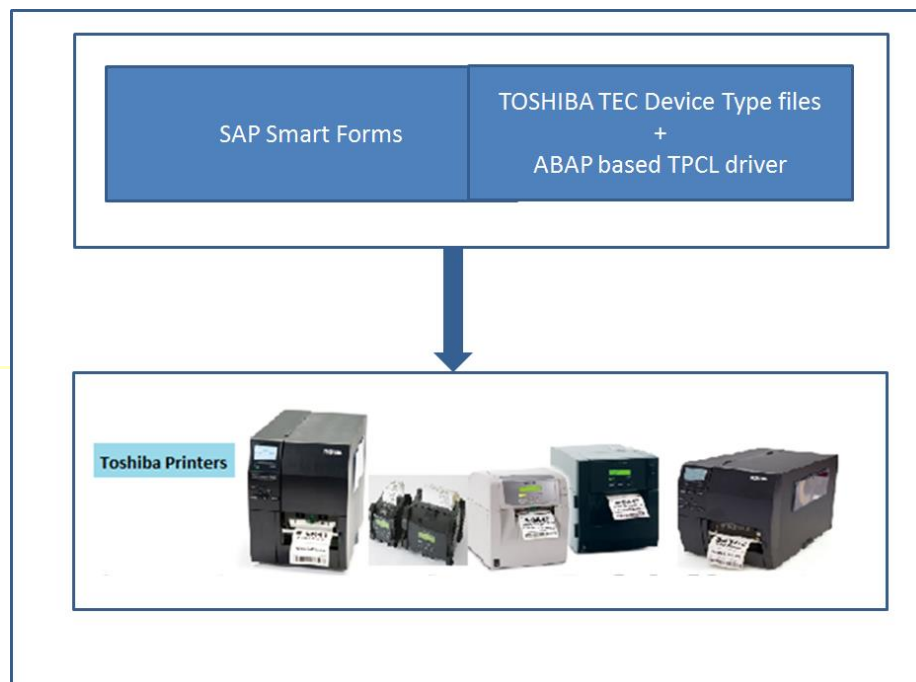


Figure 1: Overview of Solution

Please refer to the [SAP Notes: 1135105](#) for the updated information about the Toshiba Barcode PDL Driver.

TOSHIBA TEC CORPORATION

1.3 Trademark

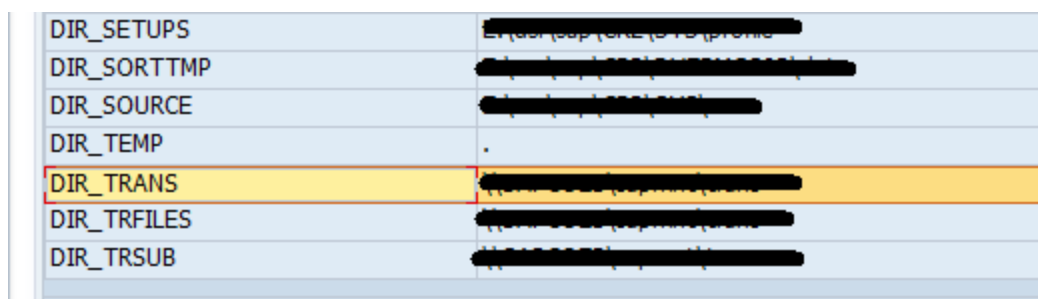
SAP, ABAP are trademarks or registered trademarks of SAP in Germany and/or other countries.

TOSHIBA TEC CORPORATION

2. Installation Procedure

2.1 Importing transport files to SAP system

1. Copy the transport files to the proper locations in SAP system:
 - a. Copy the K*.PVD to the Cofile folder located at \usr\sap\trans\cofile
 - b. Copy the R*.PVD to the Data folder located at \usr\sap\trans\data
2. Logon to the SAP ECC Dev System and open transaction AL11. Find your DIR_TRANS directory.



DIR_SETUPS	...
DIR_SORTTMP	...
DIR_SOURCE	...
DIR_TEMP	.
DIR_TRANS	...
DIR_TRFILES	...
DIR_TRSUB	...

Figure 2: Referring DIR_TRANS directory

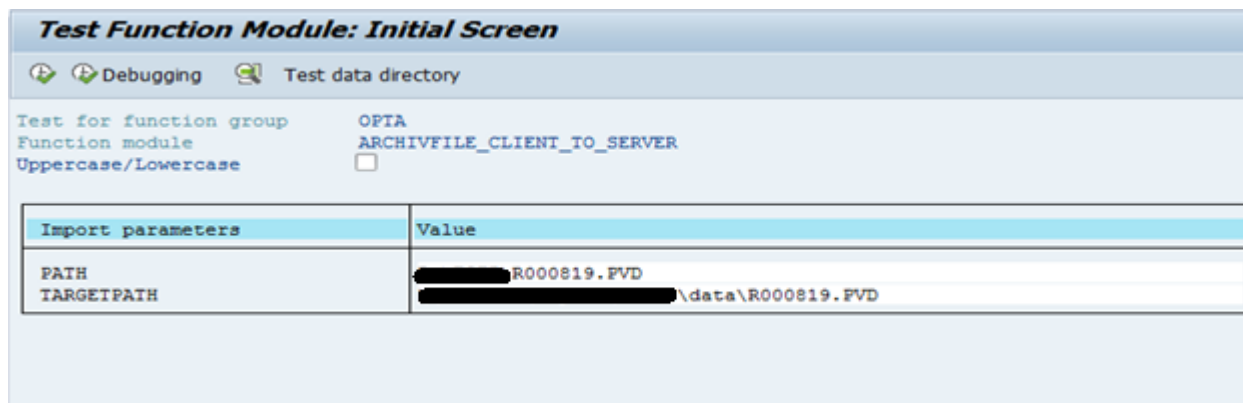
3. Go to transaction CG3Z. Then import header and data of your request into external system. For example, if the PVD files are K000819.PVD for header part and R000819.PVD for data part, then path should be like this;

For header of request:

Source file on front end : PVD file path of K000xxx.PVD
Target file on application server : DIR_TRANS \cofiles\K000xxx.PVD

For data of request:

Source file on front end : PVD file path of R000xxx.PVD
Target file on application server : DIR_TRANS \data\R000xxx.PVD



Test Function Module: Initial Screen

Debugging Test data directory

Test for function group OPTA
Function module ARCHIVFILE_CLIENT_TO_SERVER
Uppercase/Lowercase ☐

Import parameters	Value
PATH	...R000819.PVD
TARGETPATH	...data\R000819.PVD

Figure 3: Uploading the Data file to SAP system

Test Function Module: Initial Screen

Debugging
 Test data directory

Test for function group: OPTA
 Function module: ARCHIVFILE_CLIENT_TO_SERVER
 Uppercase/Lowercase: ☐

Import parameters	Value
PATH	\\K000819.FVD
TARGETPATH	\\cofiles\K000819.FVD

Figure 4: Uploading the Cofile file to SAP system

- Go to transaction **STMS**. Click **Import Overview** button and double-click to appropriate queue, which you want to import the request. Then, from the Menu bar click **Extras** Then **Other Requests** then **Add**.

Overview
 Monitor
 Extras
 Environment
 System
 Help

Transport Management System

System: System CR2
 Transp. Domain: Transport domain CR2

Figure 5 : Transaction STMS

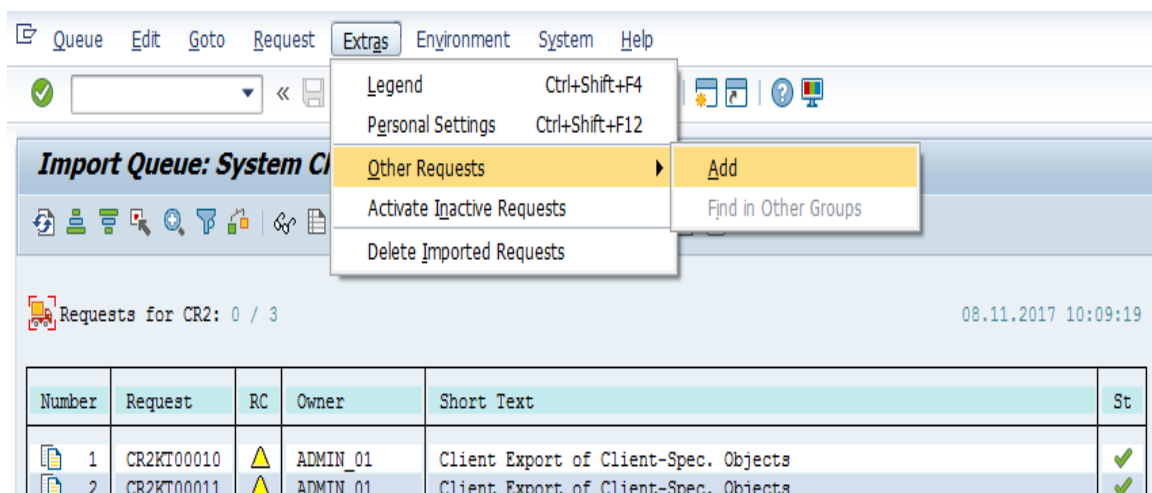


Figure 6: Adding transport request for PDL driver

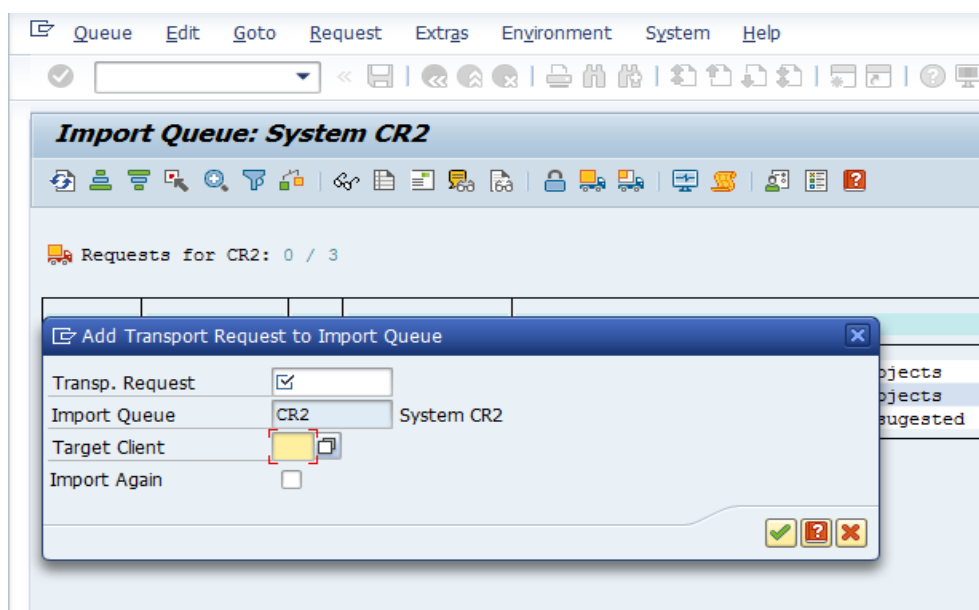


Figure 7: Enter target client and search for transport request

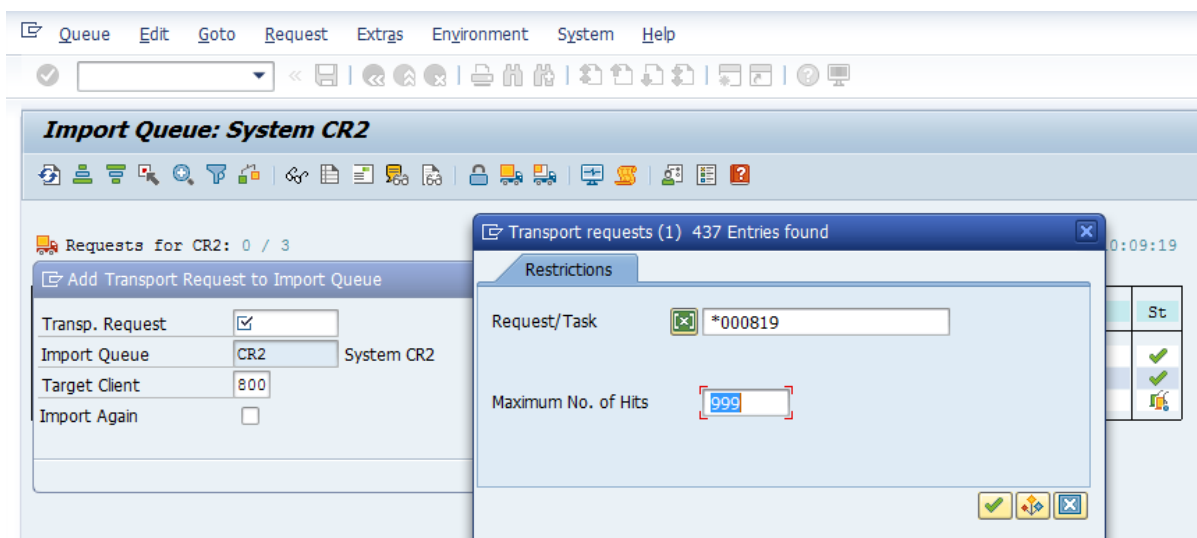


Figure 8: Search for the desired transport request using the *wildcard selection

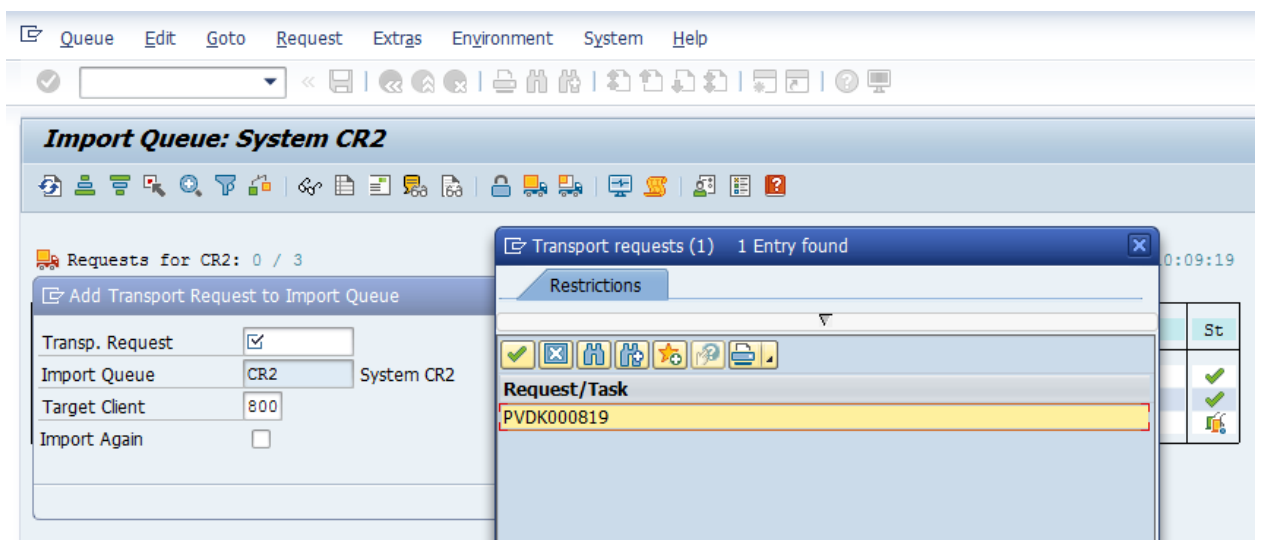


Figure 9: Select the transport request name

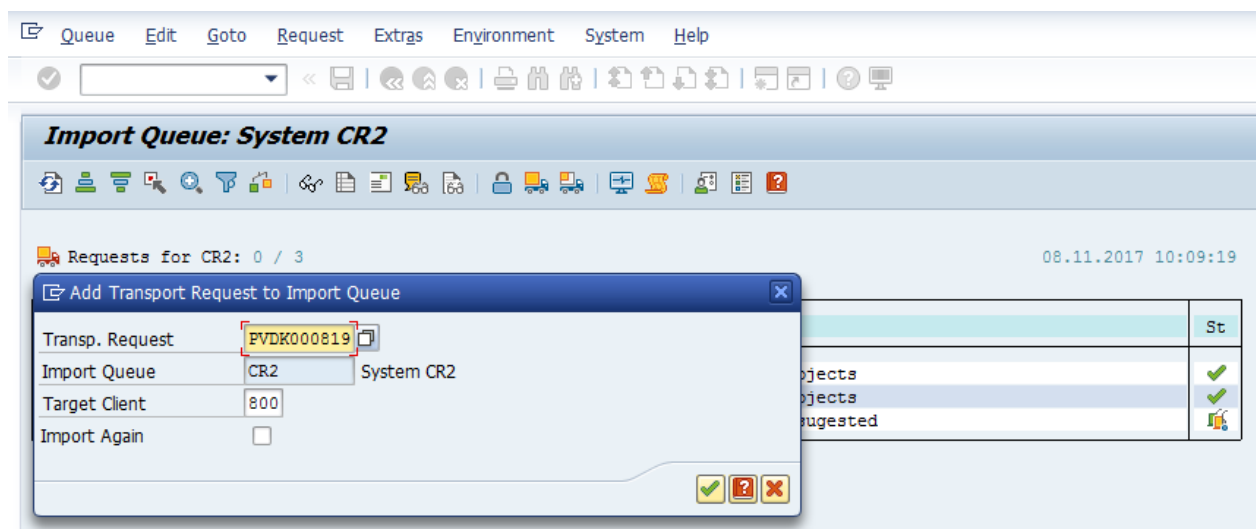


Figure 10: Select transport request by clicking tick mark button

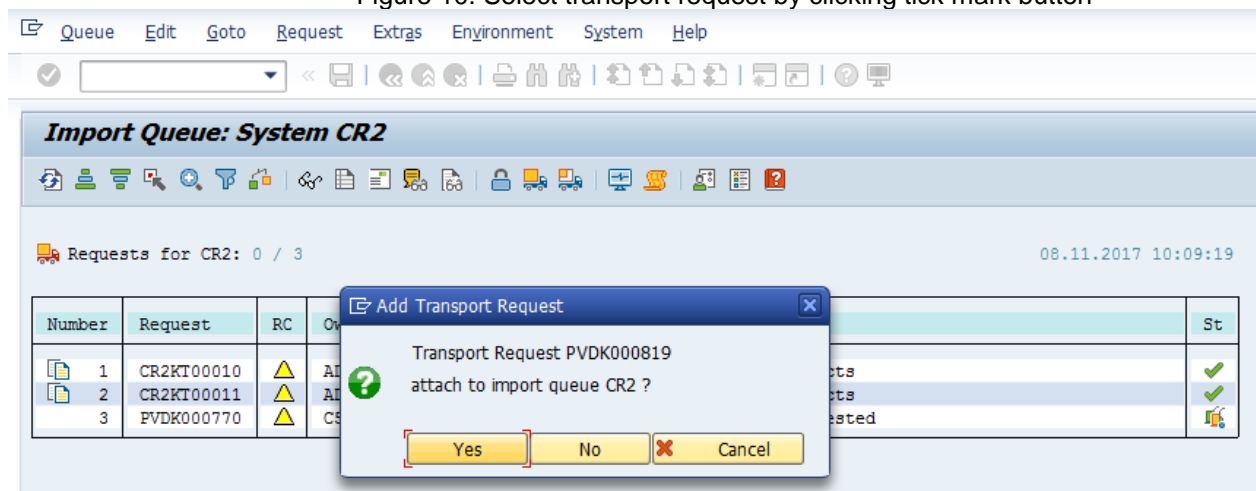


Figure 11: Confirm transport request by pressing 'Yes' button

- Importing the transport request to the target client from the import queue by selecting the transport request and click the Import request button.

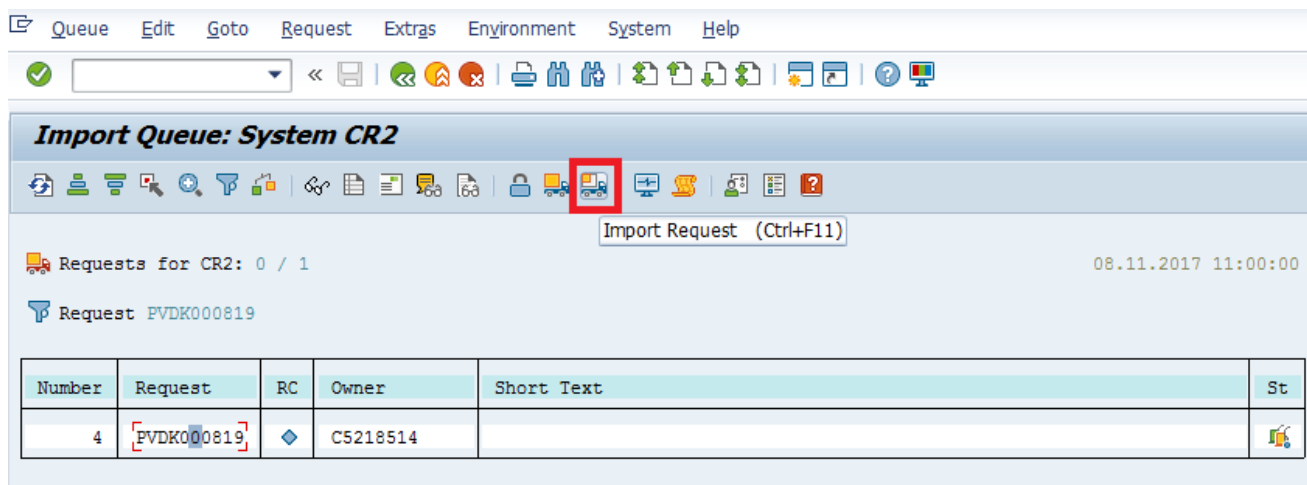


Figure 12 : Import Request

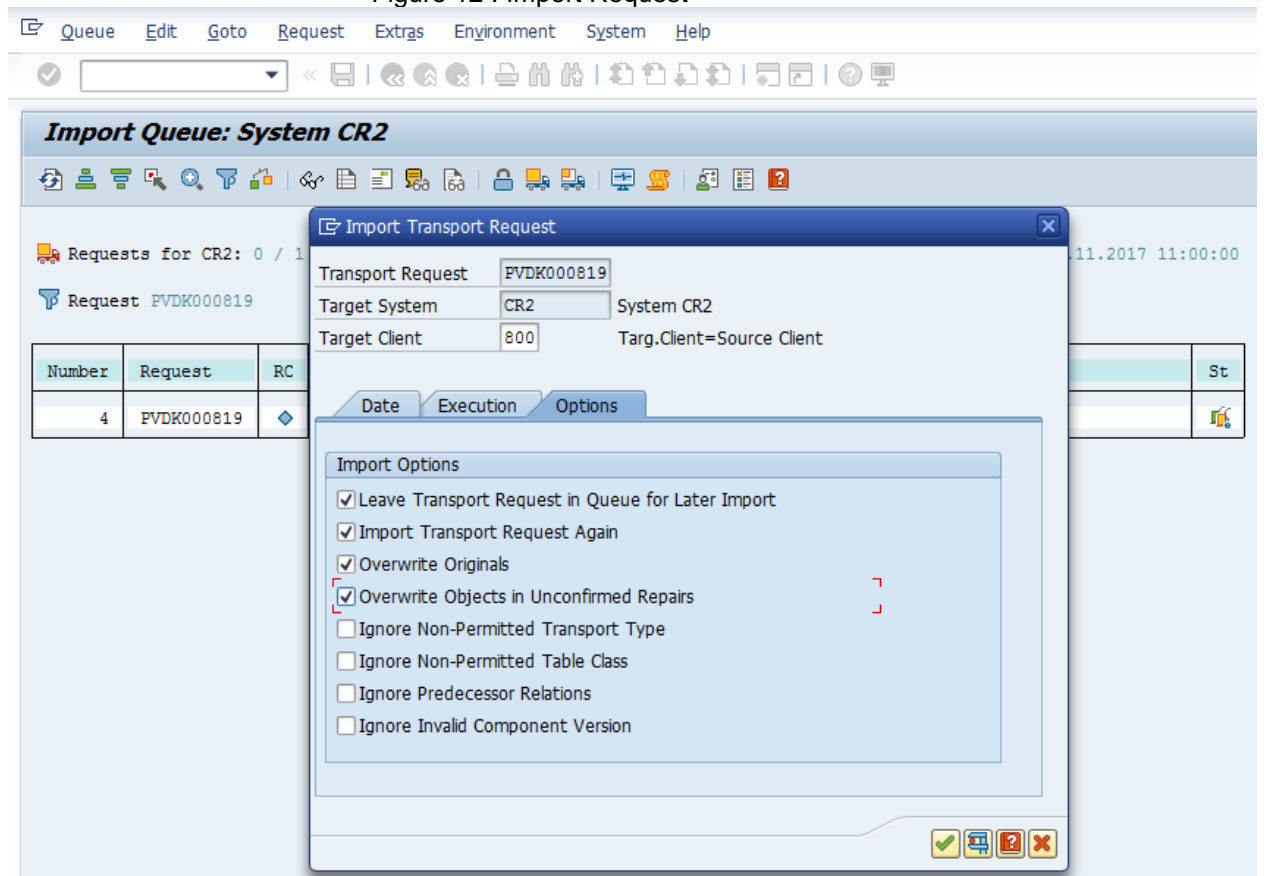


Figure 13: Select the import options and confirm the import by clicking the tick button

*Please note the images containing PVDK000819 is for illustration purpose only, actual PVD file name could be different .

2.2 Importing Device Type files

The Toshiba Device Types can be uploaded into the SAP system by Importing through SPAD transaction.

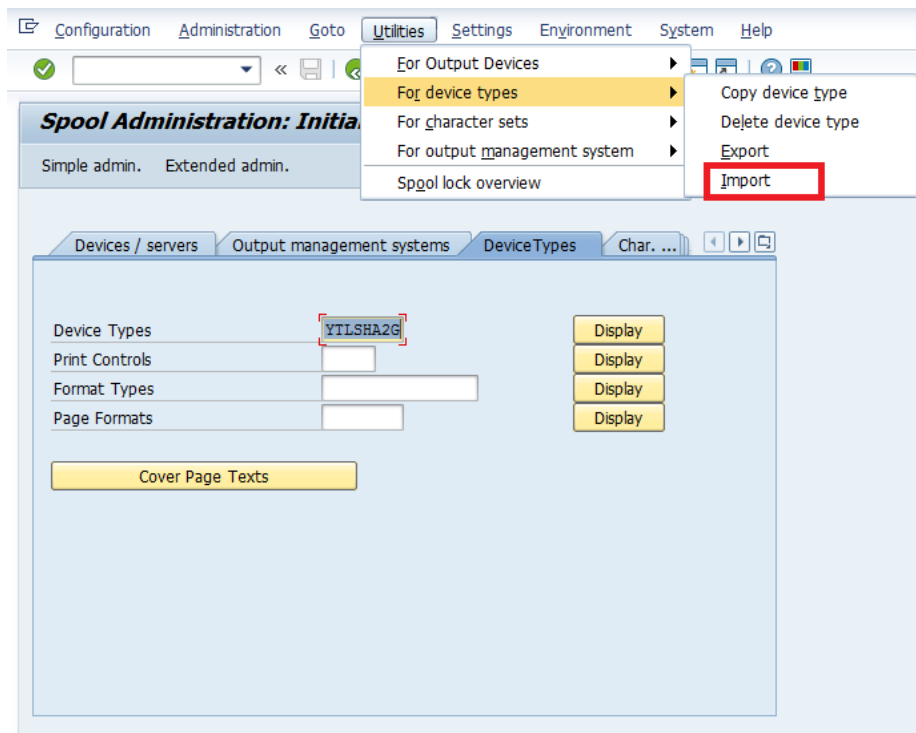


Figure 14: Importing Device Type file-1

Select Import as per above Figure 14. The following screen will be displayed:

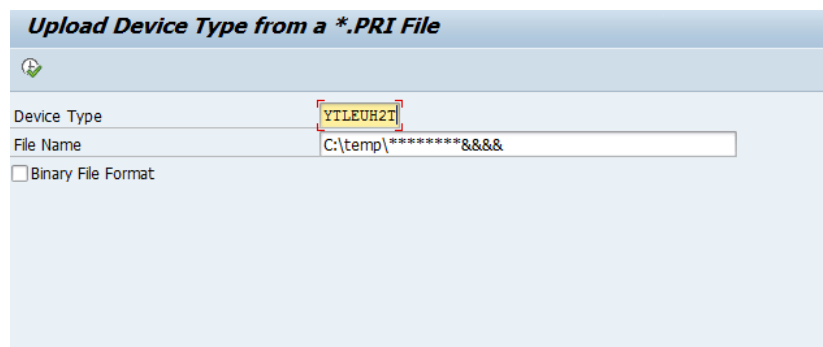


Figure 15: Importing Device Type file-2

Execute the program by clicking 'F8' to import the device type and select the device type files (.PRI files) from the list and click 'Save' button.

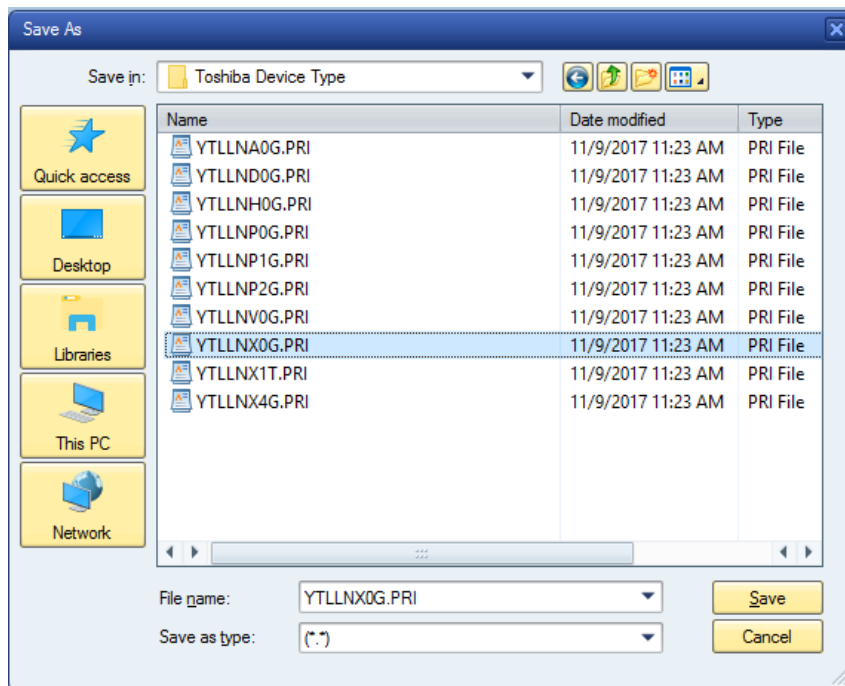


Figure 16: Selecting device type file.

Note: The device type name must start with 'YTL' for Toshiba Device type. It should contain 8 characters. The object name must match with the file name of the device type (without the extension).

3. Output Device Creation

Go to the Spool Administration application by using transaction code 'SPAD'.

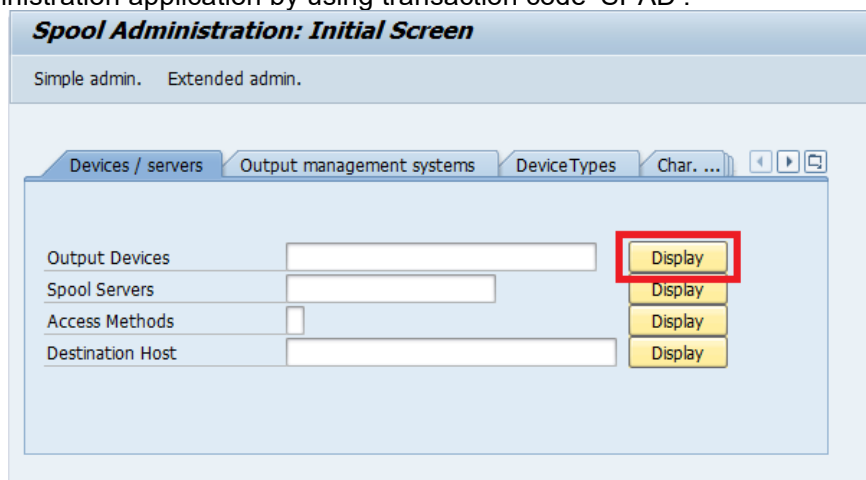


Figure 17: click on "Display" button for 'Output Devices'

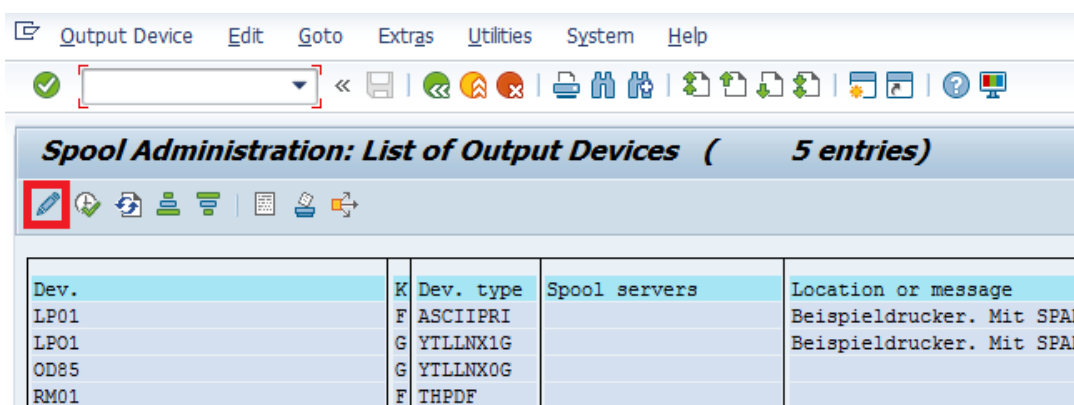


Figure 18: Click on the 'Edit' button to change from Display mode to Edit mode

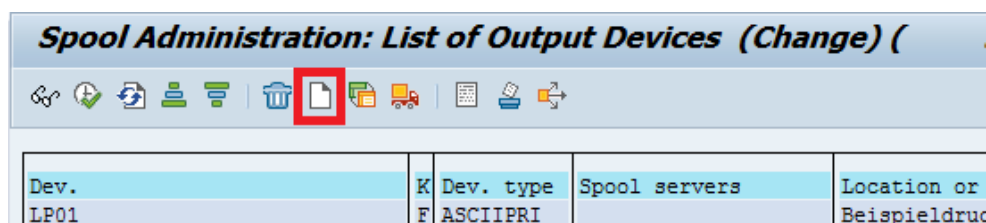


Figure 19: Click on the 'Create' button to create a new Output Device.

Spool Administration: Create Output Device

Output Device: YTL_OUTPUTDV1 Short name:

Description:

DeviceAttributes Access Method Output Attributes Tray Info

Device Type: YTLNX0G : Toshiba 203dpi B-EX4T-Latin

Device Class: Standard printer

Authorization Group:

Model:

Location:

Message:

☐ Lock Printer in SAP System

Figure 20: Select the uploaded Device Type into the SAP system

Spool Administration: Create Output Device

Output Device: YTL_OUTPUTDV1 Short name: YTL1

Description:

DeviceAttributes Access Method Output Attributes Tray Info

Host Spool Access Method: G: Front End Printing with Control Tech.

Host printer: _DEFAULT

☐ No Device Selection at Frontend

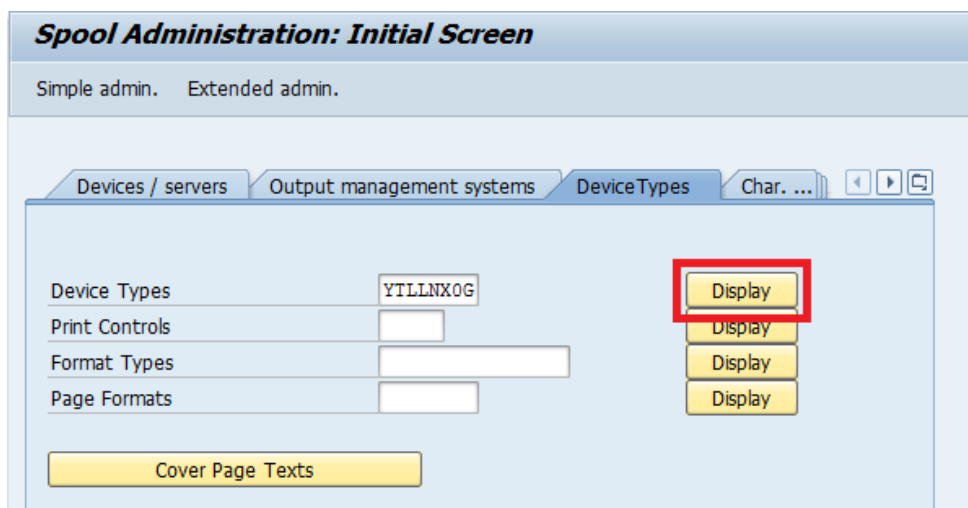
No status information available

Figure 21: Defining Access Method

TOSHIBA TEC CORPORATION

3.1 Accessing Device Types

Go to the Spool Administration application by using transaction code 'SPAD'. Enter the Device type name and click 'Display' button.

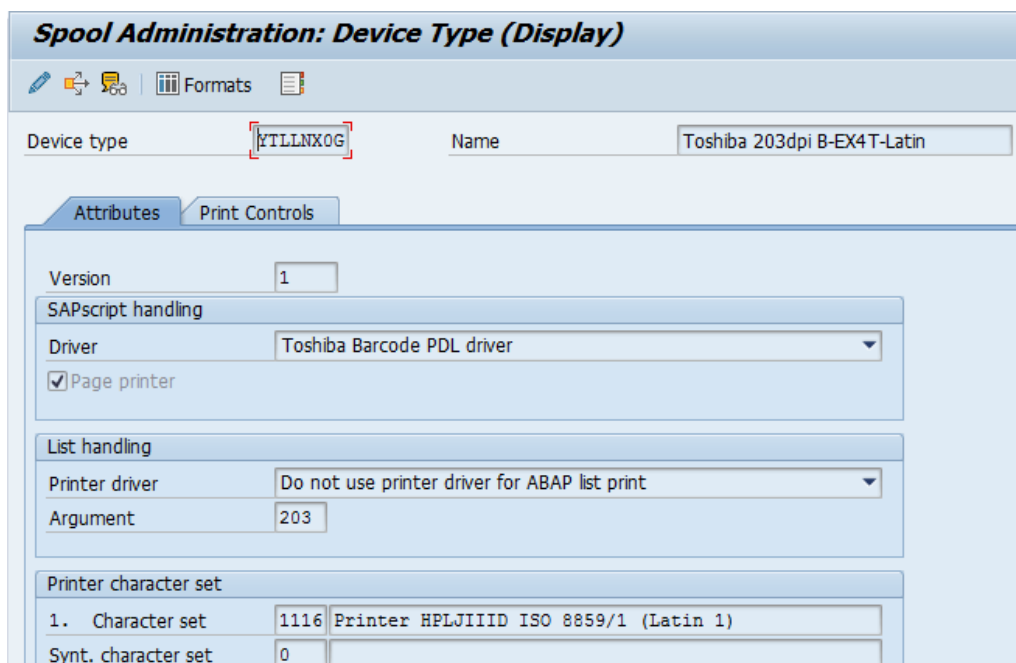


The screenshot shows the 'Spool Administration: Initial Screen' with tabs for 'Devices / servers', 'Output management systems', 'DeviceTypes', and 'Char. ...'. The 'DeviceTypes' tab is active. It contains a table with the following data:

Device Types	YTLNXXOG	Display
Print Controls		Display
Format Types		Display
Page Formats		Display

Below the table is a 'Cover Page Texts' button. The 'Display' button for the 'YTLNXXOG' device type is highlighted with a red rectangle.

Figure 22: Spool Administration



The screenshot shows the 'Spool Administration: Device Type (Display)' screen. It displays the device type 'YTLNXXOG' and its name 'Toshiba 203dpi B-EX4T-Latin'. The 'Attributes' tab is active, showing the following details:

Version	1
SAPscript handling	
Driver	Toshiba Barcode PDL driver
<input checked="" type="checkbox"/> Page printer	
List handling	
Printer driver	Do not use printer driver for ABAP list print
Argument	203
Printer character set	
1. Character set	1116 Printer HPLJIIID ISO 8859/1 (Latin 1)
Synt. character set	0

Figure 23: Displaying Device Type definition

4. Toshiba PDL driver Functions

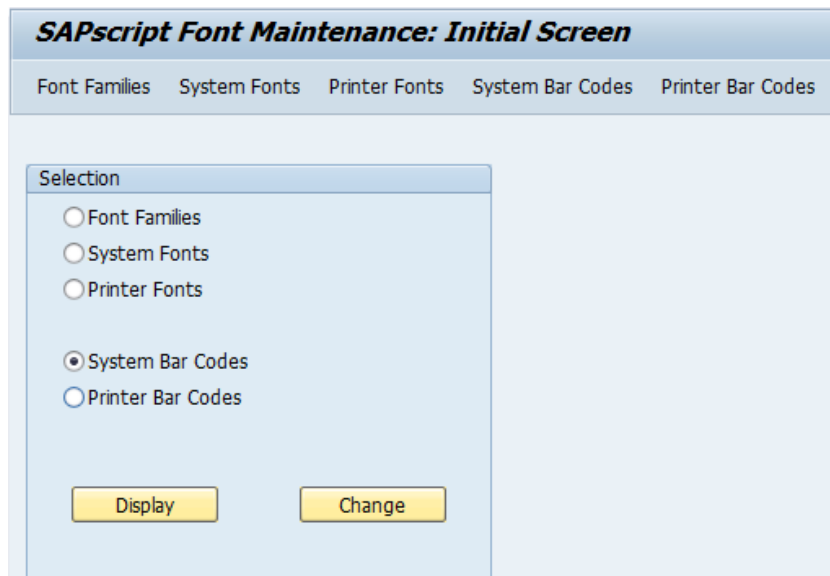
4.1 Barcode

Both SAP traditional and new barcode technology are supported. (Please refer to SAP notes: 430887 and 645158 for more information about the barcode technology).

To create Barcode definition, user needs to create the required barcode definition as System Barcode in SE73. Then link the barcode definition to the print control as Printer Barcode.

4.1.1 Defining Barcode

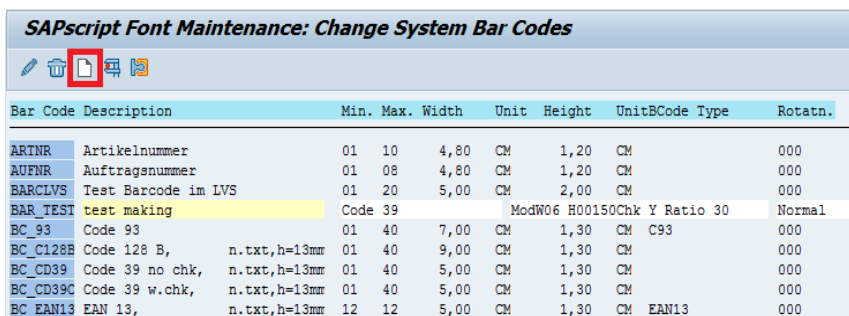
Before a Barcode can be used in the Smart Forms, the definition of the Barcode must be made. Run the transaction code 'SE73' (SAP Script Font Maintenance) to get the following screen.



The screenshot shows the 'SAPscript Font Maintenance: Initial Screen'. It has a navigation bar with tabs: 'Font Families', 'System Fonts', 'Printer Fonts', 'System Bar Codes', and 'Printer Bar Codes'. Below the tabs is a 'Selection' box containing five radio buttons: 'Font Families', 'System Fonts', 'Printer Fonts', 'System Bar Codes' (which is selected), and 'Printer Bar Codes'. At the bottom of the selection box are two buttons: 'Display' and 'Change'.

Figure 24 : System Barcode selection

Select the radio button 'System Bar Codes' and click the 'Change' button to go to the following screen.



The screenshot shows the 'SAPscript Font Maintenance: Change System Bar Codes' screen. It features a toolbar with icons for edit, delete, create, and print. Below the toolbar is a table with the following columns: 'Bar Code', 'Description', 'Min.', 'Max.', 'Width', 'Unit', 'Height', 'UnitBCode', 'Type', and 'Rotatn.'. The table contains several rows of barcode definitions, including 'ARINR', 'AUFNR', 'BARCLVS', 'BAR_TEST', 'BC_93', 'BC_C128B', 'BC_CD39', 'BC_CD39C', and 'BC_EAN13'. The 'BAR_TEST' row is highlighted in yellow.

Bar Code	Description	Min.	Max.	Width	Unit	Height	UnitBCode	Type	Rotatn.
ARINR	Artikelnummer	01	10	4,80	CM	1,20	CM		000
AUFNR	Auftragsnummer	01	08	4,80	CM	1,20	CM		000
BARCLVS	Test Barcode im LVS	01	20	5,00	CM	2,00	CM		000
BAR_TEST	test making								
BC_93	Code 93	01	40	7,00	CM	1,30	CM	C93	000
BC_C128B	Code 128 B, n.txt,h=13mm	01	40	9,00	CM	1,30	CM		000
BC_CD39	Code 39 no chk, n.txt,h=13mm	01	40	5,00	CM	1,30	CM		000
BC_CD39C	Code 39 w.chk, n.txt,h=13mm	01	40	5,00	CM	1,30	CM		000
BC_EAN13	EAN 13, n.txt,h=13mm	12	12	5,00	CM	1,30	CM	EAN13	000

Figure 25 : New Barcode creation

Click the 'Create' button or press 'F5' key to create a new System Barcode definition. A pop-up will show asking to select the New or Old Bar code technology.

4.1.2 New Barcode Technology

The 'New Barcode Technology' supports the following barcodes:

- Code39
- Code93
- Interleaved 2 of 5
- Code128

The following instruction provides how to create Barcode definitions using New Barcode Technology.

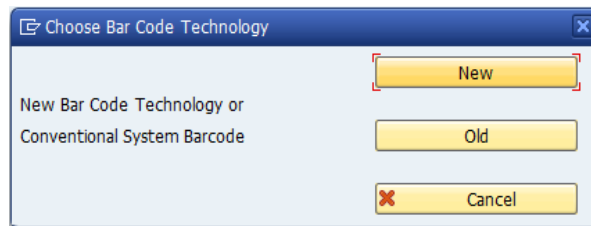


Figure 26 : Select the 'New' button from the pop-up.

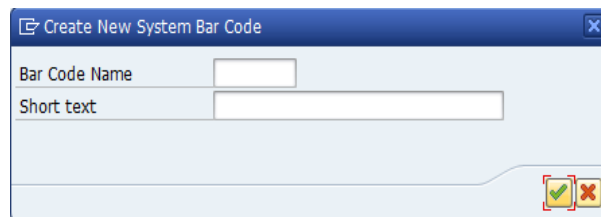


Figure 27 : Entering Barcode information

For Toshiba barcode, it is recommended to define a Barcode name with prefix 'YT'. For example, to define a new Code93 barcode, the following Barcode name can be used: YTBCOD93. Enter some description on the textbox for 'Short text'. Press the tick button to continue.

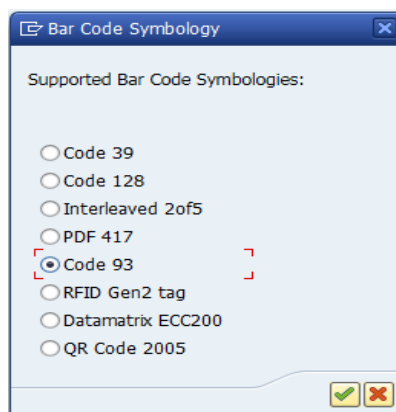


Figure 28 : Selecting Bar code type

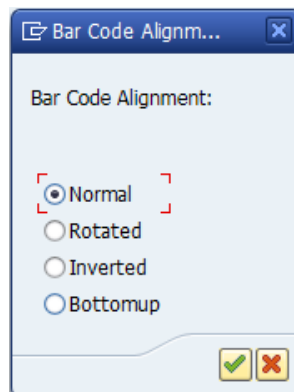


Figure 29 : Select the Bar code Alignment as 'Normal' for zero rotation

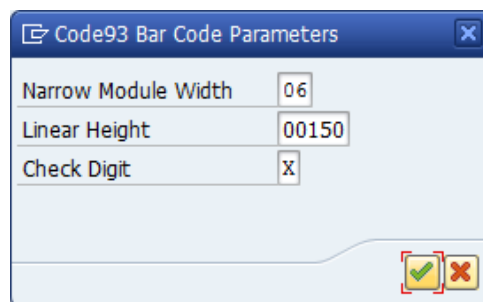


Figure 30: Entering Bar code information

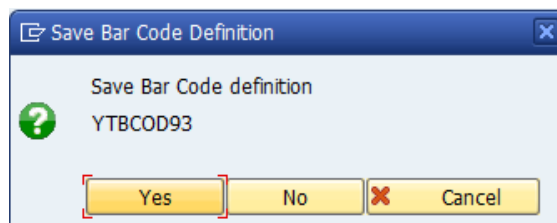
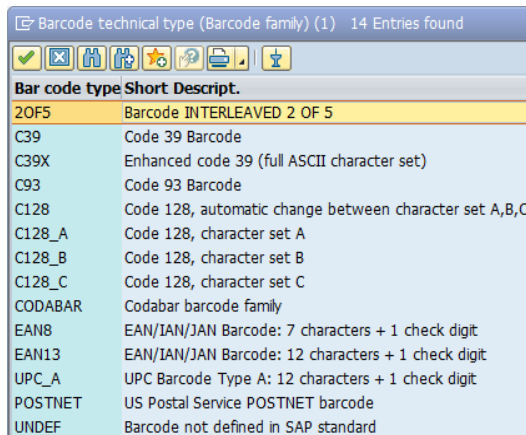


Figure 31 : Saving the Bar code definition

4.1.3 Old Barcode Technology

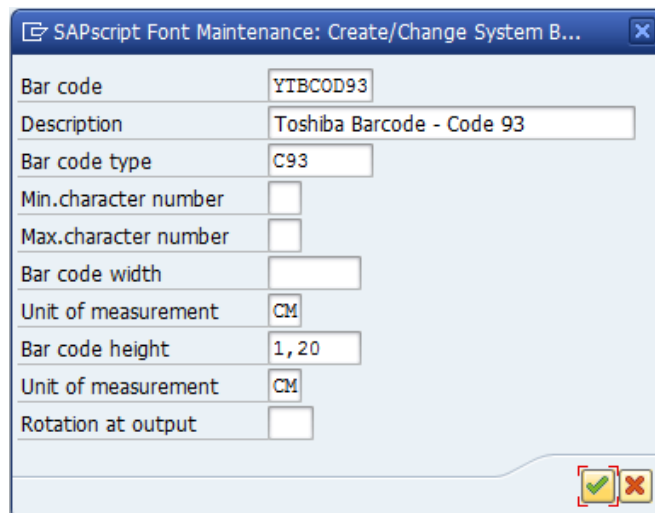
Click the 'Old' button (as in Figure 26, while choosing Bar Code Technology) to define a Barcode with Old Barcode Technology.

Old Barcode Technology supports the following types of Barcode's.



Bar code type	Short Descript.
2OF5	Barcode INTERLEAVED 2 OF 5
C39	Code 39 Barcode
C39X	Enhanced code 39 (full ASCII character set)
C93	Code 93 Barcode
C128	Code 128, automatic change between character set A,B,C
C128_A	Code 128, character set A
C128_B	Code 128, character set B
C128_C	Code 128, character set C
CODABAR	Codabar barcode family
EAN8	EAN/IAN/JAN Barcode: 7 characters + 1 check digit
EAN13	EAN/IAN/JAN Barcode: 12 characters + 1 check digit
UPC_A	UPC Barcode Type A: 12 characters + 1 check digit
POSTNET	US Postal Service POSTNET barcode
UNDEF	Barcode not defined in SAP standard

Figure 32 : Standard Barcodes



Bar code	YTBCOD93
Description	Toshiba Barcode - Code 93
Bar code type	C93
Min.character number	
Max.character number	
Bar code width	
Unit of measurement	CM
Bar code height	1, 20
Unit of measurement	CM
Rotation at output	

Figure 33 : Defining Barcode with Old Barcode Technology

Maintain the Barcode height and other details and click Confirm button. Other parameters like Barcode module width and check digit can be passed through Print control.

Print controls are also defined to pass additional information to the Barcode Definition. User have to select the print control which carries the required information and link the barcode definition to the print control as Printer Bar codes.

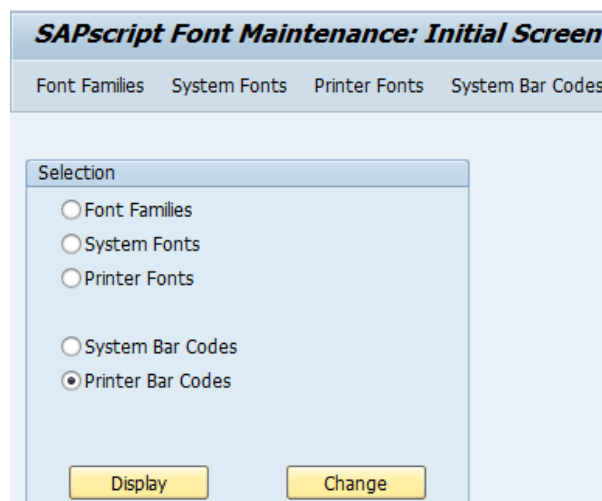
Barcode Type	SAP Print Control	TPCL Command
CODE 93	SB001-SB012	ESC XB :<Check digit, Module Width>
JAN/EAN8	SB041-SB052	ESC XB :<Check digit, Module Width>
JAN/EAN13	SB071-SB082	ESC XB :<Check digit, Module Width>
Postnet	SB111-SB122	ESC XB :<Check digit, Module Width>
UUC/EAN128 (GS1-128 Barcode)	SB141-SB152	ESC XB :<Check digit, Module Width>
UPC-A	SB171-SB182	ESC XB :<Check digit, Module Width>
UPC-E	SB211-SB222	ESC XB :<Check digit, Module Width>
CODE128 (with auto code selection)	SB241-SB252	ESC XB :<Check digit, Module Width>
CODE128 A	SB271-SB282	ESC XB :<Check digit, Module Width>
CODE128 B	SB311-SB322	ESC XB :<Check digit, Module Width>
CODE128 C	SB341-SB352	ESC XB :<Check digit, Module Width>
Customer barcode	SB371-SB382	ESC XB :<Check digit, Module Width>
RM4SCC	SB411-SB422	ESC XB :<Check digit, Module Width>
KIX CODE	SB441-SB452	ESC XB :<Check digit, Module Width>
NW-7 (Codabar, Ratio 1:3)	SB471-SB482	ESC XB :<Check digit, Narrow bar width, Narrow space width, Wide bar width, Wide space width, Character to Character >
NW-7 (Codabar, Ratio 1:2)	SB511-SB522	ESC XB :<Check digit, Narrow bar width, Narrow space width, Wide bar width, Wide space width, Character to Character >
NW-7 (Codabar, Ratio 2:5)	SB541-SB552	ESC XB :<Check digit, Narrow bar width, Narrow space width, Wide bar width, Wide space width, Character to Character >
Interleaved 2 of 5 (Ratio 1:3)	SB571-SB582	ESC XB :<Check digit, Narrow bar width, Narrow space width, Wide bar width, Wide space width, Character to Character >

Barcode Type	SAP Print Control	TPCL Command
Interleaved 2 of 5 (Ratio 1:2)	SB611-SB622	ESC XB :<Check digit, Narrow bar width, Narrow space width, Wide bar width, Wide space width, Character to Character >
Interleaved 2 of 5 (Ratio 2:5)	SB641-SB652	ESC XB :<Check digit, Narrow bar width, Narrow space width, Wide bar width, Wide space width, Character to Character >
Code 39 (Ratio 1:3)	SB671-SB682	ESC XB :<Check digit, Narrow bar width, Narrow space width, Wide bar width, Wide space width, Character to Character >
Code 39 (Ratio 1:2)	SB711-SB722	ESC XB :<Check digit, Narrow bar width, Narrow space width, Wide bar width, Wide space width, Character to Character >
Code 39 (Ratio 2:5)	SB741-SB752	ESC XB :<Check digit, Narrow bar width, Narrow space width, Wide bar width, Wide space width, Character to Character >
MSI	SB771-SB782	ESC XB :<Check digit, Narrow bar width, Narrow space width, Wide bar width, Wide space width, Character to Character >
Industrial 2 of 5	SB811-SB822	ESC XB :<Check digit, Narrow bar width, Narrow space width, Wide bar width, Wide space width, Character to Character >
MATRIX 2 of 5 for NEC	SB841-SB852	ESC XB :<Check digit, Narrow bar width, Narrow space width, Wide bar width, Wide space width, Character to Character >

Table 1: Print controls for Old Barcode Technology

4.1.4 Defining Printer Barcodes

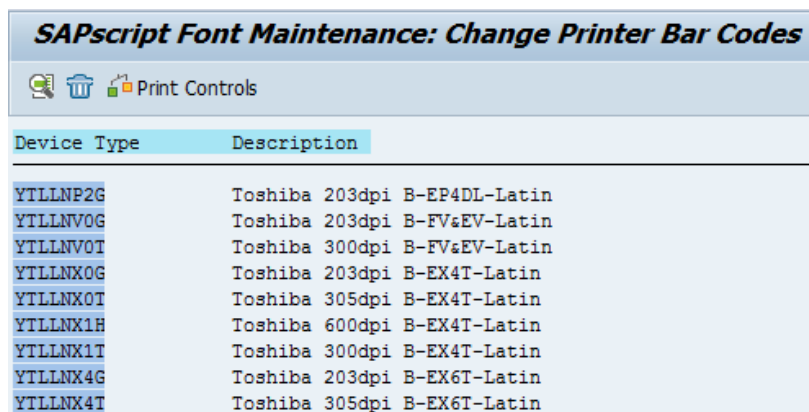
Once the System Barcode (Old Technology) has been defined, then proceed to define the printer barcode.



The screenshot shows the 'SAPscript Font Maintenance: Initial Screen' with a tabbed interface. The 'Printer Fonts' tab is selected. Below the tabs is a 'Selection' box containing five radio buttons: 'Font Families', 'System Fonts', 'Printer Fonts', 'System Bar Codes', and 'Printer Bar Codes'. The 'Printer Bar Codes' option is selected. At the bottom of the selection box are two buttons: 'Display' and 'Change'.

Figure 34 : Defining Printer Bar Codes

Choose the 'Printer Barcode's and then click the 'Change' button to create a Printer Barcode definition.



The screenshot shows the 'SAPscript Font Maintenance: Change Printer Bar Codes' screen. It features a 'Print Controls' section with icons for a printer, a trash can, and a document. Below this is a table with two columns: 'Device Type' and 'Description'. The table lists various Toshiba printer models and their corresponding barcodes.

Device Type	Description
YTLLNP2G	Toshiba 203dpi B-EP4DL-Latin
YTLLNV0G	Toshiba 203dpi B-FV&EV-Latin
YTLLNV0T	Toshiba 300dpi B-FV&EV-Latin
YTLLNX0G	Toshiba 203dpi B-EX4T-Latin
YTLLNX0T	Toshiba 305dpi B-EX4T-Latin
YTLLNX1H	Toshiba 600dpi B-EX4T-Latin
YTLLNX1T	Toshiba 300dpi B-EX4T-Latin
YTLLNX4G	Toshiba 203dpi B-EX6T-Latin
YTLLNX4T	Toshiba 305dpi B-EX6T-Latin

Figure 35 : Device List for Printer Barcodes

Select the desired Toshiba Device type which starts with prefix 'YTL' and double click on it.

SAPscript Font Maintenance: Change Printer Bar Codes				
Maint. Print Control				
Device Type	Bar Code	Prefix	Suffix	Baseline Alignment
YTLLNXOG	YTBEAN13	SB005	SB005	<input type="checkbox"/>
YTLLNXOG	YTBEAN8	SB003	SB003	<input type="checkbox"/>
YTLLNXOG	YTBAN13	SB004	SB004	<input type="checkbox"/>
YTLLNXOG	YTBAN8	SB002	SB002	<input type="checkbox"/>
YTLLNXOG	YTBAN712	SB015	SB015	<input type="checkbox"/>
YTLLNXOG	YTBAN713	SB014	SB014	<input type="checkbox"/>
YTLLNXOG	YTBAN725	SB016	SB016	<input type="checkbox"/>
YTLLNXOG	YTBANSTNT	SB001	SB001	<input type="checkbox"/>
YTLLNXOG	YTBUPCA	SB006	SB006	<input type="checkbox"/>
YTLLNXOG	YTC128A	SB010	SB010	<input type="checkbox"/>
YTLLNXOG	YTC128B	SB010	SB010	<input type="checkbox"/>
YTLLNXOG	YTC128C	SB010	SB010	<input type="checkbox"/>
YTLLNXOG	YTC128WA	SB009	SB009	<input type="checkbox"/>

Figure 36 : Printer Barcode List in the device type

The screenshot shows the SAPscript Font Maintenance: Change Printer Bar Codes window. A selection dialog is open, showing the following fields:

- Device type: YTLLNXOG
- Bar code:
- Bar code prefix:
- Bar code suffix:
- Baseline Alignment: ☐

Below the dialog, a list of system bar codes is displayed:

Bar code	Description
YSTQR_NX	QR code test
YSTQR2	SATO QR Model2
YSTR128A	SATO Code 128 code A Rotate 90
YSTRFID	SATO RFID Gen2 Tag
YSTROT	SATO rotation test
YSTUPCA	SATO UPC_A Barcode Ratio 1:3
YTBAN13	Toshiba Barcode - Code 93
YTBEAN13	Toshiba Barcode-EAN13
YTBEAN8	Toshiba Barcode-EAN8
YTBAN13	Toshiba Barcode-JAN13

The status bar at the bottom indicates "195 Entries found".

Figure 37 : Selecting System Bar code from entry list

Select the System Barcode, which has been defined previously from the entry list. Then key in the required Print Control. Note: Key in the same print control for both 'Bar code prefix' and 'Bar code suffix'.

In need of printing standard barcodes defined in Old barcode technology, define the required standard barcodes in Transaction SE73 Printer Bar Codes.

4.1.5 Customized Barcode with UNDEF Barcodes

If the printer-resident is not supported in SAP, customized print control can be added into the device type and "UNDEF" barcode type can be used to map to the print control. UNDEF is only in Old Barcode Technology. To start with UNDEF, go to SE73->System Bar codes to define a Barcode using the Conventional System Barcode (choose 'Old')

Example : Barcode with UNDEF

- a. Create System Barcode Definition

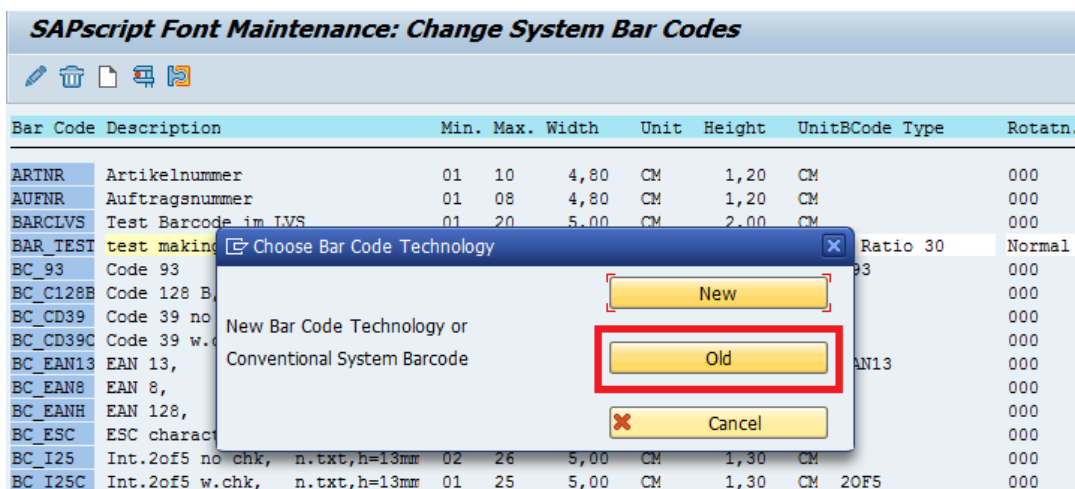


Figure 38 : UNDEF barcode definition

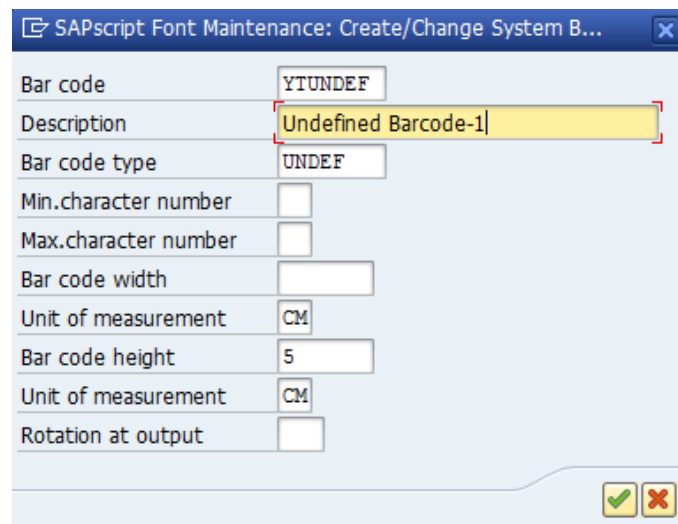
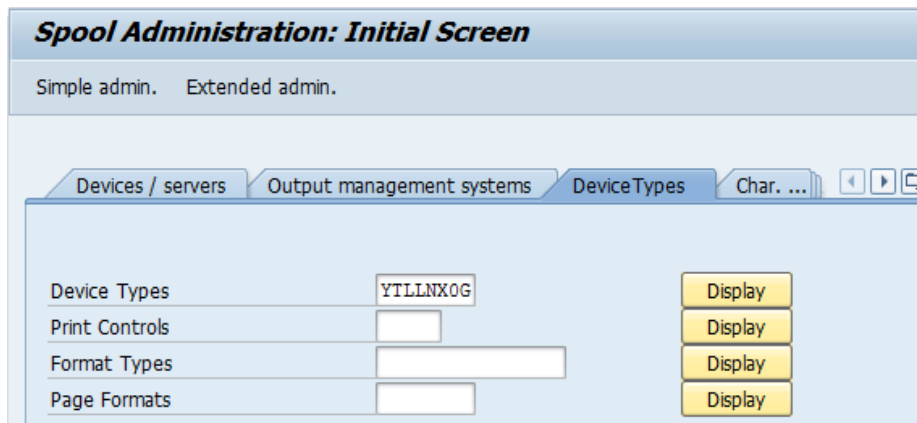


Figure 39 : Customized Barcode Definition

Maintain the Barcode height and other details and click Confirm button. Other parameters like Barcode module width and check digit can be passed through Print control.

- b. Create Print Control in device type
Go to transaction SPAD->Full Administration->Device Types to open the Print Controls tab of the device type and click Display.



Spool Administration: Initial Screen

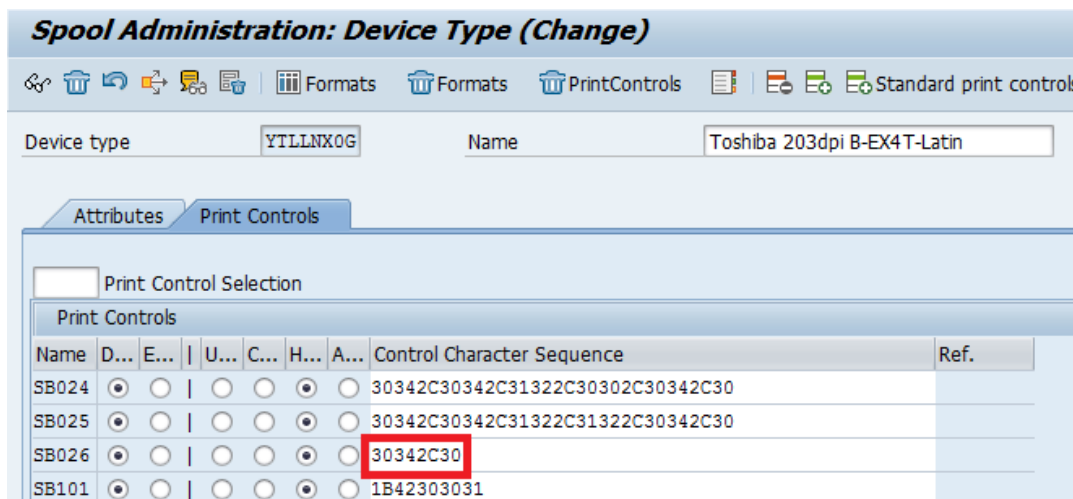
Simple admin. Extended admin.

Devices / servers Output management systems DeviceTypes Char. ...

Device Types	YTLLNX0G	Display
Print Controls		Display
Format Types		Display
Page Formats		Display

Figure 40 : Device type Selection

Add a new barcode print control (Prefix SB) and input the hex value of Control Character Sequence. In this example, the hex value of "30342C30" is entered for Print Control SB026.



Spool Administration: Device Type (Change)

Device type YTLLNX0G Name Toshiba 203dpi B-EX4T-Latin

Attributes Print Controls

Print Control Selection

Name	D...	E...	U...	C...	H...	A...	Control Character Sequence	Ref.
SB024	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	30342C30342C31322C30302C30342C30	
SB025	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	30342C30342C31322C31322C30342C30	
SB026	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	30342C30	
SB101	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	1B42303031	

Figure 41: Defining Print Control in Device type

This print control defines part of Toshiba Barcode command for Undefined Bar code with hex value '30342C30' stands for '04, 0' in ASCII text where '04' value is the module width in dots and '0' value is the Rotational angle of Bar code.

The Barcode Height will be extracted from the Barcode Definition. The Barcode Data will be supplied from Smart Forms.

- c. Mapping of Barcode Definition to Print Control
Go to SE73->Printer Bar Codes

SAPscript Font Maintenance: Initial Screen

Font Families System Fonts Printer Fonts System Bar Codes

Selection

☐ Font Families

☐ System Fonts

☐ Printer Fonts

☐ System Bar Codes

☒ Printer Bar Codes

Display Change

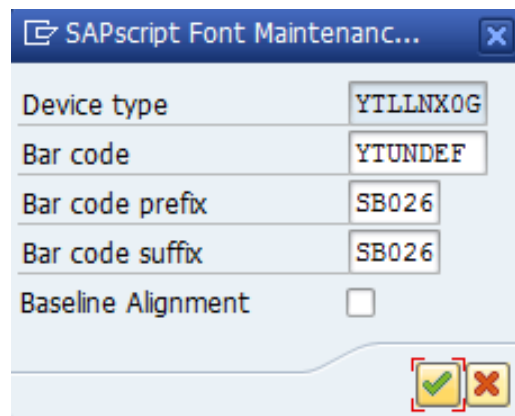
Figure 42: Selecting Printer Bar codes

SAPscript Font Maintenance: Change Printer Bar Codes

Maint. Print Control

Device Type	Bar Code	Prefix	Suffix	Baseline Alignment
YTLLNX0G	YTBCOD93	SB004	SB004	<input type="checkbox"/>
YTLLNX0G	YTBEAN13	SB074	SB074	<input type="checkbox"/>
YTLLNX0G	YTBEAN8	SB044	SB044	<input type="checkbox"/>
YTLLNX0G	YTBW712	SB514	SB514	<input type="checkbox"/>
YTLLNX0G	YTBW713	SB474	SB474	<input type="checkbox"/>
YTLLNX0G	YTBW725	SB544	SB544	<input type="checkbox"/>
YTLLNX0G	YTBPSTNT	SB114	SB114	<input type="checkbox"/>
YTLLNX0G	YTBUPCA	SB174	SB174	<input type="checkbox"/>
YTLLNX0G	YTC128A	SB274	SB274	<input type="checkbox"/>
YTLLNX0G	YTC128B	SB314	SB314	<input type="checkbox"/>
YTLLNX0G	YTC128C	SB344	SB344	<input type="checkbox"/>
YTLLNX0G	YTC128WA	SB244	SB244	<input type="checkbox"/>
YTLLNX0G	YTC3912	SB714	SB714	<input type="checkbox"/>
YTLLNX0G	YTC3913	SB674	SB674	<input type="checkbox"/>
YTLLNX0G	YTC3925	SB744	SB744	<input type="checkbox"/>
YTLLNX0G	YTCUSTB	SB374	SB374	<input type="checkbox"/>
YTLLNX0G	YTEAN128	SB144	SB144	<input type="checkbox"/>
YTLLNX0G	YTI20F12	SB614	SB614	<input type="checkbox"/>
YTLLNX0G	YTI20F13	SB574	SB574	<input type="checkbox"/>
YTLLNX0G	YTI20F25	SB644	SB644	<input type="checkbox"/>
YTLLNX0G	YTIND2F5	SB814	SB814	<input type="checkbox"/>
YTLLNX0G	YTKIXCD	SB444	SB444	<input type="checkbox"/>
YTLLNX0G	YTMAT2F5	SB844	SB844	<input type="checkbox"/>
YTLLNX0G	YTMSIB	SB774	SB774	<input type="checkbox"/>
YTLLNX0G	YTRM4SCC	SB414	SB414	<input type="checkbox"/>
YTLLNX0G	YTUPCE	SB214	SB214	<input type="checkbox"/>

Figure 43: Mapping of Print Control



The image shows a dialog box titled "SAPscript Font Maintenance...". It contains several input fields and a checkbox. The fields are labeled "Device type", "Bar code", "Bar code prefix", and "Bar code suffix". The values entered in these fields are "YTLLNX0G", "YTUNDEF", "SB026", and "SB026" respectively. There is also a "Baseline Alignment" checkbox which is currently unchecked. At the bottom right of the dialog, there are two buttons: a green checkmark button and a red X button, both of which are highlighted with a red rectangular border.

Device type	YTLLNX0G
Bar code	YTUNDEF
Bar code prefix	SB026
Bar code suffix	SB026
Baseline Alignment	<input type="checkbox"/>

Figure 44 : Select the Barcode Definition created previously, and map it to the print controls.

4.2 Fonts

Toshiba Barcode PDL driver supports the following fonts.

CHARACTER SET & FONTS	TPCL FONT	TPCL COMMANDS	PRINT CONTROLS (based on TPCL)	VALUE
Latin 1 (ISO8859-1) device types				
Helvetica	Helvetica (Medium)	[ESC]PCaaa;bbbb,cccc,d,e,G,ii,j [ESC]PCaaa;bbbb,cccc,d,e,H,ii,j [ESC]PCaaa;bbbb,cccc,d,e,I,ii,j	NA	Refer Table 3
Times	Times Roman (Medium)	[ESC]PCaaa;bbbb,cccc,d,e,A,ii,j [ESC]PCaaa;bbbb,cccc,d,e,B,ii,j	NA	Refer Table 3
CodePage 850 device types				
Helvetica	Helvetica (Medium)	[ESC]PCaaa;bbbb,cccc,d,e,G,ii,j [ESC]PCaaa;bbbb,cccc,d,e,H,ii,j [ESC]PCaaa;bbbb,cccc,d,e,I,ii,j	NA	Refer Table 3
Times	Times Roman (Medium)	[ESC]PCaaa;bbbb,cccc,d,e,A,ii,j [ESC]PCaaa;bbbb,cccc,d,e,B,ii,j	NA	Refer Table 3
COURIER BOLD	Courier (Bold)	[ESC]PCaaa;bbbb,cccc,d,e,R,ii,j	SF001	1,1,R
Simplified Chinese (GB2312) device types				
CNSONG	Outline Font Format Command	[ESC]PCaaa;bbbb,cccc,d,e,r,ii,j	SF001	1,1,r

Table 2-a : Font Table

CHARACTER SET & FONTS	TPCL FONT	TPCL COMMANDS	PRINT CONTROLS (based on TPCL)	VALUE
Japanese (Shift-JIS)				
DBGothic, DBMincho, JPMincho	Kanji (16 x 16 dots) (Square Gothic):	[ESC]PCaaa;bbbb,cccc,d,e,U(a),ii,j	SF002	1,1,U
	Kanji (24 x 24 dots) (Square Gothic)	[ESC]PCaaa;bbbb,cccc,d,e,V(a),ii,j	SF003	1,1,V
	Kanji (32 x 32 dots) (Square Gothic)	[ESC]PCaaa;bbbb,cccc,d,e,W(a),ii,j	SF004	1,1,W
	Kanji (48 x 48 dots) (Square Gothic)	[ESC]PCaaa;bbbb,cccc,d,e,X(a),ii,j	SF005	1,1,X
Helvetica	Helvetica (Medium)	[ESC]PCaaa;bbbb,cccc,d,e,G,ii,j [ESC]PCaaa;bbbb,cccc,d,e,H,ii,j [ESC]PCaaa;bbbb,cccc,d,e,I,ii,j	NA	Refer Table 3
Times	Times Roman (Medium)	[ESC]PCaaa;bbbb,cccc,d,e,A,ii,j [ESC]PCaaa;bbbb,cccc,d,e,B,ii,j	NA	Refer Table 3
COURIER BOLD	Courier (Bold)	[ESC]PCaaa;bbbb,cccc,d,e,R,ii,j	SF001	1,1,R

Table 2-b : Font Table

SAP FONTS	TPCL Font	DPI	Smart style point size	Font and Magnification value	TPCL Command
Helvetica	Helvetica (Medium)	203	0-5 points	Helvetica (Medium)/ 9 point (0.5 times)	ESC PC : 05,05,G
			6-9 points	Helvetica (Medium)/ 9 point(1 time)	ESC PC : 1,1,G
			10-14 points	Helvetica (Medium)/ 15 point((0.5 times)	ESC PC : 05,05,H
			15 points	Helvetica (Medium)/ 15 point (1 time)	ESC PC : 1,1,H
			16-17 points	Helvetica (Medium)/ 18 point(0.5 times)	ESC PC : 05,05,I
			>=18 points	Helvetica (Medium)/ 18 point(1 time)	ESC PC : 1,1,I
		300/305	0-3 points	Helvetica (Medium)/ 6 point (0.5 times)	ESC PC : 05,05,G
			4-6 points	Helvetica (Medium)/ 6 point(1 time)	ESC PC : 1,1,G
			7-9 points	Helvetica (Medium)/ 10 point((0.5 times)	ESC PC : 05,05,H
			10 points	Helvetica (Medium)/ 10 point (1 time)	ESC PC : 1,1,H
			11 points	Helvetica (Medium)/ 12 point((0.5 times)	ESC PC : 05,05,I
			>=12 points	Helvetica (Medium)/ 12 point(1 time)	ESC PC : 1,1,I
		600	0-1 points	Helvetica (Medium)/ 3 Point(0.5 times)	ESC PC : 05,05,G
			2-3 points	Helvetica (Medium)/ 3 Point(1 times)	ESC PC : 1,1,G
			4-5 points	Helvetica (Medium)/ 5 Point(1 times)	ESC PC : 1,1,H
			>= 6 points	Helvetica (Medium)/ 6 Point(1 times)	ESC PC : 1,1,I

Table 3-a : Helve and Times Font Information

SAP FONTS	TPCL Font	DPI	Smart style point size	Font and Magnification value	TPCL Command
Times	Times Roman (Medium)	203	0-6 points	Times Roman (Medium) /12 points(0.5 times)	05,05,A
			7-12 points	Times Roman (Medium)/ 12 points (1 times)	ESC PC : 1,1,A
			13-14 points	Times Roman (Medium)/ 15 points (0.5 times)	ESC PC : 05,05,B
			>=15 points	Times Roman (Medium) /15 points(1 times)	ESC PC : 1,1,B
		300/305	0-4 points	Times Roman (Medium) /8 points(0.5 times)	ESC PC : 05,05,A
			5-8 points	Times Roman (Medium) /8 points(1 times)	ESC PC : 1,1,A
			9 points	Times Roman (Medium)/ 10 points (0.5 times)	ESC PC : 05,05,B
			>=10 points	Times Roman (Medium) /10 points(1 times)	ESC PC : 1,1,B
		600	0-2 points	Times Roman (Medium)/ 4 points (0.5 times)	ESC PC : 05,05,A
			3-4 points	Times Roman (Medium) /5 points(1 times)	ESC PC : 1,1,A
			>=5 points	Times Roman (Medium)/ 5 points (1 times)	ESC PC : 1,1,B

Table 3-b : Helve and Times Font Information

SAP Fonts	Size (dots)	TPCL Font Size for 203 DPI(Points)	TPCL Font Size for 300 DPI(Points)	TPCL Font Size for 600 DPI(Points)
DBGothic, DBMincho, JPMincho	For Kanji (16 x 16 dots)	6	4	2
	For Kanji (24 x 24 dots)	9	6	3
	For Kanji (32 x 32 dots)	11	8	4
	For Kanji (48 x 48 dots)	17	12	6
CNSONGP	For Chinese (24 x 24 dots)	9	6	3

Table 4 : Japanese, Chinese Font Information

To support Japanese or Chinese character set, Fonts should be installed in printer. Also there is a variation in the font size for Japanese Characters shown on the Smart Forms print preview.

4.3 Printer Parameter in Smart forms

User can pass the printer parameter settings defined in a Smart Form to the device driver by using the Command nodes.

Open the Smart form using transaction code 'SMARTFORMS'. Right click on the Window node->Create->Flow Logic->Command to display Command node feature.

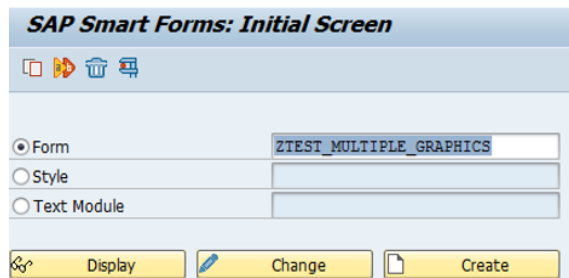


Figure 45 : Enter the Smartform name in Form field and press Change button.

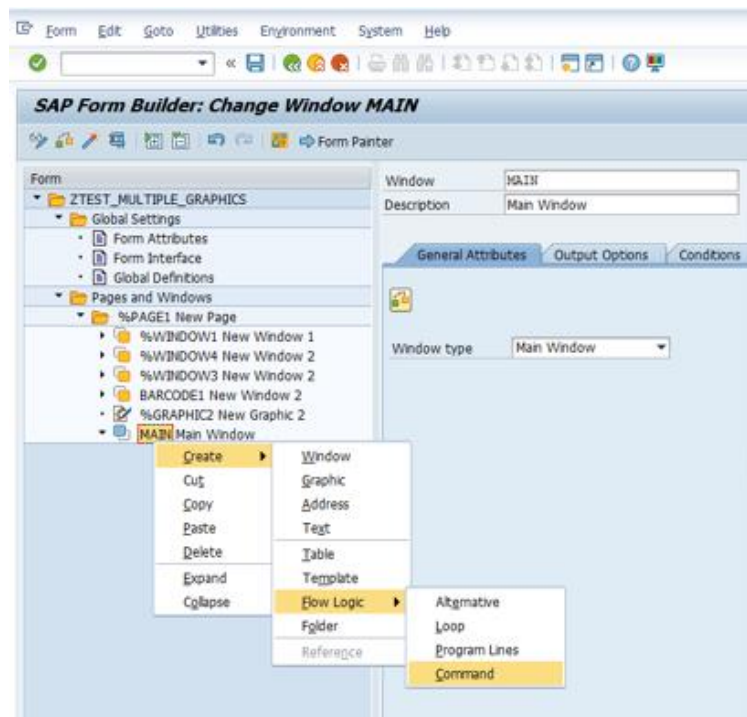


Figure 46 : Creating Command Node in Smart form by right clicking the Main Window.

Command: %COMMAND1
Description: New Command 1

General Attributes | Conditions

☐ Go to New Page

Reset Paragraph Numbering ☐

Output Options

Include Printer Control ☒

Free Attributes of Spool Request

Attribute Name	Attribute Value
PRINT_MODE	'0'
SENSOR_TYPE	'1'
ISSUE_MODE	'C'
ISSUE_SPEED	'4'

Figure 47 : Sample Command Parameters

Under the 'Output Options', user to define the parameters for printer settings in the Name-Value pairs format. The value provided must be enclosed within the single quote character ('').

The following are the available printer parameters supported by Toshiba PDL driver:

Parameter Name	Function	TPCL Command
BAR_TEXT	Print numerals under barcode	Command : ESC XB Value : p
CUT_INTERVAL	Designates the number of labels to be printed before cut.	Command : ESC XS Value : bbb
CUT_OPERATION	Ejects (or cuts) the label presently left between the print head and the cutter, and returns the next label to the original position.	Command : ESC IB
ISSUE_MODE	Issue mode	Command : ESC XS Value : d
ISSUE_SPEED	Issue speed	Command : ESC XS Value : e
LABEL_POSITION	Position fine adjust command	Command : ESC AX Value : abbb,cddd,eff

Table 5-a : Parameter Table

TOSHIBA TEC CORPORATION

Parameter Name	Function	TPCL Command
LABEL_SIZE	Label size set command	Command : ESC D Value : bbbb,cccc
PRINT_DENSITY	Print density fine adjust command	Command : ESC AY Value : abb,c
PRINT_DIRECTION	Printing direction	Command : ESC XS Value : g
PRINT_END_POS	Maximum pitch length calculation	Command : ESC D Value : Effective Length + PRINT_END_POS (input)
PRINT_QUANTITY	Number of labels to be issued	Command : ESC XS Value : aaaa
RIBBON_PARA	Whether to use ribbon	Command : ESC XS Value : f
ROTATE_180_x	180 degree rotation for text	Command : ESC PC Value (PC) : ii
ROTATE_270_x	270 degree rotation for text	Command : ESC PC Value (PC) : ii
ROTATE_90_x	90 degree Rotation for text	Command : ESC PC Value (PC) : ii
SENSOR_TYPE	Type of sensor	Command : ESC XS Value : c
START_POINT	X and Y Position to draw a barcode , text or graphics	Command :ESC PC, ESC SG and ESC XB Value (PC) : bbbb,cccc Value (XB) : bbbb,cccc Value (SG) : aaaa,bbbb

Table 5-b : Parameter Table

4.3.1 Printer Parameter Descriptions

Parameter 1:	BAR_TEXT
Description:	BAR TEXT parameter decides Whether or not to print numerals under barcodes.
TPCL command:	ESC XB: p 0: Not printed 1: Printed
Default value:	0
Input Example:	BAR_TEXT = '1'
Note:	Bar text cannot be set for the postal codes (Customer bar code, POSTNET, RM4SCC, and KIX CODE).
Parameter 2:	CUT_INTERVAL
Description:	Designates the number of labels to be printed before cut.
TPCL command:	ESC XS: bbb 000 to 100 (no cut when 000)
Default value:	000
Input Example:	CUT_INTERVAL = '001'
Note:	Only possible when the Cutter Unit is installed. Input value should follow the conditions given in TPCL manual.
Parameter 3:	CUT_OPERATION
Description:	Ejects (or cuts) the label presently left between the print head and the cutter, and returns the next label to the original position.
TPCL command:	ESC IB There is no parameter value for ESC IB command
Default value:	None
Input Example:	CUT_OPERATION = '1'
Note	Cut operation (ESC IB) will be executed only if the input value is '1'.
Parameter 4:	ISSUE_MODE
Description:	Issue mode
TPCL command:	ESC XS: d C: Batch mode D: Strip mode (with back feed and the strip sensor enabled.) E: Strip mode (with back feed enabled, the strip sensor ignored, the applicator supported)
Default value:	C
Input Example:	ISSUE_MODE = 'C'
Note:	Based on the printer model and accessories. Input value should follow the conditions given in TPCL manual.

Parameter 5: **ISSUE_SPEED**
 Description: Issue speed
 TPCL command: **ESC XS: e**
 Based on the printer model parameter value will vary
 Default value: 1
 Input Example: ISSUE_SPEED = '6'
 Note: Default value for issue speed for Mobile model and desktop model is '1'. Input value should follow the conditions given in TPCL manual.

Parameter 6: **LABEL_POSITION**
 Description: Position fine adjust command
 TPCL command: **ESC AX: abbb,cddd,eff**
 a: Whether the print start position is shifted forward or backward
 +: Forward
 -: Backword
 bbb: Feed amount fine adjustment value
 000 to 500 (in 0.1 mm units)
 c: Whether the cut position/strip position is shifted forward or backward
 +: Forward
 -: Backward
 ddd: Fine adjustment value for the cut position/strip position
 000 to 500 (in 0.1 mm units)
 e: Whether the back feed amount is increased or decreased.
 +: Increase
 -: Decrease
 ff: Back feed amount fine adjustment value
 00 to 99 (in 0.1 mm units)
 Default value: None
 Input Example: LABEL_POSITION = '+001,+001,+01'
 Note: There is no default value for this parameter, this parameter will be added to the print job only if the free Param is entered by the end user. Input value should follow the conditions given in TPCL manual.

Parameter 7: **LABEL_SIZE**
Description: Label size set command
TPCL command: **ESC D: bbbb,cccc**
bbbb: Effective print width
Fixed to 4 digits (in 0.1 mm units)
cccc: Effective print length
4 or 5 digits (in 0.1 mm units)
Default value: None
Input Example: LABEL_SIZE = '152004980'
Where '1520' is Effective print width and '04980' is Effective print length
Limitations: There is no default value for this parameter. Input values should follow the conditions given in TPCL manual. Based on the input from the user pitch length will be calculated and for this calculation there is a dependency with printer model.

Parameter 8: **PRINT_DENSITY**
Description: Print density fine adjust command
TPCL command: **ESC AY: abb,c**
a: Whether to increase or decrease the print density
+: Increase (darker)
-: Decrease (lighter)
bb: Print density fine adjustment value
When parameter a is set to "+": 00 to 10 (in units of 1 step)
When parameter a is set to "-": 00 to 20 (in units of 1 step)
c: Print method
0: Thermal transfer
1: Direct thermal
Default value: None
Input Example: PRINT_DENSITY = '+03,1'
Note: There is no default value for this parameter, this parameter will be added to the print job only if the free Param is entered by the end user. Input value should follow the conditions given in TPCL manual.

Parameter 9: **PRINT_DIRECTION**
Description: Printing direction
TPCL command: **ESC XS: g**
0: Printing bottom first
1: Printing top first
2: Bottom first mirror printing
3: Top first mirror printing
Default value: 1
Input Example: PRINT_DIRECTION = '2'
Note: Input value should follow the conditions given in TPCL manual.

TOSHIBA TEC CORPORATION

Parameter 10:	PRINT_END_POS
Description:	Maximum pitch length calculation
TPCL command:	ESC D
Default value:	None
Input Example:	PRINT_END_POS= '55'
Note:	Based on the input value from user, we will calculate maximum pitch length. ie, Value: Effective Print Length + PRINT_END_POS (input in mm units). In case PRINT_END_POS free PARAM is not defined, PITCH length needs to be calculated based on the device specifications. This command will be effective only when SENSOR_TYPE is "NO sensor".
Parameter 11:	PRINT_QUANTITY
Description:	Number of labels to be issued
TPCL command:	ESC XS: aaaa 0001 to 9999
Default value:	0000
Input Example:	PRINT_QUANTITY= '%PAGE1:3,%PAGE2:3'
Note:	If this print command is not specified, the page is printed once. Example of the value: '%PAGE1:3,%PAGE2:2' means : Subsequent page number can be added with a comma separator. '%PAGE1' is printed 3 times and page '%PAGE2' is printed 2 times.
Parameter 12:	RIBBON_PARA
Description:	Whether to use ribbon
TPCL command:	ESC XS: f 0: Without ribbon 1: With ribbon (ribbon saving function enabled) 2: With ribbon (ribbon saving function disabled) 3: Without ribbon (head up function enabled)
Default value:	Desktop Model: '1' and Mobile Model: '0'
Input Example:	RIBBON_PARA= '3'
Note:	Input value should follow the conditions given in TPCL manual.
Parameter 13:	ROTATE_180_x
Description:	180 degree rotation for text
TPCL command:	ESC PC: Value (PC) - ii Based on TPCL manual.
Default value:	0
Input Example:	Text: ROTATE_180_1 = 'MAIN,1' , where '1' indicates rotation for text and 'MAIN' is the name of window to be rotated.
Limitations:	Input value should follow the conditions given in TPCL manual. 'X' is any number to make sure the command name is not repeated in the Smart forms. For rotation while designing the smart form we required to keep one component (Text) in one window.

Parameter 14:	ROTATE_270_x
Description:	270 degree rotation for text
TPCL command:	ESC PC: Value (PC) - ii Based on TPCL manual.
Default value:	0
Input Example:	Text: ROTATE_270_1 = 'MAIN,1' , where '1' indicates rotation for text and 'MAIN' is the name of window to be rotated.
Limitations:	Input value should follow the conditions given in TPCL manual. 'X' is any number to make sure the command name is not repeated in the Smart forms. For rotation while designing the smart form we required to keep one component (Text) in one window.
Parameter 15:	ROTATE_90_x
Description:	90 degree rotation for text
TPCL command:	ESC PC: Value (PC) - ii Based on TPCL manual.
Default value:	0
Input Example:	Text: ROTATE_90_1 = 'MAIN,1' , where '1' indicates rotation for text and 'MAIN' is the name of window to be rotated.
Limitations:	Input value should follow the conditions given in TPCL manual. 'X' is any number to make sure the command name is not repeated in the Smart forms. For rotation while designing the smart form we required to keep one component (Text) in one window.
Parameter 16:	SENSOR_TYPE
Description:	Type of sensor
TPCL command:	ESC XS: C 0: No sensor 1: Reflective sensor 2: Transmissive sensor (when using normal labels) 3: Transmissive sensor (when using preprinted labels) 4: Reflective sensor (when using a manual threshold value)
Default value:	2
Input Example:	SENSOR_TYPE= '3'
Note:	Based on the printer model and accessories. Input value should follow the conditions given in TPCL manual.

Parameter 17: **START_POINT**
Description: X and Y Position to draw a barcode, text or graphics
TPCL command: **ESC PC, ESC SG and ESC XB**
Value (PC): bbbb,cccc , Value (XB) : bbbb,cccc and Value (SG) : aaaa,bbbb
Based on TPCL manual.
Default value: None
Input Example: START_POINT = '000100001'
Note: Based on the free PARAM input value there may be a chance for the design change in physical output with Smart forms.

The above spool attributes are passed from Smart form to the device driver by the FREE_PARAMS attribute (which is an internal table) of the interface IF_PDL_ADRV implemented in the PDL device driver while printing. Based on the spool attributes logic will be developed in the device driver using TPCL commands.

If the spool attributes are not maintained in the Smart form, then the default values will be passed to the TPCL command while printing.

It is important to refer to the printer settings of the printer models to understand the correct range of value that can be used for the Parameter values. Note that the Smart Form Parameter Names are case-sensitive. Parameters for printer settings should be used carefully. Invalid input may result in unexpected outcome of the printout.

*: Cut is only possible when the Cutter Unit is installed.

5. Limitations

- When printing a Smart Form, user is advised to examine the actual printout of the form from the printer, rather than just relying on the print preview image.
 - 2D barcodes and Code128 Manual are not supported.
 - Outline fonts are not supported.
 - Only Monochrome bitmaps are supported and images cannot be rotated while printing.
 - Image compression is not supported.
 - Following cases may occur while printing Smart Forms:
 - a) The printer Fonts sizes may not match with the font sizes in Smart form.
 - b) Printing different Smart styles font information in same text line will result in printing the complete line in first Smart style font.
 - c) If an object is placed outside the print area or the print start position of an object is placed within the print area but the end position is outside the print area, the part beyond the print area will be printed starting on the left end of the new line.
-