



SAPScript to SATO Printers - Printing Characters with Different Codepages

Version 112309

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SATO America, Inc.
10350 Nations Ford Road
Charlotte, NC 28273
Main Phone: (704) 644.1650
Technical Support: (704) 644.1660
Technical Support Fax: (704) 644.1661
E-Mail: satosales@satoamerica.com
www.satoamerica.com

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Table of Contents

1.	Introduction.....	6
2.	Printing SAPScript with ITF Method	7
3.	SAP Device Types and the Languages	8
4.	Printing with Codepage 850	9
5.	Printing with Latin 5 (Turkish).....	10
6.	Printing with Unicode (UTF-8).....	12
7.	Printing with Traditional Chinese (Big-5).....	16
8.	Printing with Simplified Chinese (GB2312).....	17
9.	Printing with Korean	18
10.	Appendix	19
	10.1. Command Specification	19
	10.2. Built-in Font for separate cartridge.....	20

Introduction

1

This document is to explain how to print characters with various codepages from SAP with SAPScript (ITF file upload method) to SATO printers. The printing procedure of the following languages will be explained:

- Codepage 850
- Traditional Chinese, Big 5
- Simplified Chinese, GB2312
- Korean
- Turkish
- Unicode (UTF-8)

Please refer to the following document on how to use Label Gallery to create the ITF file:

<http://satoworldwide.com/labelgallery/downloads/WhitePapers/SAP%20guidelines.pdf>

Note:

- 1) It is assumed the Non-English characters are entered on the Text Editor or read from database in the SAP environment. Label Gallery is not able to create ITF file containing Asian 2-byte characters.
- 2) It is also assumed that the SAP system is Unicode Compliant, or at least supports inputting and displaying of the required Non-English characters.

SAP Device Types and the Languages 3

The Device Type file determines the codepage applied on the generated print stream from the SAP system. Thus, choosing the right device type file is important to ensure the non-English characters are correctly generated from SAP and printed on SATO printers.

Language	Device Type
Codepage 850 (Western Europe)	ZLB_SAT
Turkish, Latin 5	ZLB_STU
Unicode (UTF-8)	ZLB_SUN
Simplified Chinese (GB2312)	ZLB_SAC
Traditional Chinese (Big5)	ZLB_STC
Korean	ZLB_SKR

The device type files can be downloaded from the following URL:

<http://www.sato-int.com/software/doc/deviceTypes.zip>

- If a device type with the required codepage is not listed above, please contact the software development team at global.sysdev@sato-int.com
- The device type file can be uploaded into the SAP system using the RSTXSCR program in SE38 transaction.

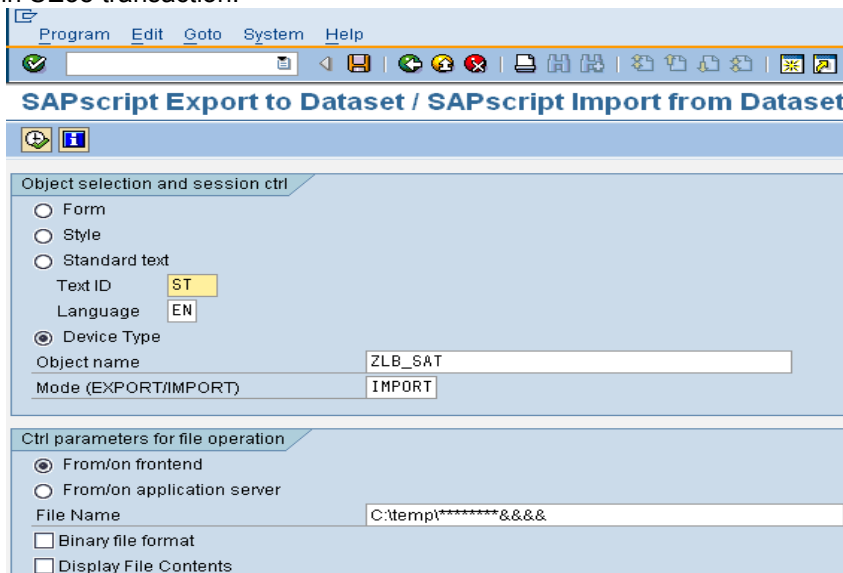


Figure 2 Importing Device Type

Printing with Codepage 850

4

Device Type: ZLB_SAT.

Codepage 850 is the default codepage for SATO fonts. This codepage supports most of the Western Europe characters. The following font commands support Codepage 850:

- XU Font
- XS Font
- XM Font
- XL Font
- XB Font
- CG Font (ESC+RDA or ESC+RDB)

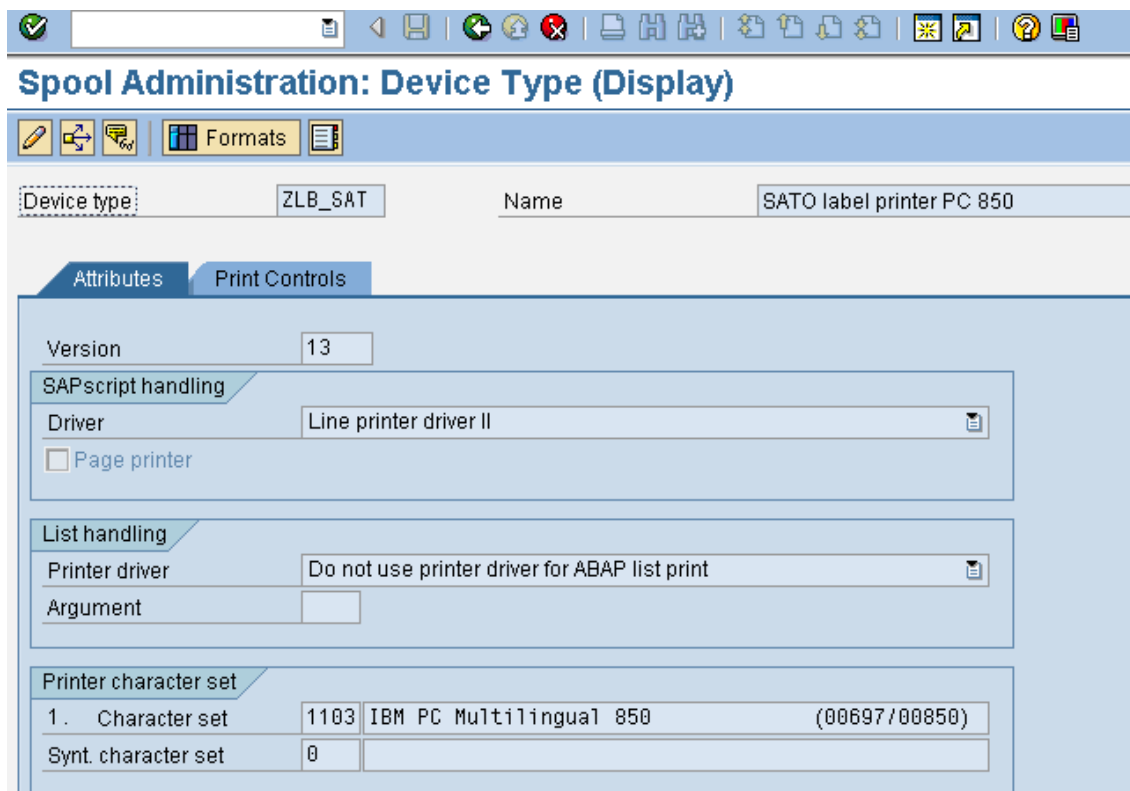


Figure 3 Codepage 850

- The SAP code for Codepage 850 is 1103 – IBM PC Multilingual 850.
- Most of the SATO models support this codepage by default.

Printing with Latin 5 (Turkish) 5

Device Type: ZLB_STU
Printer: GT4e with English Cartridge, GL4.
Command: ESC+RDt30

The **Turkish alphabet** is a variant of the Latin alphabet used for writing the Turkish language, consisting of 29 letters.

These letters are, in the upper case:

A, B, C, Ç, D, E, F, G, Ğ, H, I, İ, J, K, L, M, N, O, Ö, P, R, S, Ş, T, U, Ü, V, Y, Z

and in the lower case:

a, b, c, ç, d, e, f, g, ğ, h, i, i, j, k, l, m, n, o, ö, p, r, s, ş, t, u, ü, v, y, z.

The device type uses character set 1634 (Printer I9SWIN ISO 8859-9 (Turkey, Latin-5) as depicted below:

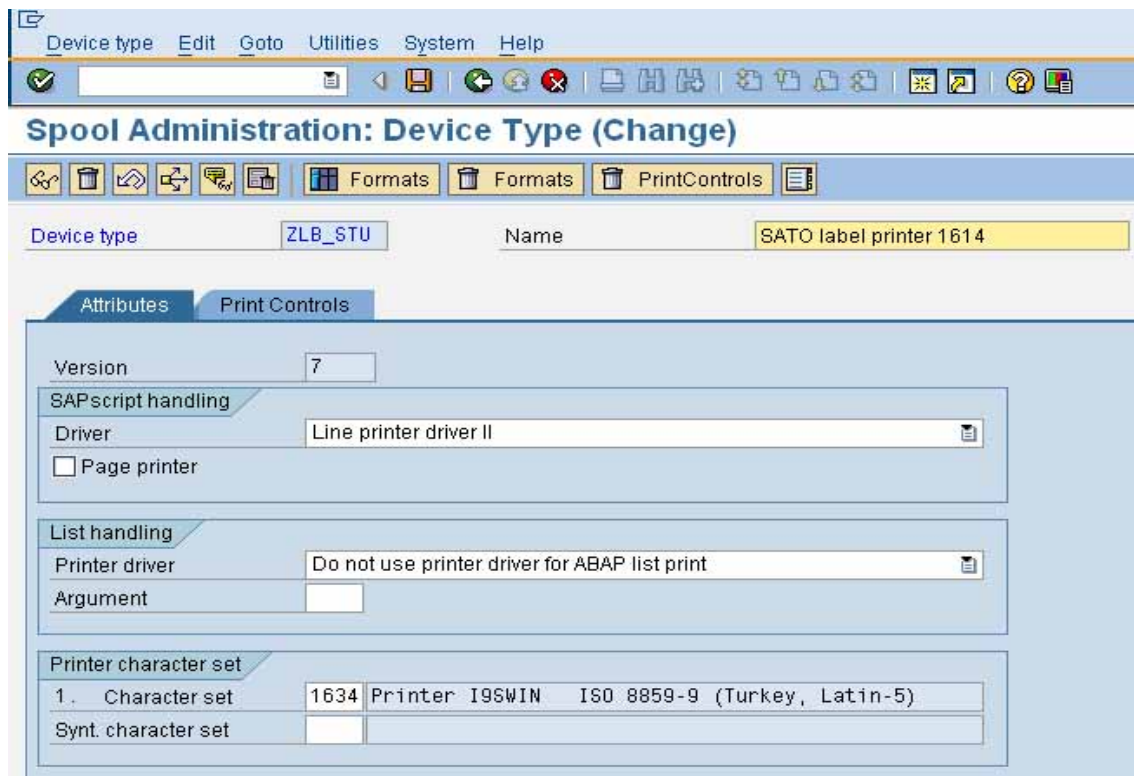
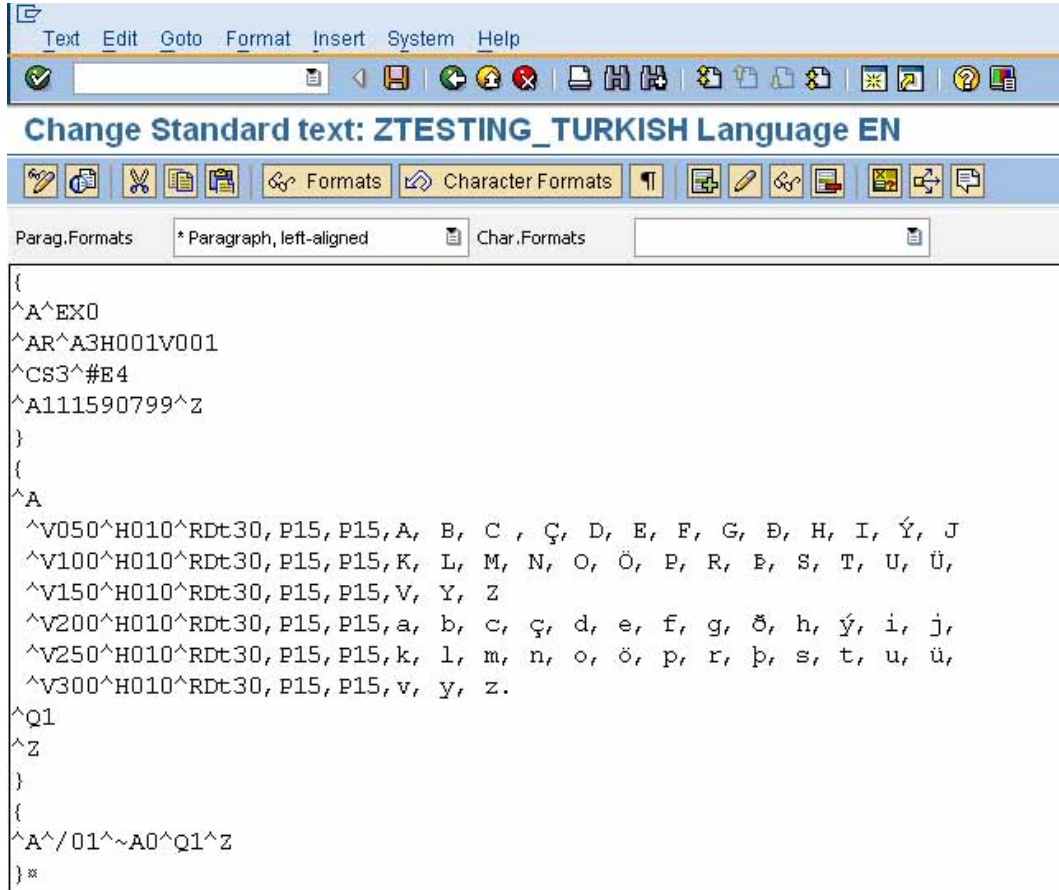


Figure 4 Turkey, Latin-5

An example of printing all the Turkish characters is shown below. By applying the output device which uses the Turkish device type, the GT/GL printer can produce the printing output as depicted below:



```

{
^A^EX0
^AR^A3H001V001
^CS3^#E4
^A111590799^Z
}
{
^A
^V050^H010^Rdt30, P15, P15, A, B, C, Ç, D, E, F, G, Đ, H, I, Ý, J
^V100^H010^Rdt30, P15, P15, K, L, M, N, O, Ö, P, R, Ğ, S, T, U, Ü,
^V150^H010^Rdt30, P15, P15, V, Y, Z
^V200^H010^Rdt30, P15, P15, a, b, c, ç, d, e, f, g, ğ, h, ý, i, j,
^V250^H010^Rdt30, P15, P15, k, l, m, n, o, ö, p, r, ı, s, t, u, ü,
^V300^H010^Rdt30, P15, P15, v, y, z.
^Q1
^Z
}
{
^A^/01^~A0^Q1^Z
}*

```

Figure 5 Sample of printing all Turkish characters in SAP

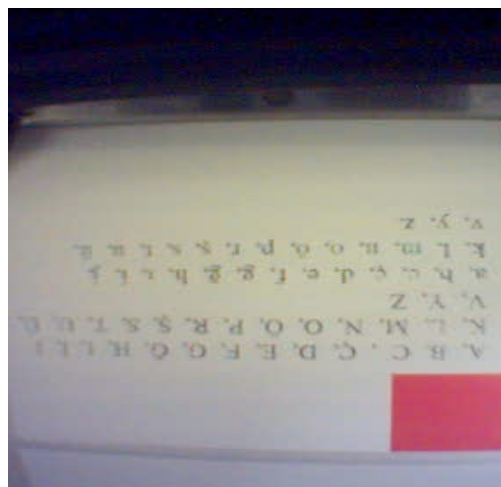


Figure 6 Turkish characters printing output

Printing with Unicode (UTF-8)

6

Device Type: ZLB_SUN

Printer: GL4 (Use Emulation->SBPL Setup-Charset Encoding->Unicode)

Codepage **4110**, Unicode UTF 8, has to be used instead in order to print the Unicode characters.

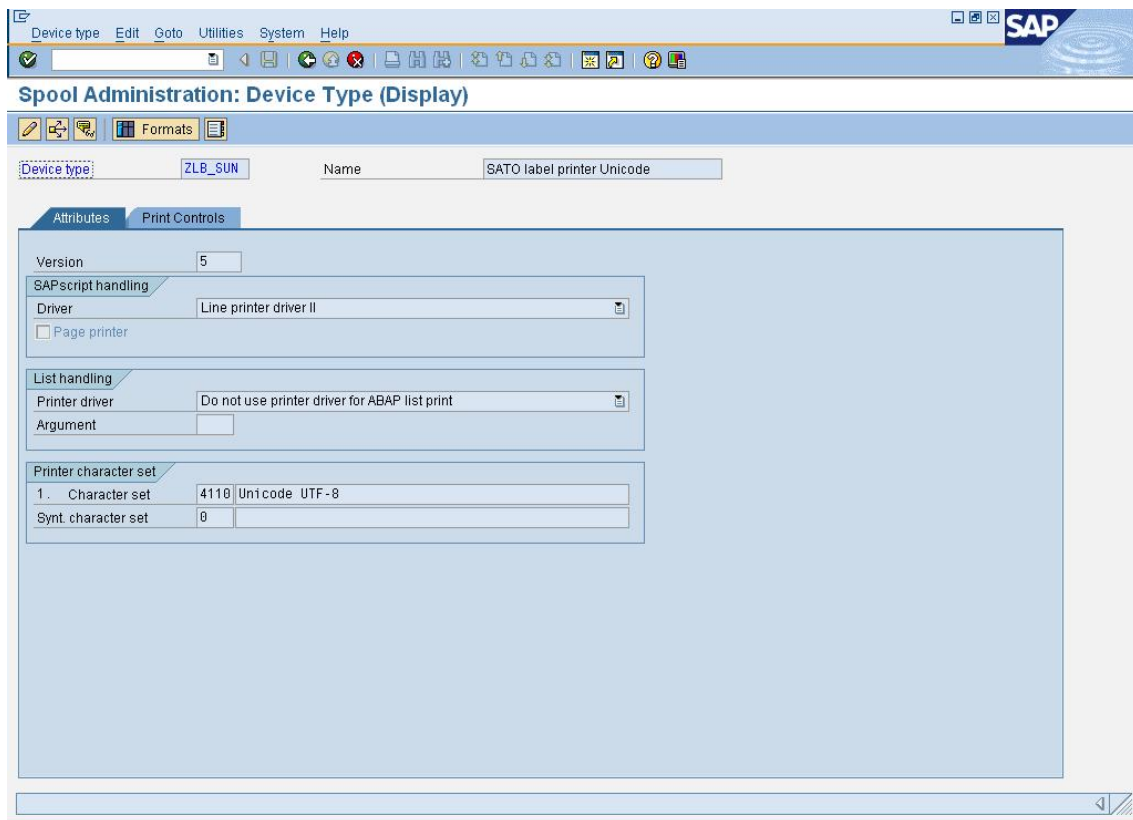


Figure 7 Using 4110 Codepage to support Unicode character set

The language cartridge has to be inserted to the printer to print the required language.

The following commands are to be used to print the Unicode characters

Command	Descriptions
RDt	Printing European languages such as Greece, Spain and Arabic.
RDT	Printing Thais
RDc	Printing Traditional Chinese
RDC	Printing Simplified Chinese
RDK	Printing Korean

Please refer to the appendix for the detail description of the commands.

Below are some examples of the ITF with different languages.

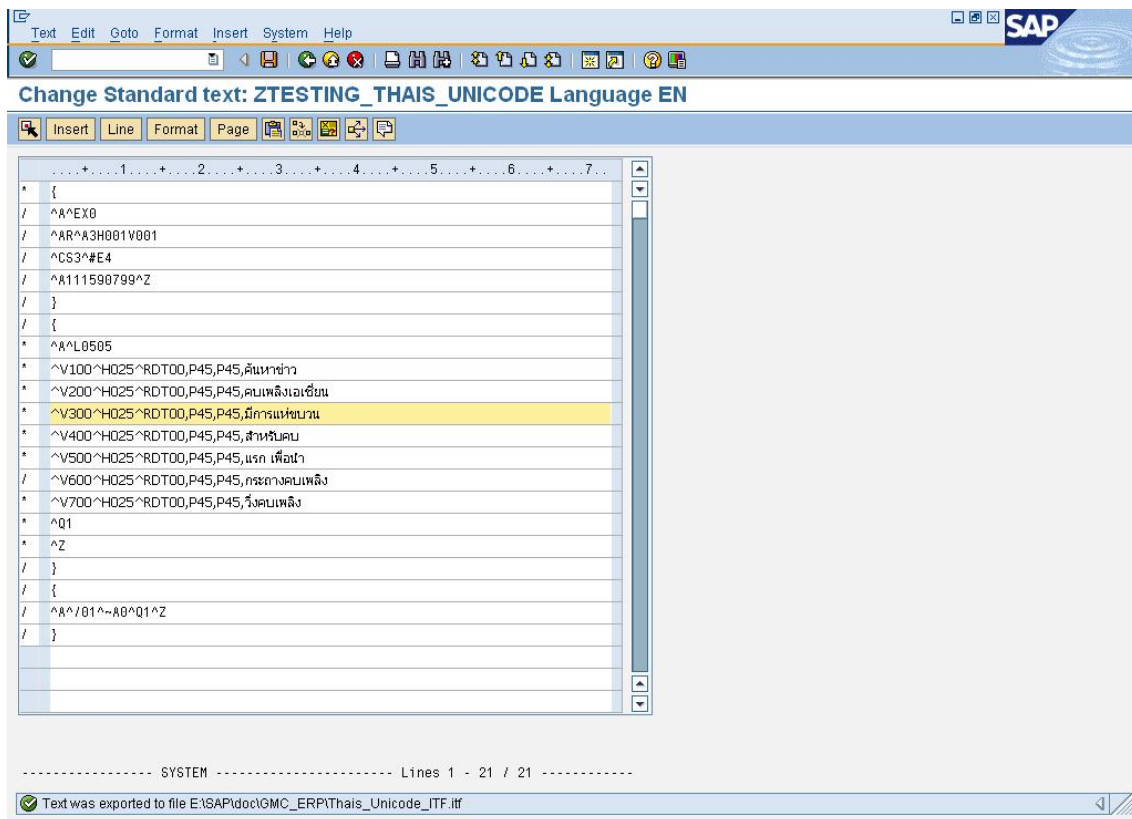


Figure 8 ITF file with Thais

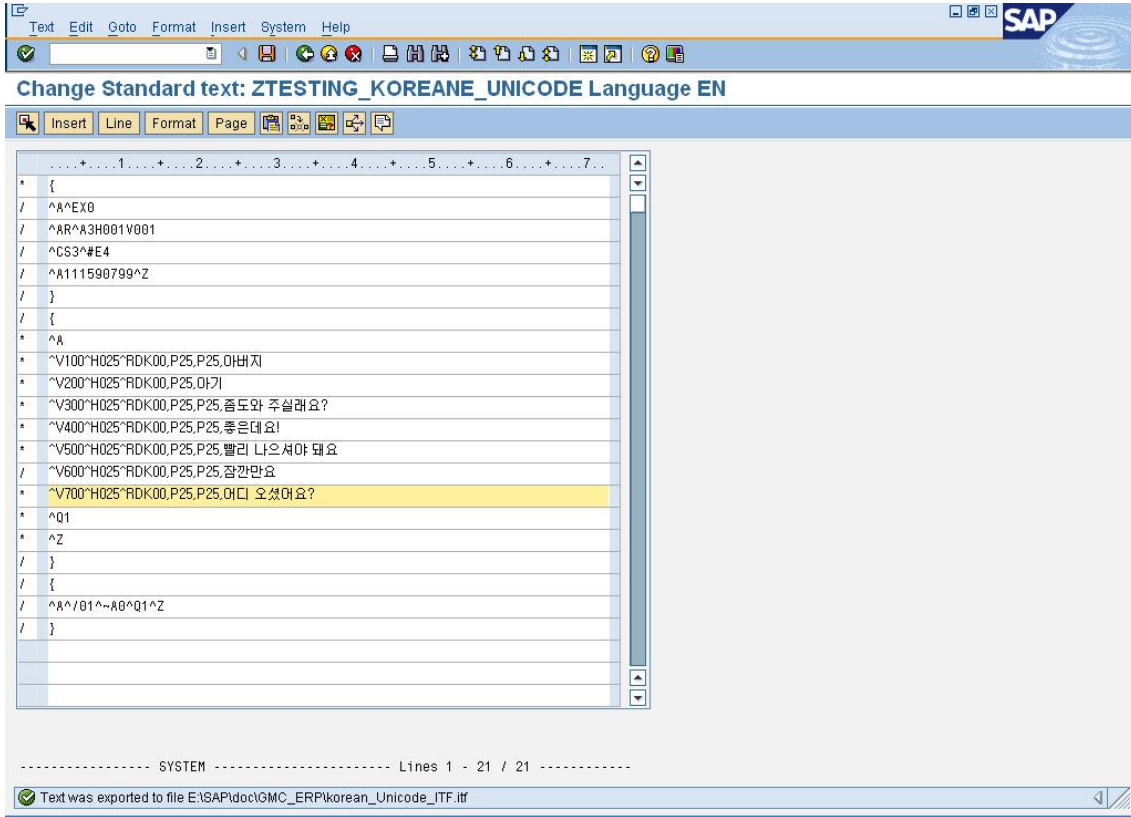


Figure 11 ITF file with Korean

Printing with Traditional Chinese (Big-5) 7

Device Type: ZLB_STC
 Printer: GL4 (Use Emulation->SBPL Setup-Charset Encoding->ANSI), GT4e
 Command: ESC+RDc
 Chinese Cartridge is needed to print this language.

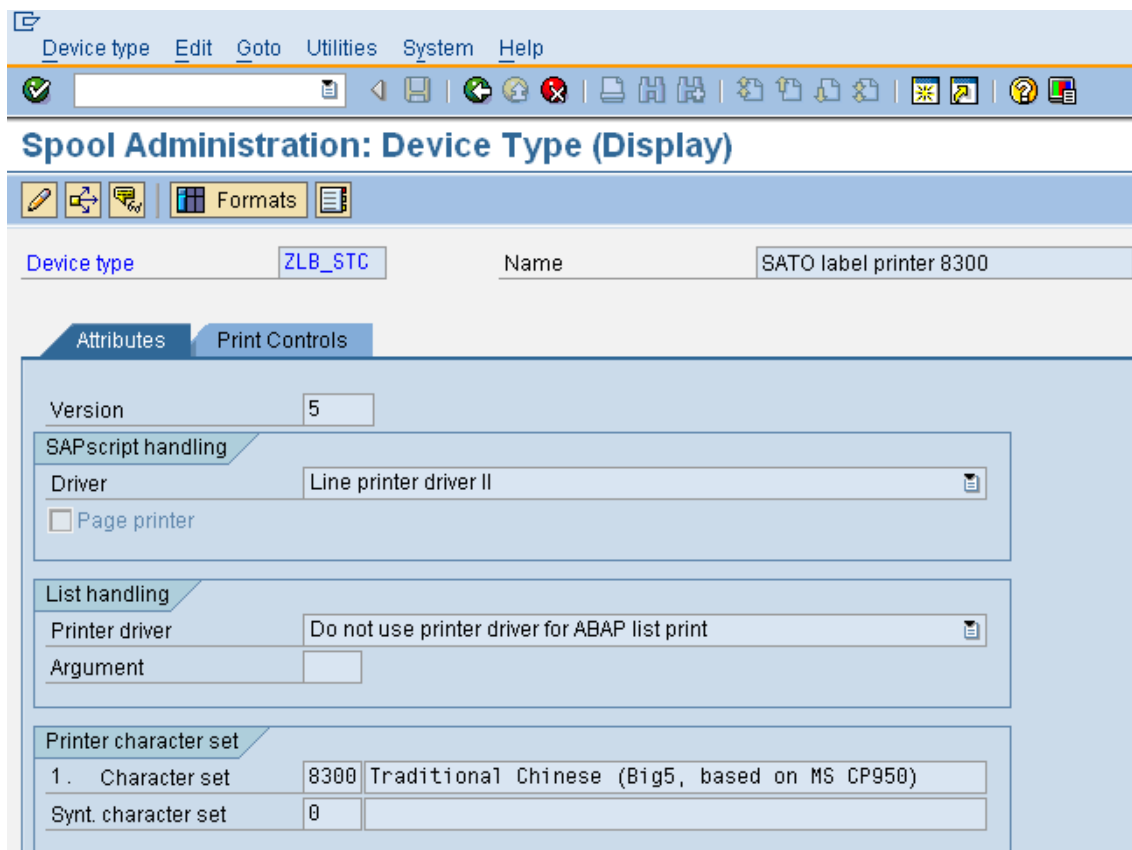


Figure 12 Using 8300 character set for Traditional Chinese

Please refer to [Figure 9 ITF file with Simplified and Traditional Chinese](#) for the example of the ITF file.

Printing with Simplified Chinese (GB2312)

8

Device Type: ZLB_SAC
Printer: GL4 (Use Emulation->SBPL Setup-Charset Encoding->ANSI), GT4e
Command: ESC+RDC
Chinese Cartridge is needed to print this language.

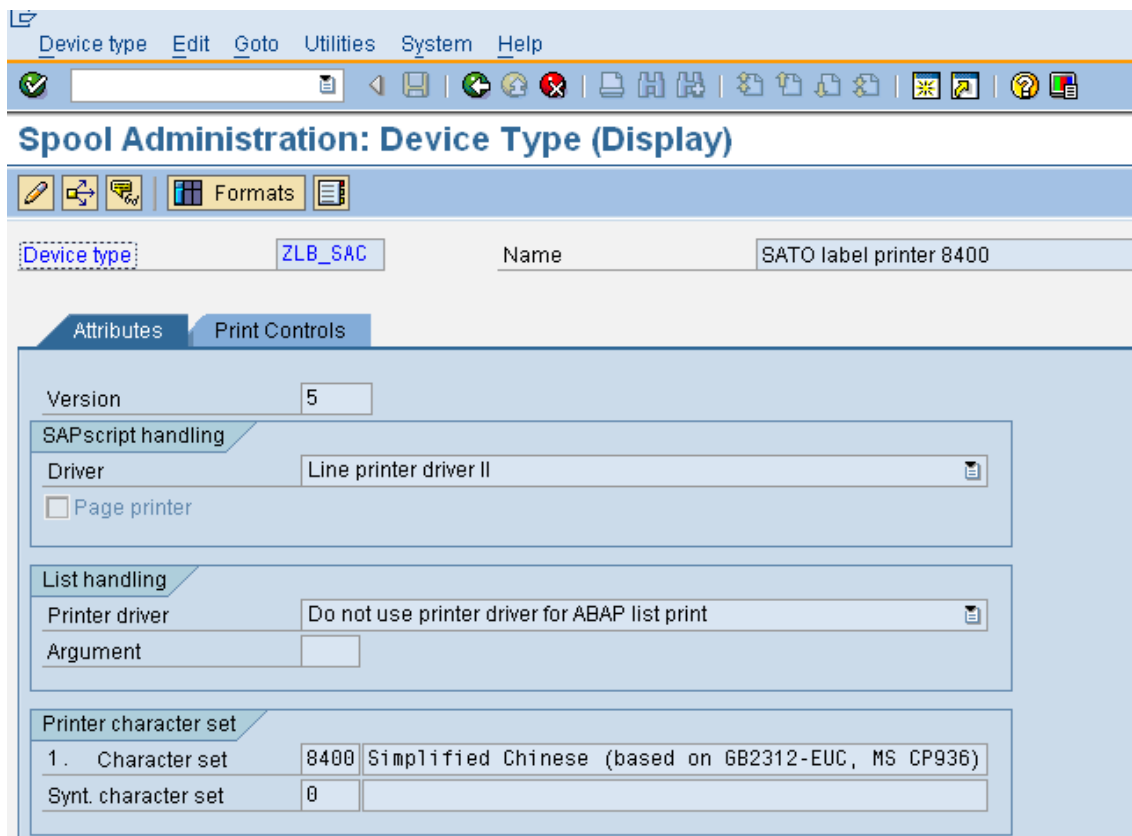


Figure 13 Using 8400 character set for Simplified Chinese

Please refer to [Figure 9 ITF file with Simplified and Traditional Chinese](#) for the example of the ITF file.

Printing with Korean

9

Device Type: ZLB_SKR
 Printer: GL4 (Use Emulation->SBPL Setup-Charset Encoding->ANSI), GT4e
 Command: ESC+RDK
 Korean Cartridge is needed to print this language.

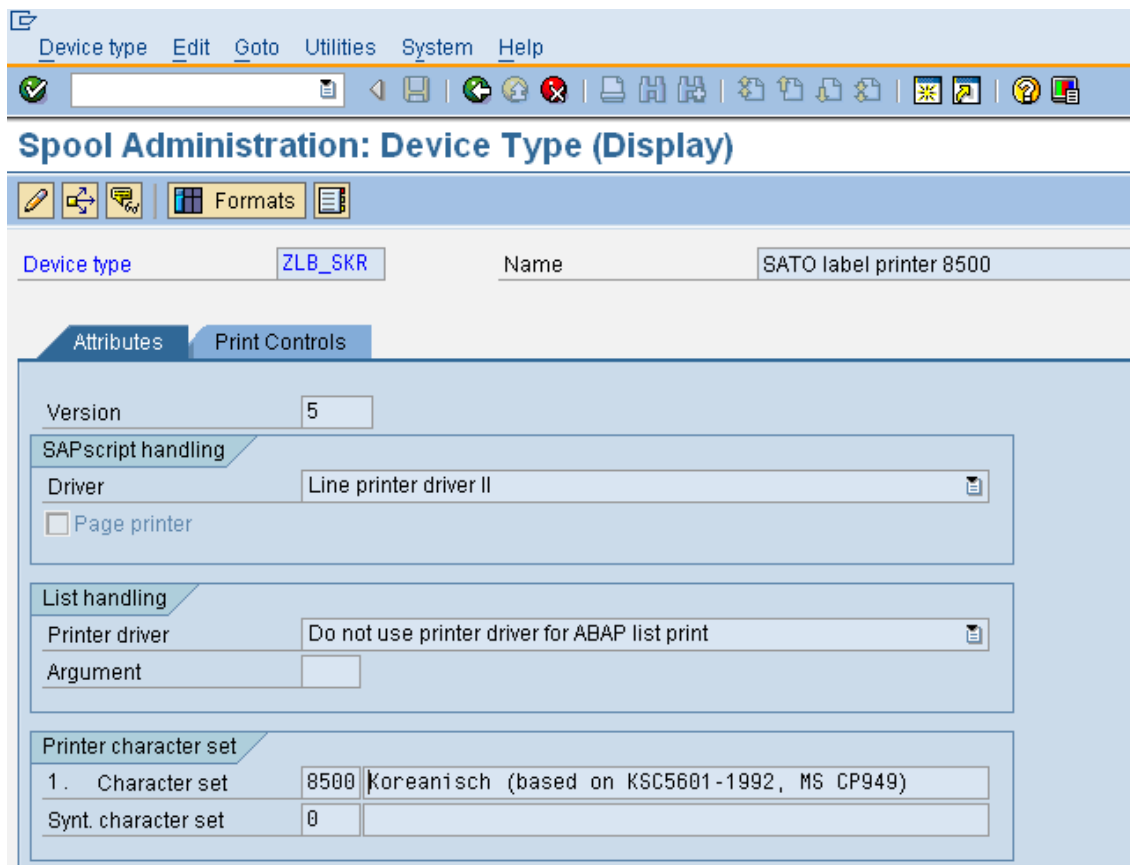


Figure 14 Using 8500 character set for Korean

Please refer to [Figure 11 ITF file with Korean](#) for the example of the ITF file.

Appendix

10

10.1. Command Specification

【Format】

<RD>a b c, d d d, e e e, n~n

• Parameter

a	「Font type」	=	C	「MKaiSO-Medium-U(simplified)」
			c	「MHeiS-Bold-U(simplified)」
			K	「HYGungSo-Bold」
			T	「AngsanaUPC」
			F	「FuturaIIBook」
			P	「CG Palacio」
			S	「CG Century Schoolbook」
			G	「CG Triumvirate Condensed」
			V	「Univers Medium」
			t	「CG Times」
b	「Character set」	=	0	w/out specifying character set
			1	「Latin1」 ISO 8859/1 Latin 1
			2	「Latin2」 ISO 8859/2 Latin 2
			3	「Latin5」 ISO 8859/9 Latin 5
			4	「Grk」 CP-737 DOSGreek
			5	「Cyr」 CP-855 DOSCyrillic
			6	「Arb」 CP-864 DOSArabic
			7	「Codepage874」 CP-874 Thai
			8	「CP-850」 CP-850 Multilingual
c	「character style」	=	0	「standard」 Medium 0 2 ~ P 9 9 (point)
e	「vertical size」	=	0 0 4 ~ 9 9 9 (dot) / P 0 2 ~ P 9 9 (point)	
n	「print data」	=	data	

10.2. Built-in Font for separate cartridge

TrueType font, outline font and setting value that is integrated in every cartridge is shown in table below.

① English cartridge

No.	Font style	Font ID No.	Font type	Style code	Character set	Data file name
1	FuturaIBook	01	F	10	CP-850	EVL91810.TTF
2	CG Triumvirate Condensed	02	G	10	CP-850	EVL92246.TTF
3	CG Palacio	03	P	10	CP-850	EVL92532.TTF
4	CG Century Schoolbook	04	S	10	CP-850	EVL92546.TTF
5	Univers Medium	05	V	10	CP-850	EVL94021.TTF
6	CG Times	06	t	20	Latin1/2/5,Grk,Cyr,Arb	EVL_UCGT.TTF
7	Univers Medium	07	V	20	Latin1/2/5,Grk,Cyr	EVL_UUNI.TTF

② European cartridge

No.	Font style	Font ID No.	Font type	Style code	Character set	Data file name
1	Univers Medium	01	V	10	CP-850	EVL94021.TTF
2	CG Times	02	t	20	Latin1/2/5,Grk,Cyr,Arb	EVL_UCGT.TTF
3	Univers Medium	03	V	20	Latin1/2/5,Grk,Cyr	EVL_UUNI.TTF

③ Arabic cartridge

No.	Font style	Font ID No.	Font type	Style code	Character set	Data file name
1	CG Times	01	t	20	Latin1/2/5,Grk,Cyr,Arb	EVL_UCGT.TTF

④ Thai cartridge

No.	Font style	Font ID No.	Font type	Style code	Character set	Data file name
1	AngsanaUPC	01	T	20	Code page874	EVLANGSA.TTF

⑤ Chinese cartridge

No.	Font style	Font ID No.	Font type	Style code	Character set	Data file name
1	MKaiSO-Medium-U(simplified)	01	C	00	GB2312(GL)	MKAISOMU.TTF
2	MHeiS-Bold-U(traditional)	02	c	00	Big5	MHSBU1.TTF

⑥ Korean cartridge

No.	Font style	Font ID No.	Font type	Style code	Character set	Data file name
1	HYGungSo-Bold	01	K	00	KSC5601	H2GSRB.TTF

⑦ Japanese cartridge

No.	Font style	Font ID No.	Font type	Style code	Character set	Data file name
1	Outline Kanji	01	K	00	JIS/SJIS	OLKanji.olf

SATO GROUP OF COMPANIES

Asia Pacific & Oceania Region

SATO ASIA PACIFIC PTE. LTD.

438A Alexandra Road #05-01/04,
Alexandra Technopark, Singapore 119967
Tel: +65-6271-5300
Fax: +65-6273-6011
Email: technical@satoasiapacific.com
www.satoasiapacific.com

SATO AUTO-ID MALAYSIA SDN. BHD.

No.25, Jalan Pemberita U1/49,
Temasya Industrial Park, Section U1, 40150
Shah Alam, Selangor Darul Ehsan,
Malaysia
Tel: +60-3-7620-8901
Fax: +60-3-5569-4977
Email: service@satosms.com.my
www.satoasiapacific.com

SATO AUTO-ID (THAILAND) CO., LTD.

292/1 Moo 1 Theparak Road,
Tumbol Theparak, Amphur Muang,
Samutprakarn 10270, Thailand
Tel: +66-2-736-4460
Fax: +66-2-736-4461
Email: technical@satothailand.com
www.satothailand.co.th

SATO SHANGHAI CO., LTD.

307 Haining Road, ACE Bldg,
10th Floor, Hongkou Area, Shanghai, China
200080
Tel: +86-21-6306-8899
Fax: +86-21-6309-1318
Email: tech@satochina.com
www.satochina.com

SATO ASIA PACIFIC PTE. LTD.

Korea Representative Office

6F, Korea Housing Center,
Yeouido-dong 45-11, Yeongdeungpo-gu,
Seoul, Korea 150-736
Tel: +82-2-761-5072
Fax: +82-2-761-5073
Email: technical@satoasiapacific.com
www.satoasiapacific.com

SATO ASIA PACIFIC PTE. LTD.

India Representative Office

Regus Level 2, Connaugh Place,
Bund Garden Road, Pune. 411001, India
Tel: +91-20-4014-7747
Fax: +91-20-4014-7576
Email: technical@satoasiapacific.com
www.satoasiapacific.com

SATO AUSTRALIA PTY LTD.

1/1 Nursery Avenue, Clayton Business Park,
Clayton, VIC 3168 Australia
Tel: +61-3-8814-5330
Fax: +61-3-8814-5335
Email: enquiries@satoaustralia.com
www.satoaustralia.com

SATO NEW ZEALAND LTD.

30 Apollo Drive, Mairangi Bay
Auckland, New Zealand
Tel: +64 9-477-2222
Fax: +64-9-477-2228
Email:
global.warranty@satonewzealand.com
www.satonewzealand.com

European Region

SATO LABELLING SOLUTIONS

EUROPE GmbH (BELGIUM)

Lambroekstraat 5, 1831 Diegem, Belgium
Tel: +32 2 719 03 90
Fax: +32 2 719 03 99 Email:
info@nl.satoeurope.com
www.satoeurope.com

SATO LABELLING SOLUTIONS

EUROPE GmbH (GERMANY)

Ersheimer Straße 71,
69434 Hirschhorn, Germany
Tel: +49-6272-9201-160
Fax: +49-6272-9201-347
Email: service@de.satoeurope.com
www.satoeurope.com

SATO LABELLING SOLUTIONS

EUROPE GmbH (NORWAY)

Hovfaret 4 0275 Oslo, Norway
Tel.: +47-225-106-70
Fax: +47-225-106-71
Email: kundeservice@satonorge.com
www.satoeurope.com

SATO LABELLING SOLUTIONS

EUROPE GmbH (NETHERLANDS)

Techniekweg 1b, 3481 MK Harmelen,
Netherlands
Tel.: +31-348-444437
Fax: +31-348-446403
Email: info@nl.satoeurope.com
www.satoeurope.com

SATO LABELLING SOLUTIONS

EUROPE GmbH (ITALY)

Viale Europa 39/1,
20090 Cusago, Milano, Italy
Tel.: +39-2-903-944-64
Fax: +39-2-903-940-35
Email: info@it.satoeurope.com
www.satoeurope.com

SATO LABELLING SOLUTIONS

EUROPE GmbH (SWITZERLAND)

Allmendstraße 19,
8320 Fehraltorf, Switzerland
Tel: +41-44-954-84-00
Fax: +41-44-954-84-09
Email: info@ch.satoeurope.com
www.satoeurope.com

EUROPE GmbH (AUSTRIA)

Niederlassing Austria
Jochen-Rindt-Straße 13
1230 Wien, Austria
Tel: +43-2762-52690
Fax: +43-2762-52018
Email: info@at.satoeurope.com
www.satoeurope.com

SATO LABELLING SOLUTIONS

EUROPE GmbH (DENMARK)

Naverland 29A DK-2600
Glostrup, Denmark
Tel.: +45-43204700
Fax: +45-43204709
Email: info@dk.satoeurope.com
www.satoeurope.com

SATO POLSKA SP. Z O.O.

ul. Wrocławska 123, 55-015 Radwanice Św.
Katarzyna, Poland
Tel: +48-71-381-03-60
Fax: +48-71-381-03-68
Email: info@sato.pl
www.sato.pl

SATO IBERIA S.A.

Dels Corralis Nous, 35-39
Pol. Can Roqueta, 08202 - Sabadell
Barcelona, Spain
Tel: +34-902-333-341
Fax: +34-902-333-349
Email: info@es.satoeurope.com
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SATO FRANCE S.A.S.

Parc d'Activités, Rue Jacques Messenger,
59 175 Templemars, France
Tel: +33-3-20-62-96-40
Fax: +33-3-20-62-96-55
www.satoeurope.com

SATO UK LTD.

Valley Road, Harwich,
Essex CO12 4RR, United Kingdom
Tel: +44-1255-240000
Fax: +44-1255-240111
Email: enquiries@satouk.com
www.satouk.com

American Region

SATO AMERICA, INC.

10350-A Nations Ford Road, Charlotte, NC
28273, U.S.A.
Tel: +1-704-644-1650
Fax: +1-704-644-1662
www.satoamerica.com

SATO LABELING SOLUTIONS

AMERICA, INC.

1140 Windham Parkway, Romeoville,
Illinois 60446, U.S.A.
Tel: +1-800-645-3290
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