

Installation of the APL-font Saxpsa in the MikTeX-distribution of L^AT_EX

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December 3, 2006

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1 Saxpsa and MikTeX

Saxpsa is a type-1 font fully scalable in L^AT_EX and pdfL^AT_EX. To use the standard way of scaling the font in L^AT_EX, one has to provide a .fd-file as described in the following.

1.1 Changes to the files available from Robert Bernecky

Theses file are available at <http://www.snakeisland.com/> for restricted use.

1. The file OT1saxpsa.fd is new. Its content must be:

```
\ProvidesFile{OT1saxpsa.fd}[2006/11/19 Dieter Kilsch]  
\DeclareFontFamily{OT1}{saxpsa}{}  
\DeclareFontShape {OT1}{saxpsa}{m}{n}{<->saxpsa}{}
```

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2. The file `qdefsax.tex` must be changed, I recommend to rename it to `saxpsa.sty`.

- (a) Enter the following line to the top of the file¹, it is wrapped here:

```
\newcommand{\apl}{\fontencoding{OT1}\fontfamily{saxpsa}
\fontseries{m}\fontshape{n}\selectfont}
```

The command `\apl` switches to the font Saxpsa according to the content of `OT1saxpsa.fd`.

- (b) In all the lines defining the `\q...` macros the command `\apl` must be deleted. If not done the scaling macros will not work.

1.2 Installation of the font

The following assumes that `L` is the path to the TeX directory on your system. If you want to install these fonts system-wide, use the system TeX directory. On SuSE Linux, this is `/usr/share/texmf`. If you want to install the fonts for your own use only, use your local TeX directory. Then follow these steps:

1. Copy the files:

- `saxpsa.pfb` to `L/fonts/type1/public/apl/`
- `saxpsa.tfm` to `L/fonts/tfm/public/apl/`
- `saxpsa.map` to `L/map/saxpsa.map`
[THIS PATH (map) DOES NOT EXIST ON MY SYSTEM!]
- `saxpsa.sty` to `L/tex/latex/saxpsa/`
- `OT1saxpsa.fd` to `L/tex/latex/saxpsa/`

I believe the italic typed parts might be changed according to your personal taste.

2. Change some files:

- In the file `L/dvips/config/config.ps` add the line
`p +saxpsa.map`
after the block

¹It could be written to any other style file or to your main document!

```
% This shows how to add your own map file.
% Remove the comment and adjust the name:
% p +myfonts.map
```

- Create the file L/miktex/config/updmap.cfg (if it does not exist) and add the line
Map saxpsa.map

3. Execute in the DOS shell to update the format and mapping files:

```
initexmf -u
initexmf --mkmaps
```

Due to the new line in updmap.cfg, the last command adds the entry in saxpsa.map to the file L/dvips/config/psfonts.map used by pdflatex, to properly embed the font.

2 Examples

Now using `\usepackage{saxpsa}` in your document you may use the standard L^AT_EX macros to scale the font:

`{\ap1\qiota\tiny\qiota\large\qiota\Huge\qiota}` will result in

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Here is the complete character set of the font:

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
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2		!	"	#	\$	%	&	'	()	*	+	,	—	.	/
3	0	1	2	3	4	5	6	7	8	9	:	;	<	=	>	?
4	@	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
5	P	Q	R	S	T	U	V	W	X	Y	Z	[\]	^	_
6	`	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o
7	p	q	r	s	t	u	v	w	x	y	z	{		}	~	
8			,	f	"	...	†	‡	^	‰	S	<	ℳ			
9		\	'	"	"	•	—	—	~	™	S	>	œ			
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11	℔	;		ℒ	ℒ		¬	•		≈		⊗	⊠	≡	⊠	¿
12		α	⊥	∩	ℓ	∈		∇	Δ	ℓ	◦		□		⊤	○
13			ρ	⌈		↓	u	ω	⊃	↑	c	⊢	≠	⊢		÷
14	ℐ	Θ	⊕	∩		⊆	∇	∇	⋈	⊥	••		⊠		Φ	Ö
15	⊗				ℚ		⋈	Φ			⊥	⊥	⊠	→	◇	♠