

The cmsrb package

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1 Why cmsrb?

The cm-super package provides great support for Cyrillic script in various languages, but there's a problem with italic variants of some letters for Serbian and Macedonian. The cmsrb package includes the correct shapes for italic letters `\cyrg`, `\cyrd`, `\cyrp`, `\cyrt` and letter `\cyrb`. This package also has some improvements in letters and accents used in Serbian language.

2 Package Features

The cmsrb fonts are the extensions of the Computer Modern fonts for Serbian and Macedonian languages for T_EX (L^AT_EX). Support files are provided for T1, TS1, T2A, X2 and OT2 encodings. Supported font styles are serif, sans-serif and mono, for size 10pt.

This package is very simple to use: just put

```
\usepackage{cmsrb}
```

in preamble of the document.

cmsrb	cm-super	cmsrb	cm-super	cmsrb	cm-super
<i>đigūū</i>	<i>đždnm</i>	<i>đigūū</i>	<i>đždnm</i>	ħħ	ħħ
đđđđ	đđđđ	āĀŃ	āĀŃ	<i>đđ</i>	<i>đđ</i>

Table 1: Some cm-super and cmsrb differences.

3 OT2 Features

The OT2 encoding is modified to match the rules of Latin to Cyrillic transcription in Serbian language. Therefore, the ts, kh, ch and similar ligatures are removed from the encoding (see Table 2).

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In OT2 encoding Macedonian letters \acute{G} and \acute{K} are added, with Montenegrin letters \acute{C} and \acute{Z} .

However, it is not recommended to use the OT2 encoding; better choice for Serbian language is T2A encoding and utf8 input. One can use OT2 encoding if they already have a document written in Latin—in which case it would be easy to transcribe it to Cyrillic.

4 T1 Features

The T1 encoding now support conversion from Cyrillic to Latin script (see Example 7).

5 Math

The `cmsrb` package load default Computer Modern math fonts, but load only fonts with size lower or equal 10pt, for better visual effect. Also, it change integral sign from \int to \int (upright integral is traditionally used in Serbian language, with `\limits` option). However, one can use `nomath` option to prevent any change in math fonts:

```
\usepackage[nomath]{cmsrb}
```

6 Examples

Example 1:

```
\documentclass{article}
\usepackage{cmsrb}
\usepackage[OT2,T1]{fontenc}
\usepackage[serbian]{babel}
\newcommand{\test}%
{Ljubazni fenjerd\v zija \v ca\dj avog lica ho\'ce da mi poka\v ze \v stos.}
\begin{document}
\test \\
\fontencoding{OT2}\selectfont \test \\
Akcenti: \'a\'aC a\f a=a^a\"a\u a
\end{document}
```

Result 1:

Ljubazni fenjerdžija čađavog lica hoće da mi pokaže štos.
Љубазни фењерџија чађавог лица хоће да ми покаже штос.
Акценти: áâãäåää

Input	Output	Input	Output	Input	Output	Input	Output
A	А	B	Б	C	Ц	D	Д
E	Е	F	Ф	G	Г	H	Х
I	И	J	Ј	K	К	L	Л
M	М	N	Н	O	О	P	П
Q	Ч	R	Р	S	С	T	Т
U	У	V	В	W	Щ	X	Ш
Y	Ы	Z	З	\#	Ђ		
a	а	b	б	c	ц	d	д
e	е	f	ф	g	г	h	х
i	и	j	ј	k	к	l	л
m	м	n	н	o	о	p	п
q	ч	r	р	s	с	t	т
u	у	v	в	w	щ	x	ш
y	ы	z	з	+	ђ		
C1	Ћ	D1	Ђ	D2	Џ	D3	Ѕ
E0	Ё	E1	Э	E2	Є	I0	Й
I1	І	J1	Ј	J2	Ј	L1	Љ
N0	Њ	N1	Њ	P1	Ђ	P2	Ђ
Z1	Ж	\v {C}	Ч	\'c	Ћ	\DJ	Ђ
\v {S}	Ш	\v {Z}	Ж	LJ	Љ	Lj	Љ
NJ	Ђ	Nj	Ђ	D\v {Z}	Џ	D\v {z}	Џ
c1	ћ	d1	ђ	d2	џ	d3	ѕ
e0	ё	e1	э	e2	є	i0	й
i1	і	j1	ј	j2	ј	l1	љ
\i	ı	n1	њ	p1	ђ	p2	ђ
z1	ж	\v {c}	ч	\'c	ћ	\dj	ђ
\v {s}	ш	\v {z}	ж	lj	љ		
nj	њ			d\v {z}	џ		
\char 20	Ѕ	\char 21	Ѕ	\char 28	v	\char 29	ө
\'G	Ѓ	\'K	Ѓ	\'g	ѓ	\'k	ќ
\'S	Ѓ	\'Z	Ѓ	\'s	с	\'z	з

Table 2: OT2 encoding in cmsrb package.

Example 2:

```

\documentclass{article}
\usepackage{cmsrb}
\usepackage[OT2,T1]{fontenc}
\usepackage[utf8]{inputenc}
\usepackage[serbian]{babel}
\newcommand{\test}{%
{Ljubazni fenjerdžija čađavog lica hoće da mi pokaže štos.}
\begin{document}
\textit{\test} \\
\fontencoding{OT2}\selectfont \textit{\test}
\end{document}

```

Result 2:

Ljubazni fenjerdžija čađavog lica hoće da mi pokaže štos.
Љубазни фењерџија чађавог лица хоће да ми покаже штос.

Example 3:

```

\documentclass{article}
\usepackage{cmsrb}
\usepackage[T2A]{fontenc}
\usepackage[utf8]{inputenc}
\usepackage[serbian]{babel}
\DeclareTextSymbolDefault{\dj}{T1}
\begin{document}
\textit{Ljubazni fenjerdžija čađavog lica hoće da mi pokaže štos.} \\
Љубазни фењерџија чађавог лица хоће да ми покаже штос.} \\
Акценти: \'{i}\'i\C{i}\f{i}\={i}\^{i}\"{i}\u{i}
\end{document}

```

Result 3:

Ljubazni fenjerdžija čađavog lica hoće da mi pokaže štos.
Љубазни фењерџија чађавог лица хоће да ми покаже штос.
Акценти: иййиййийй

Example 4:

```

\documentclass{article}
\usepackage{cmsrb}
\usepackage[T2A]{fontenc}
\usepackage[utf8]{inputenc}

```

```

\usepackage[serbianc]{babel}
\begin{document}
\textit{абвгдђежз\'}{з}сијкльмњопрс\'}{с}тћкуфхцџш}
\end{document}

```

Result 4:

абвгдђежззсујкльмњопрсџћкуфхцџш

Example 5:

```

\documentclass{article}
\usepackage{cmsrb}
\newcommand{\ud}{\, \mathrm{d}}
\begin{document}
$$ \int_0^1 e^x \ud x $$
\end{document}

```

Result 5:

$$\int_0^1 e^x dx$$

Example 6:

```

\documentclass{article}
\usepackage[nomath]{cmsrb}
\newcommand{\ud}{\, \mathrm{d}}
\begin{document}
$$ \int_0^1 e^x \ud x $$
\end{document}

```

Result 6:

$$\int_0^1 e^x dx$$

Example 7:

```
\documentclass{article}
\usepackage{cmsrb}
\usepackage[T1]{fontenc}
\usepackage[utf8]{inputenc}
\usepackage[serbian]{babel}
\begin{document}
Љубазни фењерџија чађавог лица хоће да ми покаже штос.
\end{document}
```

Result 7:

Ljubazni fenjerdzija čađavog lica hoće da mi pokaže štos.

7 Version history

3.0

- Letter $\bar{\delta}$ is modified.
- Cyrillic to Latin conversion is added.
- Math fonts are changed (`nomath` option is active).
- Upright integral sign is added.

2.0

- Added support for the letters \acute{r} , \acute{k} , \acute{c} , \acute{s} .

1.1

- The separate `.map` files merged into one.