

# 1 The Upper Sorbian language

The file `usorbian.dtx`<sup>1</sup> It defines all the language-specific macros for Upper Sorbian.

The macro `\LdfInit` takes care of preventing that this file is loaded more than once, checking the category code of the @ sign, etc.

```
1 /*code*/
2 \LdfInit\CurrentOption{date}\CurrentOption
```

When this file is read as an option, i.e. by the `\usepackage` command, `usorbian` will be an ‘unknown’ language, in which case we have to make it known. So we check for the existence of `\l@usorbian` to see whether we have to do something here. As babel also knows the option `uppersorbian` we have to check that as well.

```
3 \ifx\l@uppersorbian\@undefined
4   \ifx\l@usorbian\@undefined
5     \@nopatterns{Usorbian}
6     \adddialect\l@usorbian\z@
7     \let\l@uppersorbian\l@usorbian
8   \else
9     \let\l@uppersorbian\l@usorbian
10 \fi
11 \else
12   \let\l@usorbian\l@uppersorbian
13 \fi
```

The next step consists of defining commands to switch to (and from) the Upper Sorbian language.

`\captionsusorbian` The macro `\captionsusorbian` defines all strings used in the four standard documentclasses provided with L<sup>A</sup>T<sub>E</sub>X.

```
14 \@namedef{captions\CurrentOption}{%
15   \def\prefacename{Zawod}%
16   \def\refname{Referency}%
17   \def\abstractname{Abstrakt}%
18   \def\bibname{Literatura}%
19   \def\chaptername{Kapitl}%
20   \def\appendixname{Dodawki}%
21   \def\contentsname{Wobsah}%
22   \def\listfigurename{Zapis wobrazow}%
23   \def\listtablename{Zapis tabulkow}%
24   \def\indexname{Indeks}%
25   \def\figurename{Wobraz}%
26   \def\tablename{Tabulka}%
27   \def\partname{D\z el}%
28   \def\enclname{P\v r\l oha}%
29   \def\ccname{CC}%
}
```

---

<sup>1</sup>The file described in this section has version number v1.0i and was last revised on 2021/02/06.  
It was written by Eduard Werner (`edi@kaihh.hanse.de`).

```

30 \def\headtoname{Komu}%
31 \def\pagename{Strona}%
32 \def\seename{hl.}%
33 \def\alsoname{hl.^te\v z}%
34 \def\proofname{Proof}% <-- needs translation
35 \def\glossaryname{Glossary}%
36 }%

```

`\newdateusorbian` The macro `\newdateusorbian` redefines the command `\today` to produce Upper Sorbian dates.

```

37 @namedef{newdate\CurrentOption}{%
38 \def\today{\number\day.^`\ifcase\month\or
39 januara\or februara\or m\v erca\or apryla\or meje\or junija\or
40 julija\or awgusta\or septembra\or oktobra\or
41 nowembra\or decembra\fi
42 \space \number\year}}

```

`\olddateusorbian` The macro `\olddateusorbian` redefines the command `\today` to produce old-style Upper Sorbian dates.

```

43 @namedef{olddate\CurrentOption}{%
44 \def\today{\number\day.^`\ifcase\month\or
45 wulkeho r\o\v zka\or ma\l eho r\o\v zka\or nal\v etnika\or
46 jutrownika\or r\o\v zownika\or sma\v zniaka\or pra\v zniaka\or
47 \v znjenna\or po\v znjenna\or winowca\or nazymnika\or
48 hodownika\fi \space \number\year}}

```

The default will be the new-style dates.

```

49 \expandafter\let\csname date\CurrentOption\expandafter\endcsname
50 \csname newdate\CurrentOption\endcsname

```

`\extrasusorbian` The macro `\extrasusorbian` will perform all the extra definitions needed for the Upper Sorbian language. It's pirated from `germanb.sty`. The macro `\noextrasusorbian` is used to cancel the actions of `\extrasusorbian`.

Because for Upper Sorbian (as well as for Dutch) the " character is made active. This is done once, later on its definition may vary.

```

51 \initiate@active@char{`}
52 @namedef{extras\CurrentOption}{\languageshorthands{usorbian}}
53 \expandafter\addto\csname extras\CurrentOption\endcsname{%
54 \bbl@activate{"`}}

```

Don't forget to turn the shorthands off again.

```

55 \expandafter\addto\csname noextras\CurrentOption\endcsname{%
56 \bbl@deactivate{"`}}

```

In order for TeX to be able to hyphenate German Upper Sorbian words which contain 'ß' we have to give the character a nonzero `\lccode` (see Appendix H, the TeXbook). As some of the other language definitions turn the character ^ into a shorthand we need to make sure that it has its original definition here.

```

57 \begingroup \catcode`\^7

```

```

58 \def\x{\endgroup
59   \expandafter\addto\csname extras\CurrentOption\endcsname{%
60     \babel@savevariable{\lccode`^\~Y}%
61     \lccode`^\~Y`^\~Y}%
62 \x

```

The umlaut accent macro `\"` is changed to lower the umlaut dots. The redefinition is done with the help of `\umlautlow`.

```

63 \expandafter\addto\csname extras\CurrentOption\endcsname{%
64   \babel@save`\umlautlow%
65 \expandafter\addto\csname noextras\CurrentOption\endcsname{%
66   \umlauthigh}

```

The Upper Sorbian hyphenation patterns can be used with `\lefthyphenmin` and `\righthyphenmin` set to 2.

```
67 \providehyphenmins{\CurrentOption}{\tw@\tw@}
```

`\dq` We save the original double quote character in `\dq` to keep it available, the math accent `\"` can now be typed as `"`. Also we store the original meaning of the command `\"` for future use.

```

68 \begingroup \catcode`\"12
69 \def\x{\endgroup
70   \def\@S{\mathchar"7019 }
71   \def\dq{"}
72 \x

```

Now we can define the doublequote macros: the umlauts,

```

73 \declare@shorthand{usorbian}{"a}{\textormath{\{"a\}}{\ddot{a}}}
74 \declare@shorthand{usorbian}{"o}{\textormath{\{"o\}}{\ddot{o}}}
75 \declare@shorthand{usorbian}{"u}{\textormath{\{"u\}}{\ddot{u}}}
76 \declare@shorthand{usorbian}{"A}{\textormath{\{"A\}}{\ddot{A}}}
77 \declare@shorthand{usorbian}{"O}{\textormath{\{"O\}}{\ddot{O}}}
78 \declare@shorthand{usorbian}{"U}{\textormath{\{"U\}}{\ddot{U}}}

```

tremas,

```

79 \declare@shorthand{usorbian}{"e}{\textormath{\{"e\}}{\ddot{e}}}
80 \declare@shorthand{usorbian}{"E}{\textormath{\{"E\}}{\ddot{E}}}
81 \declare@shorthand{usorbian}{"i}{\textormath{\{"i\}}{\ddot{i}\imath}}
82 \declare@shorthand{usorbian}{"I}{\textormath{\{"I\}}{\ddot{I}}}

```

usorbian es-zet (sharp s),

```

83 \declare@shorthand{usorbian}{"s}{\textormath{\ss{}}{\@S{}{}}}
84 \declare@shorthand{usorbian}{"S}{\SS{}}

```

german and french quotes,

```

85 \declare@shorthand{usorbian}{"`}{%
86   \textormath{\quotedblbase}{\mbox{\quotedblbase}}{}}%
87 \declare@shorthand{usorbian}{"'}{%
88   \textormath{\textquotedblleft}{\mbox{\textquotedblleft}}{}}%
89 \declare@shorthand{usorbian}{"<}{%
90   \textormath{\guillemotleft}{\mbox{\guillemotleft}}{}}%

```

```

91 \declare@shorthand{usorbian}{">}{%
92   \textormath{\guillemotright}{\mbox{\guillemotright}}}
discretionary commands
93 \declare@shorthand{usorbian}{"c}{\textormath{\bbldisc ck}{c}}
94 \declare@shorthand{usorbian}{"C}{\textormath{\bbldisc CK}{C}}
95 \declare@shorthand{usorbian}{"f}{\textormath{\bbldisc f{ff}}{f}}
96 \declare@shorthand{usorbian}{"F}{\textormath{\bbldisc F{FF}}{F}}
97 \declare@shorthand{usorbian}{"l}{\textormath{\bbldisc l{ll}}{l}}
98 \declare@shorthand{usorbian}{"L}{\textormath{\bbldisc L{LL}}{L}}
99 \declare@shorthand{usorbian}{"m}{\textormath{\bbldisc m{mm}}{m}}
100 \declare@shorthand{usorbian}{"M}{\textormath{\bbldisc M{MM}}{M}}
101 \declare@shorthand{usorbian}{"n}{\textormath{\bbldisc n{nn}}{n}}
102 \declare@shorthand{usorbian}{"N}{\textormath{\bbldisc N{NN}}{N}}
103 \declare@shorthand{usorbian}{"p}{\textormath{\bbldisc p{pp}}{p}}
104 \declare@shorthand{usorbian}{"P}{\textormath{\bbldisc P{PP}}{P}}
105 \declare@shorthand{usorbian}{"t}{\textormath{\bbldisc t{tt}}{t}}
106 \declare@shorthand{usorbian}{"T}{\textormath{\bbldisc T{TT}}{T}}
and some additional commands:
107 \declare@shorthand{usorbian}{"-}{\nobreak-\bbldallowhyphens}
To avoid problems in bookmarks the shorthands should be hyperref aware.
108 \providetcommand\texorpdfstring[2]{#1}
109 \declare@shorthand{usorbian}{"|}{%
110   \texorpdfstring{\textormath{\nobreak\discretionary{-}{}{\kern.03em}}{%
111     \allowhyphens}}{}}
112 \declare@shorthand{usorbian}{""}{\hskip\zskip}

```

\mdqon All that's left to do now is to define a couple of commands for reasons of compatibility with *german.sty*.

```

\ck 113 \def\mdqon{\shorthandon{}}
114 \def\mdqoff{\shorthandoff{}}
115 \def\ck{\allowhyphens\discretionary{k-}{k}{ck}\allowhyphens}

```

The macro \ldf@finish takes care of looking for a configuration file, setting the main language to be switched on at \begin{document} and resetting the category code of @ to its original value.

```

116 \ldf@finish\CurrentOption
117 </code>

```