

1 The Upper Sorbian language

The file `usorbian.dtx`¹ 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 `upporsorbian` we have to check that as well.

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

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

`\captionusorbian` The macro `\captionusorbian` defines all strings used in the four standard documentclasses provided with `LATEX`.

```
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\ v el}%
28 \def\enclname{P\ v r\ l oha}%
29 \def\ccname{CC}%
```

¹The file described in this section has version number `v1.0j` and was last revised on 2021/11/05. 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}% <-- Needs translation
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 znika\or pra\v znika\or
47   \v znjenca\or po\v znjenca\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 \TeX book). As some of the other language definitions turn the character `ˆ` into a shorthand we need to make sure that it has it’s orginial 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\@SS{\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}{"0}{\textormath{"{0}}{\ddot 0}}
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\imath}}
82 \declare@shorthand{usorbian}{"I}{\textormath{"{I}}{\ddot I}}

```

usorbian es-zet (sharp s),

```

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

```

`\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>

```