### Hebrew Module for datetime2 Package

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2015-03-30 (v1.0)

This module is currently unmaintained and may be subject to change. If you want to volunteer to take over maintanance, contact me at http://www.dickimaw-books.com/contact.html

#### Abstract

This is the Hebrew language module for the datetime2 package. If you want to use the settings in this module you must install it in addition to installing datetime2. If you use babel or polyglossia, you will need this module to prevent them from redefining \today. The datetime2 useregional setting must be set to text or numeric for the language styles to be set. Alternatively, you can set the style in the document using \DTMsetstyle, but this may be changed by \date \language \rangle depending on the value of the useregional setting.

The date style simply uses either babel's \hebdate or polyglossia's \hebrewdate so the date style isn't expandable.

I don't know if these settings are correct as I can't speak Hebrew. In particular, I don't know if the hebrew time style is correct. Currently this just uses the default time style. Please be aware that this may change. Whoever takes over maintanance of this module may can change it as appropriate.

The new maintainer should add the line:

The Current Maintainer of this work is Name.

to the preamble part in datetime2-hebrew.ins where Name is the name of the maintainer(s) and replace the 'inactive' status to 'maintained'.

#### 1 The Code

There is currently only one .ldf file.

#### 1.1 Main Hebrew Module (datetime2-hebrew.ldf)

Identify Module

1 \ProvidesDateTimeModule{hebrew}[2015/03/30 v1.0]

The date style uses \hebrewdate or \hebdate, depending on which is defined. This needs to be robust, which means the date can't be expanded with this style. This should be fixed if at all possible. (I don't know how.)

### \DTMhebrewdate

```
2 \ifdef\hebrewdate
3 {%
  5 }%
6 {%
  \ifdef\hebdate
7
  {%
    9
10
  }%
  {%
11
    \newcommand*\DTMhebrewdate[3]{#3-#2-#1}%
12
    \PackageWarning{datetime2-hebrew}{Neither
13
    \string\hebrewdate\space nor \string\hebdate\space defined}{}%
14
  }%
15
16 }%
```

For some reason \hebrewdate doesn't work with \datetime2's definition of \today so it needs to be changed.

\today

\Today

18 \renewcommand\*{\Today}{\DTMDisplaydate{\year}{\month}{\day}{-1}}

The full style will probably need to check for RL or LR.

\DTMhebrewdatetimesep

The separator between the date and time blocks in the full format (either text or numeric).

19 \newcommand\*{\DTMhebrewdatetimesep}{\space}

\DTMhebrewtimezonesep

The separator between the time and zone blocks in the full format (either text or numeric).

20 \newcommand\*{\DTMhebrewtimezonesep}{\space}

\DTMhebrewdatesep

The separator for the numeric date format.

21 \newcommand\*{\DTMhebrewdatesep}{.}

\DTMhebrewtimesep

The separator for the numeric time format.

22 \newcommand\*{\DTMhebrewtimesep}{:}

Provide keys that can be used in \DTMlangsetup to set these separators.

- 23 \DTMdefkey{hebrew}{datetimesep}{\renewcommand\*{\DTMhebrewdatetimesep}{#1}}
- $24 \DTMdefkey{hebrew}{timezonesep}{\renewcommand*{\DTMhebrewtimezonesep}{\#1}}$

Define a boolean key that determines if the time zone mappings should be used.

```
27 \DTMdefboolkey{hebrew}{mapzone}[true]{}
The default is to use mappings.
28 \DTMsetbool{hebrew}{mapzone}{true}
   Define the hebrew style.
29 \DTMnewstyle
   {hebrew}% label
30
   {% date style
31
     \renewcommand*\DTMdisplaydate[4]{%
32
33
        \DTMtexorpdfstring{\DTMhebrewdate{##1}{##2}{##3}}{##3-##2-##1}%
34
     }%
     \renewcommand*\DTMDisplaydate{\DTMdisplaydate}%
35
36 }%
   {% time style (use default)
37
     \verb|\DTMsettimestyle{default}||%
38
39 }%
40
   {% zone style
     \DTMresetzones
41
     \DTMhebrewzonemaps
42
     \renewcommand*{\DTMdisplayzone}[2]{%
43
       \DTMifbool{hebrew}{mapzone}%
44
       {\DTMusezonemapordefault{##1}{##2}}%
45
46
47
          \ifnum##1<0\else+\fi\DTMtwodigits{##1}%
          \ifDTMshowzoneminutes\DTMhebrewtimesep\DTMtwodigits{##2}\fi
48
       }%
49
     }%
50
51 }%
   {% full style
52
     \renewcommand*{\DTMdisplay}[9]{%
53
      \ifDTMshowdate
54
       \DTMdisplaydate{##1}{##2}{##3}{##4}%
55
       \DTMhebrewdatetimesep
56
57
      \DTMdisplaytime{##5}{##6}{##7}%
58
59
      \ifDTMshowzone
60
       \DTMhebrewtimezonesep
61
       \DTMdisplayzone{##8}{##9}%
62
      \fi
63
     \renewcommand*{\DTMDisplay}{\DTMdisplay}%
64
65 }%
   Define numeric style.
66 \DTMnewstyle
  {hebrew-numeric}% label
67
68
   {% date style
      \renewcommand*\DTMdisplaydate[4]{%
```

```
\DTMifbool{hebrew}{showdayofmonth}%
 70
 71
         {%
            \number##3 % space intended
 72
            \DTMhebrewdatesep
 73
         }%
 74
 75
         {}%
 76
         \number##2 % space intended
         \DTMifbool{hebrew}{showyear}%
 77
 78
         {%
            \DTMhebrewdatesep
 79
            \number##1 % space intended
 80
         }%
 81
 82
         {}%
 83
       \renewcommand*\DTMDisplaydate{\DTMdisplaydate}%
 84
    }%
 85
    {% time style
 86
       \renewcommand*\DTMdisplaytime[3]{%
 87
 88
         \number##1
 89
         \DTMhebrewtimesep\DTMtwodigits{##2}%
         \ifDTMshowseconds\DTMhebrewtimesep\DTMtwodigits{##3}\fi
 90
       }%
 91
    }%
 92
    {% zone style
93
      \DTMresetzones
 94
 95
      \DTMhebrewzonemaps
 96
      \renewcommand*{\DTMdisplayzone}[2]{%
        \DTMifbool{hebrew}{mapzone}%
 97
        {\DTMusezonemapordefault{##1}{##2}}%
 98
        {%
 99
           \ifnum##1<0\else+\fi\DTMtwodigits{##1}%
100
101
           \ifDTMshowzoneminutes\DTMhebrewtimesep\DTMtwodigits{##2}\fi
102
        }%
      }%
103
    }%
104
    {% full style
105
      \renewcommand*{\DTMdisplay}[9]{%
106
       \ifDTMshowdate
107
108
        \DTMdisplaydate{##1}{##2}{##3}{##4}%
109
        \DTMhebrewdatetimesep
110
       \DTMdisplaytime{##5}{##6}{##7}%
111
       \ifDTMshowzone
112
        \DTMhebrewtimezonesep
113
114
        \DTMdisplayzone{##8}{##9}%
115
116
      }%
      \renewcommand*{\DTMDisplay}{\DTMdisplay}%
117
118 }
```

\DTMhebrewzonemaps

The time zone mappings are set through this command, which can be redefined if extra mappings are required or mappings need to be removed. There are currently no mappings.

```
119 \newcommand*{\DTMhebrewzonemaps}{%
120 }
```

Switch style according to the useregional setting.

```
121 \DTMifcaseregional
122 {}% do nothing
123 {\DTMsetstyle{hebrew}}
124 {\DTMsetstyle{hebrew-numeric}}
```

Redefine  $\del{datehebrew}$  (or  $\del{date}(dialect)$ ) to prevent babel from resetting  $\del{datehebrew}$  (For this to work, babel must already have been loaded if it's required.)

```
125 \ifcsundef{date\CurrentTrackedDialect}
126 {%
127
     \ifundef\datehebrew
     {% do nothing
128
129
     }%
130
     {%
       \def\datehebrew{%
131
132
         \DTMifcaseregional
133
         {}% do nothing
         {\DTMsetstyle{hebrew}}%
134
         {\DTMsetstyle{hebrew-numeric}}%
135
       }%
136
     }%
137
138 }%
139 {%
     \csdef{date\CurrentTrackedDialect}{%
140
       \DTMifcaseregional
141
142
       {}% do nothing
       {\DTMsetstyle{hebrew}}%
143
       {\DTMsetstyle{hebrew-numeric}}
144
145
    }%
146 }%
```

# Change History

1.0		
	General: Initial release	 1

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D	${f T}$
\DTMhebrewdate $\dots 2$	\Today 2
$\DTMhebrewdatesep \dots 2$	\today 2
\DTMhebrewdatetimesep 2	(today 2
\DTMhebrewtimesep2	
\DTMhebrewtimezonesep 2	${f U}$
\DTMhebrewzonemaps 5	useregional 1, 5