

**TextEngine**

<b>COLLABORATORS</b>
----------------------

	<i>TITLE :</i> TextEngine		
<i>ACTION</i>	<i>NAME</i>	<i>DATE</i>	<i>SIGNATURE</i>
WRITTEN BY		December 8, 2024	

<b>REVISION HISTORY</b>
-------------------------

NUMBER	DATE	DESCRIPTION	NAME

# Contents

<b>1</b>	<b>TextEngine</b>	<b>1</b>
1.1	TextEngine.doc . . . . .	1
1.2	TextEngine/--background-- . . . . .	1
1.3	TextEngine/--compiling-- . . . . .	3
1.4	TextEngine/--history-- . . . . .	3
1.5	TextEngine/--todo-- . . . . .	4
1.6	TextEngine/TextEngine . . . . .	5
1.7	TextEngine/TextEngineJD . . . . .	8

## Chapter 1

# TextEngine

### 1.1 TextEngine.doc

```
--background--
--compiling-- ()
--history-- ()
--todo-- ()
TextEngine ()
TextEngineJD ()
```

### 1.2 TextEngine/--background--

NAME

TextEngine -- This module helps you with text features (V33)

FUNCTION

This module handles strings with different % commands

NOTES

None.

COPYRIGHT

This software is copyrighted 1994-95 by Kai Hofmann.  
All rights reserved!

- Permission for COMMERCIAL USE is only given by an extra available commercial license that must be validated!  
Contact me directly for this license, because it will be individually handed out per your needs!
- Permission is hereby granted, without written agreement and without license, to USE this software and its documentation for any NON-COMMERCIAL purpose, provided that the above copyright notice and the following paragraph appear in all copies of this software (Non-commercial includes Giftware and Shareware!).

You *\*must\** include the following notice in your product and in your documentation:

---

"This software uses the textengine that is copyrighted 1994-95 by Kai Hofmann"

You "must" send me a full version of your product at no cost including free updates!

Extra money is welcome (For Bank Account see below - but \*ONLY\* send in DM to this Bank Account!).

- THERE IS \*NO PERMISSION\* GIVEN TO MODIFY THIS SOFTWARE!

If you need only parts of this software, you should not worry, because it's the job of the optimizer from your C compiler to include only the needed parts in your executable!

#### DISCLAIMER

THERE IS NO WARRANTY FOR THE PROGRAM, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDER AND/OR OTHER PARTIES PROVIDE THE PROGRAM "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE PROGRAM IS WITH YOU. SHOULD THE PROGRAM PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY REDISTRIBUTE THE PROGRAM AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE PROGRAM (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE PROGRAM TO OPERATE WITH ANY OTHER PROGRAMS), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

THE AUTHOR HAS NO OBLIGATION TO PROVIDE MAINTENANCE, SUPPORT, UPDATES, ENHANCEMENTS, OR MODIFICATIONS.

#### DISTRIBUTION

Permission is hereby granted, without written agreement and without license or royalty fees, to copy and distribute this software and its documentation for any purpose, provided that the above copyright notice and the following paragraphs appear in all copies of this software, to:

- All who will distribute this software for free!
- All free accessible INTERNET servers and PHONE boxes!
- All Aminet sites
- All SimTel sites
- Fred Fish for his great Amiga-Software-Library
- The German SAAR AG PD-Library
- All others who do NOT take more than \$5.- for one disk that includes this software!
- ALL others who do NOT take more than \$40.- for one CD that includes this software!

#### ADDITIONAL INFORMATION

I have tried to make portable/useful and I hope bugfree software

---

for eternity!

So I hope very much that to some extend I will be compensated for my hard work - monetarily or otherwise:-)

Kindly send US - dollars to a friend of mine in the USA who will forward it to me in a timely manner. Please send checks or money orders only.

Contact me via email for more!

AUTHOR  
Kai Hofmann  
Arberger Heerstraße 92  
28307 Bremen  
Germany

Phone: (+49)-(0)421/480780  
(Remember that my parents don't speak english!)

E-Mail: i07m@zfn.uni-bremen.de  
i07m@informatik.uni-bremen.de

IRC : PowerStat@#AmigaGer

WWW : <http://www.informatik.uni-bremen.de/~i07m>

Bank account : 1203 7503  
Account owner: Kai Hofmann  
Bank code : 290 501 01  
Bank name : Sparkasse in Bremen/Germany

THANKS

Thank you's are going to the following people:

Rita Reichl - For correcting my bad english (very often)

Christian Schaefer - For spending time on this code with his  
Borland C++ 4.5 compiler

Jacco van Weert &  
Frans Slothouber - For the 'Robodoc' utility

## 1.3 TextEngine/--compiling--

NAME  
compiling -- Specials for compiling the textengine.

COMPILING  
- You could compile this code as normal C or as C++

## 1.4 TextEngine/--history--

NAME  
history -- TextEngine is a module to help with text features

VERSION  
\$VER: TextEngine 33.071 (28.07.95)

HISTORY

---

22.02.1994 - DateString() initiated.  
 23.02.1994 - Continuation of DateString(), making FormatStr() and copying max from old Datum.mod  
 TimeString() Initiated.  
 24.02.1994 - Inserting %w command in DateString()  
 04.03.1994 - Starting translation into C  
 21.01.1995 - Continuation of translation to C, using new date library functions.  
 Internal procedures: FormatStr(), strdel(), strinspos()  
 TimeString() completly rewritten.  
 04.02.1995 - TimeString() completly rewritten.  
 Bug fixes in strinspos().  
 05.02.1995 - DateString() completly rewritten.  
 Eliminating FormatStr(), because there is no need for it, at the moment.  
 TextEngine(), TextEngineJD() initiated.  
 06.02.1995 - Small changes in the autodocs  
 16.02.1995 - Fixing bugs found with C++  
 Adding C++ overloading to TextEngine() & TextEngineJD()  
 24.02.1995 - Rita Reichl corrects my bad English - again.  
 16.03.1995 - Corrections and changes in the autodocs.  
 22.03.1995 - Introducing DiffDateString().  
 Changing interface!!!  
 02.04.1995 - More C++ Support! Adding To-Do list.  
 Adding NOTES to autodocs. Fixing some things.  
 Introducing DiffTimeString(), StringString().  
 07.04.1995 - Fixing two bugs.  
 17.04.1995 - Integrating StringString()  
 22.04.1995 - Rita Reichl corrects my bad English - again.  
 14.05.1995 - New copyright notice!  
 16.05.1995 - Fixing two small bugs.  
 19.05.1995 - Rita corrects my English.  
 24.05.1995 - Changing interface of TextEngine(), TextEngineJD(), StringString()  
 Rewriting StringString() to support additional insert strings.  
 25.05.1995 - Writing test program  
 08.06.1995 - Writing --compiling-- autodoc and some other small fixes in the autodocs.  
 18.06.1995 - Fixing C++ warnings/errors in textenginetest.c  
 18.07.1995 - Replacing abs() with labs() to avoid problems!  
 Changing header from \*strarr[] to \*\*stararr  
 28.07.1995 - Shortening the year of the version-string to 95, because the Amiga 'version' command is buggy!

## 1.5 TextEngine/--todo--

NAME

todo -- This is the 'To-Do' list of the TextEngine module

TODO

Find out about the Borland C++ 4.5 report about lines 140/150 in textenginetest.c 'suspicious pointer conversion' / 'could not match

```
TextEngine()' :
void TextEngine(char *const string, double jd, const Languages lang,
double jd2, const char *const *const strarr);
----- (That's what the compiler does not like!)
```

## 1.6 TextEngine/TextEngine

### NAME

TextEngine -- Fills up %-commands (V33)

### SYNOPSIS

```
TextEngine(string, day, month, year, hour, min, sec, lang, day2, month2,
year2, hour2, min2, sec2, strarr);
TextEngine(string, jd, lang, jd2, strarr)
```

```
void TextEngine(char *const string, const unsigned short day,
const unsigned short month, const int year = 0,
const unsigned short hour = 0, const unsigned short min = 0,
const unsigned short sec = 0, const Languages lang = English,
const unsigned short day2 = 0, const unsigned short month2 = 0,
const int year2 = 0, const unsigned short hour2 = 0,
const unsigned short min2 = 0, const unsigned short sec2 = 0,
const char *const *const strarr = NULL);
```

```
void TextEngine(char *const string, double jd,
const Languages lang = English, double jd2 = 0.0.
const char *const *const strarr = NULL);
```

### FUNCTION

Finds and replaces % commands with real values.

### INPUTS

```
string - String with % commands
day    - The day to fill in for % command
month  - The month to fill in for % command
year   - The year to fill in for % command, if this is 0 it will not
        filled in!
hour   - The hour to use
min    - The minute to use
sec    - The sec to use
lang   - The language to use for texts
day2   - The diff. day
month2 - The diff. month
year2  - The diff. year, if you use 0, this will mean: use the same
        as year!
hour2  - The diff. hour
min2   - The diff. minute
sec2   - The diff. second
strarr - Stringarray with the strings to insert, terminated by NULL
```

### RESULT

string - String without % commands, but with real values

### EXAMPLE

...



```
string = "Only a test!";
TextEngine(string,18,9,1970,14,44,0,English,22,3,1995,15,14,0,NULL);
...
```

#### SYNTAX

Syntax of % commands:

```
%%      : %
%+DTj   : JD.JD   date+time
%+DTJ   : MJD.JD  date+time
```

```
%D1[2][3]
```

```
1 : d : day
    m : month
    M : month text
    y : year
    w : weekday
    W : week
    s : scaliger year
    j : JD
    J : MJD
2 : v : variable length
    f : fixed length
    s : short text
    l : long text
3 : 2 : short year
    4 : full year
```

```
%Ddv - supported: d[d]
%Ddf - supported: dd
%Dmv - supported: m[m]
%Dmf - supported: mm
%Dms - supported: MMM
%Dml - supported: M..M
%Dyv2 - supported: y[y]
%Dyv4 - supported: y[y[y[y]]]
%Dyf2 - supported: yy
%Dyf4 - supported: yyyy
%Dws - supported: ww[w]
%Dwl - supported: w..w
%DWv - supported: W[W]
%DWf - supported: WW
%Dsv - supported: s[s[s[s]]]
%Dsf - supported: ssss
%Dj - supported: j..
%DJ - supported: J..
```

```
%T1[2]
```

```
T : time identifier
1 : h : hour 24h format
    H : hour 12h format without "am/pm" text
    M : "am/pm" text
    m : minute
    s : second
    j : jd time
2 : v : variable length
    f : fixed length
```

```
%Thv - supported: h[h]
%Thf - supported: hh
%THv - supported: h[h]
%THf - supported: hh
%TM - supported: am|pm
%Tmv - supported: m[m]
%Tmf - supported: mm
%Tsv - supported: s[s]
%Tsf - supported: ss
%Tj - supported: j

%ADl
l : d : Difference from the given date to the actual date in days.
y : Difference from the given date to the actual date in years.

%ADd - supported: d[d..]
%ADy - supported: y[y..]

%ATl
l : h : full hours
m : full minutes
s : full seconds
H : all in hours
M : all in minutes
S : all in seconds
j : as JD time difference

%Ath - supported: h[h..]
%ATm - supported: m[m]
%ATs - supported: s[s]
%ATH - supported: h[h..][.h[h..]]
%ATM - supported: m[m..][.m[m..]]
%ATS - supported: s[s..]
%ATj - supported: j

%S
S : string identifier

%S - supported: s
```

#### NOTES

If day2 and month2 are both 0 only year2-year will be calculated for %ADy, don't use %ADd in this situation!

Think before using:

```
TextEngine(str,18,9,1970,0,0,0,English,18,9,1995,0,0,0) or
TextEngine(str,18,9,1995,0,0,0,English,18,9,1970,0,0,0)
```

#### BUGS

Keep care that in string is enough space to expand it - if not unknown effects may occur!

#### SEE ALSO

DateString(), TimeString()

## 1.7 TextEngine/TextEngineJD

### NAME

TextEngineJD -- Fills up %-commands (V33)

### SYNOPSIS

```
TextEngineJD(string, jd, lang, jd2, strarr);
```

```
void TextEngineJD(char *const string, double jd,  
    const Languages lang = English, double jd2 = 0.0,  
    const char *const *const strarr);
```

### FUNCTION

Finds and replaces % commands with real values.

### INPUTS

string - String with % commands.  
jd - The JD including time information.  
lang - The language to use for texts.  
jd2 - The diff. JD.  
strarr - Stringarray with the strings to insert, terminated by NULL

### RESULT

string - String without % commands, but with real values.

### EXAMPLE

```
...  
string = "Only a test!";  
TextEngineJD(string, 2449754.630556, English, 2449700, NULL);  
...
```

### SYNTAX

Syntax of % commands:  
See TextEngine()

### NOTES

See TextEngine().

### BUGS

Unknown.

### SEE ALSO

TextEngine()

---