

The `timestamp` package ^{*}

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Abstract

L^AT_EX package that defines a (hexa-)decimal timestamp.

Résumé

Extension L^AT_EX offrant un horodateur (hexa-)decimal.

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^{*}This file describes version v1.7, last revised 2020/05/02.

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Part I

Usage

<hr/> <hr/>	<code>\usepackage{timestamp}</code>
	Requirement
	<ol style="list-style-type: none"> 1. <code>timestamp.sty</code> and its dependencies are in the path of the L^AT_EX engine. See Part III, section 3. 2. Goes in the <i>preamble</i>
<hr/> <hr/>	<code>\Timestamp*[date time datetime]<10 16></code>
	Semantics Timestamp in base 10 or 16, optionally prefixed by the ‘jobname’[1, l3sys]
<hr/> <hr/>	<code>\TimestampDelimiter[char]</code>
	Semantics Sets the delimiter used by <code>\Timestamp</code>

Part II

Listing

Listing 1. Base 10

```
\ExplSyntaxOn
\noindent\Timestamp[date]<10>{-}\Timestamp[time]<10>\\
\Timestamp[datetime]<10>\\
\Timestamp*[datetime]<10>\\
\ExplSyntaxOff
```

```
20200502-2358
20200502-2358
timestamp-20200502-2358
```

Listing 2. Base 16

```
\noindent\Timestamp[date]<16>{\%}\Timestamp[time]<16>\\
\TimestampDelimiter[\%]
\Timestamp\\
\Timestamp*
```

```
1343c36%936
1343c36%936
timestamp%1343c36%936
```

Part III

Other

1 Acknowledgment

This work has benefited from Q&A's from the L^AT_EXcommunity[2]

2 Install

- 1) Compile `timestamp.dtx` (under Unix, `$tex timestamp.dtx`)
- 2) Put the generated `timestamp.sty` in the search path of the L^AT_EXengine

3 Support

This package is available from <https://www.ctan.org/pkg/timestamp> and <https://github.com/rogard/timestamp>.

3.1 Platform

- i)* Linux laptop 4.15.0-20-generic #21-Ubuntu SMP Tue Apr 24
↪ 06:16:15 UTC 2018 x86_64 x86_64 x86_64 GNU/Linux

3.2 Engine

- a)* pdfTeX 3.14159265-2.6-1.40.20 (TeX Live 2019)
- b)* pdfTeX 3.14159265-2.6-1.40.21 (TeX Live 2020)
- c)* LuaHBTeX, Version 1.12.0 (TeX Live 2020)
- d)* XeTeX 3.14159265-2.6-0.999992 (TeX Live 2020)

3.3 Results

- 1) `timestamp v1.2` compiles satisfactorily on platform *i)* and engines *b)*, *c)*, and *d)*

References

- [1] The L^AT_EX3 Project Team *The L^AT_EX3 interfaces*, 2019, <http://ftp.math.purdue.edu/mirrors/ctan.org/macros/latex/contrib/l3kernel/interface3.pdf>
- [2] <https://tex.stackexchange.com/users/112708/erwann?tab=questions>

Change History

v1.0	General: Initial version 4	v1.4	General: Add: \timestamp:nn 4
v1.1	General: Add: dependency to erw-l3 . . 4		Remove: \syshex_date: 4
	Remove: internals 4		Remove: \syshex_date_hex: 4
v1.2	General: Add: \syshex_date: 4		Remove: \syshex_jobname_dec: . . 4
	Add: \syshex_date_hex: 4		Remove: \syshex_time_dec: 4
	Add: \syshex_jobname_dec: 4		Remove: \syshex_time_hex: 4
	Add: \syshex_time_dec: 4		Rename: syhex to timestamp 4
	Add: \syshex_time_hex: 4	v1.5	General: Add: @_datetime_join:nnn
	Remove: \SyshexDateHex 4		(fixes a bug) 4
	Remove: \SyshexDate 4	v1.6	General: Fix: minor bugs 4
	Remove: \SyshexFilename 4	v1.7	General: Add: \TimestampDelimiter . 4
	Remove: \SyshexTimeHex 4		Add: \Timestamp 4
	Remove: \SyshexTime 4		Add: dependency to erw-l3 4
	Remove: dependency to erw-l3 4		Remove: all non doc-level
v1.3	General: Misc: cleanup 4		commands 4

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Part IV

Implementation

1 Opening

```
1 <@@=timestamp>
2 \ExplSyntaxOn
```

2 Document level

```
3 \NewDocumentCommand\Timestamp{s0{datetime}D<>{16}}
4 {
5   \IfBooleanTF{#1}
6   {
7     \erw_sys_jobnametimestamp:nn{#2}{#3}
8   }
9   {
10    \erw_sys_timestamp:nn{#2}{#3}
11  }
12 }
13 \NewDocumentCommand\TimestampDelimiter{o}
14 {
15   \IfValueTF{#1}
16   { \erw_option:n{ sys / timestamp_delim = #1 } }
17   { \erw_option:n{ sys / timestamp_delim } }
18 }
```

3 Closing

```
19 \ExplSyntaxOff
```