
timeparse Documentation

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thomst

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Contents:

TIMEPARSE

An argparse-extension for parsing command-line arguments as time-, date-, datetime-, or timedelta-objects.

1.1 Latest Version

The latest version of this project can be found at : <http://github.com/thomst/timeparse>.

1.2 Installation

- Option 1 : Install via pip

```
pip install timeparse
```

- Option 2 : If you have downloaded the source

```
python setup.py install
```

1.3 Dokumentaion:

Please visit the documentation on readthedocs.org: <https://timeparse.readthedocs.org/en/latest/index.html>

1.4 Usage

How to use?

```
>>> import argparse
>>> from timeparse import ParseDatetime
>>>
>>> parser = argparse.ArgumentParser()
>>> parser.add_argument('--datetime', action=ParseDatetime, nargs='+')
>>>
>>> parser.parse_args("--datetime 2.4.2013 23:02".split()).datetime
datetime.datetime(2013, 4, 2, 23, 2)
```

1.5 Reporting Bugs

Please report bugs at github issue tracker: <https://github.com/thomst/timeparse/issues>

1.6 Author

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- <http://github.com/thomst>

DOKUMENTATION

An `argparse`-extension for parsing command-line arguments as objects of the `datetime`-module.

class `timeparse.ParseTime` (*option_strings*, *dest*, *nargs=None*, *const=None*, *default=None*, *type=None*,
choices=None, *required=False*, *help=None*, *metavar=None*)

Action for `argparse.ArgumentParser.add_argument()` to parse cmdline-parameters as `datetime.time`.

usage:

```
>>> import argparse
>>> import timeparse

>>> parser = argparse.ArgumentParser(prog='PROG')
>>> parser.add_argument(
...     '--time',
...     action=timeparse.ParseTime
... )
>>> parser.parse_args('--time 23:20:33'.split()).time
datetime.time(23, 20, 33)
```

class `timeparse.ParseDate` (*option_strings*, *dest*, *nargs=None*, *const=None*, *default=None*, *type=None*,
choices=None, *required=False*, *help=None*, *metavar=None*)

Action for `argparse.ArgumentParser.add_argument()` to parse cmdline-parameters as `datetime.date`.

usage:

```
>>> import argparse
>>> import timeparse

>>> parser = argparse.ArgumentParser(prog='PROG')
>>> parser.add_argument(
...     '--date',
...     action=timeparse.ParseDate
... )
>>> parser.parse_args('--date 24/04/2013'.split()).date
datetime.date(2013, 4, 24)
```

class `timeparse.ParseTimedelta` (*option_strings*, *dest*, *nargs=None*, *const=None*, *default=None*,
type=None, *choices=None*, *required=False*, *help=None*,
metavar=None)

Action for `argparse.ArgumentParser.add_argument()` to parse cmdline-parameters as `datetime.timedelta`.

usage:

```
>>> import argparse
>>> import timeparse

>>> parser = argparse.ArgumentParser(prog='PROG')
>>> parser.add_argument(
...     '--days',
...     nargs='+',
...     action=timeparse.ParseTimedelta
... )
>>> parser.parse_args('--days 20 12 4'.split()).days
datetime.timedelta(20, 43440)

>>> parser.parse_args('--days 20h 12m 4s'.split()).days
datetime.timedelta(20, 72724)
```

If the dest-property of `argparse.Action` (which is by default the literal part of the option-string) matches one of the kwargs accepted by `datetime.timedelta` the values are interpreted starting with this unit with the next lesser unit following. If the values could be flagged with some letters matching those kwargs. In the first exemple above the values are interpreted as 20 days, 12 hours and 4 min. In the second one as 20 hours, 12 minutes and 4 seconds.

```
class timeparse.ParseDatetime(option_strings, dest, nargs=None, const=None, default=None,
                              type=None, choices=None, required=False, help=None,
                              metavar=None)
```

Action for `argparse.ArgumentParser.add_argument()` to parse cmdline-parameters as `datetime.datetime`.

usage:

```
>>> import argparse
>>> import timeparse

>>> parser = argparse.ArgumentParser(prog='PROG')
>>> parser.add_argument(
...     '--datetime',
...     nargs='+',
...     action=timeparse.ParseDatetime
... )
>>> parser.parse_args('--datetime 24/04/2013 23:22'.split()).datetime
datetime.datetime(2013, 4, 24, 23, 22)
```

```
class timeparse.ParseTimeOrDatetime(option_strings, dest, nargs=None, const=None, default=None,
                                     type=None, choices=None, required=False, help=None,
                                     metavar=None)
```

Action for `argparse.ArgumentParser.add_argument()` to parse cmdline-parameters either as `datetime.time` or `datetime.datetime`..

usage:

```
>>> import argparse
>>> import timeparse

>>> parser = argparse.ArgumentParser(prog='PROG')
>>> parser.add_argument(
...     '--time-or-datetime',
...     nargs='+',
...     action=timeparse.ParseTimeOrDatetime
... )
```

```
>>> parser.parse_args('--time-or-datetime 24/04/2013 23:22'.split()).time_or_datetime
datetime.datetime(2013, 4, 24, 23, 22)
```

```
>>> parser.parse_args('--time-or-datetime 23:22'.split()).time_or_datetime
datetime.time(23, 22)
```

class timeparse.**AppendTime**(*option_strings*, *dest*, *nargs=None*, *const=None*, *default=None*,
 type=None, *choices=None*, *required=False*, *help=None*, *metavar=None*)
Like [ParseTime](#) with support for multiple use of arguments.

usage:

```
>>> import argparse
>>> import timeparse

>>> parser = argparse.ArgumentParser(prog='PROG')
>>> parser.add_argument(
...     '--time',
...     action=timeparse.AppendTime
... )
>>> parser.parse_args('--time 23:20:33 --time 22:20'.split()).time
[datetime.time(23, 20, 33), datetime.time(22, 20)]
```

class timeparse.**AppendDate**(*option_strings*, *dest*, *nargs=None*, *const=None*, *default=None*,
 type=None, *choices=None*, *required=False*, *help=None*, *metavar=None*)
Like [ParseDate](#) with support for multiple use of arguments.

usage:

```
>>> import argparse
>>> import timeparse

>>> parser = argparse.ArgumentParser(prog='PROG')
>>> parser.add_argument(
...     '--date',
...     action=timeparse.AppendDate
... )
>>> parser.parse_args('--date 23.4.13 --date 24.4.13'.split()).date
[datetime.date(2013, 4, 23), datetime.date(2013, 4, 24)]
```

class timeparse.**AppendTimedelta**(*option_strings*, *dest*, *nargs=None*, *const=None*, *default=None*,
 type=None, *choices=None*, *required=False*, *help=None*,
 metavar=None)

Like [ParseTimedelta](#) with support for multiple use of arguments.

class timeparse.**AppendDatetime**(*option_strings*, *dest*, *nargs=None*, *const=None*, *default=None*,
 type=None, *choices=None*, *required=False*, *help=None*,
 metavar=None)

Like [ParseDatetime](#) with support for multiple use of arguments.

class timeparse.**AppendTimeOrDatetime**(*option_strings*, *dest*, *nargs=None*, *const=None*, *de-*
 fault=None, *type=None*, *choices=None*, *required=False*,
 help=None, *metavar=None*)

Like [ParseTimeOrDatetime](#) with support for multiple use of arguments.

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