

# Examples for the datetimetools package

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## convert\_date

Convert dates in numeric external formats (e.g. from MATLAB or Excel) to Date.

```
> convert_date(40000, "excel")
```

```
[1] "2009-07-06"
```

```
> convert_date(725935, "matlab")
```

```
[1] "1987-07-17"
```

## convert\_tz

Convert a timestamp from one timezone to another.

```
> convert_tz("2016-05-10 12:00:00", "Europe/Berlin", "America/Chicago")
```

```
[1] "2016-05-10 05:00:00 CDT"
```

## Business days

See ?business\_days.

```
> is_weekend(as.Date("2017-1-5"))
```

```
[1] FALSE
```

```
> next_businessday(as.Date("2017-1-5")) ## there is also 'previous_businessday'
```

```
[1] "2017-01-06"
```

```
> next_businessday(as.Date("2017-1-5"), shift = 2) ## short-hand: 'next_bday'
```

```
[1] "2017-01-09"
```

## Guess Timestamp Format

```
> s <- c(" 1999-08-19 10:00",  
        "19.8.1999 10:00", ## Central-European, e.g. Germany  
        "8/19/99 10:00:00") ## US  
> guess_datetime(s)
```

```
[1] "1999-08-19 10:00:00 CEST" "1999-08-19 10:00:00 CEST"  
[3] "1999-08-19 10:00:00 CEST"
```

## Days of the week

```
> last_weekday(5, as.Date("2017-1-1")) ## last Friday of Jan 2017
```

```
[1] "2017-01-27"
```

```
> nth_weekday(1, as.Date("2017-1-1"), 2) ## second Monday of Jan 2017
```

```
[1] "2017-01-09"
```

```
> toLatex(sessionInfo())
```

- R version 3.3.3 (2017-03-06), x86\_64-w64-mingw32
- Locale: LC\_COLLATE=C, LC\_CTYPE=German\_Switzerland.1252,  
LC\_MONETARY=German\_Switzerland.1252, LC\_NUMERIC=C,  
LC\_TIME=German\_Switzerland.1252
- Base packages: base, datasets, grDevices, graphics, methods, stats, utils
- Other packages: datetimetools 0.2-7
- Loaded via a namespace (and not attached): tools 3.3.3