# Calendar extension "cz\_simple\_cal"

**Christian Zenker** 

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### Abstract

cz\_simple\_cal is a simple calendar written on top of extbase

## **Table of Contents**

1. Introduction
What does it do?
Feature List
Sources
2. Users manual
3. Administration
4. Configuration
extConf
TypoScript
5. HowTo's
Add a fake action
6. Known problems
7. To-Do List
8. ChangeLog
9. Copyright Notice
Glossary
A. The type date
Date Formats
Time Formats
Compound Formats
Relative Formats
Chaining

## **List of Tables**

A.1. Used Symbols	11
A.2. Localized Notations	11
A.3. ISO8601 Notations	12
A.4. Used Symbols	13
A.5. 12 Hour Notation	13
A.6. 24 Hour Notation	14
A.7. Used Symbols	14
A.8. Localized Notations	15
A.9. Used Symbols	15
A.10. Day-based Notations	

## **List of Examples**

A.1.	Chaining of DateTime	formats	 16
	chaming of Date I have	10111110	- 0

# **Chapter 1. Introduction**

### **Caution**

This extension in alpha state.

It was only tried with TYPO3 4.4 and the corresponding extbase version. Different versions might work, but propably they do not.

### What does it do?

This extension provides a simple calendar.

### **Feature List**

- Allday Events
- · Recurring Events
- Exceptions, Exception Groups
- Categories
- · adding actions via Typoscript
- templates using the hCalendar and hCard microformats
- ...and all the goodness that is Extbase and Fluid.

### **Sources**

Home in forge http://forge.typo3.org/projects/extension-cz\_simple\_cal

Distribution in TER http://typo3.org/extensions/repository/view/cz\_simple\_cal/current/

Bugtracker http://forge.typo3.org/projects/extension-cz\_simple\_cal/issues

Official Git Repository http://github.com/czenker/cz\_simple\_cal

# Chapter 2. Users manual

# **Chapter 3. Administration**

# **Chapter 4. Configuration**

## extConf

When installing the extension the Extension Manager will let you set some values.

recurrenceEnd

cz\_simple\_cal indexes recurring events. Here you can set until what date the indexing should be done. Use any valid format for the date type here -2020-12-31 or +2 years could be some.

#### Note

Don't forget to reindex your events when using a relative date. The index could be outdated else.

## **TypoScript**

You can also configure the extension on page-level using TypoScript. Everything you configure goes into  $plugin.tx\_czsimplecal$ 

persistence.storagePid

The page id where your records are stored. You can set multiple pages seperated by comma (,).

### Note

If you use tt\_address for location and/or organizer, you also have to give the pids of these records.

## Chapter 5. HowTo's

### Add a fake action

Adding a fake action is pretty simple and can be done only using TypoScript. Let's say we want to add a view that displays the event that has recently finished. We'll call this action recent.

#### 1. Choose a fitting real action

In our example case this would be the listAction. ShowAction won't fit as you don't know the id of the event to display in advance. Instead, we'll limit the list to display only one event.

#### 2. Extend the TypoScript configuration

#### Note

All given TypoScript paths are relative to plugin.tx\_czsimplecal. I am to lazy to add this to the path each time, and so should you. Use the curly brackets:  $plugin.tx_czsimplecal\{ //... \}$ 

The TypoScript settings already hold some action configurations. So we'll just copy the configuration for the listAction in settings.EventIndex.actions.list to settings.EventIndex.actions.recent.

The configureable options should be pretty obvious. But first we'll add useAction = list to the actions configuration. This way the fake recentAction knows which real action to call. Now we can change the other configuration like this:

```
recent {
    useAction = list
    startDate = now -1 month
    endDate = now

    maxEvents = 1
    orderBy = end
    order = DESC
}
```

Guess what each of the configuration values is doing. ;) We select all events between now and one month ago, order them by their endtime and just pick the first one.

#### 3. Add the action to the allowed actions

Just add the name of the action to the allowedActions in settins. EventIndex.

#### 4. Create a view

Well, thats even simpler: Just copy the list.html template and rename it to recent.html. Do changes on the file if you like - removing the dayWrapper could be a good idea.

# **Chapter 6. Known problems**

# **Chapter 7. To-Do List**

# Chapter 8. ChangeLog

# **Chapter 9. Copyright Notice**

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The documentation on the date type in the appendix is a slight modification of the official PHP documentation which is licensed under a Creative Commons [http://creativecommons.org/licenses/by/3.0] license.

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## **Glossary**

Date A date usually means the combination of day and time.

See Also Day, Time.

Day When speaking of a *day* usually no time is meant. For example 1st January 2010

would be a day.

See Also Date, Time.

Time When speaking of a *time* usually no day is meant. For example 12:34:56 would

be a time.

See Also Date, Day.

Event (Domain Object) The Domain Object Event represents a series of events that share some common

information like the name or a description. Events might be recurrant or have

exceptions in this recurrances.

See Also EventIndex (Domain Object).

Event (Controller) The most important controller for the Events. Technically it is no controller for

the Event but for the EventIndex

EventIndex (Domain Object) In contrast to the Event an EventIndex is a representation of a concrete

occurance of the event. So an Event the recurrs every week will have a EventIndex representation fore every week. Even not recurring Events have an EventIndex representation. Queries on several events are almost exclusivly

done on these domain objects.

See Also Event.

Exception (Domain Object)

An Exception is an "Event" that symbolizes that an Event is not taking place

when the exception is active. It might be recurring, but Exceptions is not stored

are not stored as Indices in the database as it is done with Events.

ExceptionGroup (Domain

Object)

A collection of Exceptions that belong together somehow.

GetDate is a concept taken from the TYPO3 extension cal. GetDate makes some

actions configurable using GET-parameters. All relative dates of the action are

calculated based on that date.

Timespan A timespan has a start and an end date and covers everything in between. There

are no gaps in a timespan.

Timeline A timeline is a collection of timespans. The contained timespans might overlap

or build gaps.

See Also Timespan.

Fake Action One of the concepts of this calendar is to generate actions dynamically based

on TypoScript configuration. Actions that have no method in the corresponding

controller are called "fake actions".

See Also Real Action.

Real Action In comparisson to fake actions the real actions have a method in the corresponding

controller. These are the actions as they are conceptually intended by extbase.

See Also Fake Action.

# Appendix A. The type date

The first thing to mention is that you can *only* use english phrases and month names. Numeric formats are usually standartized formats.

### Note

The type date is based on PHP's date and time formats [http://php.net/manual/en/datetime.formats.php]. With some exceptions all of the formats there can be used. Some of the relative formats require PHP 5.3, so you should avoid them if possible to keep compatibility.

## **Date Formats**

Table A.1. Used Symbols

Description	Format	Examples
daysuf	"st"   "nd"   "rd"   "th"	
dd	([0-2]?[0-9]   "3"[01]) daysuf?	"7th", "22nd", "31"
DD	"0" [0-9]   [1-2][0-9]   "3" [01]	"07", "31"
m	'january'   'february'   'march'   'april'   'may'   'june'   'july'   'august'   'september'   'october'   'november'   'december'   'jan'   'feb'   'mar'   'apr'   'may'   'jun'   'jul'   'aug'   'sept'   'oct'   'nov'   'dec'   "I"   "II"   "III"   "IV"   "V"   "VI"   "VIII"   "VIII"   "XI"   "XII"   "XII"	
М	'jan'   'feb'   'mar'   'apr'   'may'   'jun'   'jul'   'aug'   'sep'   'sept'   'oct'   'nov'   'dec'	
mm	"0"? [0-9]   "1"[0-2]	"0", "04", "7", "12"
MM	"0" [0-9]   "1"[0-2]	"00", "04", "07", "12"
У	[0-9]{1,4}	"00", "78", "08", "8", "2008"
УУ	[0-9]{2}	"00", "08", "78"
YY	[0-9]{4}	"2000", "2008", "1978"

**Table A.2. Localized Notations** 

Description	Format	Examples
American month and day	mm "/" dd	"5/12", "10/27"
American month, day and year	mm "/" dd "/" y	"12/22/78", "1/17/2006", "1/17/6"
Four digit year, month and day with slashes	YY "/" mm "/" dd	"2008/6/30", "1978/12/22"
Four digit year and month (GNU)	YY "-" mm	"2008-6", "2008-06", "1978-12"

Description	Format	Examples
Year, month and day with dashes	y "-" mm "-" dd	"2008-6-30", "78-12-22", "8-6-21"
Day, month and four digit year, with dots, tabs or dashes	dd [.\t-] mm [] YY	"30-6-2008", "22.12\t1978"
Day, month and two digit year, with dots or tabs	dd [.\t] mm "." yy	"30.6.08", "22\t12\t78"
Day, textual month and year	dd ([ \t])* m ([ \t])* y	"30-June 2008", "22DEC78", "14 III 1879"
Textual month and four digit year (Day reset to 1)	m ([ \t])* YY	"June 2008", "DEC1978", "March 1879"
Four digit year and textual month (Day reset to 1)	YY ([ \t])* m	"2008 June", "1978-XII", "1879.MArCH"
Textual month, day and year	m ([ .\t-])* dd [,.stndrh\t ]+ y	"July 1st, 2008", "April 17, 1790", "May.9,78"
Textual month and day	m ([ .\t-])* dd [,.stndrh\t ]*	"July 1st,", "Apr 17", "May.9"
Day and textual month	d ([ .\t-])* m	"1 July", "17 Apr", "9.May"
Month abbreviation, day and year	M"-" DD"-" y	"May-09-78", "Apr-17-1790"
Year, month abbreviation and day	у"-"М"-"DD	"78-Dec-22", "1814-MAY-17"
Year (and just the year)	YY	"1978", "2008"
Textual month (and just the month)	m	"March", "jun", "DEC"

### Table A.3. ISO8601 Notations

Description	Format	Examples
Eight digit year, month and day	YY MM DD	"15810726", "19780417", "18140517"
Four digit year, month and day with slashes	YY "/" MM "/" DD	"2008/06/30", "1978/12/22"
Two digit year, month and day with dashes	уу "-" MM "-" DD	"08-06-30", "78-12-22"
Four digit year with optional sign, month and day	[+-]? YY "-" MM "-" DD	"-0002-07-26", "+1978-04-17", "1814-05-17"

### Note

For the y and yy formats, years below 100 are handled in a special way when the y or yy symbol is used. If the year falls in the range 0 (inclusive) to 69 (inclusive), 2000 is added. If the year falls in the range 70 (inclusive) to 99 (inclusive) then 1900 is added. This means that "00-01-01" is interpreted as "2000-01-01".

### Note

The "Day, month and two digit year, with dots or tabs" format (dd [.\t] mm "." yy) only works for the year values 61 (inclusive) to 99 (inclusive) - outside those years the *time format* "HH [.:] MM [.:] SS" has precedence.

### Note

The "Year (and just the year)" format only works if a time string has already been found -- otherwise this format is recognised as HH MM.

### Note

It is possible to over- and underflow the dd and DD format. Day 0 means the last day of previous month, whereas overflows count into the next month. This makes "2008-08-00" equivalent to "2008-07-31" and "2008-06-31" equivalent to "2008-07-01" (June only has 30 days).

It is also possible to underflow the mm and MM formats with the value 0. A month value of 0 means December of the previous year. As example "2008-00-22" is equivalent to "2007-12-22".

If you combine the previous two facts and underflow both the day and the month, the following happens: "2008-00-00" first gets converted to "2007-12-00" which then gets converted to "2007-11-30". This also happens with the string "0000-00-00", which gets transformed into "-0001-11-30" (the year -1 in the ISO 8601 calendar, which is 2 BC in the proleptic Gregorian calendar).

### **Time Formats**

Table A.4. Used Symbols

Description	Formats	Examples
frac	. [0-9]+	".21342", ".85"
hh	"0"?[1-9]   "1"[0-2]	"04", "7", "12"
нн	[01][0-9]   "2"[0-4]	"04", "7", "19"
meridian	[AaPp] .? [Mm] .? [\0\t ]	"A.m.", "pM", "am."
MM	[0-5][0-9]	"00", "12", "59"
II	[0-5][0-9]	"00", "12", "59"
space	[\t]	
tz	"("? [A-Za-z]{1,6} ")"?   [A-Z][a-z]+([_/][A-Z][a-z]+)+	"CEST", "Europe/Amsterdam", "America/Indiana/Knox"
tzcorrection	"GMT"? [+-] hh ":"? MM?	"+0400", "GMT-07:00", "-07:00"

**Table A.5. 12 Hour Notation** 

Description	Format	Examples
Hour only, with meridian	hh space?meridian	"4 am", "5PM"
Hour and minutes, with meridian	hh[.:] MM space? meridian	"4:08 am", "7:19P.M."
Hour, minutes and seconds, with meridian	hh [.:] MM [.:] II space? meridian	"4:08:37 am", "7:19:19P.M."
MS SQL (Hour, minutes, seconds and fraction with meridian), PHP 5.3 and later only	hh ":" MM ":" II [.:] [0-9]+ meridian	"4:08:39:12313am"

**Table A.6. 24 Hour Notation** 

Description	Format	Examples
Hour and minutes	't'? HH [.:] MM	"04:08", "19.19", "T23:43"
Hour and minutes, no colon	't'? нн мм	"0408", "t1919", "T2343"
Hour, minutes and seconds	't'? HH [.:] MM [.:] II	"04.08.37", "t19:19:19"
Hour, minutes and seconds, no colon	't'? HH MM II	"040837", "T191919"
Hour, minutes, seconds and timezone	't'? HH [.:] MM [.:] II space? ( tzcorrection   tz)	"040837CEST", "T191919-0700"
Hour, minutes, seconds and fraction	't'? HH [.:] MM [.:] II frac	"04.08.37.81412", "19:19:19:532453"
Time zone information	tz tzcorrection	"CEST", "Europe/Amsterdam", "+0430", "GMT-06:00"

# **Compound Formats**

Table A.7. Used Symbols

Description	Formats	Examples
DD	"0" [0-9]   [1-2][0-9]   "3" [01]	"02", "12", "31"
doy	"00"[1-9]   "0"[1-9][0-9]   [1-2] [0-9][0-9]   "3"[0-5][0-9]   "36"[0-6]	"36"[0-6] "000", "012", "366"
frac	. [0-9]+	".21342", ".85"
hh	"0"?[1-9]   "1"[0-2]	"04", "7", "12"
НН	[01][0-9]   "2"[0-4]	"04", "7", "19"
meridian	[AaPp] .? [Mm] .? [\0\t ]	"A.m.", "pM", "am."
ii	[0-5][0-9]	"04", "8", "59"
II	[0-5][0-9]	"04", "08", "59"
M	'jan'   'feb'   'mar'   'apr'   'may'   'jun'   'jul'   'aug'   'sep'   'sept'   'oct'   'nov'   'dec'	
MM	[0-5][0-9]	"00", "12", "59"
space	[ \t]	
ss	[0-5][0-9]	"04", "8", "59"
SS	[0-5][0-9]	"04", "08", "59"
W	"0"[1-9]   [1-4][0-9]   "5"[0-3]	"05", "17", "53"
tzcorrection	"GMT"? [+-] hh ":"? MM?	"+0400", "GMT-07:00", "-07:00"
YY	[0-9]{4}	"2000", "2008", "1978"

**Table A.8. Localized Notations** 

Description	Format	Examples
Common Log Format	dd "/" M "/" YY: HH ":" II ":" SS space tzcorrection	"10/Oct/2000:13:55:36 -0700"
EXIF	YY ":" MM ":" DD " " HH ":" II ":" SS	"2008:08:07 18:11:31"
ISO year with ISO week	YY "-"? "W" W	"2008W27", "2008-W28"
ISO year with ISO week and day	YY "-"? "W" W "-"? [0-7]	"2008W273", "2008-W28-3"
PostgreSQL: Year with day-of-year	YY "."? doy	"2008.197", "2008197"
SOAP	YY "-" MM "-" DD "T" HH ":" II ":" SS frac tzcorrection?	"2008-07-01T22:35:17.02", "2008-07-01T22:35:17.03+08:00"
Unix Timestamp	"@" "-"? [0-9]+	"@1215282385"
XMLRPC	YY MM DD "T" hh ":" II ":" SS	"20080701T22:38:07", "20080701T9:38:07"
XMLRPC (Compact)	YY MM DD 't' hh II SS	"20080701t223807", "20080701T093807"
WDDX	YY "-" mm "-" dd "T" hh ":" ii ":" ss	"2008-7-1T9:3:37"

### Note

The "W" in the "ISO year with ISO week" and "ISO year with ISO week day day" formats is case-sensitive, you can only use the upper case "W".

The "T" in the SOAP, XMRPC and WDDX formats is case-sensitive, you can only use the upper case "T".

## **Relative Formats**

**Table A.9. Used Symbols** 

Description	Format
dayname	'sunday'   'monday'   'tuesday'   'wednesday'   'thursday'   'friday'   'saturday'   'sun'   'mon'   'tue'   'wed'   'thu'   'fri'   'sat'   'sun'
number	[+-]?[0-9]+
reltext	'next'   'last'   'previous'   'this'
space	[\t]+
unit	(('sec'   'second'   'min'   'minute'   'hour'   'day'   'month'   'year') 's'?)   'weeks'   daytext

### **Table A.10. Day-based Notations**

Format	Description	Examples
'yesterday'	Midnight of yesterday	"yesterday 14:00"

Format	Description	Examples
'midnight'	The time is set to 00:00:00	
'today'	The time is set to 00:00:00	
'now'	Now - this is simply ignored	
'noon'	The time is set to 12:00:00	"yesterday noon"
'tomorrow'	Midnight of tomorrow	
'first day' ' of'?	Sets the day of the first of the current month. This phrase is best used together with a month name following it.	"first day of January 2008"
'last day' ' of'?	Sets the day to the last day of the current month. This phrase is best used together with a month name following it.	"last day of next month"
'last' space dayname space 'of'	Calculates the <i>last</i> week day of the current month.	"last sat of July 2008"
number space ? ( unit   'week')	Handles relative time items where the value is a number.	"+5 weeks", "12 day", "-7 weekdays"
reltext space 'week'	Handles the special format "weekday + last/this/next week".	"Monday next week"

### **Caution**

Weeks always start with mondays. That's a difference to the original DateTime starts with sundays.

# Chaining

All afore mentioned formats can be chained by using the pipe character (|). All rules will be applied one after another.

### **Example A.1. Chaining of DateTime formats**

- first day this month monday this week
- 2009-02-13 00:00:00|sunday next week