

Plone-Calendar

Oliver Merkel¹, Christian Meffert², Aleksandar Matic², Ralf Steinmetz¹

KOM - Multimedia Communications
Department of Electrical Engineering and Information Technology
Darmstadt, University of Technology
Merckstr. 25 · 64283 Darmstadt · Germany

¹ {Oliver.Merkel, Ralf.Steinmetz}@KOM.tu-darmstadt.de
² {cmeffert, amatic}@gmx.de

Abstract: *If in collaborative working environments synchronization of different employee's time tables has to be done, an access to a common shared knowledge-base has to be offered. This is normally done through semi-automatic usage of groupware applications with calendaring functionalities. Due to the fact that the content management system PLONE offers a variety of web-oriented functionalities in the computer supported cooperative work area including a simple calendaring system, but lacks convenient views and features to the users, we provide an add-on for the existing calendaring system and event objects and news objects (time driven objects) inside PLONE.*

Keywords: *PLONE, CMF, Zope, Groupware, CSCW, Knowledge Sharing, Web-based Application Service Providing.*

1. Introduction

This document describes our developed Plone conform Groupware Calendaring application extending the given features of time driven PLONE objects like events and news. The resulting agenda offers day, alternative week and month views on these objects. All views offer the feature to filter and show private time driven objects only or show all publicly available objects. Information Pop-Up in calendar views is supported, too.

In collaborative business-like working environments synchronization of different employee's time tables is a crucial planning task. An access to a common shared knowledge-base containing private entries and publicly shared entries has to be offered (private & publicly shared calendaring). This is normally done through semi-automatic usage of groupware applications with calendaring functionalities. Due to the fact that the content management system PLONE offers a variety of web-oriented functionalities in the computer supported cooperative work area including a simple calendaring system, but lacks convenient views and features to the users, we provide an add-on for the existing calendaring system and event objects and news objects (time driven objects) inside PLONE.

2. Installation

The current versions and documentation of ZOPE, CMF and PLONE can be found at [1], [2] and [3]. These frameworks for our development here will only be mentioned in this document if needed for explaining functionalities of our contribution.

The PLONE-Calendar was developed on on the following components:

- ZOPE 2.6
- CMF 1.3
- PLONE 1.0

After installing Zope, CMF and Plone the PLONE-Calendar installation continues with the following steps:

1. Copy the directory PLONECalendar from the unpacked distribution into the following directory:
/<install-dir. Zope>/lib/python/Products/CMFPlone/skins/plone_3rdParty/
2. Start – respectively restart - the ZOPE server

3. Create a new object “Filesystem Directory View” at your favoured position in the PLONE portal of the ZMI and choose the directory .../PLONECalendar (Illustration 1).

Illustration 1: PLONE-Calendar installation

3. Invocation of the PLONE-Calendar

In this section two ways to access the PLONE-Calendar will be depicted.

URL

The PLONE-Calendar kann be accessed direly through an URL (Security-Properties: standard):

<plone-root-url>/<path to PLONECalendar>/PLONECalendar/calendarDay

Additional register card

Creation of a additional register card in the PLONE portal (Illustration 2).

1. Go to the PLONE-root-view of the ZMI in "portal_actions".
2. Fill in the empty text fields in "Add an action":

Name: calendar
 ID: Calendar
 Action: string:\$portal_url/<path to PLONECalendar>/PLONECalendar/calendarDay
 Condition:
 Permission: View
 Category: portal_tabs
 Visible: “checked”



Illustration 2: Registration card

4. Description of the PLONE-Calendar

There are four views implemented in the PLONE-Calendar to access time-driven objects like events. Besides the possibility to view these by day, two views by week and a view by month is accessible. Due to the fact that the views offer equivalent funtionalities only the view by day will be described in detail.

View by day

In Section 1 of illustration 3 all event objects are displayed if they are whole day events, have started before the current day and end during or after the current day. In Section 2 the current day is displayed in a table showing the hours of the day. All event objects beginning and ending the current day are displayed here. A short description of the event is displayed at its starting hour. The font color of the entry depends on its status:

- green: public
- red: private
- blue: others

Hour	Events
0.00	1
1.00	2
2.00	
3.00	Treffen (start: 03:00 h - Feb 17, 2003 end: 05:00 h - Feb 17, 2003)
4.00	
5.00	
6.00	

Illustration 3: View by day – private events only

Additionally the timespan of the validity of the event object is marked in dark blue. If no event is “active” during the displayed hour the cell of the table is colored in light blue.

An additional navigation is offered by the links "previous day" and "next day".

Following the link "show only my events" only the users private events will be displayed. If you are viewing the private events only the link text changes to "show all events".

The link “show all events” (Illustration 4) allows to view the other community members event object having the status “public” beside viewing your own events.

Each event offers a mouse-over pop-up functionality displaying a pop-up window showing additional information on the event object. On pop-up the color of the timeframe of the event object inside the time table changes to yellow.

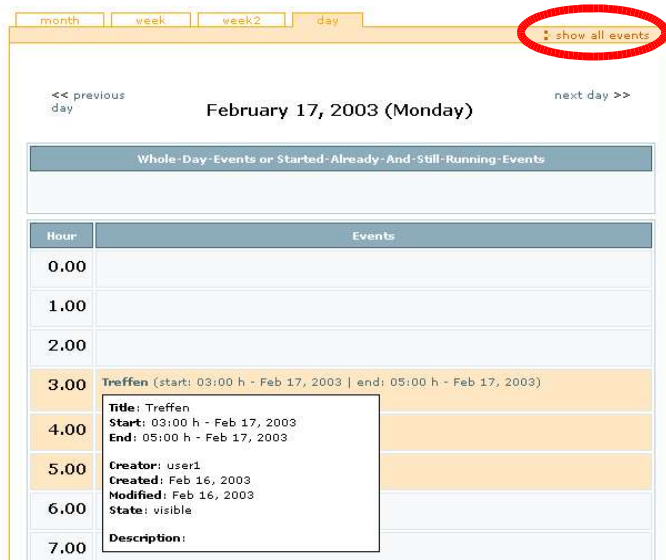


Illustration 4: View by day - all events

View by week

While showing the view by week all event objects are displayed that continue and last the whole week or began before and end during or after the current week (Illustration 5).

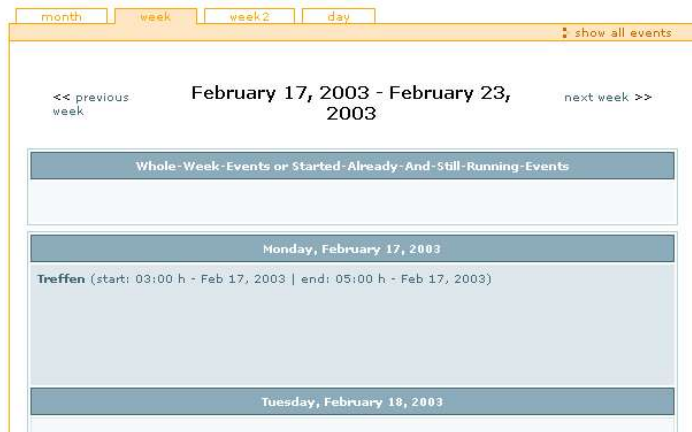


Illustration 5: View by week

View by week 2

Compared to “view by week” the “view by week 2” uses a tabular time schedule with shortened entries instead of a more list like displaying.

	Monday 17. Feb	Tuesday 18. Feb	Wednesday 19. Feb	Thursday 20. Feb	Friday 21. Feb	Saturday 22. Feb	Sunday 23. Feb
0.00							
1.00							
2.00							
3.00	Treffen (Feb 17 - Feb 17)						
4.00							

Illustration 6: View by week 2 - alternative view

View by month

The days without “active” event objects are displayed with light blue background. The time span of a valid event object is displayed in dark blue. Days with white background belong to the previous or to the next month.

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
27	28	29	30	31	1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23

Illustration 7: View by month

5. Conclusion

The implemented add-on PLONE-Calendar offers a variety of possibilities to administrate and maintain the dates and events in a personalised and shared agenda via web-access efficiently. Beside the view by day alternative views by week and by month are implemented. A view by year is not implemented due to clarity reasons.

With the currently existing CMF-event-object some agenda functionalities like repetitive events can not be realised (e. g. weekly repetitive dates). This have to be maintained manually then. Also missing is the possibility to add a customised icon or marker to an event for refined clarity and easier readability.

To implement such functionalities in the PLONE-Calendar:

- the event object has to be extended by the additional needed attributes or new content types have to be introduced (e.g. extended events, meetings, whole day events, dates, todos)
- all objects accessing the existing event objects have to be changed in an adequate implementation, e.g. the input and output page template of PLONE

before a refined version containing these features of the PLONE-Calendar can be implemented.

In CMF 1.3 and PLONE 1.0 the event object is the only one that owns a “start” and an “end” attribute. When searching for event objects in a given time span (day, week, month) the PLONE-Calendar uses the “start” and “end” attributes only (assigned values for the portal_catalog). By a simple extension of the existing or new objects these can be displayed in the PLONE-Calendar [3].

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References

- [1] <http://www.zope.org/>
- [2] <http://cmf.zope.org/>
- [3] <http://www.plone.org/>