

Feeding the Bird

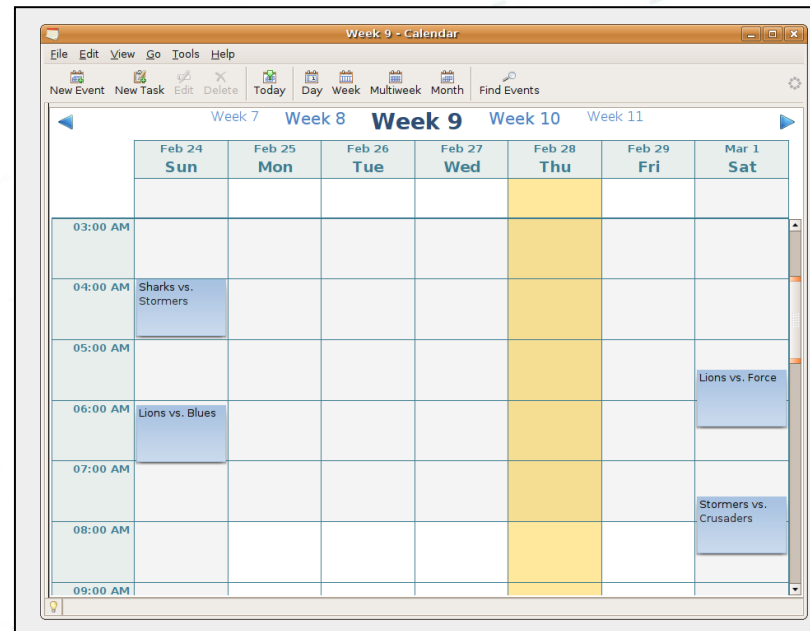
A quick start into calendar development

Duration: 30 Minutes
by Philipp Kewisch



Sunbird
it's about time

- › **What does a Provider do?**
 - › Show and manipulate events from a custom source
 - › Provide access to calendar servers
 - › Changes to items are “live”



› Existing providers

- › Internal storage (sqlite)
- › iCalendar / ICS
- › CalDAV
- › Sun Java Calendar Server (WCAP)
- › Provider for Google Calendar
- › ThunderBirthDay

› Ideas for new providers

- › Microsoft[®] Exchange Server
- › Lotus Notes / Domino
- › Zimbra Collaboration Suite
- › X10 / Home control

- › **Advanced Features**
 - › Freebusy querying
 - › Searching for calendars / Subscriptions
 - › Invitation handling (iMIP/iTIP)
 - › Advanced synchronization (caching)

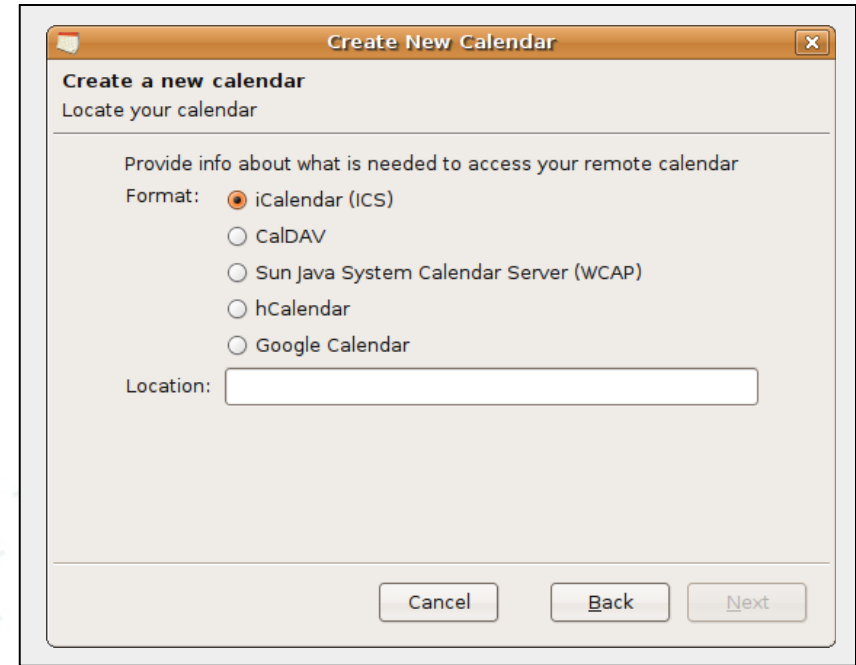
- › **Controlling the UI**
 - › Disable unsupported features (i.e tasks)
 - › Specify possible values (i.e privacy)



> Implement calICalendar

- > Most methods and attributes can be inherited from calProviderBase
- > type attribute (Short name for the provider)
- > getItems (Retrieve Items)
- > getItem (Retrieve a specific Item)
- > add, delete, modifyItem (Write Items)
- > canRefresh, refresh (Action when calendar is reloaded)

To allow calendar creation using the calendar wizard, calendarCreation.xul needs to be overlaid.



```
<!DOCTYPE overlay SYSTEM "chrome://gdata-provider/locale/gdata.dtd">
<overlay id="calendarCreation"
  xmlns="http://www.mozilla.org/keymaster/gatekeeper/there.is.only.xul">
  <radiogroup id="calendar-format">
    <radio value="gdata" label="&gdata-provider.label;"/>
  </radiogroup>
</overlay>
```

> The hCalendar format

- > Embed events into XML-based documents
- > Makes events human-readable but allows easy parsing

```
<div id="hcalendar-FOSDEM" class="vevent">  
  <a href="http://fosdem.org" class="url">  
    <abbr title="20080222T2000+0100" class="dtstart">February 22th 8pm</abbr> –  
    <abbr title="20080224T2000+0100" class="dtend">23th 8pm, 2008</abbr> –  
    <span class="summary">FOSDEM</span>– at  
    <span class="location">ULB Campus Solbosh</span></a>  
  <div class="description">The event you are visiting</div>  
</div>
```

- › **Creating the provider**
 - › Set up a simple extension
 - › Add UI as previously described
 - › Implement callCalendar
 - › Retrieve page in getItem call
 - › On completion, parse events from page
 - › Notify listeners with parsed events
- › **Live Demo**
 - › Baseball games

Source available from:
<https://addons.mozilla.org/en-US/sunbird/addon/6702>



I hope you are hungry for more!



Thank you for listening!

Any questions?



Sunbird
it's about time