Welcome, Bienvenue, Welkom ...

Feeding the Bird
A quick start into calendar development

Duration: 30 Minutes
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› What does a Provider do?
› Show and manipulate events from a custom source
› Provide access to calendar servers
› Changes to items are “live”
Provider Basics

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)
Implementing a Provider

The real work...

Implement `calICalendar`

- Most methods and attributes can be inherited from `calProviderBase`
- `type` attribute (Short name for the provider)
- `getItems` (Retrive 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.

```xml
<!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

```html
<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>
```
Implementing a Provider

Creating the provider
› Set up a simple extension
› Add UI as previously described
› Implement calICalendar
  › Retrieve page in getItems call
  › On completion, parse events from page
  › Notify listeners with parsed events

Live Demo
› Baseball games

Source available from:

I hope you are hungry for more!

Thank you for listening!

Any questions?