Bedework 3.0
(a.k.a. UWCalendar)
an institute-wide open-source Java events calendar
Communications & Middleware Technologies
Rensselaer Polytechnic Institute
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Who We Are
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Topics
• Overview of Bedework
• Recent progress
• Demonstration
• Future plans
Overview of Bedework

- The Bedework is:
  - a total calendaring and events system
  - open source
  - Java (hence platform independent)
  - modular, extensible, and easily integrated with other systems
  - intended for higher education
  - and...

STANDARDS COMPLIANT

- iCal: RFC 2445
  http://www.ietf.org/rfc/rfc2445.txt
- CalDAV draft version 06
  http://ietf.webdav.org/caldav
- Why? ...interoperability!
Bedework: named after the Venerable Bede (AD 673-735)
- monk & highly influential scholar
- in 725 AD wrote treatise: *On the Reckoning of Time*
  - and a Google search of bedework, for now, returns only this project!

**UW Calendar Overview**

- Four main components:
  - public view
  - personal view
  - administrative interface
  - CalDAV

**Features:**
- Distributed, fine grained administration
- Administrative groups
- Servlet role based authorization
- Location and contacts management
- Stand-alone & portlet implementations
- True synchronization (PDAs, Outlook, etc)
- Highly customizable look and feel
- Deliver to any platform, device, or media
Bedework 3.0
Core Technologies

• Java / J2EE
• XML, XSLT
• Hibernate
  (in development)
  • Again, supporting
  JSR-168 and CalDAV

Bedework 3.0
Architecture

Bedework 3.0
Bedework Back-End

• Modular
  • Built under a service interface ("service oriented architecture")
  • No presentation logic in core calendar code
  • Replaceable!
Bedework 3.0 Portlet Implementation

- JSR-168
- Currently implemented for Jetspeed using the portal-struts bridge
- Pre-release UPortal version working

Bedework 3.0 Portlet Implementation

Bedework 3.0 CalDAV Implementation

- Emerging standard
- Based on WebDAV
- Provides synchronization
- Promises flexibility in choice of user client
- Clients and servers being developed by vendors now…
Bedework 3.0  Sync Implementation

- Have proof of concept implementation of synchronization using SyncML
- Successfully synchronized with Outlook
- Palm is under development

Bedework 3.0  Bedework Front-End

- XML-based J2EE web applications built in the MVC framework
- Separate content from presentation and presentation from business logic so that each can be developed independently

Images
CSS
XSL
DB
XML
HTML
PDF
TEXT
Our Design Approach

- XSLT lives in designer’s world
- XSLT files live on the web “outside” our applications and are called over http
- We don’t need to redeploy an application to change its appearance or to deploy a new skin
- Applications are accessible to regular web designers
- Easy to change look and feel (which happens not infrequently…)

Progress

What’s been accomplished over the past year
Switched to Hibernate
Improved RFC compatibility
Added CalDav
Added synchronization layer
- SyncML component contributed by Xavier Lawrence and Jahia in Switzerland (http://www.jahia.com)
- JSR-168 portlet implementation
- Improved user interfaces & added features

Joined CalConnect
- participate in interoperability tests
- invited to co-chair, and work on RFC
- http://www.calconnect.org
- Consortia...

Demonstration
Future Plans

- Event notification (alerts)
- Emailing of events
- Departmental calendars
- Recurring events
- Support clustering
- Group calendaring
- Room / resource scheduling
• Major goal:
  - make product more attractive
  - encourage adoption and development

References
• Bedework (UWCalendar) Project
  - http://www.washington.edu/ucal
• Rensselaer Institutional Calendar of Events
  - http://events.rpi.edu
• Washington Events Calendar
  - http://myuw.washington.edu/pubevents/services/uwcal.UWCal