The Future of the Portal and uPortal 5

Jim Helwig, uPortal Steering Committee Chair
Classic Portals

- 15-20 years of growth
- Multiple tabs, multiple portlets
- Built-in tools
- Locally hosted
Importance of Mobile

Usage of MyUW by device:
- Desktop: 81%
- Mobile: 17%
- Tablet: 2%
Dynamic and Fast User Interfaces
Adoption of Common Paradigms
Do More With Less

Content  Systems  Users  Resources
New and Improved Functionality
AngularJS-Portal

- Alternative front end
- Now in Apereo Incubation
- Available now, but will be bundled in uPortal 5
- Based on Material Design
<table>
<thead>
<tr>
<th>Paid</th>
<th>Earned</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>10/27/2016</td>
<td>10/02/2016 - 10/15/2016</td>
<td></td>
</tr>
<tr>
<td>10/13/2016</td>
<td>09/18/2016 - 10/01/2016</td>
<td></td>
</tr>
<tr>
<td>09/29/2016</td>
<td>09/04/2016 - 09/17/2016</td>
<td></td>
</tr>
<tr>
<td>09/15/2016</td>
<td>08/21/2016 - 09/03/2016</td>
<td></td>
</tr>
<tr>
<td>09/01/2016</td>
<td>08/07/2016 - 08/20/2016</td>
<td></td>
</tr>
<tr>
<td>08/18/2016</td>
<td>07/24/2016 - 08/06/2016</td>
<td></td>
</tr>
<tr>
<td>08/04/2016</td>
<td>07/10/2016 - 07/23/2016</td>
<td></td>
</tr>
<tr>
<td>07/21/2016</td>
<td>06/26/2016 - 07/09/2016</td>
<td></td>
</tr>
<tr>
<td>07/07/2016</td>
<td>06/12/2016 - 06/25/2016</td>
<td></td>
</tr>
</tbody>
</table>
State and federal laws require the university to collect emergency contact information for every student. Learn more in the KnowledgeBase.

This information is being collected for the safety of our students. Only authorized UW personnel will be able to access it.

My Phone Number
A number where you can be reached in an emergency.
764-123-2347 (mobile)

Update phone number

My Local Address
A physical address where you live or frequently stay during the school year.
123 Maple St.
Madison, WI 53715
USA
Only here during the week.

Add another  Edit  Delete

Emergency Contact
A parent, relative, or trusted friend to contact in case of an emergency.
Jane Doe
Primary phone: 323-234-2344 (mobile)
jane123@gmail.com
Relationship: Parent
Comments: Speaks only Italian

Add another  Edit  Delete
MyUW

Course Services
Access services including Learn@UW, email class list requests, Registrar’s Office forms, Teaching and Learning Excellence, and more.
+ Add to home  Details  ★★★★★

Textbooks
Textbooks and course materials organized by department and term.
+ Add to home  Details  ★★★★★

Course Guide
Find courses by title, college, department, school, or instructor.
+ Added to home  Details  ★★★★★

Learn@UW
Access your Learn@UW account.
+ Add to home  Details  ★★★★☆

Plan Courses
Manage favorite course lists and course planners.
+ Add to home  Details  ★★★☆☆

Help
Provides help documentation for the Course Guide tab.
+ Add to home  Details  ★★★☆☆

News
Provides news and updates for the Course Guide tab.
+ Add to home  Details  ★★★☆☆

Directory
Your account is not allowed to use MyUW System. For assistance, contact the Help Desk.
Benefit Information

Annual Benefits Enrollment
22 days left to enroll
Learn more

Enroll

System maintenance may interrupt your self service (ebenefits) Open Enrollment session Oct. 22, 6 a.m. – Oct. 23, 10 a.m.

Go to benefit information.

MyUW

Time and Absence

The end-of-February 2017 Human Resources System upgrade will interrupt access to this app.

12/27/15 to 12/31/15 University Staff Leave Balance

Leave Balances Leave Reports

Leave balances are also available on your current Earnings Statement.

<table>
<thead>
<tr>
<th>Entitlement</th>
<th>Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALRA Balance</td>
<td>0.00</td>
</tr>
<tr>
<td>Banked Leave</td>
<td>128.40</td>
</tr>
<tr>
<td>Classified Furlough Allocated</td>
<td>0.00</td>
</tr>
<tr>
<td>Legal Holiday Balance YTD</td>
<td>72.00</td>
</tr>
<tr>
<td>Personal Holiday Balance</td>
<td>36.00</td>
</tr>
</tbody>
</table>
Common Scholarship Application
Get money for school! Find out about scholarships you qualify for, apply, and track your applications.
Learn more  Not interested
Additional presentation on design and motivation

Beyond Portals: A Next Generation, Action-Oriented Service Delivery Platform for Rich Campus Applications

https://goo.gl/PKsFQx
Introducing Soffits

● New standard for pluggable content in uPortal
● Alternative to JSR-286 portlets
● Why?
  ○ JSR-286 was drafted in 2008 -- almost 10 years ago!
  ○ JSR-286 is fundamentally about 1 click == 1 page
  ○ JSR-286 portlets *must* be written in JVM languages, usually Java
  ○ JSR-286 portlets run in the same Tomcat and Java process and the portal; adding or updating a portlet requires and build cycle & restart
  ○ JSR-286 places too many restrictions on information from the container…
    ■ NO user attribute discovery
    ■ NO attributes for unauthenticated users
    ■ NO groups discovery
  ○ JSR-286 requires too much configuration in portlet.xml (e.g. attributes, groups, caching); if you want different settings for these items, you must fork the project
How Soffits Work

- Soffits may run in their own process, on their own host; (or they may run in Tomcat, if you prefer)
- Communication with the container (uPortal) is JSON over HTTP(S)
- There is a data model...
  - PortalRequest -- Information about the user's request to the portal service
  - Bearer -- Information about the user
  - Definition -- Information from the publishing record (portlet-definition.xml) of the soffit
  - Preferences -- Publish-time configuration settings for this soffit
- Data model object are sent as JSON Web Tokens (JWTs) using HTTP headers
- You don’t have to write soffits in Java; but if you do, there are a lot of shortcuts available (especially with Spring Boot!)
- Sample soffits project: [https://github.com/drewwills/soffit-samples](https://github.com/drewwills/soffit-samples)
- Alternative Soffit orchestration [https://github.com/bpowell/brocker](https://github.com/bpowell/brocker)
Snooper

Here is an example of data elements available to a remote sofrit endpoint.

Request Headers: Bearer

- authorization: Bearer LNVVqcZZKEhMtjCwXw/ VyFcyxjZjyqC/LRJo1gCI0IFIXEHEBcKsQDozoc8uNt9y8tB/GsctPZNSxZQSFD3x2j
- x-softit definition: QshDT3PSdVz9gQ3l18QmW0+pS4qLAltOj8ScGpj2i1lWkjq467hhUCEfC0peNULoPaFmWt191116hr47W
- x-softit preferences: guzIClh2kT3Bh0hJuWim8tUM+rxcf4V3a0AXYUK8/1IPX3AdqExTYKmh+Orb777ALNVEQ5Kkq58866J5bM
- x-softit portal request: iX7/Gs9udFy/06y5IQ/QuxfSnZsl8anpXfQPwYmld5SQ2wk0FkUs3JobmVQMq1i8fHshze50jnsyf8zUj6
- host: localhost:8000
- connection: Keep-Alive
- accept-encoding: gzip, deflate
- user-agent: Apache-HttpClient/4.5.2 (Java/1.8.0_121)

Bearer:

```
"encryptedToken" : "LNVVqcZZKEhMtjCwXw/VyFcyxjZjyqC/LRJo1gCI0IFIXEHEBcKsQDozoc8uNt9y8tB/GsctPZNSxZQSFD3x2j
```

Tip #8: Some portlets have more features if you focus on them by using the arrow icon in their header.
Better Accessibility

- WCAG 2.0 Level AA accessibility audit
- Guidelines:
  - US - Section 504
  - US - Section 508
  - US - ADA
  - FR - RGAA 3-2016
  - CA - AODA
- Test plan: https://wiki.jasig.org/x/CYBnB
Better Accessibility

- Available in uPortal 4.3 (rel-4-3-patches)
- Specific issues:
  - https://issues.jasig.org/browse/EMAILPLT-190
  - https://issues.jasig.org/browse/FBP-28
  - https://issues.jasig.org/browse/ETPLT-7
  - https://wiki.jasig.org/display/PLT/EsupSympa
- Thanks in particular to Christian Murphy and Christian Cousquer!

Better accessibility results in a better experience for all!
Improved Internationalization and Localization

- Build into new components
- Reduce need to fork
- Looking for guidance, advice, and assistance!
Improved Build Architecture
Better Documentation

- Co-locate with code
- Easier to create and maintain
- Jekyll, markdown, GitHub Pages
- 100% open source
- Examples
Common Apereo Binaries

- Don’t need to build on each server
- Download and configure
- Separate out what should be modified locally
- Easier to internationalize, localize, and configure
- Fix bugs on branch, contribute back for next release
- Best to do this in the core project, release, and then deploy

- Better yet, make your changes directly in the core project first!
Microservices and Container Packaging

● Easier to create and maintain
● Easier to get started with
● Deploy only what you need
● Easier to deploy into containers like Docker

● Start small for the win!
Working Together
Share early and often

- Discussion lists
- Blogs, personal or [https://apereo.github.io/](https://apereo.github.io/)
- Hangouts, webinars, community calls
Branch, don’t fork

- Easier in the long run to keep current
- Not separate versions, just separate deployments
- Incorporate local fixes and enhancements back to project
- Better yet, fix and enhance the core project and then deploy locally
Discussion

● What excites you about uPortal 5? What concerns you?
● What are the barriers to more adoption and collaboration?
● What ideas do you have that would make it easier?
● What are your ideas for the future of uPortal?
● ???
Merci beaucoup!

Resources:

- Presentation slides: https://goo.gl/U9R99O
- Presentation notes: https://goo.gl/D5BkW2
- uPortal 5 overhaul: https://wiki.jasig.org/x/GYBfB
- Beyond Portals presentation from Educause: https://goo.gl/6rtVd7