

The Future of the Portal and uPortal 5

Jim Helwig, uPortal Steering Committee Chair

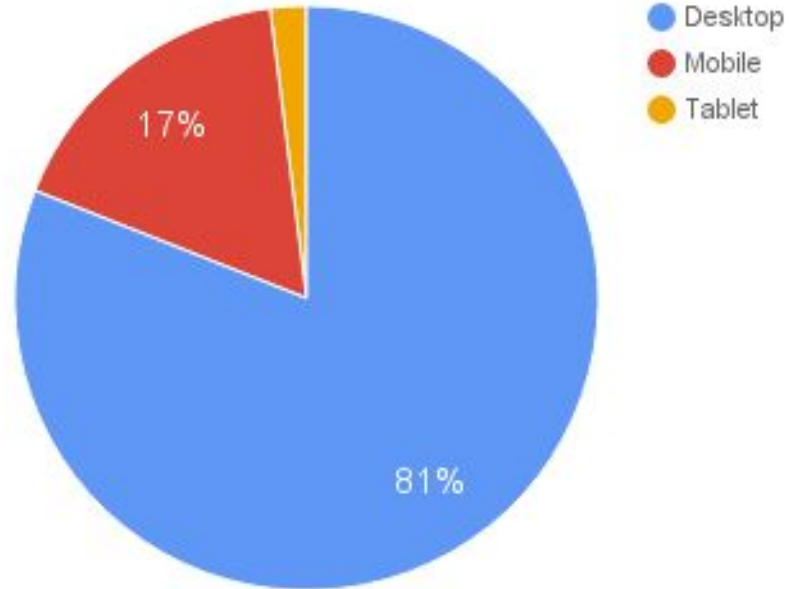
Emerging Themes

Classic Portals

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

Importance of Mobile

Usage of MyUW by device

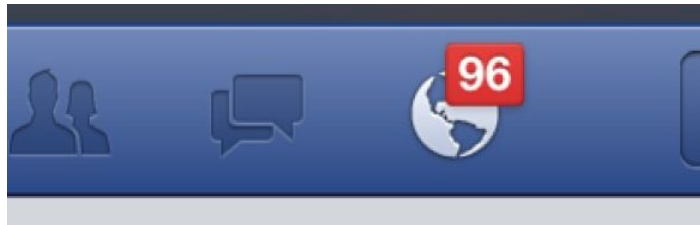
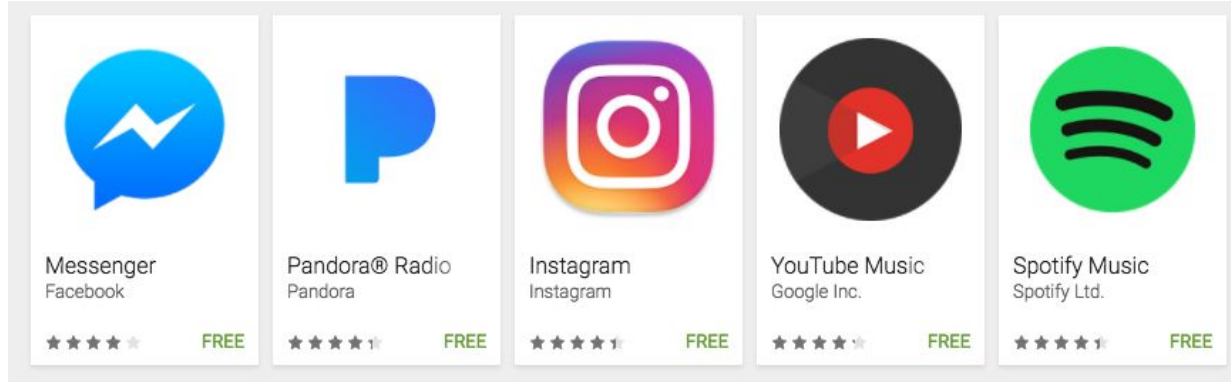
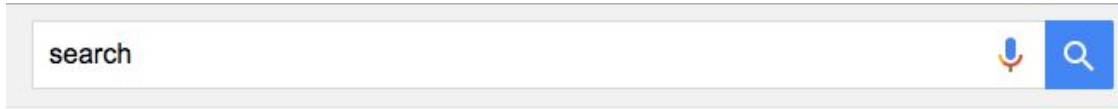


Dynamic and Fast User Interfaces

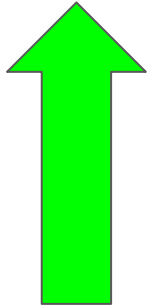
The logo for AJAX is rendered in a bold, blue, sans-serif font. The letters 'A', 'J', 'A', and 'X' are positioned on a baseline. The letter 'A' is on the left. The letter 'J' is positioned such that its top curve overlaps the top of the first 'A'. The second 'A' is to the right of the 'J'. The letter 'X' is on the far right. The entire logo has a slight drop shadow effect.

AJAX

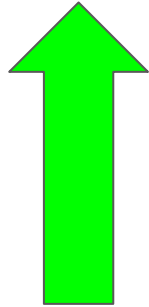
Adoption of Common Paradigms



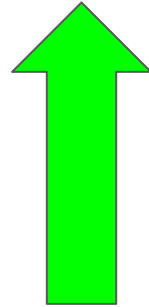
Do More With Less



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



Payroll Information

[10/27/2016 Earnings Statement](#)

[10/13/2016 Earnings Statement](#)

[09/29/2016 Earnings Statement](#)

Launch payroll to find:

- Earnings statements
- Tax statements (W-2, 1095-C, etc.)
- W-4 and direct deposit forms

[See all payroll information](#)

Weather

Madison, Wisconsin

Now



45° F

Wed



H: 48°
L: 43°

Thu



H: 49°
L: 39°

Fri



H: 63°
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Course Services



[Learn@UW](#)



[Classlist](#)



[Classroom Scheduling](#)



[Grading Policy](#)

[See all course services](#)

Personal Information



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Benefit Information

Annual Benefits Enrollment

16 days left to enroll

[Learn more](#)

[Enroll](#)

[Go to benefit information](#)

HR, Payroll and Benefits News

[Individual and Family Life Insurance ...](#)

[UIA Life Insurance Annual \\$24 Premium...](#)

[Annual Benefits Enrollment period: Oc...](#)

[WRS News Online, September 2016](#)

Showing 4 of 5

[See all](#)

Course Guide

Search for courses



Use My Course Guide for more options:

- Search by term
- Search by instructor
- Browse by subject
- Plan your degree

[Go to my course guide](#)

Scheduling Assistant



Launch full app

Personal Information



Launch full app

Time and Absence

Show balances

Personal Holiday Balance	<i>hidden</i>
Personal Holiday Balance	<i>hidden</i>
Sick Leave Balance (class)	<i>hidden</i>
Sick Leave Balance (uncls)	<i>hidden</i>
Vacation Available Balance	<i>hidden</i>

Showing 5 out of 13

See all balances

Course Services



Learn@UW



Classlist



Classroom
Scheduling



Grading Policy

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Learning and Talent Development



All courses and
events



My transcript

Launch talent development

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Earning Statements

Tax Statements

Your Net Pay Check amount is reflected on each individual Earnings Statement

Show earnings dollar amounts

Previous 1 2 3 4 5 6 7 8 9 Next

Paid	▼ Earned	Amount
10/27/2016	10/02/2016 - 10/15/2016	
10/13/2016	09/18/2016 - 10/01/2016	
09/29/2016	09/04/2016 - 09/17/2016	
09/15/2016	08/21/2016 - 09/03/2016	
09/01/2016	08/07/2016 - 08/20/2016	
08/18/2016	07/24/2016 - 08/06/2016	
08/04/2016	07/10/2016 - 07/23/2016	
07/21/2016	06/26/2016 - 07/09/2016	
07/07/2016	06/12/2016 - 06/25/2016	



My Profile - Emergency Info

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](#)



Q Advising Gateway

[+ Add to home](#) [More ▾](#)



BUCKINGHAM U BADGER

Campus ID: 0123456790
Date of birth: 10/02/1949

Email: bbadger@wisc.edu
Phone: 262/555-5555
School/College: Engineering, College of
Matriculation term & type: Fall 2013 FYR (UGRD)

[Back to Search](#)

Alerts **2**

Cleared of Previous Action - 2014 Fall (ACTION)

Probation - 2014 Sprng (ACTION)

Degree & major **1**

Certificates **0**

Student group(s) **3**

Advisor(s) **2**

Progress toward degree



59

credits

[Launch DARS](#)

Courses and GPA



2.179

cumulative
GPA

2.133

last term GPA

[Launch course history](#)

Advisor notes



1

notes

[Launch advisor notes](#)

Quick links



Degree
planner



Course grid



Student center



Enrollment
history



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[Grading Policy](#)

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Personal Information



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All (157019)

MyUW (7)

Directory (12)

Wisc.edu (157000)

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



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Course Guide



HR, Payroll and
Benefits News



UWRF Resources



UWRF News



Learning and Talent
Development



Scheduling Assistant



Time and Absence



Student Center



Course Schedule



Teaching Resources



Faculty Center



My Courses Map



Advisee Lookup - with
Notes



Advising Resources



SOAR Registration



Grad Application
Status



Learn@UW



My Courses



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Payroll Information



Weather



Email



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Benefit Information



Course Guide



HR, Payroll and Benefits
News

2 Jim ▾

+ Add more to home Expand widgets


Notifications

New 2 Dismissed 1

UW Employee Annual Benefits Enrollment starts October 17 and ends November 11, 2016. [Learn more](#) [Enroll](#) ×

2015 WRS Statements of Benefits are posted. Check if you have one. ×

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

 MyUW 8 Jim ▾

Home Add more to home Expand widgets

Payroll Information Weather Email



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.

Previous 1 2 Next

Entitlement	Balance
ALRA Balance	0.00
Banked Leave	128.40
Classified Furlough Allocated	0.00
Legal Holiday Balance YTD	72.00
Personal Holiday Balance	36.00

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

Common Scholarship Application

Get money for school! Find out about scholarships you qualify for, apply, and track your applications.

[Learn more](#) [Not interested](#)



Elizabeth



Add more to home

Options

Google Apps



Drive



Recent docs





Payroll Information

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Stacked navigation bars for various University of Wisconsin (UW) systems, each featuring a search bar with the text "Search MyUW, people, and the web".

- UWRF MyUW** (Red bar)
- UW MyUW** (Red bar)
- UWSP MyUW** (Purple bar)
- MyUW** (Blue bar)
- MyUW** (Green bar)
- UWM MyUW** (Black bar)

Home

 Weather	 Payroll Information	 Course Guide
		



Admin Tools



Portal Administration



Launch full app

Snooper

my id is admin.

Statistics



Launch full app

Announcements Admin



Launch full app

Emergency Alert Admin



Launch full app

Please Register



Launch full app



The new MyUW makes it easier to do more.
You'll be switched over automatically in 14 days.

Learn more

Try it now

UNIVERSITY OF WISCONSIN-MADISON

Email/Calendar | Learn@UW | Bookmarks |

My UW-Madison

Search

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 a 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 objects 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>
- Alternative Soffit orchestration <https://github.com/bpowell/brocker>



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



Snooper Soffit

Options ▾

Snooper

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

Request Headers

- **authorization:** Bearer LNVVqcZZKEhMTjCVWxw/VfYCxjZjqcLRJ0rgC0IFIXEHbCKSqDozc0uuNTy0t8/GscTPZNzXQZSFD3x2j*
- **x-soffit-definition:** QshD73PsDVz9gG3liBQAnw0+p9qLATl0JsgcJ/ziiLwKjq6a77hhUerfC0peNUqlfoPaFNWI9l113hr47W
- **x-soffit-preferences:** guzIcLh2ktJBrHojwMdlHTUM+rxcf4V3aDAXyUKlB/iPX3AdqEX7YkM+Drb77AlNVEQSKgp3qBLE6j5bM
- **x-soffit-portalrequest:** iX//Gs0udfY/0GySIG/QqxFmZs1a8anpXPiQWYNid5q20wk0Fu3JobmvQMqi01fHshzeS0jnsyf0PUjoL
- **host:** localhost:8090
- **connection:** Keep-Alive
- **accept-encoding:** gzip, deflate
- **user-agent:** Apache-HttpClient/4.5.2 (Java/1.8.0_121)

Bearer:

```
{
  "encryptedToken" : "LNVVqcZZKEhMTjCVWxw/VfYCxjZjqcLRJ0rgC0IFIXEHbCKSqDozc0uuNTy0t8/GscTPZNzXQZSFD3x2jV8vi0CIqHdBL0zMSB5SRJ0jnFFTL/mJNgbI/HNzCQi606QF0qhDji/0Ec5t9wRa9a0+s8SACDZ6kuvHIMaJ9fYpQWweDlviPHe3wJR1sWCF9UwXkfySBN10IDMv1qaarUB9QtlCp6JbsQkG7VPpjzVAz9IvjF9wWkPQ0d4rEpigbMd2efi9rILSNirsBu5pe/MemlJaaJlzS0DNpPfSNRO+7M2P4CWAqja0i0h9etAAALVPEZ+NNbW26DeFd5DKlz5H4+4Fn92F0svPob0Apfxe0DY8CpMyQw5JFogLES6YweoxovjQJ0o316+IbIggGJPrXdPtNjKQTNJVSfnLHS4Ls0k5C+f3K5b702jr1aU+gFmwIQLod4MS7MAqSdhcdYQglV8J9tyeIXDdSddLgaqngU2A+Gj3I2jGurCXpuC7E0pBezdnpaCICfWjgcSYwYzt9WpAhG73Jof4ruAuVExZvBzBoFOWL0xxwjQ648sAj6zYmX0mIkiHoRU1uhnBB8J2BomCdL5KTGic+Nq8iNYFvX3HYcdVX0GUJ0s7nUeAjdpq3shlLa+MJJNHfo0m0z6FCLewIw6f5ec1DsFs/KFjHNOmbUdVayLcLuXwo2i8aciZ+ryDTGVTrHXvwdJv/KR14CYUh071xvk17Q/qhYdstfL40DPM3aArrfSnBAPR
```

Health Check

Options ▾

Status of Systems on Campus

Facebook

Yahoo!

Blackboard

blueimp

Options ▾



@tikido on Instagram!



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/UP-4735>.
 - <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
 - uPortal stub <http://jasig.github.io/uPortal/>
 - AngularJS-Portal <http://uw-madison-doit.github.io/angularjs-portal/>

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/>
- 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>