

JA-SIG Projects In Action

John A. Lewis

2006 Winter JA-SIG Conference
Atlanta - Dec 3-5, 2006

© Copyright Unicon, Inc., 2006. This work is the intellectual property of Unicon, Inc. Permission is granted for this material to be shared for non-commercial, educational purposes, provided that this copyright statement appears on the reproduced materials and notice is given that the copying is by permission of Unicon, Inc. To disseminate otherwise or to republish requires written permission from Unicon, Inc.



Topics:

1. JA-SIG Projects
2. "Open Architecture For the Online Campus"
3. Open Source Showcase Demo
4. Questions & Discussion

JA-SIG Projects

What are they?

Why do they exist?

Why should they exist?

What are the JA-SIG Projects?

- uPortal

- Enterprise Information Portal Platform



- CAS

- Single Sign-On (SSO) Authentication System



- HyperContent

- Web Content Management System



What Can I Do With The JA-SIG Projects?

- Provide infrastructure for complete web presence management for Higher Education
- **Enterprise Portal** – One point of access to aggregate all content and provide rich links into other enterprise systems
- **Single Sign-On** – One set of credentials and one session login to access all enterprise systems
- **Content Management** – One place to create and maintain web content that allows direct access for the content experts

What is an Enterprise Portal Exactly?

- **Wikipedia Definition:**
- **Enterprise Information Portals** are one of the most popular ways in which enterprises can allow their employees and customers to search and access corporate information.
- It is a *single* gateway for users, such as employees, customers and company's partners to log into and retrieve corporate information, company history and other services or resources.

What is an Enterprise Portal Exactly?

University of Hull Definition:

- A thin service delivery platform which aggregates, integrates, personalizes, and presents information, transactions and applications to the user seamlessly and securely, according to their role, location and preferences, independent of browser, platform or device.

What is an Enterprise Portal Exactly?

- So, an Enterprise Information Portal has three main functions:
 - Aggregation
 - Personalization
 - Access Control

Why does Higher Ed Need It's Own Portal?

- uPortal was created out of necessity – it predates the Portal standards and most other commercial and open source portals. But do we still need it?
- Do we have unique needs around aggregation, personalization, and access control?
- If so, what is different about uPortal from other available open source and commercial portals that meets these unique needs?

Highly Complex Organizational Structure

- Higher Education institutions are an incredibly complicated organization with many different roles:
Students, Faculty, Staff, Teaching Assistants, Lab Assistants, Part-Time Jobs, Majors, Minors, Colleges, Grad Schools, Athletics, Intramurals, Clubs, Residences, Residence Assistants, Fraternities, Sororities, ...
- Any person can have any number of these roles!
- Even worse, the roles change constantly!

uPortal Can Handle Complex Groups!

- uPortal has the most sophisticated mechanisms for managing all these roles of any Portal out there:
 - Composite Group Service
 - Pluggable Group Stores
 - RDBMS Group Store
 - LDAP Group Store
 - Person Attributes Group Store (PAGS)
 - Filesystem Group Store
 - Groups and Permissions (GAP) as a spin-off project allows other applications to take advantage of all this!

uPortal Can Handle Complex Layouts!

- Having a large number of roles and groups means that the content to be aggregated, personalized, and controlled is much more complex and granular
- uPortal has sophisticated Layout Management tied into all this Groups And Permissions infrastructure (SLM, ALM, DLM)

uPortal is Battle-Proven!

- uPortal has been developed and used in these highly complicated higher education organizations for over **seven years!**
- It has evolved over time to deal with all the specific and unique needs of higher education in a way that no other portal platform has.

Why Does Higher Ed Need Its Own SSO?

- Frankly, there weren't any good, open source single sign-on systems around when Yale started CAS, so it was created out of necessity
- It is now a simple, powerful, widely-adopted, well-integrated SSO platform that is used both outside and inside higher education
- Proxy ticket technology is a major innovation and still unique
- CAS was simply first-to-market – there are now several other options, but CAS has set the standard
- It does need to continue to evolve to survive (Single Sign-Out, SAML support, etc.)

CAS + uPortal + OpenLDAP = Identity Management?

- “Identity Management” is perhaps still mostly hype
 - but what should it be?
 - Central management of users in an enterprise, including credentials, profiles, and demographics
 - Access via a single authentication method validated by one single data source
 - Fine-grained authorization of user access to resources with role-based access controls
 - Assured level of security protection over this identity-centric data
- CAS + uPortal + OpenLDAP seems to provide this!
- Maybe we just need some admin apps w/ workflow

Why Does Higher Ed Needs Its Own WCM?

- Most other web content management systems are tightly integrated into their own presentation layer.
- Most open source systems are PHP based and do not integrate well with Java/XML/XSLT architecture.
- HyperContent fits well with the rest of JA-SIG:
 - Java-based Architecture
 - Fully CAS Enabled
 - Reuses uPortal Groups and Permissions
 - Now publishes content as portlets and provides portlet-based management tools!

“Open Architecture For The Online Campus”

“Open Architecture For The Online Campus”

- The JA-SIG projects provide a basis for strong Open Architecture to create the “Online Campus”
- What do I mean by by “Open Architecture”?
 - Open Standards
 - Open Source

Open Standards Are Important!

“The great thing about standards is that there are so many to choose from.”

- Standards are not about creating a homogenous IT universe.
- Standards are important for creating well-defined contracts that multiple systems can use to interact in a predictable and valuable way.
- Metcalfe’s Law (the “Network Effect”) creates greater value in standards as they are more widely adopted.
- **Open Standards** are important so we can all use them without fear or cost (Microsoft DMCA threats vs. Microsoft’s Open Standards Promise)
- We love open standards today: HTTP, HTTPS, HTML, XHTML, XML, XSLT, Java, Portlet (JSR-168), WSRP, J2EE, SOAP, JSP, JSF
- We will love more open standards tomorrow: Portlet 2.0 (JSR-286), WSRP 2.0, JCR (JSR-170), SAML, JBI (JSR-208), CC/PP (JSR-188)

Open Source Is Important!

- Open Source isn't just an efficient and fun way to create great software.
- Open Source is great for the consumer of projects:
 - Honest relationship between vendors and customers
 - Business based on the value of services and support
 - No extortion from hidden switching costs
 - No “vendor lock-in” – if the vendor isn't doing the job then switch (or support it yourself) without switching platforms
- Open Source is great for commercial vendors too:
 - Use as a competitive weapon against closed source
 - Gain broader community and some outside assistance
 - Gain adoption through “try before you buy” usage

Two Kinds of Open Source

Community Open Source

- Truly owned by the community that uses it
- Supported by passionate community experts
- Passionate consumers can become committers and still be consumers as well
- *Examples: Linux, Apache, JA-SIG, Sakai, Kuali, Eclipse, PostgreSQL*

Commercial Open Source

- Clear vision and strong stewardship
- Commercially supported by the sponsoring company
- Consumers can provide input and help, but are rarely given committer status
- *Examples: JBoss, Liferay, Zimbra, SugarCRM, Alfresco, Sun, MySQL*

The “Open Source Showcase”

- Unicon project to assemble valuable open source technologies for use in higher education
- Purposes of the project:
 - Show what is possible
 - Demonstrate the vision of “Open Architecture for the Online Campus”
 - Innovation through Experimentation

Why Build the Open Source Showcase?

- We are refocusing on our core expertise:
Providing Services and Support for
Open Source in Higher Education
- Direct Commercial Support for Community Source
 - uPortal Cooperative Support
 - Sakai Cooperative Support
- Professional Services for both Community and
Commercial Open Source Projects

Showcase Projects - Already Included

- uPortal 2
- uPortal 3
- CAS
- HyperContent
- Sakai
- Zimbra
- Alfresco
- JForum
- OpenLDAP

Open Source Showcase Demo

Never demo a development server over
the Internet in front of a crowd...

Showcase Projects – Possible Additions

- OpenEAI
- UBC WebMail +
Courier MTA
- Bedework Calendar
- LAMS
- Mule
- SugarCRM
- *Other Suggestions?*

Questions?



John A. Lewis

jlewis@unicon.net

www.unicon.net