Sakai Newsletter

January 26, 2006

Sakai News

Unisa has Successfully Implemented Sakai 2.0.1: myUnisa

After much hard work over December, Unisa successfully implemented Sakai 2.0.1, called myUnisa, on 9 January 2006. We extend our sincere thanks to the Sakai community who answered many questions and assisted us with information. Below is a summary of how we put myUnisa together, as well as some statistics.

As a distance learning institution, students are invited to join myUnisa, and it is an ongoing process. To date, 16679 students have joined (registered) and 23750 course sites have been created.

At peak times the cluster handled 1200 concurrent connections with no strain on the machines. The average number of connections is between 200 and 300.

Our biggest hurdle in the first week was severe bandwidth congestion, so much so that Unisa had to purchase (overnight!) additional bandwidth to relieve the problem. High connection volumes to our student system, due to online subject registrations, have also been problematic.

Student reactions have been complimentary and most find myUnisa easy to use (if slow in the first week!). They have reported some browser display issues, especially as regards Safari (for Mac).

Tool set:
myUnisa went live with 4 Sakai tools and 18 Unisa-developed tools. Tools were divided into 3 groups for display purposes. Subject sites have the tools: Announcements, Resources, Discussion Forum and Schedule from the Sakai set and Welcome Message, Assignments, FAQs, E-mail, Class List and Prescribed Books developed by Unisa.

Each student also has a site called "My Admin". Lecturers have a site called "My Students" that is similar to "My Admin", but the lecturer view can be controlled by student number. My Admin contains the tools: Assignments, Academic Record, Biographical Details, Examination Results, Financial Details, Parcel Information, Registration Details, Study Fees Quotation and Change Password. "Join myUnisa" and "Forgot my Password" functions have been made available on the public pages of myUnisa.

My Students displays the tools: Assignments, Academic Record, Examination Results, Financial Details and Parcel Information similar to "My Admin", as well as Student List (for generating lists/spreadsheets with student information), Mailing List (for sending bulk e-mails to specific student groupings) and File Manager (for uploading study materials to a central repository and subsequently viewing it in Resources)

Lecturer information:
Unisa had a function in place that allows academic departments to link the person responsible for uploading study materials to a central repository to a specific subject. This function was expanded for myUnisa to allow departments to link academic staff members to subjects by role. In myUnisa the following roles have been created: Primary Lecturer, Secondary Lecturer, Head of Department, Observer, Tutor, Agent and Courseware Administrator.

As December and January are the main holiday season in South Africa, having role information updated has been a big headache. Subjects can only exist on myUnisa if a Primary Lecturer is linked to a subject and thus we are adding subjects to myUnisa daily as lecturers return from leave.

Technology:
As a bit of background, Unisa is currently looking at moving towards Microsoft instead of Novell for its local intranet infrastructure, and due to this, we started testing some of the services that MS has to offer. Therefore, all our students (as they join myUnisa) are created as objects on an active directory, while the lecturers are still on Novell. Therefore, we had to implement a kind of a proxy provider that authenticates using both the Novell native LDAP client, as well as a Jndi provider that authenticates to AD.

We have utilized the Quartz framework to allow us to run "cron" jobs that create our sites for us, as well as do clean up and data migration, all in the background. These jobs mail us whenever any output is generated, as well as any exception that is thrown.

We have replaced sakai-james totally with a unisa-james that allows the lecturer to choose an email address for the site, unknown to the student, to which all mail gets rewritten, tagged, stored and forwarded. This allows the lecturer to respond to these messages with total anonymity. It also allows us to keep some stats with regards to response times etc.

All of our admin tools were written in Struts, making use of a Struts tool adapter (also developed here, and submitted to contrib) that allows our Struts applications to function in Sakai. All of these tools were also adapted to use the sakai event services to store audit/MIS information per tool. To date we have 1.9 million records in SAKAI_EVENT.

SAKAI_SESSION shows 78316 login sessions, and SAKAI_SITE shows 23750 course sites (this grows daily as more lecturers request that their course be made available on MyUnisa).

Before going live, we ran a full stress test, utilizing HTTPUNIT to simulate actual student and lecturer logins, with these sessions accessing tools and submitting data to both the Sakai base tools, as well as some of our own tools. We found that our Novell LDAP server was incapable of handling more than 350 logins at the exact same time, but everything else was handling the 350 concurrent connections and access very well (our major load comes from students anyhow, so we were not too concerned about the Novell LDAP server). We will be releasing the full report on this in a few days time.

Our production environment (on which the stress tests were run) has one software load balancer (<http://www.linuxvirtualserver.org>www.linuxvirtualserver.org), one file server/mysql server, and four diskless nodes that boot off the fileserver, each hosting a single apache that balances requests to two tomcat servers using mod_jk.

Francette Myburgh & Johan van den Berg
for UNISA

New Whitepaper: "Understanding the Open Source Portfolio, Version 2.1"

From Chris Coppola: A new whitepaper called "Understanding the Open Source Portfolio, Version 2.1 <http://www.rsmart.com/assets/understandingOSP_Dec2005.pdf>" has just been published. The OSP version 2.1 will be released to synchronize with an upcoming Sakai release (most likely Sakai 2.1.2) in March. The whitepaper is written to help newcomers to the community understand the OSP software, and the community that produces it. It attempts also to describe the OSP version 2.1 in sufficient detail to build a common understanding of the software, and common language to describe it among veteran members of the OSP community. While it is difficult for one document to satisfy the needs of newcomers and veterans alike, this document provides a comprehensive introduction, as well as a foundation on which the OSP community can build and extend. With the OSP 2.1 release on Sakai 2.1.x, it will be practical for more of the Sakai community to take an active interest in the OSP tools, and the sister community. The whitepaper is a great way for folks who haven't been watching OSP to get up-to-speed quickly.

Indiana University Libraries and the University of Michigan University Library
have received a Mellon Foundation grant for tool development

From Jon Dunn: IU Libraries and UM Library have received a grant of $438,000 from
the Andrew W. Mellon Foundation to develop open-source tools to integrate access to
subscription-based online resources into Sakai.

Creation of the tools will provide a mechanism for faculty to provide students with
scholarly information and resources, and in turn, for students to access such materials.

The project will develop new tools and enhance existing tools within Sakai to provide
easy access to licensed electronic full-text resources. The work will build upon the IU-
developed Twin Peaks Navigator, that allows for easy searching and linking of library
resources within Sakai, and include support for librarian-developed subject guides.

Jon Dunn of Indiana University and Susan Hollar of the University of Michigan are co-
directors of the project. Steve Smail at Indiana, Bill Dueber and Bill Eng at Michigan,
and others will be working on the technical implementation.

The grant from the Andrew W. Mellon Foundation will support the project over an 18-
month period and will provide for project management, programming, interface design,
and evaluation, as well as support for necessary travel, meetings, and computer hardware.

More information about the project:
http://www.dlib.indiana.edu/projects/sakai/

Message Center

From Lance Speelmon and Kristol Hancock: Many of you have heard of the Indiana
University's Message Center Tool.

For those of you who have not, here is a quick explanation. Message Center is a
discussion forum and private messaging tool that IU developed to meet our faculty's
needs. IU is currently running this tool in production.

Message Center includes the following features:

- Create multiple forums/topics
- Disable forum/topic postings while still allowing users to read previously posted
messages
- Mark messages as read
- Send a private message to a user or group of users in a site
- Forward private messages to a personal email address

To keep track of our progress with Message Center and to learn about the additional features that will be coming in future releases, please visit the Message Center Confluence site at the following location:

http://bugs.sakaiproject.org/confluence/display/MFT/Home

If you have any questions, feel free to post them in Confluence and we will respond to them as quickly as possible.

Post'Em

Also from Lance Speelmon and Kristol Hancock: Indiana University recently developed and implemented the Post'Em tool in production. Post'Em is a tool that enables people to display feedback, uploaded in .csv format, to individual site participants. IU is currently running this tool in production.

Post'Em works well for faculty who prefer to keep complex grade books in Excel and just need a way to show a student his own individual data. Faculty may view the data for all students at once or they can view a single student's data for an office visit.
Post'Em is a simple tool to use and may even be useful for collaboration or research.

To keep track of our progress with Post'Em and to learn about the additional features that will be coming in future releases, please visit the Post'Em Confluence site at the following location: http://bugs.sakaiproject.org/confluence/display/PEM/Home

If you have any questions, feel free to post them in Confluence and we will respond to them as quickly as possible.

Sakai Collab Server Organization Updated

From Chuck Severance: The last few weeks has been a flurry of reconfiguring collab.sakaiproject.org to get us in shape to be a Community and Foundation rather than a Project and a SEPP.

The new configuration of the sites is below. I placed the following information on the MOTD of the collab site so all users would see it when they log in.

Welcome to the Sakai Project's Collaboration Server using Sakai. This is organized into "sites." Joining a site is like joing an E-Mail list. If you want to get off a list, simply unjoin the site. This is all done under the Membership button in your My Workspace area.

Important Sakai-Wide Sites
Announce - Everyone should join this site to get the announcements and news of the Sakai community.

Sakai Development - This is the best place to get technical support of installing and running Sakai or developing Sakai Tools.

Sakai User - This is the place for the end-users of Sakai, faculty, staff, students, and researchers to be involved.

Advocacy and Strategy - This is a place where we talk about the big strategic issues in Sakai and discuss governance of Sakai and other strategic issues.

Open Forum - This is the Sakai "cafe" where we can all relax and talk about anything that comes up.

Important Sakai Coordination Sites
Management - This is where all of the Sakai management is done. This group coordinates the work effort across the Sakai community. This site keeps the project plan up to date across the Sakai community.

WG: Requirements - This is a working group which gathers the community requirements, prioritizes, and maintains the requirements for Sakai.

You are welcome and encouraged to join any site that is shown under Membership even if all you want to do is monitor the activity.

Submit your Sakai Requirements before February 8th!

Basic Requirements Practice (In Pilot):

1)   This information will be gathered and reviewed initially by a Requirements Review WG. This group will work in conjunction with you as the requirement owner, existing working groups, and the foundation technical staff to cluster and present these to the community in a way that it can easily rank and prioritize them.

2)   The prioritized requirements will then be vetted to identify all available resources, schedule constraints, and technical feasibility.

Instructions:

1) Go to Sakai Foundation Jira: http://bugs.sakaiproject.org/

2) Click the "Enter the Sakai Bug Management System" link.

3) Log in. (If you don't have an account, you can choose to create one from this page.)

4) Now, add new Requirements by clicking on Jira's "Create New Issue" link (near the top of the window just below the Jira banner).

5) Then select "Sakai Requirements" as the Project and "Requirement" as the Issue Type.

6) Click Next>> This will open the Requirements form.

IMPORTANT: You do not need to review what has already been submitted. The number of requirements submitted on an issue gives an indication to the Review WG regarding the urgency and importance of the requirement. If you see an existing requirement that you would like to contribute FTE toward, please indicate it in the comments field.

Mara Hancock
ETS Associate Director of Learning Systems

Conference News

Announcing the 5th Sakai Conference (with OSP) in Vancouver

As the Sakai community continues to grow, our bi-annual conferences provide vital information and networking opportunities for developers, instructional designers, implementers, faculty, and administrators.

Call for Conference Proposals Opens in February

The Call for Proposals for the Sakai (with OSP) Conference in Vancouver (May 30-June 2, 2006) will open in February.   Start developing your proposals and plan to join us for our 5th Sakai conference!

Wende Morgaine
Sakai Conference Program Co-chair

Sakai 5th Conference (with OSP) Website is Up

Go to

http://www.sakaiproject.org/vancouver

to find all about the upcoming Conference in Vancouver.

Events

5th Sakai (with OSP) Conference in Vancouver

May 30 - June 2, 2006