Case Studies in Collaboration: NITLE’s Consortial use of the InCommon Federation

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NSF Cyberinfrastructure Vision

• Virtual communities supporting
• Peer to peer collaboration and
• Networks of research and education
What is NITLE?
How might it relate to the NSF vision?

- A community-based non-profit initiative
- Advances the strategic, effective adoption of digital technologies and innovation in institutional and individual practices
- Serves non-profit undergraduate-centered colleges, universities, & consortia
What is NITLE?
How might it relate to the NSF vision?

• A community-based non-profit initiative
  125 colleges and universities (& growing)
• Advances the strategic, effective adoption of digital technologies and innovation in institutional and individual practices
  250,000 students
• Serves non-profit colleges, universities, and consortia that have an undergraduate-centered focus.
  30,000 faculty and staff
NITLE offers a growing number of services to its participants

• NITLE Network
  – Tools & resources for peer collaboration
  – Access to NITLE programs & services

• NITLE Institute
  – Professional development and training programs for faculty & staff – F2F and via MIV

• NITLE Information Services
  – Managed technology services for participating institutions
CURRENT INFORMATION SERVICES:

Repository (DSpace)
Communications (MIV)
Learning Management (Sakai & Moodle)
Technology Futures Market (beta)

Variety of other services being explored with the community
NITLE is Community-Driven
NITLE’s Repository Service is a hub of community activity

User Community Meetings
(one f2f, four online yearly)

Managed Common Infrastructure
25 DSpace campuses

Univ of Puget Sound
– f2f event host
Franklin & Marshall
- virtual event host
Kalamazoo College
- virtual event host

Training & Workshops
Wheaton College (MA)
- Technology Fellow/trainer
Common Features between NITLE’s Services and “Cyberinfrastructure” Vision

• The NET is central to success
• Support for peer communities is essential
• Infrastructure locations are distributed
• Knowledge is often best created collaboratively and shared using common infrastructure
• Cross-organizational approach is used for computing power.
Operationally – How does this work?

- The NET is central to success
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Behind the scenes – High Quality Building Blocks

• Network
  • Internet 2 connection is available for MIV service
  • High quality commodity providers for access to information services

• Storage
  – Plan and purchase storage in a highly scalable manner. Use utility storage (billed in increments of Gb/Month) whenever possible
Key Building Blocks (Continued)

• Compute
  – Use utility computing providers to create extremely scalable and fault-tolerant service
  – Virtualization provides the flexibility necessary to provision and manage resources efficiently

• Application
  – Contracts with application service providers to install and maintain applications.
  – ASP devotes staff resources as necessary
  – Maintain close contact with open- and community-source development community.
What does NITLE do “behind the scenes” (so that individual campuses don’t have to)?

• Issue RFPs, choose vendors, negotiate contracts
• Plan service deployment
• Test service deployment
• Move service into production
• Change service as needed
• Update service as needed
• Keep management overhead to a minimum
• Provide oversight for quality assurance
• Stay abreast of infrastructure developments
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Financially Responsible & Sustainable

- Information services must scale up and down both technologically and financially.
- Information services should leverage expert support at all levels of operations
  - Ex. – *Servers should be operated from a remote carrier-grade datacenter. These locations are staffed 24x7 with expert support*
How can NITLE scale?
How can NITLE scale?
Solution

• Join InCommon
• Educate the Community about IdM
• Help the community own Shib at the campus level
• Work to have NITLE systems “shibbolized.”
• Encourage InCommon membership by community
Educate the Community about IdM

- Survey of the community on current IdM practices and needs.
- Sponsored discussion at the NITLE Summit on Federated IdM
- Sponsoring an online discussion as part of NITLE’s larger discussion of campus core services
Help the NITLE community own Shib at the campus level (policy and implementation)

• Organized a group of 5 campuses to work with I2 & develop a Federated IdM “roadmap” for smaller colleges and universities.

• Sponsoring an event at Lafayette College on Shibboleth and Federated IdM in October
Work to have NITLE systems “shibbolized.”

- Moodle – currently, NITLE is running a sandbox version of Moodle 1.9 integrated into our Shibboleth testing environment.
- 2) Sakai – Investigating options with vendors but are blocked from full implementation because webdav does not work with shib
- 3) NITLE website, Peer Community softwar, markets.nitle.org – These sites will use a single NITLE sign-on system which is shib enabled.
- 4) dSpace – investigating options with our vendor
Conclusions

• Active involvement of the community – especially early adopters – is critical for success.
• There is very strong interest in IdM by our participants.
• Education and community networking support for IdM takes a lot of work.
• Shibboleth is best included in OS and Community Source software when it is built.
• Now is the time!
FOR MORE INFORMATION

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