

A Future for InCommon: Products and Services

Future of InCommon Topics

- InCommon Products and Services (Ken)
 - Advocacy, outreach and leadership
 - Foundational development
 - Trust Services
- InCommon Process, Governance, Membership – (Jack)
 - Process and Report
 - Internet2 Board and management responses
 - Next steps and outstanding issues

Three categories of future work

- Leadership, Advocacy, Outreach
- Foundational – Core IdM middleware development, integration with other open source efforts
- Trust Services - basic federation operations, Silver and Bronze, Certificate Services, Training and Consulting, etc.

Leadership, Advocacy and Outreach

- Leadership for InCommon and for Foundational Activities
- Work with federal partners
- Work with higher ed and research partners
- Work with corporate partners
- Work with international partners
- CAMPs, workshops, conference sessions

InCommon as advocate

- Silver
- Need to have campuses provide persistent opaque identifiers (eptid)
- Need to adopt some explicit privacy approach, likely in the format of best practices and self certification
- Need to develop audit training mechanisms
- Active user privacy management

InCommon and incident handling

- “Requirement” of Grid facilities
- Elements of an answer
 - Trust
 - Local enforcement of external requests
 - Interactions with law enforcement as needed
- How to amend InCommon agreements and processes

Foundational Activities

- Maintain and evolve core software for IdM and federations
- Maintain and evolve core data standards for InCommon
- Work closely with overseas, open source and corporate developers

Core software for IdM

- Systems that provide common identity services (identity, groups and privileges) for enterprise, domain and collaboration apps
- Shibboleth, Grouper, Privman (*), COmanage
- (Note – other important packages in this space include Kerberos, CAS, LDAP, etc.)

The US role is shifting in IdM

- International development
 - Shibboleth – uApprove (Switch), SimpleSAML (Norway), Attribute aggregation (Switch), Delegated assertions Java library (Unicon), Inter-federation (GEANT), etc
 - Grouper – UI (UK), Sun IdM connector (Germany), web services validation (UK)
 - Components from Sweden, France, Dutch, etc...
- New use cases, new ways of interacting with partners
 - Integration with uPortal
 - Integration with KIM – Grouper and PACCman

Shibboleth Futures

- SAML 2.0 watershed for basic interop
- Key new functionalities such as attribute aggregation, privacy managers, account linking, N-tier, OpenId libraries being added
- Addressing new high-end and new-user requirements

Some examples

- Delegated assertions – policy management
- Expanded attribute aggregation
- Simplified configuration, especially for metadata
- More powerful configuration, especially for metadata
- Expose token/signature validation as web services –
 - Plug Shib style trust management into other systems and implementations

This is the Digital ID Card to be sent to 'https://aai-demo.switch.ch':

Digital ID Card

Surname	SWITCHaai
Given name	Demouser
Unique ID	234567@example.org
User ID	demouser
Home organization	example.org
Home organization type	other
Affiliation	staff
Entitlement	http://example.org/res/99999 http://publisher-xy.com/e-journals

☐ Don't show me this page again. I agree that my Digital ID Card (possibly including more data than shown above) will be sent automatically in the future.

[Cancel](#)[Confirm](#)

Grouper

- Simpler UI
- Role management capabilities
- Kualu integration
- uPortal integration
- LDAPPC NG (LDAP NG?)
- <https://spaces.internet2.edu/display/GrouperWG/Grouper+Product+Roadmap>

Privilege management

- Lessons learned
- A variety of steps forward
 - Adding priv man capabilities to Grouper
 - Guides to untangling privilege “snags” and getting a structured campus conversation going
 - Working with open source application projects that have some elements of privilege management to see if they can be extended to broader use cases
 - Campus contributions such as perMIT

IdM for Collaboration (COmanage)

- Harnessing Shib, Grouper and priv man together (with some other glue) to support inter-realm collaborations
- Externalizes common IdM from collaboration and domain apps into a coordinated, self-contained but re-plumbable platform
- Delivered as a framework/service/appliance
- An international area of interest and work

What is Out of Scope

- ESB, workflow, DRM, etc
- Grid software
- UI design beyond the subject area
- Lots of other stuff...
- The Internet of things

Data Standards

- eduPerson refresh
 - Clarity on epTid
 - More semantics ?
 - A few new attributes (eduPersonOpenId?)
- Guidelines on new schema (e.g. NIIextperson, GENI)
- New edu schema if needed

InCommon Trust Services

- Develop and deploy core federation
 - Basic, Bronze and Silver
 - Improved metadata services
- Evaluate, develop and deploy related services as appropriate
 - Certificate services
 - Shibboleth training and IdM consulting
 - Outsourced federation operations
 - Eduroam

InCommon Silver

- LOA 2 on the campus
- Highly secure federation operational procedures
- Many applications require it (especially with LOA 1 now being sooooo low)
- May enfold other procedures on campuses

Possible new services

- Certificate services
 - SSL
 - Root CA (USHER)
 - Personal certs
 - Grid replacement certs

eduRoam

- International wireless roaming for the R&E community - www.eduroam.org
- 802.1x based authn technology, not web-redirect authn; typically requires client on laptop
- Federation might be the scope of use, types of policies, operator, etc but still not use the web authn that people think of as “federation”.

Shib training and IdM consulting

- Intended to accelerate adoption more than generate revenue
- Shib training already a useful service in other countries
- IdM consulting more of a prolonged engagement or self-help groups or ...

Operating other federations

- Some sectors may need help – K-20, health, etc.
- Could be operational or consultative
- Not an early target of opportunity

Some thoughts about the future

- Perilous and uncertain
- Not all businesses enabled by InCommon should be operated by InCommon...
- Tend to the knitting
 - Stick close to core skills and purposes
 - Do a few things well