Update on Trust and Identity at Internet2

MAGIC webinar
3 Feb 2016
Goals for our time today

• Introductions (if practical)

• Overview of Trust and Identity through the lens of < a month in the position

• A discussion about the Research and Scholarship Entity Category and it’s adoption

• What else?
Introductions

• You

• Me
Trust and Identity at Internet2 in < 30 days

• To be fair, these activities have been on-going for a long time (over 15 years)

• Community leaders and Internet2 leadership decided it was time to raise the profile of these activities to the division level with a dedicated VP

• What honeymoon period?
Four major themes observed

- clarity
- reliability
- maturity
- sustainability
Clarity - Trust and Identity
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InCommon (incomplete, nothing implied by order)

- eduroam
- eduGAIN
- InCommon Federation
- Shibboleth
- Community Trust/Assurance
- MFA profile
- MFA profile might need to be plural (eventually might need multiple profiles)
- POP replacement
- Certificate Service
- Federation management and support training
- Grouper
- Stewards Program - Scaling to onboard all of R&E
- Metadata Query - Move federation to DNS-like functionality.
- IdPoLR
- InCert
- Fed. Incident Resp.
- COmanage
- Scalable consent
- R&S entity category
- Social-to-SAML (or SocialID in general)
- MFA proxy service
- Metadata Aggregator and pipeline.
- Local metadata management tools that integrate with InCommon metadata management
- Catalyst Program
- Testing/certification program (demonstrate adherence to fed practices)
TIER  (incomplete, nothing implied by order)

- Shibboleth
- Grouper
- COmanage
- Scalable consent
- CommIT
- InCommon Certificate Service API

- General APIs
- Open ID Connect integration
- Entity registry
- Campus practices
- Training/education
- Campus share repository to enable community outreaching to itself
Questions so far?
Some research specific, related activities

• Federated incident response
• eduGAIN
• Increases in federation participants
• POP replacement
• Entity categories - Research and Scholarship (R&S)
Research & Scholarship Category

InCommon is offering an easier method for participants to provide collaborative services for researchers and scholars via their federated identities by reducing the policy interpretation, inter-institutional agreements, and system configuration needed for those services. This method categorizes service providers (SPs) to simplify the configuration of identity providers (IdPs); the result is that researchers can successfully access SP sites without delay and without contacting their local IdP admin. The Research & Scholarship (R&S) Category applies to service providers that support research and scholarly activities such as virtual organizations and campus-based collaboration services. Participating IdPs agree to release a minimal set of attributes to the R&S category with a one-time addition to their default release policies, a simpler and more scalable approach than negotiating such release bilaterally with every service provider.

Contents
- Background
- Candidate Services
- R&S Category Attributes
- R&S Application Process

The Research & Scholarship Value Proposition

1) The immediate and most tangible benefit is that researchers and scholars on campuses that support R&S may seamlessly access a growing list of R&S services without friction or administrator involvement. In other words, the end result may be characterized as: *Federation for Research and Scholarship that Just Works.*

2) Many potential R&S services choose not to federate because IdP support for R&S across our campuses is spotty and uneven. We expect a threshold number of campuses to cause a "Cambrian Explosion" of valuable R&S services to appear in the InCommon Federation, which will spur collaboration and research in the US.

3) Continuing our participatory role in the global R&E community, InCommon has introduced an *international version of the Research & Scholarship Service Category* to the REFEDS community, which requires broad support from InCommon participants to be successful.
R&S in a nutshell

• Service Providers (SPs) express interest in being certified as an R&S Provider. InCommon vets the request and requestor.

• Identity Providers (IdPs) can become R&S IdPs by releasing a small number of attributes upon an R&S SPs request

• The value: researchers funded across multiple institutions can seamlessly connect to tools across university and organizational domains
However ....

- If only 22% of the federation’s IdPs are participating in R&S, there is a high degree of probability that many research teams are colliding into permission brick walls.
R&S IdPs

- Ohio State University
- Cornell University
- University of California–Irvine
- University of Washington
- Internet2
- University of Virginia
- University of Chicago
- University of Alabama at Birmingham
- University of California–Los Angeles
- University of Maryland Baltimore County
- New York University
- University of Southern California
- Penn State
- University of Maryland Baltimore
- Duke University
- Stony Brook University
- University of Maryland College Park
- Clemson University
- Johns Hopkins University
- University of California, Davis
- Texas A & M University
- Indiana University
- Northwestern University
- University of Wisconsin–Madison
- University of Massachusetts Amherst
- Columbia University
- Lawrence Berkeley National Laboratory
- Virginia Polytechnic Institute and State University
- University of Michigan
- University of Utah
- Rutgers, The State University of New Jersey
- University of Illinois at Urbana-Champaign
- George Mason University
- Carleton College
- University of Minnesota
- University of Iowa
- University of South Florida
- University of Dayton
- The University of Arizona
- Massachusetts Institute of Technology
- Vanderbilt University
- University of California, San Francisco
- University of Nebraska–Lincoln
- University of California, Santa Cruz
- Purdue University
- Main Campus
- Colorado State University
- Stevens Institute of Technology
- Arizona State University
- Brown University
- University of Missouri System
- North Carolina State University
- University of Colorado at Boulder
- University of Florida
- University of North Carolina at Chapel Hill
- University of Vermont
- California State Polytechnic University, Pomona
- University of Pennsylvania
- California State University, Fullerton
- University of Alaska Statewide System
- University of California, Davis
- University of Illinois at Chicago
- University of North Carolina at Greensboro
- San Diego State University
- Carnegie Mellon University
- University At Albany, State University of New York
- Iowa State University
- University of Cincinnati Main Campus
- Loyola University of Chicago
- California Institute of Technology
- University of Oregon
- University of Pittsburgh
- Smithsonian Institution
- The University of Memphis
- Utah State University
- University of Wisconsin–Madison
- Georgia Institute of Technology
- University of Hawaii
- University of Central Florida
- Florida International University
- Rice University
- Indiana University of Pennsylvania
- Yale University
- Reed College
- Southern Methodist University
- University of Arkansas
- Lehigh University
- University of Kansas
- LERTN (Long Term Ecological Research Network)
- Boston University
- Weill Cornell Medical College
- Kansas State University
- Towson University
- University of Illinois At Springfield
- Northern Illinois University
- LIGO Scientific Collaboration
- Western Michigan University
- Syracuse University
- Ohio Technology Consortium (OH-TECH)
- Brookhaven National Laboratory
- Tufts University
- University of Nebraska Medical Center
- Southern Illinois University
- University of Houston Libraries
- Pomona College
- Oregon State University
- GPN (Great Plains Network)
- Colorado School of Mines
- Bates College
- Wheaton College (MA)
- Montana State University – Bozeman
- Rockefeller University
- Gettysburg College
- West Virginia University
- Utah Valley University
- University of West Florida
- ICER – Mali
- ICER – Uganda
R&S SPs

- Berkeley Lab Commons
- CarmenWiki
- CILogon
- COHERENT collaboration
- Collaboration Wiki Spaces at Internet2
- Dash
- Dash Development Instance
- Dash Staging Instance
- DMP Tool
- DMP Tool Development Instance
- DMP Tool Stage Instance
- FileSender
- GENI Experimenter Portal
- GitLab for I2 Fed Op WG hosted by LIGO
- Gravitational Wave Astronomy Community List Server
- Gravitational Wave Astronomy Community Registry
- Gravitational Wave Astronomy Community Wiki
- Gravitational-wave Candidate Event Database
- Indiana CTSI HUB
- Internet2 Services
- Lifestyles of the Attribute Rich and Privacy Preserved (LARPP) Calendar Server
- Lifestyles of the Attribute Rich and Privacy Preserved (LARPP) List Manager
- Lifestyles of the Attribute Rich and Privacy Preserved (LARPP) Registry
- Lifestyles of the Attribute Rich and Privacy Preserved (LARPP) Wiki

- LIGO CBC Wiki
- LIGO Software Control System - Test
- LIGO Wiki
- MGHPC Portal
- MGHPC Tenant Wiki
- MGHPC Test Portal
- Multi-Factor Authentication (MFA) Cohortium List Manager
- Multi-Factor Authentication (MFA) Cohortium Registry
- Multi-Factor Authentication (MFA) Cohortium Wiki
- nanoHUB.org
- Narada Metrics
- National Ebola Training & Education Center (NETEC)
- NCIP Hub
- NIAID ICER Collaboration Manager (development)
- Open Science Data Cloud Console
- Open Storage Research Infrastructure
- Penn State WikiSpaces
- Springshare LibApps
- SSERCA
- UNCG REDCap
- UNCG REDCap testing instance
- Unizin Community
- UW-Milwaukee CGCA Wiki
• Awareness raising has been done with federation operators in a variety of contexts (TechX, Global Summit, webinars, etc.)

• Same for HE CIOs

• A list of IdPs of interest to LIGO and others was generated and InCommon Steering contacted the CIOs of those IdPs (very little success)

• As VOs bump into issues, they have contacted the federation operator and requested assistance (a little more success)

• InCommon Steering published a statement of direction regarding the relaxation of IdP policies around attribute release

• Embedded “marketing” in most if not all eduGAIN communications efforts

• What else can be done to make progress on adoption?
Where does the value proposition vs. risk conversation happen at a given IdP?
Who else can push on this?

- Senior Research Officers?
- Industry and federal sponsors?
- Existing collaborations, VOs?
There is another way

- IdP of Last Resort of Unaffiliated IdP
- REFEDs announced a working group on this just today
Questions, comments