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

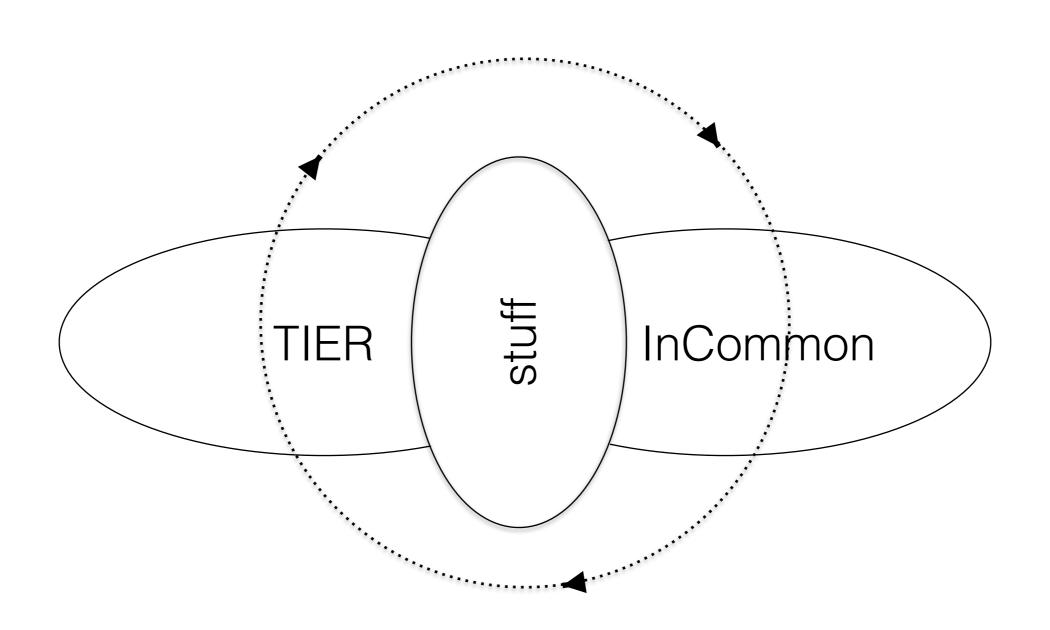
reliability

maturity

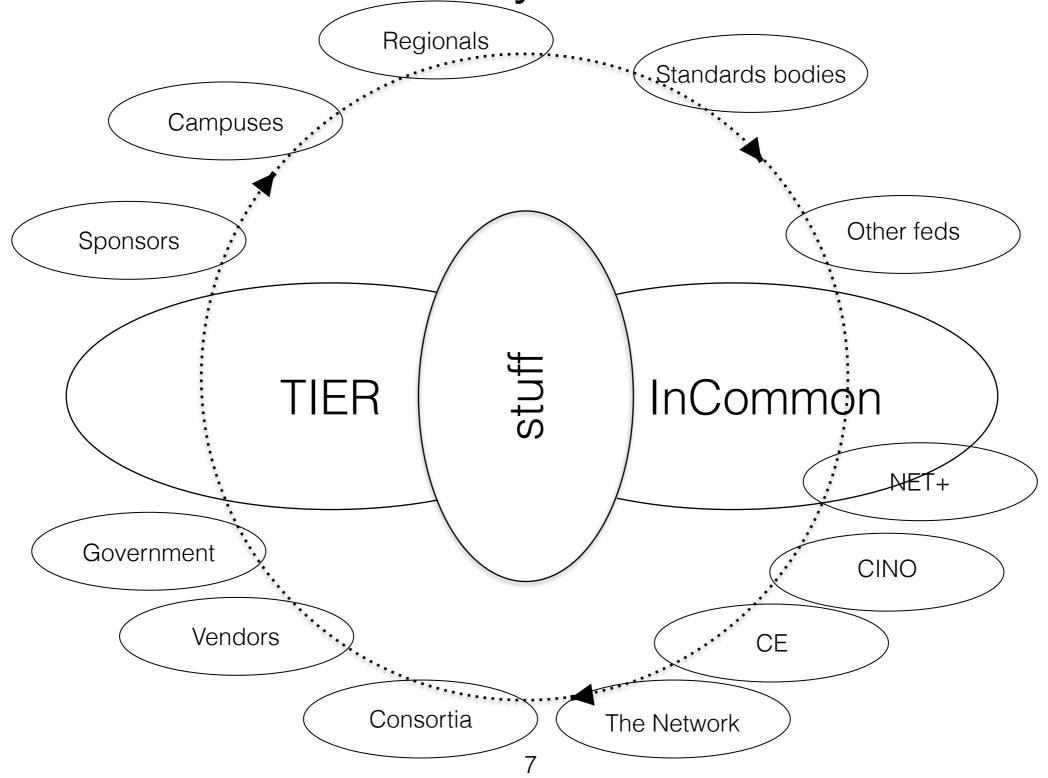
sustainability



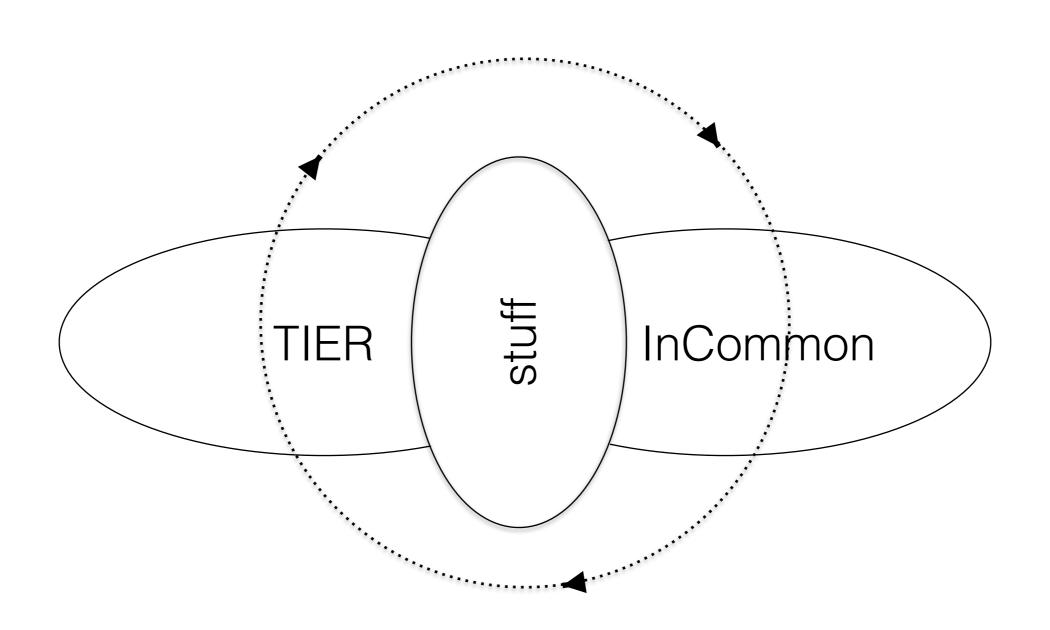
Clarity - Trust and Identity



Clarity - Trust and Identity Vanity View



Clarity - Trust and Identity



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)



https://spaces.internet2.edu/display/InCFederation/Research+and+Scholarship+Category



For a quick overview, see: R&S Category Overview

Created by David Walker, last modified by Thomas Scavo on Dec 16, 2014

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

- 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
- WashingtorInternet2
- University of Virginia
- •University of Chicago
- University of Alabama at Birmingham
- •University of California-Los
- Angeles
 •University of
- Maryland Baltimore
- New York University
- University of Southern California
- Penn State
- University of Maryland Baltimore County
- Duke University
- •Stony Brook University
- University of Maryland College Park
- Clemson University
- Johns HopkinsUniversity of
- California, Davis
- •Texas A & M University
- Indiana University

- Northwestern University
- University of Wisconsin-Madison
- •University of Massachusetts Amherst
- ColumbiaUniversity
- ·Lawrence Berkeley National
- Laboratory
 •Virginia
- Polytechnic Institute and State University
- University of Michigan
- University of UtahRutgers, The State
- University of New Jersey •University of
- Illinois at Urbana-Champaign
- George Mason University
- Carleton CollegeUniversity of
- Minnesota
- University of IowaUniversity of
- South Florida
 •University of
- •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 PennsylvaniaCalifornia Sta
- California State University, Fullerton
- University of Alaska Statewide System

- Louisiana State University
- California State University, Fresno
- •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 UniversityUniversity of
- Wisconsin-Milwaukee
- Georgia Institute of Technology

- University of Hawaii
- University of Central Florida
- Florida International University
- Rice University
- Indiana University of Pennsylvani
- Yale University
- Reed College
- Southern Methodist University
- •University of Arkansas
- Lehigh University
- •University of Kansas
- LTERN (Long Term Ecological Research Network)
- 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 StateUniversity –Bozeman
- Rockefeller University
- Gettysburg CollegeWest 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
- MGHPCC Portal
- MGHPCC Tenant Wiki
- MGHPCC 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

