Campus Cyberinfrastructure Plans and Enabling Access for Academic Collaborations

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Academic Collaboration Challenge

Faculty and Students Want Access and Attribution

Let’s Make it Easy to Collaborate and Get to Stuff
Academic Collaboration Approach

Campus Enterprise Identities Exist and Good/Valuable
Campus Enterprise Identities can be Federated
Let’s Leverage those for Academic Collaboration
How do we do that?
A View from the Campus CIO Seat

Melissa Woo,
Sr. VP for Information Technology and CIO,
Stony Brook University
Campus CI Plan

Support discovery, innovation, and education in science & engineering

Position the institution for future CI development

Integration w/institution’s science & tech plan

IPv6 deployment, InCommon Federation

Examples: [https://fasterdata.es.net/campusCIplanning/](https://fasterdata.es.net/campusCIplanning/)
InCommon Federation Reqs

Registered w/InCommon as supporting Research & Scholarship (R&S) Entity Category

Meets InCommon Baseline Expectations for Trust In Federation
WIIFM? (What’s in it for me?)

R&S streamlines integrations with research applications -> one less barrier for your campus researchers

Baseline expectations -> puts some “teeth” around a set of expectations for accounts, services, and configurations
Brass Tacks: What This Means for Collaboration

Tom Barton
Senior Consultant for Cybersecurity and Data Privacy, University of Chicago; and Trust and Identity research engagement at Internet2
What’s InCommon Federation for?

Academic collaboration reaches beyond a single campus or organization

Thousands of R&E organizations worldwide connect to a common infrastructure

Network for data flow

Federation for user access
Built for R&E

Research networks are designed to meet the high water mark needs of data flows for science

R&E federations are designed to enable user access to academic collaborations
# Federation tools for academic collaboration

<table>
<thead>
<tr>
<th>Baseline Expectations</th>
<th>Standards for basic interoperability and usability rolling out to all InCommon Participants over CY2018</th>
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</thead>
<tbody>
<tr>
<td>Research &amp; Scholarship (R&amp;S) Category</td>
<td>Global opt-in program to provide research &amp; scholarship services with user’s name, email, identifier at login time</td>
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<tr>
<td>Sirtfi</td>
<td>Global opt-in program by which sites can say “we’re ready to collaborate with you in case a federated security incident should arise”</td>
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<td><strong>Add-ons for higher risk academic collaborations</strong></td>
<td></td>
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<tr>
<td>MFA</td>
<td>Global standard to add Multi-Factor Authentication to federated login</td>
</tr>
<tr>
<td>REFEDS Assurance</td>
<td>Opt-in global standards for login credential management</td>
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Baseline Expectations

Why?
- Provide a baseline for trust across InCommon
- Make user access to collaboration reliable
- Ensure that InCommon’s strategic value to R&E continues to grow

How?
- Ensure account is used only by the user to whom it is assigned and the user is currently authorized to use it
- Ensure services use personal information only for the stated purpose and reasonably prevent unauthorized disclosure
- Ensure that all parts of the federation system have up to date configuration that users need for access and how to get help when something goes wrong
### Processes to meet Baseline Expectations

<table>
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<tr>
<th>Sites keep federation metadata up to snuff</th>
<th>InCommon notifies Site Administrators of gaps in their metadata</th>
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<td>Sites review operational practices</td>
<td>Apply “eat your own dogfood” principle to login and service system operation. If you don’t, why should others trust you?</td>
</tr>
<tr>
<td>Community Trust &amp; Assurance Board Oversight</td>
<td><strong>Consensus</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Dispute resolution</strong></td>
</tr>
<tr>
<td>Removal &amp; reinstatement</td>
<td>When all efforts to resolve a system’s unmet expectation fail, its ability to participate in federation is unilaterally altered or removed and reinstated when fixed</td>
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Research & Scholarship Category – basic usability for academic collaborators

Many academic services need user’s name, email, persistent identifier in order to work

R&E Federations vet and “tag” these in a standard way

Login servers can say “I’ll send R&S attributes to R&S tagged services” in a standard way

Needed by some R&S services before they’ll let a user try to login

SIRTFI

Support your faculty and students by being ready in case a security incident happens in the federation.

Here’s how:

- Record security contact in metadata for your federated systems.
- Compare your security practices with those in the Sirtfi standard.
- Ask your Site Administrator to set the “Sirtfi tag”.

InCommon and many other federations have complementary security incident response plans.

Some federated academic services require a user’s login service to have the Sirtfi tag before allowing them to login.

Baseline Expectations includes security contact in metadata.
For all of the details ...

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<td>R&amp;S Entity Category specification</td>
<td><a href="https://refeds.org/category/research-and-scholarship">https://refeds.org/category/research-and-scholarship</a></td>
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<tr>
<td>R&amp;S FAQ</td>
<td><a href="https://wiki.refeds.org/display/ENT/Research+and+Scholarship+FAQ">https://wiki.refeds.org/display/ENT/Research+and+Scholarship+FAQ</a></td>
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<tr>
<td>Blog on above for NSF CC* CI Plans</td>
<td><a href="https://www.internet2.edu/blogs/detail/15144">https://www.internet2.edu/blogs/detail/15144</a></td>
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If you need help with understanding how InCommon relates to your Campus CyberInfrastructure Plan, contact ci-plan-help@incommon.org
Questions?

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How does InCommon relate to my Campus CyberInfrastructure Plan? Contact ci-plan-help@incommon.org.
Upcoming Webinars

Wednesday, January 17, 2018 – IAM Online: CILogon 2.0
2 pm ET | 1 pm CT | Noon MT | 11 am PT
www.incommon.org/iamonline

Jim Basney, National Center for Supercomputing Applications
Scott Koranda, Spherical Cow Group

Wednesday, January 24, 2018 – InCommon Baseline Expectations: How They Will Affect You
2 pm ET | 1 pm CT | Noon MT | 11 am PT
https://spaces.internet2.edu/x/sALxBg

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