Update on Internet2/InCommon Trust & Identity Program

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Trust & Identity program areas

➢ InCommon Federation (focus for today)
  ● InCommon Trusted Access Platform
    ● Software tools that make R&E federation work well for
      ● Campus Identity & Access Management
      ● Research and academic collaborations
  ● InCommon Certificate Service
  ● eduroam
  ● Engagement
● NB: new InCommon Ecosystem meeting Summer 2019
Global R&E federated access ecosystem

eduGAIN stats:
58 countries
>5,000 entities
O(10^8) users
Federation’s value to research collaborations

- Ubiquity – federated access for users at all Higher Eds
- Attribute release – “Research & Scholarship bundle”
- Interop
  - Accurate, complete, fresh federation metadata
  - Works no matter where user and service are located
  - Multi-protocol
- Trustworthiness
  - I’m ok relying on your credentials if you do too!
  - Security
  - Participation in federation governance
Increasing the value

- **Baseline Expectations**
- International standards
  - SIRTFI (Security Incident Response Trust Framework for Federated Identity)
  - REFEDS Assurance Framework, including MFA and SFA profiles
- IdP aaS to address long tail of Higher Eds
- Deep engagements
  - Science Gateways Community Institute Partner
  - Collaboration Success Partners (~10 collaborations to begin)
  - Campus Success Program (11 campuses just completed)
Baseline Expectations

#1 impedance to achieving full value of federation:

- IdP and SP operators who don’t pay attention, and
- Federation operators who aren’t effective at managing that

- Falls off radar when key staff or management changes
- Decreasing IT skills in-house at Higher Eds
- “Cloud-first” approach to campus IT is common
Baseline Expectations: Identity Providers

1. The IdP is operated with **organizational-level authority**
2. The IdP is **trusted enough to be used to access the organization’s own systems**
3. **Generally-accepted security practices** are applied to the IdP
4. Federation **metadata is accurate, complete**, and includes site technical, admin, and security contacts, MDUI information, and privacy policy URL
Baseline Expectations: Service Providers

1. Controls are in place to **reasonably secure information and maintain user privacy**
2. Information received from IdPs is **not shared with third parties without permission** and is stored only when necessary for SP’s purpose
3. **Generally-accepted security practices** are applied to the SP
4. Federation **metadata is accurate, complete**, and includes site technical, admin, and security contacts, MDUI information, and privacy policy URL
5. Unless governed by an applicable contract, **attributes required to obtain service are appropriate and made known publicly**
Baseline Expectations: Federation Operators

1. Focus on **trustworthiness** of their Federation as a primary objective and be **transparent** about such efforts
2. **Generally-accepted security practices** are applied to the Federation’s operational systems
3. Good practices are followed to ensure **accuracy and authenticity of metadata** to enable secure and trustworthy federated transactions
4. **Frameworks that improve trustworthy use of Federation**, such as entity categories, are implemented and adoption by Members is promoted
5. **Work with relevant Federation Operators** to promote realization of baseline expectations
How the Baseline Expectations program helps

<table>
<thead>
<tr>
<th>Purpose</th>
<th>Process</th>
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<tbody>
<tr>
<td>Give specific, actionable info to the right people at the right time</td>
<td>Metadata Health Check</td>
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<tr>
<td>Formal, transparent resolution of concerns about federation entities.</td>
<td>Community Dispute Resolution</td>
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<td>Mitigate or remove.</td>
<td></td>
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<tr>
<td>Enhance Baseline Expectations</td>
<td>Community Consensus</td>
</tr>
<tr>
<td>Make member obligations clear</td>
<td>Amend Participation Agreement</td>
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<tr>
<td>Tell people stuff!</td>
<td>All manner of outreach</td>
</tr>
</tbody>
</table>
InCommon metadata & Baseline Expectations

% Meet Baseline Progress

- % IDP Meets BE
- % SP Meets BE
- % Organizations Meets BE
Attribute release

- **Research & Scholarship Entity Category**
  - International standard
  - Federation operators “tag” SPs serving R&S mission
  - Participating IdPs automatically release attributes to R&S SPs
    - Name, email, affiliation, persistent unique identifier
- Great idea and GDPR goodness, but insufficient uptake
- Community working group recommended adding R&S for IdPs to Baseline Expectations
Maturing federation

- Baseline Expectations needs to go global
- Not just SAML anymore
- More delegation in the trust chain as the ecosystem evolves
- People and processes are needed to leverage innovations in federation technology
- “Federated Identity Management for Research v2”
- International “Federation 2.0” WG about to start
Thank You!

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