

CHICAGO

MARCH 4-7

INTERNET2

2024
COMMUNITY
exchange

Improving Teamwork with the
InCommon Federation

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March 5, 2024



Teamwork and Digital Collaboration

- InCommon Federation and Context
- What's up?
 - Increasing Security across the Community
 - Enhancing User Experience
 - Making it Easier to Connect
- Federation Futures



What does our world look like?

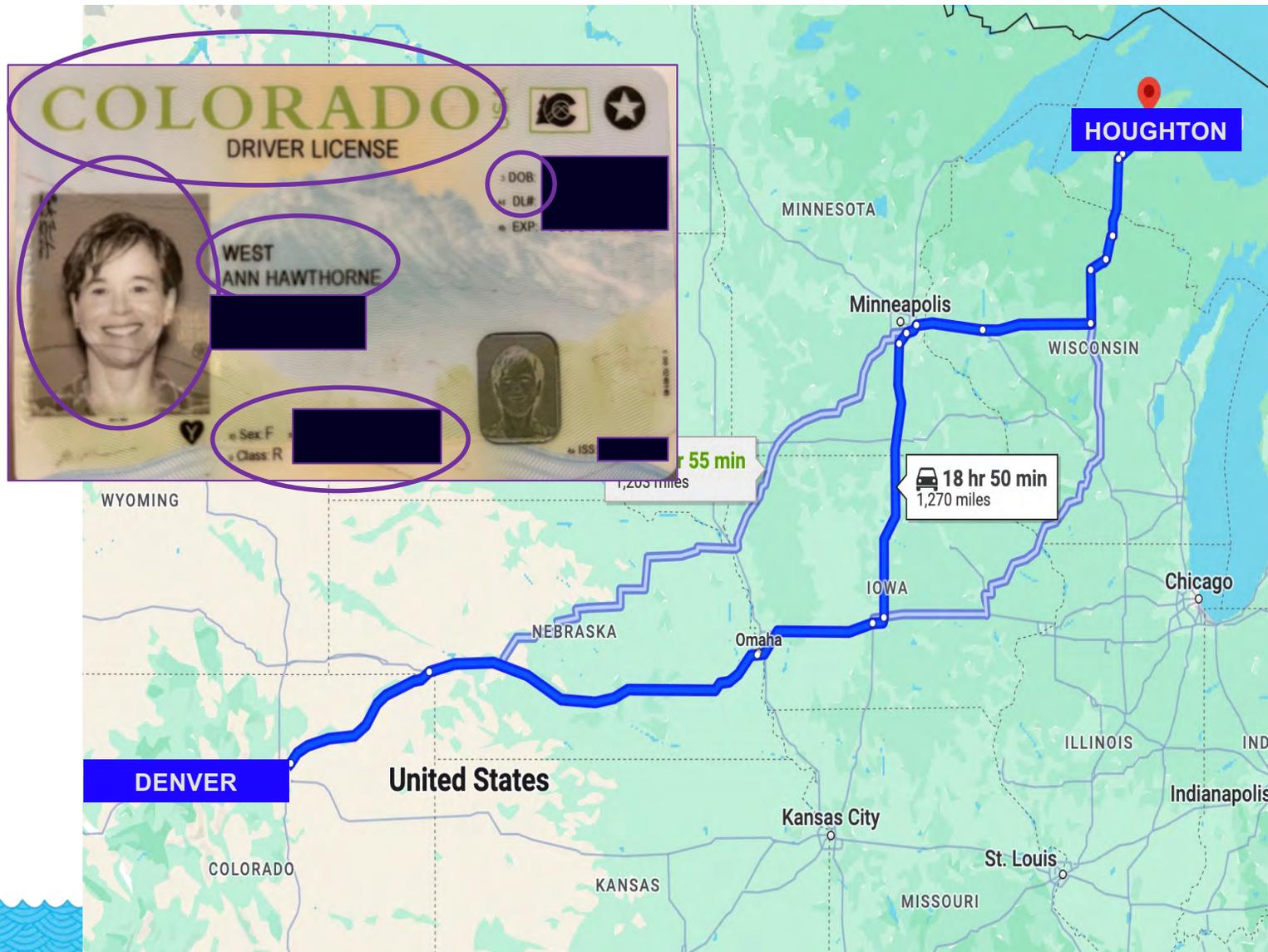
- Increased administrative efficiencies and cost containment
- Increased urgency for global collaboration
- More online learning and diversification of programs
- New(ish) open data requirements and sharing of federally-funded data sets
- Focus on Zero Trust and checking everyone at the door...



How can the
InCommon Federation help?



Ann Drives Across The Country



Ann Buys a Flight...



What's inside?

- Who issues the license and vouches for the person?
- What information do they share based on what I want to do?
- What risk does the provider of the service need to mitigate? How do they do that?

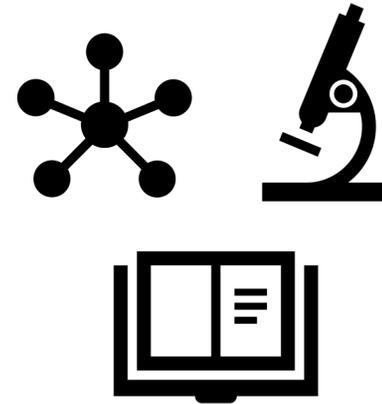
Enable access based on an individual's role/attributes across technology platforms and policy spaces



Increasing Security Across the Community



Two Ways to Participate in the Federation



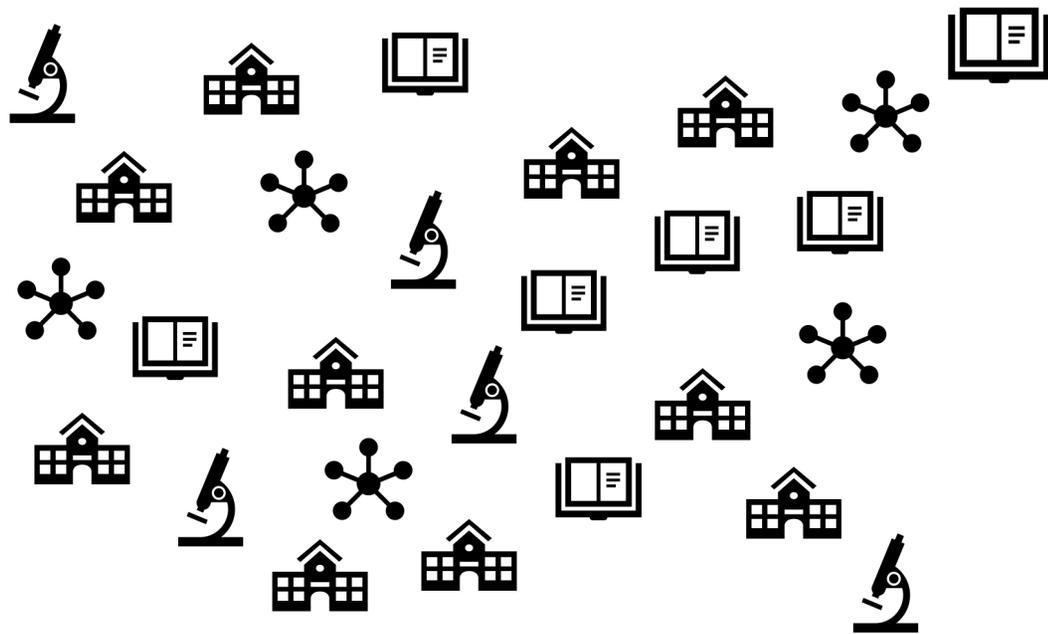
Identity Provider

Brings the People

Resource Provider

Delivers Services / Data
Hosts Collaborations

There are Many of Us

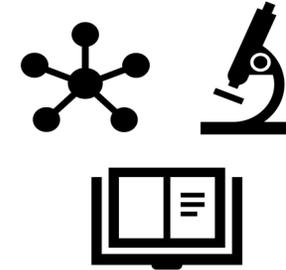


780 organizations | 586 Identity Providers | 6000+ Resource Providers
Interoperation across federations from 79 countries

How do we
connect securely,
protect user privacy,
and
streamline user access
to collaborations?

**across many
organizations?**

Baseline Expectations Improves Security and Trust



An Identity Provider is..

Operated with organizational-level authority.
Trusted to access the organization's own systems.

A Service Provider agrees to...

Implement security controls to ensure user privacy.
Store user information only when necessary.
Obtain permission before sharing information.

All parties agree to...

Adhere to the REFEDS Security Incident Response Trust Framework for Federated Identity.
Maintain accurate published contact, connection, and privacy policy information.
Secure connection endpoints with current and trustworthy transport layer encryption.

Baseline Expectations' Impact on Encryption

Baseline Expectations is a By Community, For Community Policy. The community decides what is important, and the community rallies to enforce these policies.

When InCommon stepped up the encryption requirement in 2021,

55%

of over 6,000 InCommon-registered services received an "A" in the SSL Lab's SSL Server Test.

Just a year later, over

80%

Of these 6000+ services had a score of A.

Security threats evolve. We are never going to be perfect, but we continue to strive for better. Ongoing instrumentations introduced 2023 prompts organizations to act when their scores falter.. We want to be as close to 100% as we can.

Beyond Baseline: Building Trusted Bridges

SIRTFI Exercise

The SIRTFI Exercise Working Group conducted InCommon's second annual community Cyber- security Cooperation Exercise, focusing on the SIRTFI framework. 14 organizations, including the Australian Access Federation and the Research and Education Advanced Network New Zealand (REANNZ), joined to fine tune security incident coordination procedures.

NIST 800-63 Digital Identity Guidelines

The Community & Trust Assurance Board spearheaded a community review and crafted a response to the new NIST 800-63 rev 4 draft, aiming to foster ongoing interoperability between higher education (HE) and Federal identity practices.

MFA and Identity Assurance

Working with international partners, InCommon updated multi-factor authentication and identity assurance frameworks for research and education (R&E) in 2023, making them clearer and easier to adopt.

National Institutes of Health (NIH)

InCommon continues to help NIH implement multi-factor authentication and identity proofing requirements for selected NIH services.

Enhancing User Experience



What (and why) do we care about UX in Federation?

**Secure,
Privacy-Preserving,
Streamlined,
Scaled
User Access**

As it turns out, it's pretty hard to devise a universally intuitive user experience spanning dozens of countries, thousands of organizations / services, and millions of individuals.

... which makes it that much more important that we get it right.

to collaborations across
Research and Education.

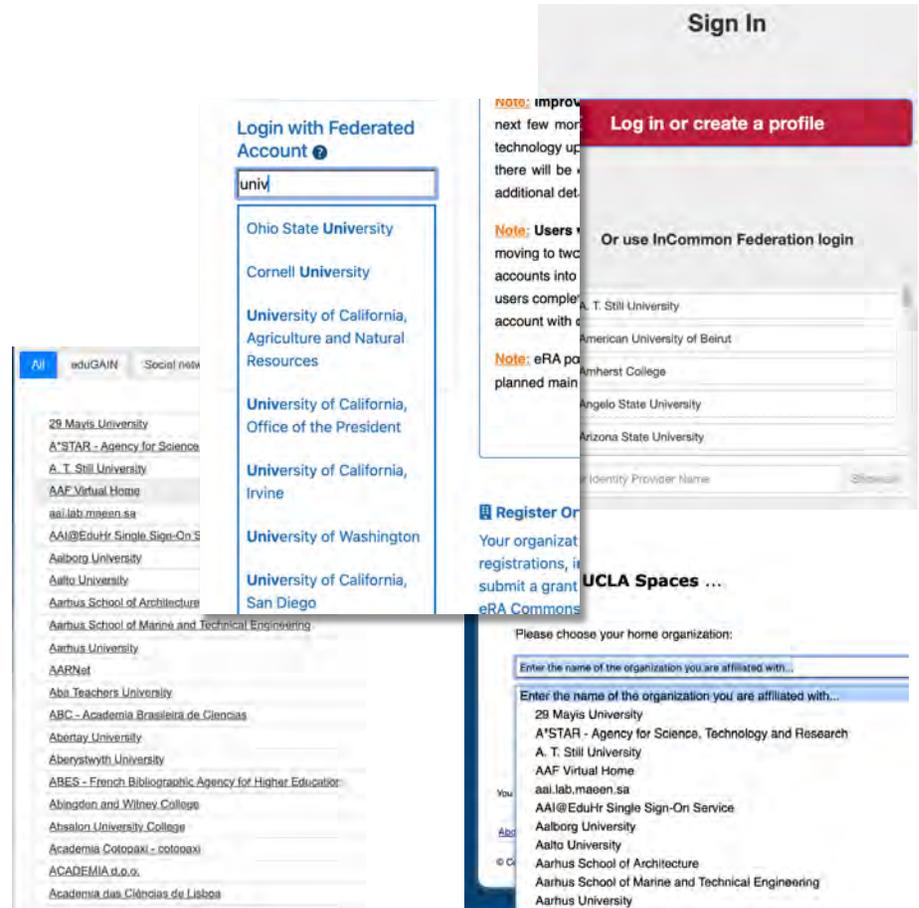


Federated UX Challenges Illustrated

Service: Which organization is the user from?

User: What is this and why should I trust you?

Federation: How do we improve recognition and communicate trust?



Creating a global R&E Login Experience - SeamlessAccess



Joint effort between GÉANT, Internet2, NISO, and STM.

A service designed to help foster a more streamlined online access experience when using scholarly collaboration tools, information resources

InCommon to adopt as its default home organization discovery service in 2024.

Making it Easier to
Connect to the World



Organizations need help

- Schools are seeing increased pressure to share resources, consolidate and collaborate
- Overwhelmed by constrained resources, some leaders are looking to simplify their support model and outsource IAM to companies like Microsoft
- Commercial off the Shelf (CotS) IAM solutions don't natively support R&E federations like InCommon, leaving running your own open-source solution like Shibboleth as the only option

Let's change that!



What's the Solution? The InCommon Catalysts

- Making access through InCommon Federation easier
 - InCommon connectors/solutions for campuses leveraging Okta and Microsoft Entra
 - Hosted, supported by InCommon Catalysts
 - Possible branding program to help you find companies and products doing the right InCommon thing
- Who are the InCommon Catalysts?
 - 12 great companies, many have roots in higher ed
 - R&E focused services and business
 - Work with the community to design and offer IAM-related tools, hosted services, consulting and software to help with your specific need.



What's Next?



InCommon Futures2 Strategy Report

PROMOTING DIGITAL COLLABORATION

Executive Summary

Over the next 5 years, InCommon leads as the collective authority in devising creative, sustainable IAM best practices for Higher Education & Research.

Through a four-step, repeatable process, InCommon will effectively engage the membership collective to achieve its strategic objectives.



STRATEGIC OBJECTIVES

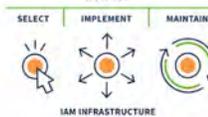
AN EVOLVED, STRONG VALUE PROPOSITION

TRUSTED COLLECTIVE FOR IAM WITHIN R&E



CLEAR GUIDANCE & TECHNICAL RECOMMENDATIONS

HOW TO:



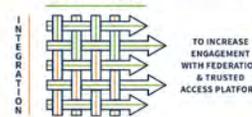
A SECURITY-FOCUSED INNOVATION GROUP

FOR EMERGING PROTOCOLS IN IAM



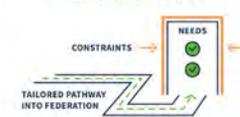
IMPROVED PRODUCT IMPLEMENTATION & INTEGRATION

IMPLEMENTATION



EASY TO NAVIGATE PRODUCT & SERVICE OFFERINGS

FOR ALL AUDIENCE GROUPS



ADDRESSING AN EVOLVING IAM LANDSCAPE

INTEGRATING NEXT GEN SECURITY



NEW DIGITAL LEARNING MODALITIES



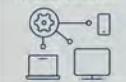
SKILLS GAP & KNOWLEDGE LOSS



PROLIFERATION OF COMMERCIAL OFFERINGS



UNIFICATION, AUTOMATION, INTEROPERABILITY



Happy
20th Birthday,
InCommon
Community!



Learn more about InCommon's Future at the Community Exchange...

Wednesday

10:00 am - [InCommon Futures2](#)

11:10 am - [Trust, Identity, and Access for Learning and Research Across Borders](#)

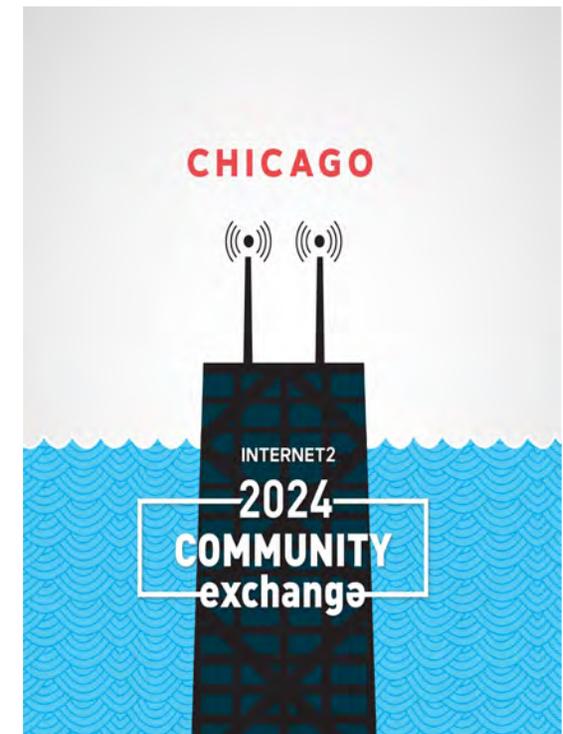
1:30 pm - [Microsoft Multilateral Federation Future](#)

2:40 pm - [Identity: Open Source Hosted & Managed](#)

4:10 pm - [Future-Proofing IAM Infrastructures](#)

Thursday

- 8:30 am - [Building InCommon Futures Together](#)



What's the Impact?

- The InCommon Collective raises the security bar, making itself better every year.
- Easier to federate than ever.
- Easier for your users too.

But wait there's more

- InCommon Steering Committee completed strategic planning process called InCommon Futures2
- Learn where the InCommon Collective is going tomorrow at 10:00 am



InCommon®

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