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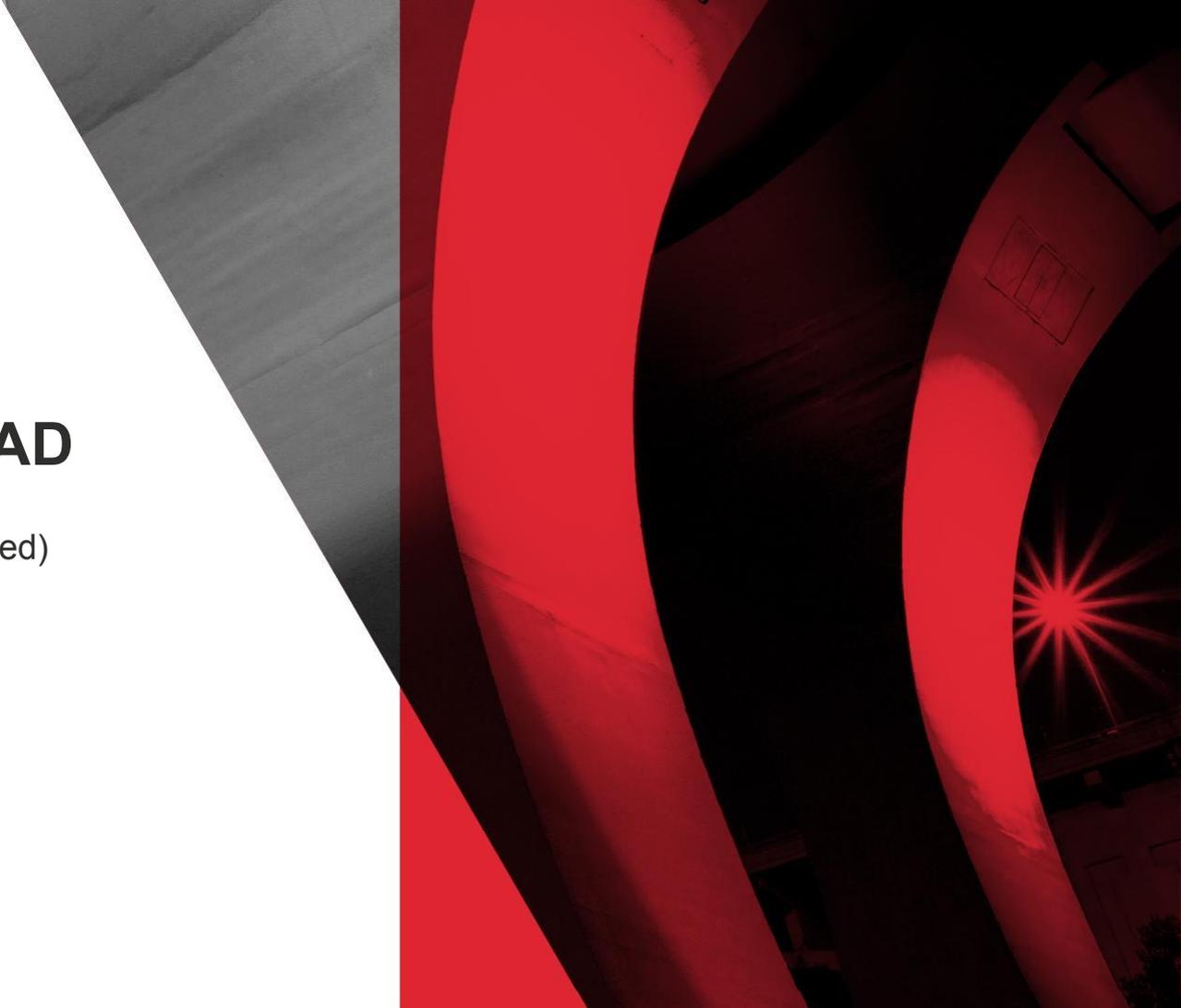
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SECTION HEAD

Additional text (if needed)





2023 INTERNET2
TECHNOLOGY
exchange

InCommon Futures2: What's next for InCommon

Marc Wallman

Vice President Information Technology, North Dakota State University and Chair, InCommon Steering Committee

Kevin Morooney

Vice President Trust and Identity Services, NET+ Cloud Services at Internet2



Outline



Past



Present



Future

But first,
what is “InCommon Futures2” ?

InCommon Futures2

... is a project being undertaken by the InCommon Steering Committee to help guide a vibrant future for InCommon.

What is InCommon?



- InCommon is an infrastructure, tools, community and organization
- **Infrastructure:** a trust federation enabling federated access to data and tools that enable national and international collaboration
- **Tools:** software, services, training, standards (development and adoption)
- **Community:** thousands of people who share, collaborate, and define the future of identity and access management in higher education
- **Organization:** a single member LLC nestled within Internet2, with staff dedicated to deliver on the infrastructure, tools development and community curation

What is InCommon?



Federation

**Community
Development**

eduroam

Software
(Trusted Access Platform)

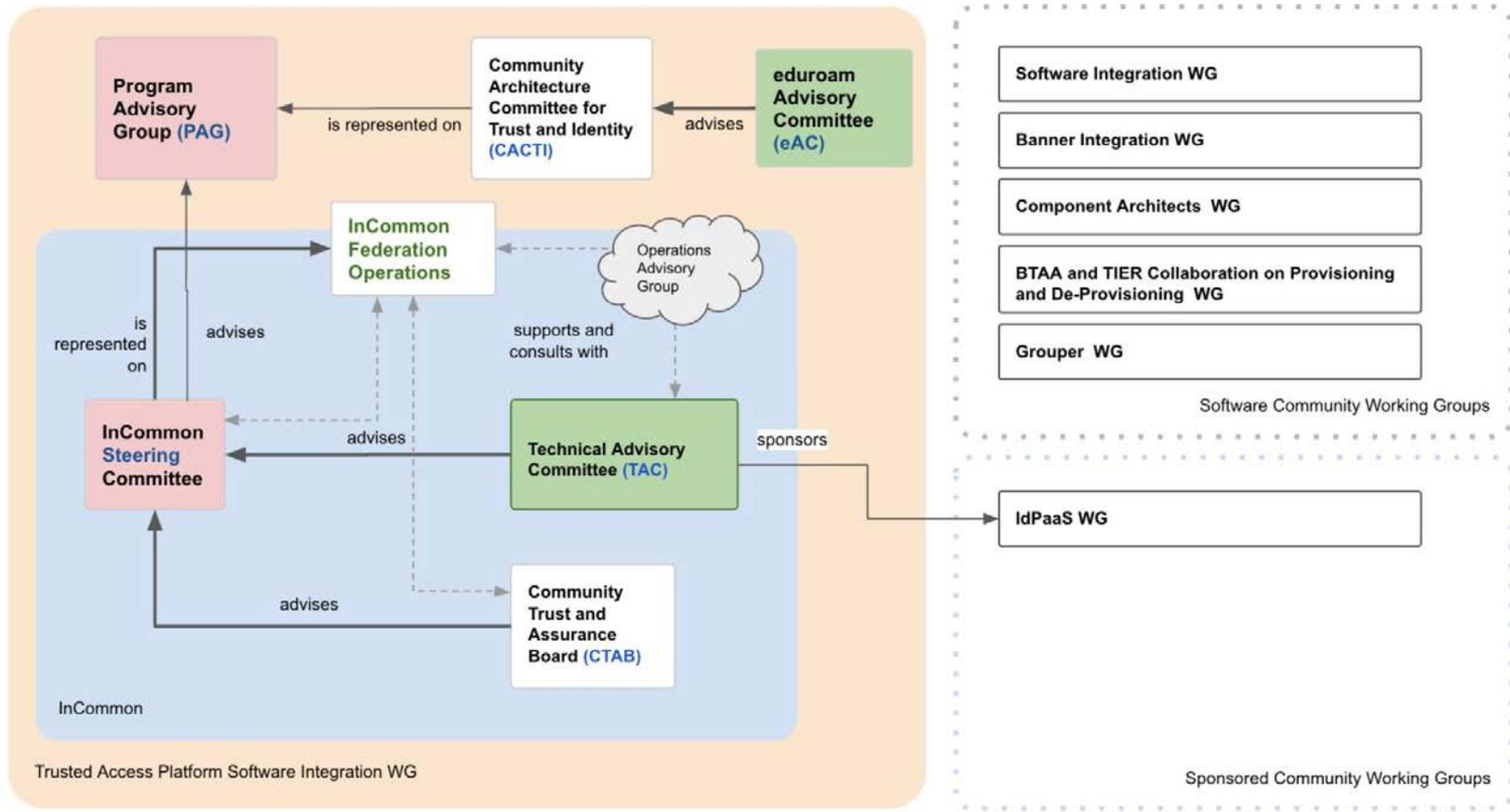
**Education &
Consulting**

**Certificate
Services**

Who is the InCommon Steering Committee?

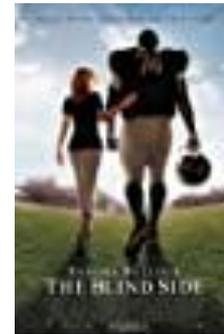
Member	Role	Organization	Term Ends
Marc Wallman	Chair	North Dakota State University	2025
Chris Misra	Vice Chair	University of Massachusetts Amherst	2023
Rachana Ananthakrishnan	Secretary	Globus, University of Chicago	2024
Brad Christ	Member	Eastern Washington University	2025
Jeff Erickson	Member	National Institutes of Health	2025
Bernie Gulachek	Member	University of Minnesota	2025
Kristi Holmes	Member	Northwestern University	2023
Jeremy Livingston	Member	Stevens Institute of Technology	2023
Christine Miki	Member	Benelogic	2024
Laura Paglione	Member	Spherical Cow Group	2023
Dave Robinson	Member	Grinnell College	2025
Jim Stewart	Member	UETN	2025
Ann West	Member	Internet2	—
David Bantz	Liaison from CTAB	University of Alaska	2023
Margaret Cullen	Liaison from CACTI	Painless Security	2025
Keith Wessel	Liaison from TAC	University of Illinois at Urbana-Champaign	2025
Kevin Morooney	Advisor	Internet2	—
Steve Zoppi	Advisor	Internet2	—
Klass Wierenga	Advisor	GEANT	—
Elaine Alejo	Flywheel	Internet2	—

<https://incommon.org/community/leadership/>





Past





2009 was a great year!



InCommon Future Report and Recommendation

Presented to the Internet2 Board of Trustees, July 2009, for discussion

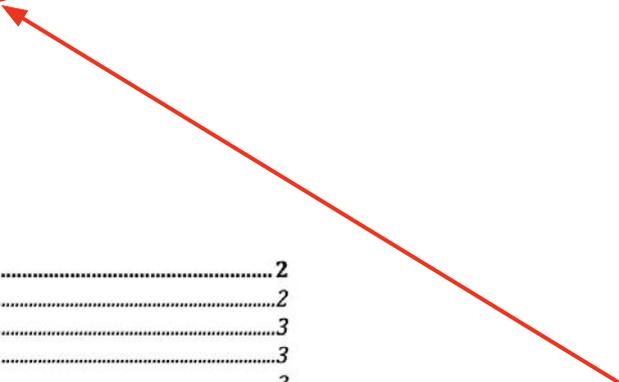


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- Brand recognition and confusion for InCommon, Internet2, and transitioning projects

11. The InCommon Future Group

Amy Philipson, Pacific NW Gigapop, (Internet2 AMSAC)

Chris Shillum, Elsevier, (InCommon Steering)

Clair Goldsmith, UT System, (InCommon Steering)

Cliff Lynch, CNI, (Internet2 RAC)

Doug Van Houweling, Internet2 CEO

Jack Suess, UMBC, (InCommon Steering, Internet2 AMSAC)

John Krienke, Internet2, InCommon

Ken Klingenstein, Internet2, U Colorado, (InCommon Steering)

Kevin Morooney, Penn State, (InCommon Steering)

Lois Brooks, Stanford, (InCommon Steering)

Richard Katz, EDUCAUSE

Rosio Alvarez, Lawrence Berkeley Labs, (Internet2 RAC)

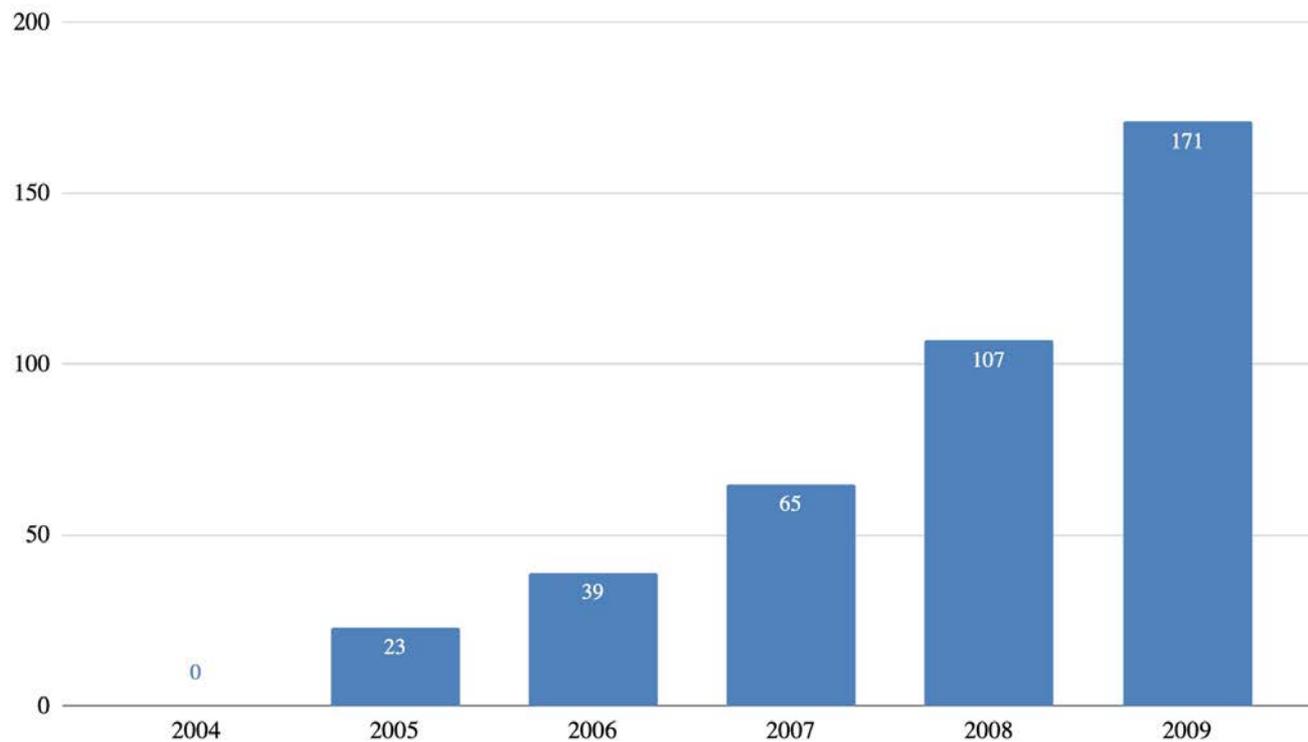
Ray Ford, U Montana, (Internet2 AMSAC)

RL 'Bob' Morgan, U Washington, (MACE, InCommon TAC -- Technical Advisory Committee)

Rick Summerhill, Internet2 CTO

Sally Jackson, U Illinois, (Internet2 AMSAC)

InCommon Participants Year-by-Year



Recommendation
Structure: A trust services platform
Structure: Foundation establishment
Governance: establish InCommon Board of Directors
Membership: NSF
Membership: NIH
Membership: DoE
Membership: State-based, K-12
Membership: Service provider companies and orgs
By Q2 2010, InCommon should develop a clear mission statement and a funding plan to ensure the continued success of core federation services and core middleware research and development.
Internet2 commits to continued funding, organizational development, and growth of InCommon services and foundation for the next three years. Concurrently, InCommon should work toward financial cost-recovery of the InCommon Identity Federation by Q4 2012 and should seek out additional investment partners, particularly those interested in the foundation's research and development.
Internet2 remains committed to the success of this activity and to the growth and stability of InCommon, and should fund additional staff beginning September 2009 as outlined in the Staffing section of this document, with the understanding that all investments should continue to be repaid, as has historically been the case between Internet2 and InCommon.
For the duration of this plan, Internet2 should continue to provide operational and administrative staff and services, including secure metadata registry, registration authority support, accounting, grant administration, technical and meeting support, human resources, and office infrastructure at a rate commensurate with costs.
Internet2 should strive to bring at least 75% of its members into the InCommon Identity Federation by the end of 2010.
InCommon should analyze additional service opportunities that relate to or increase the value of its core services. Examples are a server certificate service, core identity federation services for states or regional consortia. Investment and business plans for any new opportunities in 2010 should be articulated by Q3 2009.
InCommon should, with additional staff support, develop a training and adoption program (either internally or through community and commercial partnerships) in Q2 2010.
InCommon should, with additional staff support, develop a plan by Q1 2010 for engagement and outreach work to build partnerships with agencies, companies, and volunteers to build support for federated partnerships and distributed campus services.
InCommon should launch the Bronze and Silver assurance profiles by Q4 2009, with a demonstration pilot ready in September of 2009 and presented at the Internet2 Fall member meeting.
InCommon should develop a new pricing plan for the InCommon Identity Federation service that accounts for all actual costs of operating the federation via a price increase in 2010 and a tiered pricing model by calendar year 2011.

2009 InCommon Futures Report Card

Recommendation	No	No but...	Yes but...	Yes
Structure: A trust services platform				X
Structure: Foundation establishment	X			
Governance: establish InCommon Board of Directors	X			
Membership: NSF			X	
Membership: NIH				X
Membership: DoE		X		
Membership: State-based, K-12		X		
Membership: Service provider companies and orgs			X	
By Q2 2010, InCommon should develop a clear mission statement and a funding plan to ensure the continued success of core federation services and core middleware research and development.			X	
Internet2 commits to continued funding, organizational development, and growth of InCommon services and foundation for the next three years. Concurrently, InCommon should work toward financial cost-recovery of the InCommon Identity Federation by Q4 2012 and should seek out additional investment partners, particularly those interested in the foundation's research and development.		X		
Internet2 remains committed to the success of this activity and to the growth and stability of InCommon, and should fund additional staff beginning September 2009 as outlined in the Staffing section of this document, with the understanding that all investments should continue to be repaid, as has historically been the case between Internet2 and InCommon.		X		

Recommendation	No	No but...	Yes but...	Yes
For the duration of this plan, Internet2 should continue to provide operational and administrative staff and services, including secure metadata registry, registration authority support, accounting, grant administration, technical and meeting support, human resources, and office infrastructure at a rate commensurate with costs.			X	
Internet2 should strive to bring at least 75% of its members into the InCommon Identity Federation by the end of 2010.				X
InCommon should analyze additional service opportunities that relate to or increase the value of its core services. Examples are a server certificate service, core identity federation services for states or regional consortia. Investment and business plans for any new opportunities in 2010 should be articulated by Q3 2009.			X	
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InCommon should launch the Bronze and Silver assurance profiles by Q4 2009, with a demonstration pilot ready in September of 2009 and presented at the Internet2 Fall member meeting.				X
InCommon should develop a new pricing plan for the InCommon Identity Federation service that accounts for all actual costs of operating the federation via a price increase in 2010 and a tiered pricing model by calendar year 2011.		X		

Context for the 2009 Report

- Audience: Internet2 and the Internet2 Board of Trustees
- It wasn't entirely clear if InCommon was going to make it.
- Community leaders that strongly believed in its importance wanted to weigh in on what was going to be necessary to scale “pilot success.”
- A critical mass of community leaders and Internet2 decision makers was necessary to create and allocate the resources necessary for success.



Present

DENVER

MAY 23-25, 2022



2022
Leadership **EX**change
SERIES

WE LOOK FORWARD TO SEEING YOU AT LEADERSHIP EXCHANGE NEXT WEEK!

We can't wait to see you next week in Denver, Colorado. As you prepare for your trip, we want to provide you with some helpful resources and information about the event.

The Leadership Exchange will take place at [The Westin Denver International Airport](#). We will kick off the event with social networking time on Monday, May 23 starting at 6:00 p.m. MT. Join us in the Grand Foyer for drinks and hors d'oeuvres to reconnect with colleagues.

On Tuesday, May 24, join us for breakfast at 8:00 a.m. MT in the Alder ballroom to start your day. The official program will begin at 9:00 a.m. [We have a great lineup of sessions planned](#) with opportunities for discussion and we have built in plenty of time in the agenda to allow you to connect with peers and colleagues. We will round out the day with a happy hour/hors d'oeuvres. Dinner will be on your own. Programming will continue Wednesday starting with breakfast at 8:00 a.m. and we'll wrap up the event by 12:00 p.m.

FIVE-YEAR ROAD MAP

WE ARE HERE

PHASE 1

PHASE 2

PHASE 3

PROGRAM ADVISORY GROUPS

TOWN HALLS

1:1 MEETINGS

IN-PERSON

“FEED BACK”

PPC

SECURITY

NETWORK

CLOUD

PAGs

WORKING GROUPS

COMMUNITY

REFINEMENT

CATEGORIZATION

PRIORITIZATION

DIRECTED CONVERSATIONS



DRAFT

The landscape has changed

Landscape (source: Crunchbase.com)

- There are **1,401** Companies in the “**Identity Management**” Category marked as “Active”
 - *There are **120 MORE** Companies registered since 2020 (1,281).*
- There are **172** Companies in the “**Identity and Access Management Software**” Category
 - *There are **150 FEWER** Companies registered in this category since 2020 (322)*

Status	2020	2021
Closed after 2015	17	20
IPO	8	18
Operating	1254	1401
Was Acquired	43	157
Made Acquisitions	---	132



Sampling of Offerings and Practitioners:

Popular Commercial Product and Service Offerings

Okta

[\$229.3M Funding | Founded: 2009 | IPO: 2017 \$187M]

Oracle Identity Manager

[Founded 1991 | Acquired: 2005]

PING Identity

[Founded 2002 | \$128.3M Funding | Bought by Vista Equity Partners for \$600M 2016 | IPO: 2019 \$187M]

ForgeRock

[\$233.7M Funding | Founded: 2010 | Venture Backed]

Agency Affiliates of Internet2 and the Higher-Education and Research Community

Alfa Jango

Cirrus Identity

Evolveum

Exclamation Labs

Spherical Cow Group

Unicon

West Arete

Additional “Special Experts”

University Assignees, Independent Contractors and Consultants, Global Relationships, CI Logon (Research Organisations)

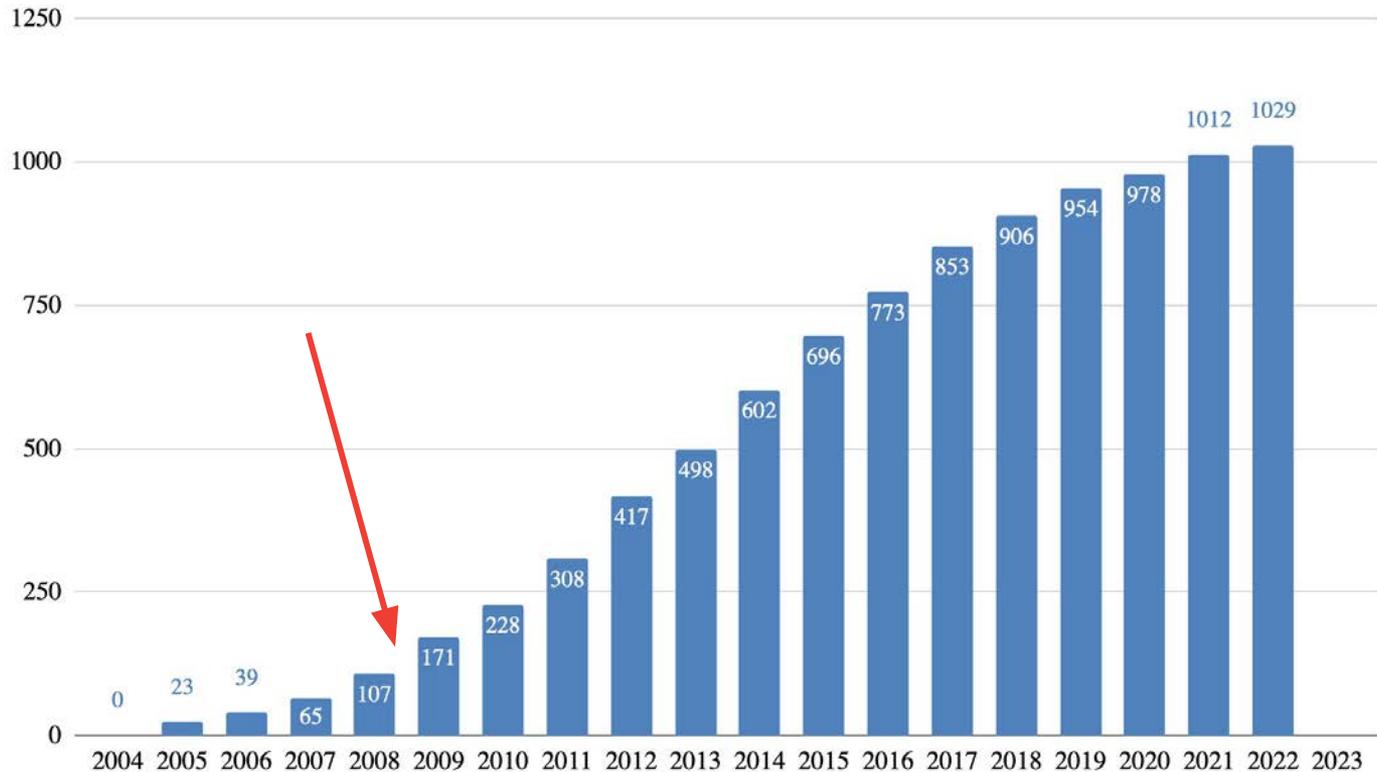
One example...

Cumulative Funding Raised Over Time



InCommon has changed, too.

InCommon Participants Year-by-Year





- 27,000,000 students, researchers and educators
- 5,458 identity providers
- 3,621 service providers

- | | |
|----------------|-------------------|
| Albania | Malaysia |
| Algeria | Malta |
| Argentina | Mexico |
| Armenia | Moldova |
| Australia | Mongolia |
| Austria | Montenegro |
| Azerbaijan | Morocco |
| Bangladesh | Mozambique |
| Belgium | New Zealand |
| Brazil | Nigeria |
| Bulgaria | North Macedonia |
| Canada | Norway |
| Chile | Oman |
| China | Pakistan |
| China | Peru |
| Colombia | Poland |
| Croatia | Portugal |
| Cyprus | Romania |
| Czech Republic | Saudi Arabia |
| Denmark | Serbia |
| Ecuador | Singapore |
| Estonia | Slovakia |
| Finland | Slovenia |
| France | South Africa |
| Georgia | South Korea |
| Germany | Spain |
| Greece | Sri Lanka |
| Hong Kong | Sweden |
| Hungary | Switzerland |
| India | Tajikistan |
| Indonesia | Thailand |
| Iran | The Netherlands |
| Ireland | Trinidad & Tobago |
| Israel | Turkey |
| Italy | Uganda |
| Japan | UK |
| Kenya | Ukraine |
| Kyrgyz | Uruguay |
| Latvia | USA |
| Lebanon | Zambia |
| Lithuania | |
| Luxembourg | |



IAM Online

InCommon's mostly monthly webinar series that delivers interactive education on timely IAM topics. See our [YouTube channel](#) (combined with our European friends GÉANT) for past webinars.



The time is right to do the next
InCommon Futures Report.



Future

Why is this important?

1. Identity management services are the most important services we run. They bring **coherence** to all of the other services we operate.
2. They are critical components in IT **security** and risk management.
3. Our identity landscape is **unlike any other sector**.

Some of what I want for my campus...

1. Permissions frameworks for individuals to be **consistently implemented** across all university offered services.
2. Permissions frameworks for individuals to be **centrally managed and auditable** across all university offered services.
3. Permissions to **dynamically/automatically change** and adapt as people's roles and responsibilities change.
4. Approaches to the above goals to be **normalized** across the higher ed community to the greatest extent possible.

Some of what I want for our community....

1. Greater participation in InCommon Federation (institutions and vendors)
2. Greater uptake of T&I tools
3. Lower bar for install and operations of T&I tools

Some of what I want from our community....

1. Others to contribute to the list of wants.
2. Others to contribute to prioritizing the communal list of wants
3. Participation at some level in the Futures 2.0 process

Some of the questions to consider

- What are the major trends in Higher Education and Research that the community will need to respond to in the next 5 years?
- What are the corresponding trends in industry and other external forces that institutions will have to consider?
- How will these two questions affect what higher education and research IT will need to support or protect against?
- What capabilities need to be developed and what is no longer needed?
- What will Internet2's InCommon do to provide strategic value to the communities we serve and what should it not do?
- Whom do we serve and what audiences will be strategically important as we move forward?

Guiding Principles

- Our work together must stand up to the lens of the broader community. We must assume that we operate in transparency by default.
- It is essential to foster confidence and inclusion in our activities and messaging.
- The process we design to engage the community and develop the additional artifacts will be as important as the final document we produce. The process of producing this document has value in and of itself. This process is a community-engagement exercise with expected goodness and “bounce.”
- We want individuals to see themselves (or someone like them) as contributing to the process in some way.
- Our decisions, strategies and recommendations can be traced to community or research-driven data or citations.
- The actors guiding this process are the community and Internet2. All decisions are driven by consensus by the Steering Futures2 Working Group.
- We will respect the opinions, business needs, and time of all members. We are advocates for each other.
- We will facilitate preparation with clear communication and the timely dissemination of information to Steering Committee and the Community at-large. The likelihood of an impact will be higher if we communicate and tell the story as it unfolds.

An update on

Futures2

2028 Strategy

A collaboration between Internet2 and SecondMuse

Introducing SecondMuse

HELLO



Sam Letscher

Research & Design



Mina Aiken

Project Manager



Neisan Massarrat

Global Head - Technology
Programs



Katey Metzroth

Global Head of Design
& Innovation

Internet2 is engaging SecondMuse* as part of Futures2 Planning.

SecondMuse is facilitating a collaborative process between the InCommon Steering Committee, Internet2, a Focus Group, and the broader InCommon community to determine an aligned, inclusive strategic direction for Identity & Access Management (IAM) within InCommon.

This 3-part scope of work includes community consultation and desk research to gather insights, synthesis, and delivering a 2028 Strategic Report in January 2024.

*SecondMuse is an organization that brings communities together to build economies that benefit people and protect the planet.

The SecondMuse APPROACH



Aim to establish a community-centered view on what would transform the system



Consult key stakeholders and the broader community to reveal root factors and greatest opportunities for transformation



Establish a shared vision for change and a defined, unique value proposition within the community's broader ecosystem

Program DELIVERABLES



DEFINE & SCOPE (Until Aug 7)

Deliver a refined project plan that includes:

- Priority stakeholders to engage
- Formal activities and timeline
- Major questions we'll answer
- Guiding principles



EXPLORE & ANALYZE (Aug 8 - Nov 6)

- Design and execute needs assessment, 8-10 stakeholder interviews, a participatory workshop, & desk research
- Synthesize combined research findings to prioritize trends, objectives, potential strategies and intervention points
- Deliver a 3-page report from this process



STRATEGIES & RECOMMENDATIONS (Nov 6 - Jan 22)

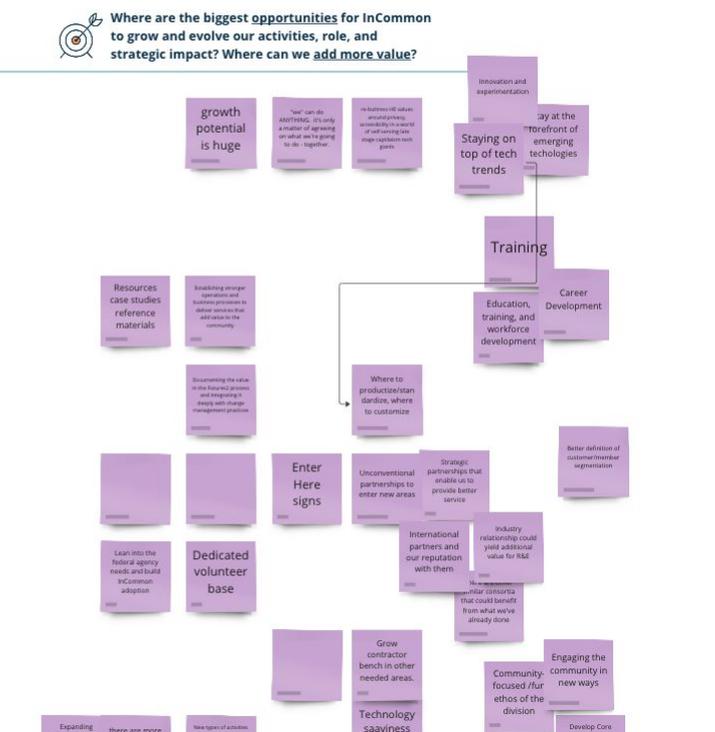
Develop a 8-10 strategy report that covers identified research topics, concluding with a final strategy report to be shared with the community.

PROGRESS TO DATE

So far, we have:

1. Kicked off work by presenting our process to the InCommon Steering Committee
2. Updated activities according to expressed needs and objectives, and delivered a revised plan to Steering
3. Set and begun executing a Research Plan
4. Kicked off the Consultation phase of our work with 3 facilitated sessions with InCommon Advisory, Catalysts, Staff
5. Deployed the Futures2 Needs Assessment Survey

A virtual, collaborative process



Your participation is *critically* important.

Please take 10-15 minutes to complete the
Futures 2 Needs Assessment Survey



<https://forms.gle/8DbKfs1R4meAPuAj8>





Before you go...

ACAMP Unconference 2023 Home

Created by Elaine Alejo (internet2.edu), last modified by jean.chorazyczewski@at.internet2.edu on Sep 14, 2023



Welcome to the 2023 ACAMP Unconference!

ACAMP Dates: Thursday Sept. 21 and Friday Sept 22, 2023

Location: Hilton, Minneapolis, MN (See program for specific meeting room)

We hope you have enjoyed CAMP Week at TechEX23 so far. Content that's dedicated to identity and access management continues for 1.5 more days with Advance CAMP (ACAMP). ACAMP is an unconference, where participants develop the agenda at the beginning of the event. ACAMP then continues with as many as five breakout sessions per hour to discuss issues of interest to the international research and education identity and access management community. Each ACAMP session is documented by a group scribing process.

EVERYTHING IS OK!

The ACAMP Unconference is a highly participatory gathering where attendees use an amazingly fast and fun process to create an on-the-spot agenda that addresses the topics of greatest interest to them and then go to breakout sessions to dig into those topics. The motto is "everything is OK!" You can:

- Propose a topic if you want to pitch an idea, practice, or tool; or raise and delve into some problem. You don't need to have the answers!

<https://incommon.org/acamp2023>

Bring Your Unique Expertise to InCommon Advisory Committees

InCommon Community

[Submit a Nomination](#)

InCommon seeks enthusiastic volunteers to serve on its advisory committees. We invite your nominations for membership, including self-nominations. The window for nominations closes on **Friday, Oct. 1, 2023**, and new terms start in January 2024.

InCommon
COMMUNITY

Serving on InCommon committees is an excellent way to contribute to the community, broaden your professional

<https://incommon.org/community/leadership/join-incommon-advisory-committees/>

