

# IAM Online

## December 13, 2013

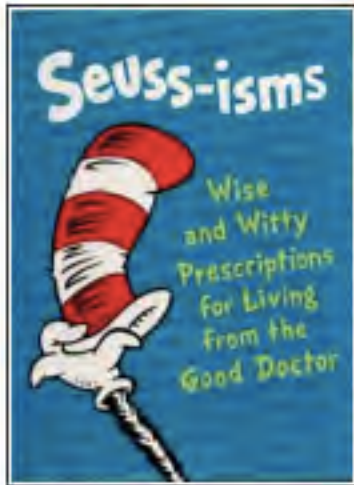
*Thank you to InCommon Affiliates for helping to make IAM Online possible.*



*Brought to you by Internet2's InCommon, in cooperation with EDUCAUSE*

# InCommon IAM Online December 13, 2013

**Seuss-isms:** Wise and Witty Prescriptions for Living from the Good Doctor



Dr. Seuss

HarperCollins Publishers Limited, 1999 - American wit and humor - 28 pages



21 Reviews



Jack Suess  
Jack@umbc.edu

# Vice President of Information Technology & CIO Jack Suess

Home

News

Media

Documents

Members

Settings

Spotlights



## Jack Suess & Sons

Technology Adoption Starts at a Young Age

This photo, taken from 1997, shows CIO Jack Suess with his two sons, Kyle (5) and Ryan (3). This is part of a larger article that appeared in UMBC Magazine.

Download



New Bark



**Jack Suess**

**Institutional Group**

1 member / 2 followers



Mr. John (Jack) Suess

Me in Haiku.

A Technologist.  
Father, husband, and leader.  
I swim, run, and bike

<http://my.umbc.edu/groups/jack>

# Poll

What is your institutional role?

- IAM Technical Specialist
- IAM Management
- Central IT Management
- Regional network
- None of the above

# Agenda For Discussion

1. The InCommon Futures Report - 2009-2012
2. Reflection and Rededication – 2013
3. Creating Trusted Identity in education and research, Goals for 2014-2016
4. Discussion



You have **BRAINS** in your **HEAD**.

You have **FEET** in your **SHOES**.

You can **STEER** yourself any  
**DIRECTION** you **CHOOSE**.

~ Dr. Seuss

# InCommon Futures Report - 2009

January 2009

- InCommon had under 100 participants and 1.75 staff.
- Report issued to Internet2 Board in July 2009
- Focus was on answering these questions
  1. Is this initiative strategically important to higher education?
  2. If so, how should this be organized and governed to broadly lead to success?
  3. What investments were needed to jumpstart this and build momentum?

# Futures Report (13 Recommendations)

1. Move beyond federation to focus on *Trust Services*
2. Establish an InCommon foundation for middleware dev.
3. Establish a management and governance structure with authority to make decisions that are necessary for InCommon's success. Expand membership to include other communities that collaborate with higher ed.
4. By Q2 2010. InCommon should have a business plan (done).
5. By Q4 2012. InCommon should break even financially.
6. Internet2 should provide working capital that will be repaid as identified in the business plan.



# Futures Report (13 Recommendations)

7. Continued support and administrative services from Internet2.
8. Internet2 will strive to bring in 75% of its members to InCommon by the end of 2010 ( presently at 61%).
9. InCommon should review new services, such as Certificate Service for launch in 2010 (did this in 2009).
10. By Q2 2010. InCommon should launch training and adoption programs to support new members (done).
11. By Q1 2010. InCommon should build partnerships (launched affiliate program).
12. By Q4 2009. Bronze and Silver profiles should be defined and launched (done in 2011).
13. For 2010. InCommon should adjust participant pricing to bring this in line with costs (done).

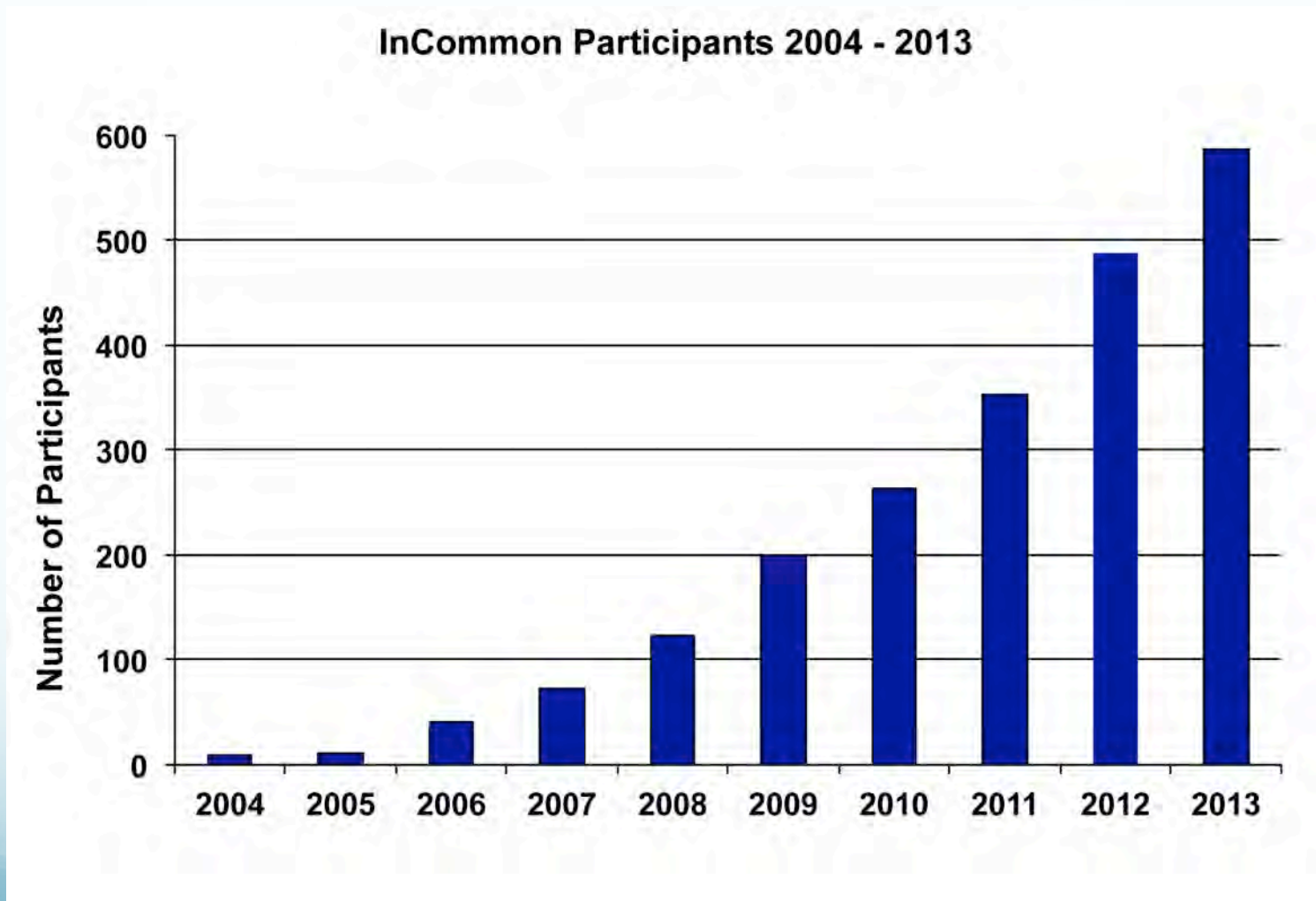
# Business Plan

- Called for rapid growth of about 50% per year over that time.
  - 2009 - 165
  - 2010 - 265
  - 2011 – 390
  - 2012 – 540
  - 2013 – 740
- Launch the Certificate service
- Launch the Assurance program
- Operate federation services for others

# Planned Approach

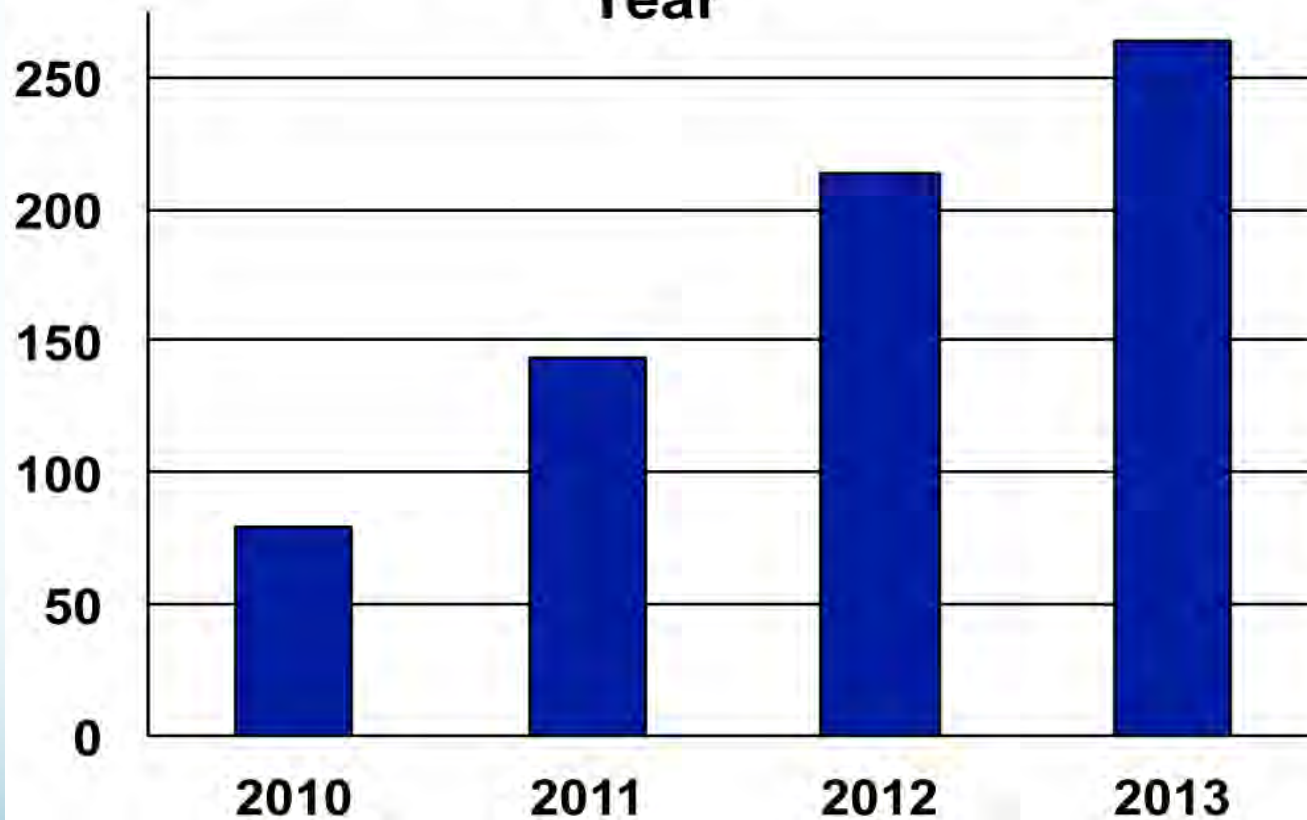
- Create a training and adoption program to support campuses.
- Leverage commercial partners to help make IAM and federation easier on campus.
- Work with Microsoft to make ADFS easy to use with federation services.
- Collaborate with regionals and systems to provide support for federation and services.
- Support Federal government FICAM initiative with high-value education partners – NSF and NIH – through assurance.

# InCommon Today



# InCommon Today

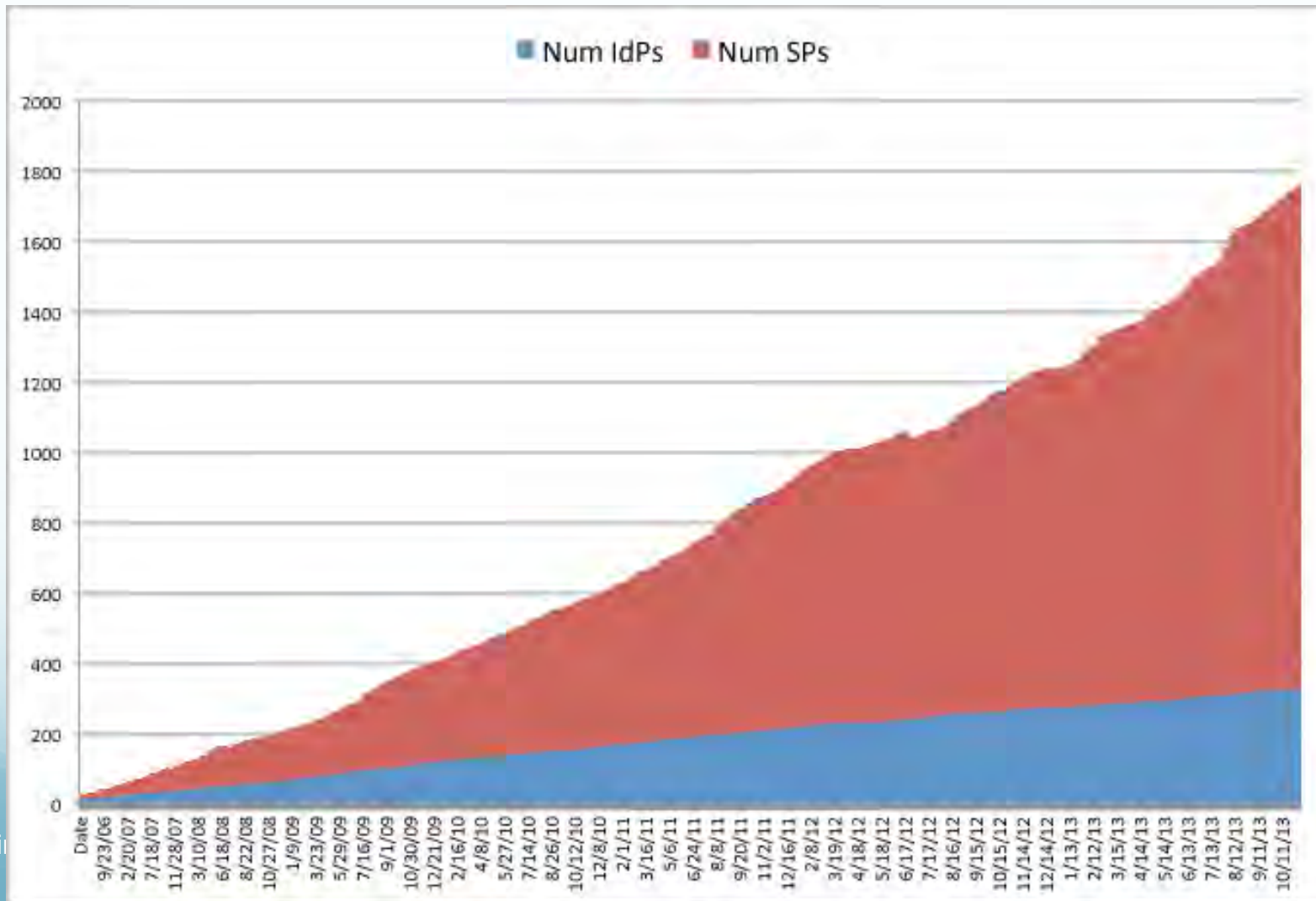
**Certificate Subscribers Year-by-Year**



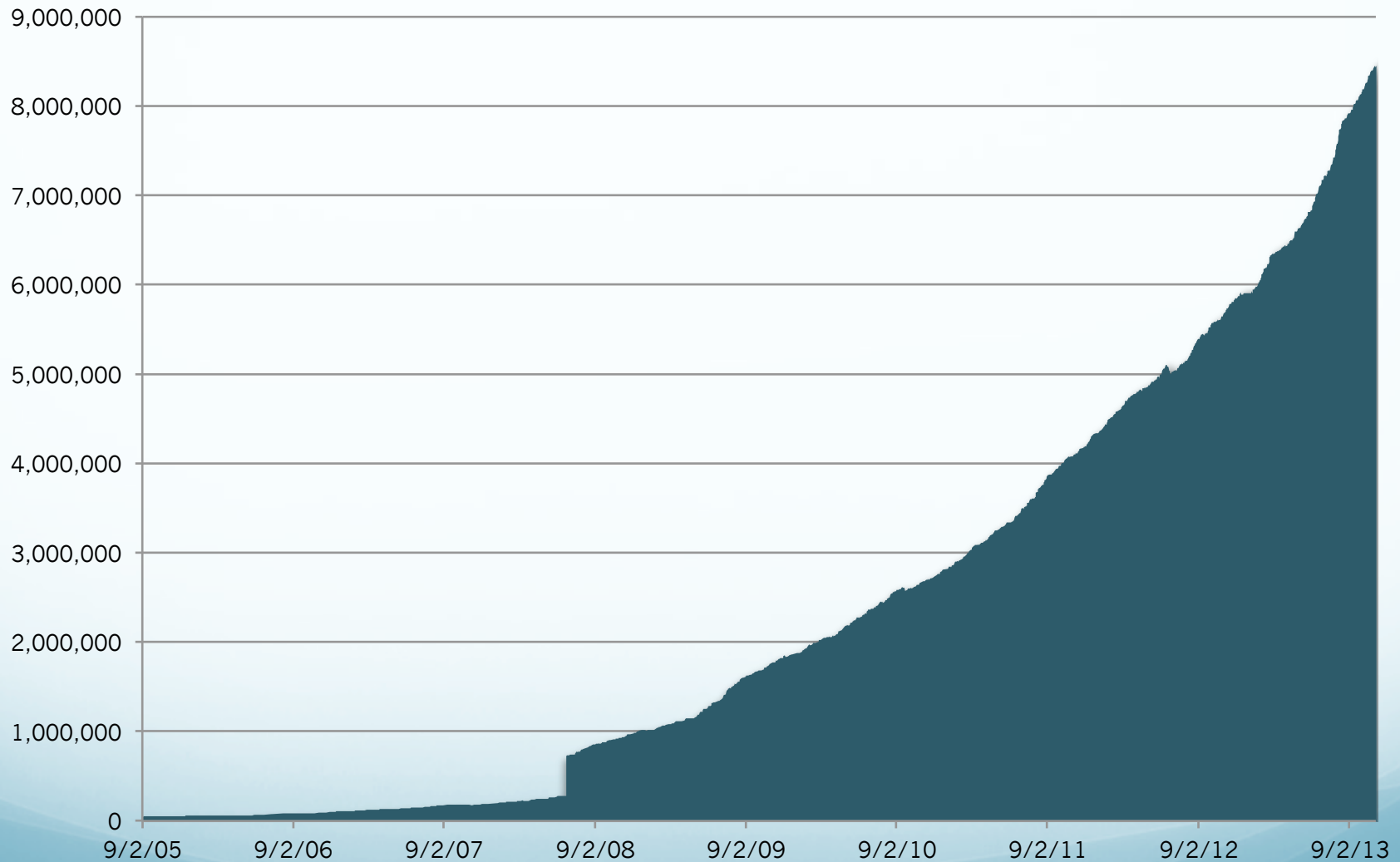


# InCommon Growth

Number of IdPs and SPs – 2006-2011



# Size of Metadata File Over Time



# Reviewing Where We Are Today

- 500% growth over 5 years (2009-2013) – from 105 to 588.
  - This growth has challenged our processes and approaches and requires new thinking to scale.
- Working with partners like the federal government takes time – this hurt assurance.
- In 2011, Internet2 announced the NET+ program, an initiative that requires InCommon, but NET+ service deployment requires time.
- Launching NET+ has required a lot of vendor interaction and discussion on provisioning that is informing how we think about cloud services.

# Comparing Reality to the Plan

Metric	Plan	Today
# participants	800	587
# higher ed	600	402
# sponsored partners	160	156
# labs/agencies	40	29
# certificate subscribers	200	263
# certified under assurance program	100+	2

# Poll

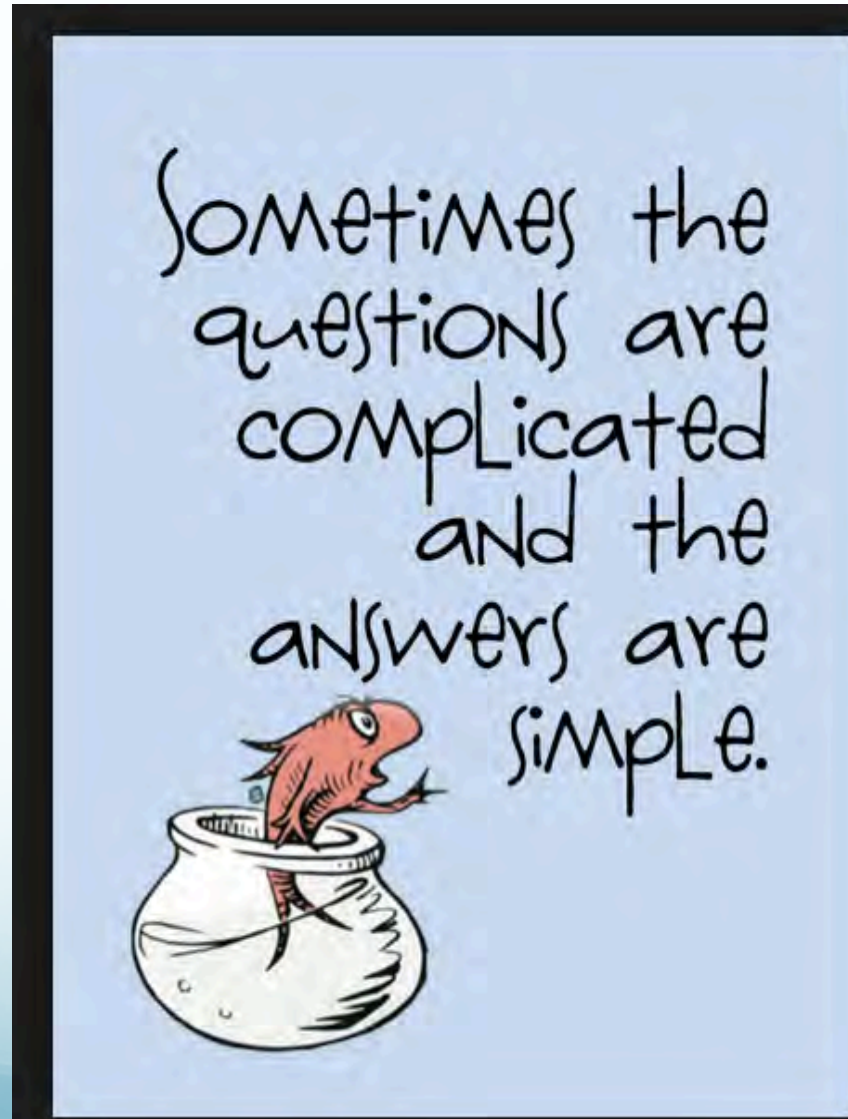
- What Is the greatest benefit you derive from InCommon today?
  - A consistent approach to deploying cloud services on campus.
  - A community of people that I can collaborate with and learn from.
  - A standards-based approach that I know is working to support my long-term needs.
  - An advocate for working with vendors and making high-value services available through federation.
  - I don't know if I get any value from InCommon.



# Poll

- What do **you** think is the greatest barrier to institutions participating in InCommon?
  - Federation is too technically complex.
  - Most institutions don't have a strategy for IAM.
  - Lack of commercial partners to assist in IAM and federation deployment.
  - The value proposition is missing – there are few compelling services that require federation.

# 2013 – Reflection and Rededication



# Drivers For IAM in 2013

- Massive Open Online Courses (MOOCs)
- Inter-institutional research collaboration
- Large and specialized shared inter-institutional resources
- Library and other information retrieval systems, including e-learning tools
- Grant administration systems through funding agencies
- ERP systems for human resources, financials, and student enrollment, *etc.*
- Systems for operational efficiency in multiple administrative areas, such as parking, benefits, prescription management, *etc.*

# 2013 EDUCAUSE IT Issues Related to IAM and InCommon

- 1 – Managing wireless and device explosion on campus
- 3 – Developing an institution-wide cloud strategy select the right sourcing and solution strategies
- 5 – Facilitating the appropriate balance between infrastructure openness and security
- 6 – Determining the role of online learning and developing a sustainable strategy for that role
- 7 – Supporting the trends toward IT consumerization and bring-your-own device
- 8 – Transforming the institution's business with information technology



## Identity Management in



Edit



Share



Add ▾



Tools ▾

## Higher Education - A View of the Landscape

13 Added by [Steven T. Carmody](#), last edited by [Bill Yock](#) on Nov 20, 2013 ([view change](#))

### Identity Management in Higher Education: A View of the Landscape - June 17, 2013

---

- [1. Executive Summary](#)
- [2. Identity in Higher Education](#)
- [3. The Process We Used](#)
- [4. What We Learned](#)
- [5. Observations and Recommendations](#)
- [6. Appendix - A Functional Model of the Identity Landscape](#)
- [7. Appendix - Implications for CIOs](#)
- [8. Appendix - The Project Survey](#)
- [9. Appendix - Top 10 IT Issues from EDUCAUSE](#)
- [10. Acknowledgments](#)

[https://spaces.internet2.edu/x/loM\\_Ag](https://spaces.internet2.edu/x/loM_Ag)



# Identity Landscape

*"Institutes of higher education and research are complex, highly dynamic, non-hierarchical organizations where people often have multiple simultaneous roles and relationships. Off-the-shelf identity and access management solutions do not generally meet the needs of higher education and research. In a very real sense, higher education is leading the creation of identity management solutions because it has to."*

# Nine Major Trends Impacting Identity

## InCommon Technical Advisory Committee Report

1. Improving the integration of NET+ providers with campus IAM for provisioning and deprovisioning
2. The graying of institutional boundaries. Today, services are increasing deployed across institutions
3. The expanding number and type of identity relationships on campus
4. Expanding the use of federation to small and mid-sized institutions as well as K-12
5. The evolving nature of privacy and what they may mean for federation and IAM
6. Enhancing the usability of this technology and providing support across multiple devices

# Nine Major Trends Impacting Identity

InCommon Technical Advisory Committee Report

7. Expanding the use of assurance and multi-factor security controls
8. The availability of robust tools to support audit and compliance
9. Developing reference implementations and conformance testing that holds vendors accountable to interoperability.

# TAC's Seven Recommendations to InCommon Steering

1. Generate a multi-year roadmap and timeline for IAM
2. Communicate regularly and often to CIOs and campuses
3. InCommon should collaborate with CIFER to create a reference platform to gauge vendor conformance
4. InCommon should work to identify best practices and policies that can be pre-configured into CIFER
5. InCommon should encourage the development of “Identity-as-a-Service” options for quick and affordable adoption by institutions
6. InCommon should work with HEISC to communicate the benefit of assurance for services on campus
7. InCommon should work with NET+ on SP security

# InCommon Steering Efforts

<https://spaces.internet2.edu/x/BQFkAg>

Dashboard › InC-Steering › ... › Planning\_2014 Browse ▾ Jack Suess ▾ Search

› InCommon Steering's Role in Trusted Identity in Education and Research

---

**InCommon<sup>®</sup>** InCommon Steering's ✎ Edit ✉ Share + Add ▾ ⚙ Tools ▾

## Role in Trusted Identity in Education and Research

✎ 3 Added by [Jack Suess](#), last edited by [Michael R Gettes](#) on Jul 15, 2013 ([view change](#))

### Background

As background, higher-education, through a variety of efforts under the auspices of Internet2, EDUCAUSE, and InCommon have been working on the challenges of identity and access management (IAM) since the late 90's. These efforts were amongst the first of any sector to realize the importance that identity would have in our organizations. While not complete, these grassroots efforts have led to efforts across the globe to advance IAM and have helped *demonstrate* the critical role Identity will play in shaping the future delivery of IT enabled services, including education. Today, mainstream organizations such as [Gartner](#), [Forrester](#), [IBM](#), and [Oracle](#) all highlight the importance of IAM in the enterprise, and by extension to the cloud. Similarly, we have seen the rise of mega-scale Internet services such as Facebook, Google, and Microsoft that now have extended their infrastructure to support 3rd party applications. These providers, often referred to as social network providers, now form the basis for providing authentication to thousands of 3rd party cloud applications and hundreds of millions of users. In higher education, tracking by many surveys indicates that at least 25%, or over 1000 institutions, are now outsourcing their email to Google or Microsoft. While these third-party services such as Google, Microsoft, and Facebook are used heavily by students, faculty, and staff in higher education these services lack the strong privacy and security

# Education Organizations and Identity

1. The CIFER project
2. The Shibboleth consortium
3. REFEDS and EDUGAIN
4. NSTIC and IDESG
5. Kuali RICE
6. Internet2 NET+
7. EDUCAUSE
8. InCommon



# From Trust Services to Trusted Identity

- Pace of change is challenging to institutions. Note:
  - EDUCUASE top-10 list
  - number of organizations working on identity-related projects
  - NET+ activities
- Institutions need guidance from a trusted source.
- Essential that education and research community develop scalable identity solutions

# Why InCommon for Trusted Identity

- Strong relationships and collaborations with all the projects and groups operating in the educational space
- Largest base of members of any of the groups actively working on identity.
- Internet2 has the resources to continue to make progress.
- We have the expertise across our members to do.

# Governance Principles Identified To Broaden InCommon's Mission

1. Governance – proactive and transparent governance
2. Planning – set and manage to priorities
3. Community – continue to build and maintain community
4. Financial – ensure resource availability to achieve goals and responsibilities
5. Operations – Ensure InCommon is a service institutions can depend upon
6. Regularly review and reaffirm our efforts

## Five Issues To Be Addressed by InCommon and Internet2.

1. Adequate staffing to accommodate growth and lead, manage, and implement programs and priorities
2. Tighter integration between InCommon and the broad set of partners in trusted identity
3. InCommon must work closely with NET+ leadership and help set budget priorities for trusted identity and inform services.
4. Review InCommon bylaws and procedures to assure they evolve to support the broader role trusted identity.
5. To broadly reach all of education, InCommon needs to maintain and build on its recognized brand and not be consumed inside Internet2.

# Poll:

- Should InCommon broaden its mission beyond trust services to trusted identity?
  - Yes, it is absolutely essential to meet my institutions needs.
  - Probably, but I'm not 100% certain.
  - Maybe, I'm unsure that trusted identity is important or that InCommon should try to lead this effort.
  - No, this is a mistake and will likely hinder InCommon's ability to meet my institutions needs.
- Text input – with comments.

## 2014-2015 Planning and Goals

**YOU'RE OFF TO GREAT PLACES.  
TODAY IS YOUR DAY.  
YOUR MOUNTAIN IS WAITING  
SO GET ON YOUR WAY.  
—DR. SEUSS**



# Identity Week – Seven Initiatives

- Steering met for a half-day and developed a set of initiatives to complete over the next two years. Details and timelines are still being formed – need your input.



# #1 – Increase the Value of InCommon to Participants

- Launch the Social-2-SAML gateway to leverage consumer identity and understand implications.
- Develop and operate community specific IdP's (such as CommIT) for different groups
- Identify high-value SP's to be brought into NET+
- Develop cost-effective, community-based shared services
- Make IAM easier by instantiating best practice in the design of CIFER and use as a reference platform.

## #2 – Make Federation Easier to Implement and Use

- Build tools to support delegation and easier administration – move from /etc/hosts to dns
- Support local custom metadata aggregates
- Improve and harden federation operations
- Develop “Federation-ready” guides, installers, and configuration managers
  - Document and improve support for ADFS
  - Work with affiliates to make their products easy to use.
  - Use CommIT to build reference platform for IAM on campus.

## #3 – Make Interfederaton a Community Priority

- Continue work on international efforts, especially those that support collaborative research
- Develop pilots that work with regionals to use interfederation with InCommon
- Work with NSTIC on efforts to develop cross-sector interfederation efforts.
- Continue to partner with the Federal government on their efforts to set up federal exchange for VA, Dept. of Ed, NIH, NSF.

## #4 – Innovate, Influence, and Lead Identity Efforts

- Our strength is that our model is international.
- Actively engage in, and leverage, the best work coming from REFEDS, eduGAIN, Shibboleth consortium, CIPHER, NSTIC, IETF, FICAM, FIDO, TF-EMC-2, and other initiatives
- InCommon needs to work closely with the Internet2 middleware software development efforts.
- Develop formal relationships with other groups to align their work into our roadmaps

## #5 – Putting Trust and Privacy into Identity

- Build an approach to privacy that creates an infrastructure for managing attribute release and user consent tools
- Extend the assurance program to meet our needs for better authentication to services
- Make multifactor authentication cost-effective and useful



## #6 – Increase InCommon’s Value for Learning and Teaching

- Develop ways to integrate Social2SAML, IAM, and federation with existing standards such as LTI and LIS for interoperability.
- Identify high-value learning and teaching services in that bring value to InCommon’s members (e.g. MOOC’s)
- Adding support for K-12 and other partnerships in state and regional consortia.

See <http://www.educause.edu/ero/article/new-architecture-learning>

## #7 – Increase the Value of InCommon for Research

- Increase outreach to researchers to leverage the efforts we are making in Social2SAML, multifactor, assurance, interederation, and community IdP to help them better enable access to research resources.
- Launch a collaboration services platform that can support research teams and virtual organizations.
- Focus on identifying large VOs to serve as pilots for working with InCommon as LIGO has.

# Poll:

- What efforts are most important to you or your institution over the next two years that you would want InCommon to focus on?
  - Input your answer in the text box

# Poll Discussion and Questions

**AND WILL YOU SUCCEED?  
YES YOU WILL INDEED!  
(98 AND 3/4 PERCENT  
GUARANTEED.)**

THE END - jack@umbc.edu

*Don't cry*  
because it's over.

*Smile*  
because it happened.

~ Dr. Seuss ~

## Evaluation

Please complete the evaluation of today's IAM Online:

[https://www.surveymonkey.com/s/IAMOnline\\_December\\_2013](https://www.surveymonkey.com/s/IAMOnline_December_2013)



*Thank you to InCommon Affiliates for helping to make IAM Online possible.*



*Brought to you by Internet2's InCommon, in cooperation with EDUCAUSE*