



# 2015 GLOBAL SUMMIT

APRIL 26-30 WASHINGTON DC

## CLOUD TECHNOLOGY EXPLORATION AND IMPLEMENTATION

David Barks, University of Maryland – College Park  
Keith Wessel, University of Illinois at Urbana-Champaign  
Bob Flynn, Indiana University  
Jeffrey Gumpf, Case Western Reserve University



# What's Driving Us Into The Cloud?

---

- Hint: it's not (mostly) about saving money
- Speed of innovation
- Responding to elasticity of demand
- Taking advantage of scale - geographic redundancy, backups, etc.



# Challenges of the Cloud

---

- Hint: Integration is not first on the list
- Contract language (FERPA, HIPAA, intellectual property)
- Billing and price aggregation across distributed units
- THEN integration. Don't tell me it's complicated to do it right. Tell me how to get started quickly and simply, even if we don't get all the bells and whistles.



# Differences from Local Deployment

---

- Provisioning / Deprovisioning
- Policy Alignment
- User Support
- Loss of control: both financially and technically
- Vendor models cater to corporate/enterprise norms, not university technical models



# What is the Cookbook?

---

- Best practices and recommendations for implementing federated services for campuses and cloud service operators
- Recipes that save resources
- Well-developed and tested from some of the most experienced kitchens



# Who is the CIC?

---

- Committee on Institutional Cooperation
- Collaborative effort between the Big Ten schools and the University of Chicago
- The CIC's size, technical breadth, and collaborative environment gives broad input and insight to this project.
- In the CIC, even a “small” federated service can be used by hundreds or thousands of users. Increased scale makes following best practices even more important.



# Topics in the cookbook

---

- Determining who our users are and what they're allowed to do
- Working within the federation
- Sharing the burden
- User experience
- Policy and Compliance
- Additional Content
  - Higher Ed. IdM Landscape
  - Case Studies
  - Sample RFP language



# A guide for every kitchen

---

- Four distinct guides for different audiences
- Vendor guide
- Developer guide
- Campus deployer guide
- IDP operator guide
- A list of recipes relevant to each group with links to the main document





# Challenges: Network IDs and Email Addresses

---

**CONSIDER** the relationship between ePPN and mail.

*Campus:* **DO** socialize the use of organizational email addresses.

*Campus:* **DO** make eduPersonPrincipalName useful.

*Vendor:* **DO** be cautious about using mail as a unique identifier.

*Vendor:* **DO** use appropriate attributes for friendly names.



# Challenges: Out-of-Band Metadata

---

DO register SAML metadata with the InCommon federation.

*Campus:* DO define a process for maintaining SAML Service Provider metadata.

DO understand your partners' limitations.



# Challenge: De-Provisioning

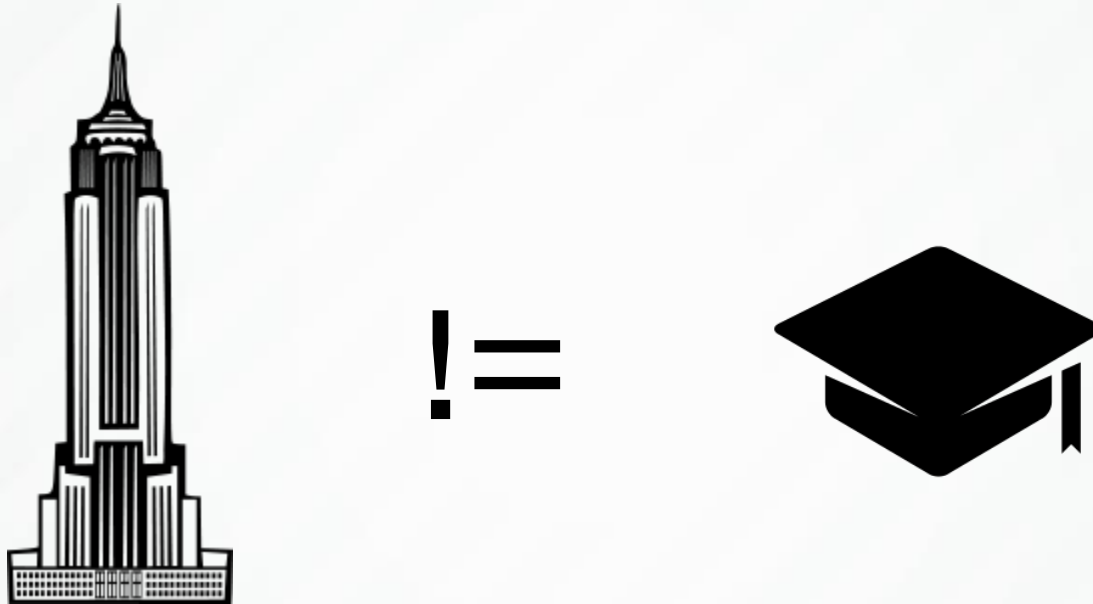
---

*Campus:* DON'T expect robust de-provisioning support.



# Challenge: Higher Education Environment

---



**Cloud Cookbook Section:**  
***Overview of Higher Education IDM Landscape***



# Want more?

---

Cookbook draft:

<https://carmenwiki.osu.edu/x/nLdCAg>

Vendor Guide:

<https://carmenwiki.osu.edu/x/uYPcAg>

Please share with your technical staff and project managers.

Feedback welcome!

Keith Wessel, [kwessel@illinois.edu](mailto:kwessel@illinois.edu)

David Barks, [dbarks@umd.edu](mailto:dbarks@umd.edu)

