#COSN14

Federated Identity and Access Management for Cloud Services

Extending InCommon Federation Services to K-12

Panel

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Agenda

- What is Federated Identity?

- InCommon & the K12 Federation Pilot Program

- Two Federation Pilots

  - Nebraska K-12 Identify Federation

  - Illinois Shared Learning Environment

- Questions

What is Federated Identity?

- A collection of organizations that have agreed to interoperate using a common framework for trust

- Participants use a common technology for the secure exchange (assertion) of agreed upon common attributes

- Federations include Identity Providers (IdP) and Service Providers (SP)
    - IdPs maintain identity databases and authenticate users
    - SPs have a protected online resource and authorize users

Benefits of Federated Identity Management

- Reduced Support

  - Reduces password resets and account creation

- Improved Security and Privacy

  - Passwords are not shared with provider

  - Providers receive only the data they need to provide appropriate access

- Potential Cost Savings

- Faster Integration of new services

- Shared Services (without creating new accounts)

Personal "Federated" Identity (OpenID, Oauth)

Sign in with your existing account

Facebook twitter
Google Windows Live ID
YAHOO! Linked in
Google apps

Google accounts

The application Khan Academy is requesting permission to access your Google Account.

Please select an account that you would like to use.

○ jfsiegl1@fcpsschools.net

Google is not affiliated with the contents of **Khan Academy** or its owners. If you sign in, Google will share your email address with **Khan Academy** but not your password or any other personal information.

[Allow]   [No thanks]   Sign in to another account

Real World Federations

InCommon & the K12 Federation Pilot Program

- An organization of more than 600 Universities, Government and Nonprofits laboratories, research centers and sponsored partners (vendors).

- A common <u>technical and business</u> framework for trusted, shared management of access to on-line resources.

CoSN 2014 Annual Conference   #COSN14

ISLE
K12 School Districts, Partners, & Data Centers

Create, Find, Map, Use, and Visualize Data Linked to Content and Standards enabling Personalized Learning and Career Preparedness for All Illinois Learners (P-K12 & Life-Long).

Learning Maps & Learning Content

Partner Institutions
Data Centers
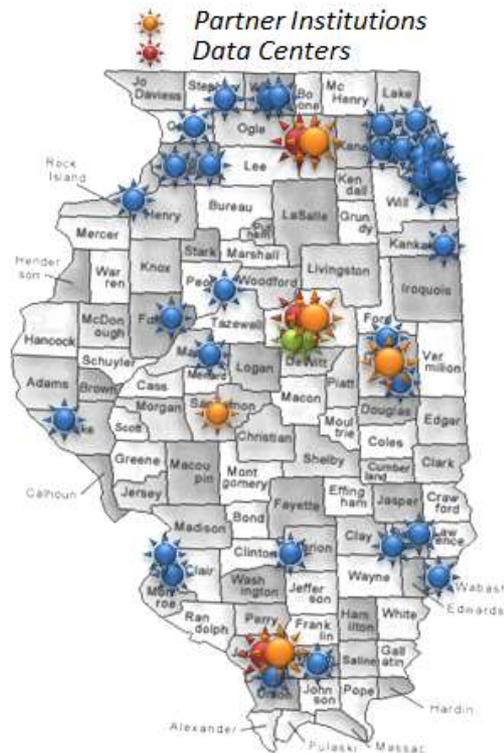
Dynamic Cloud Infrastructure

Apps

DB

Compute

Applications and Dashboards

Partners:

Students, Educators, Parents, Researchers, Schools, Institutions and Agencies empowered by the Middleware infrastructure and Dynamic Self-Service Procurement Cloud Platform Services:
*Learning Maps *Applications *Dashboards*Portal Integration
*Databases *Collaboration Tools *Development Incubator
*Advanced Analytics*Shared Data Services*Enterprise Services

Ms. Bullen's Data-Rich Year
When teachers are empowered with data, students do better

13 With his parents' approval, Ms. Bullen reviews Joey's performance data with his after-school tutor. Together, they note areas for improvement.

JOEY

Let's work on...

Good work!

14 Ms. Bullen meets with Joey to discuss how he needs to improve and set clear goals.

15 By the end of the year, grades and summative assessment data show Joey is back on track—though he will continue to need support in the future.

DATA

RECOMMEN-DATIONS

16 Ms. Bullen uses Joey's data to support her recommendation for his class placement next year. Her conclusion is based on objective—not anecdotal—data.

meetings are set up by grade level, subject matter, or other useful ways.

DATA

RECOMMEN-DATIONS

SUMMER

How well did I meet Joey's needs?

not admonish. They note areas of strength and for improvement.

better understand and use different types of data.

In 6th grade, 30% of students are falling off track

What do they have in common?

16 Ms. Bullen uses Joey's data to support her recommendation for his class placement next year. Her conclusion is based on objective—not anecdotal—data.
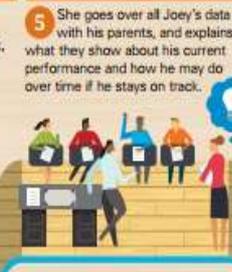
17 After meeting with her principal, Ms. Bullen studies her own value-added score and evaluates how she did with different students, standards, and concepts.

18 During the summer Ms. Bullen and other district teachers meet to solve problems using data. They identify trends and promising practices from throughout the district.

Who Will Use the Presentation Service?

CASE 1: Non-Authenticated Users, Anonymous

Unknown User May see only informational content

Known User No Affiliation & Organization Domain may use public Applications

CASE 2: Federated IDP Other Than IC IDP/P Authenticates User and implicitly claims identity authority for a user's logical session.
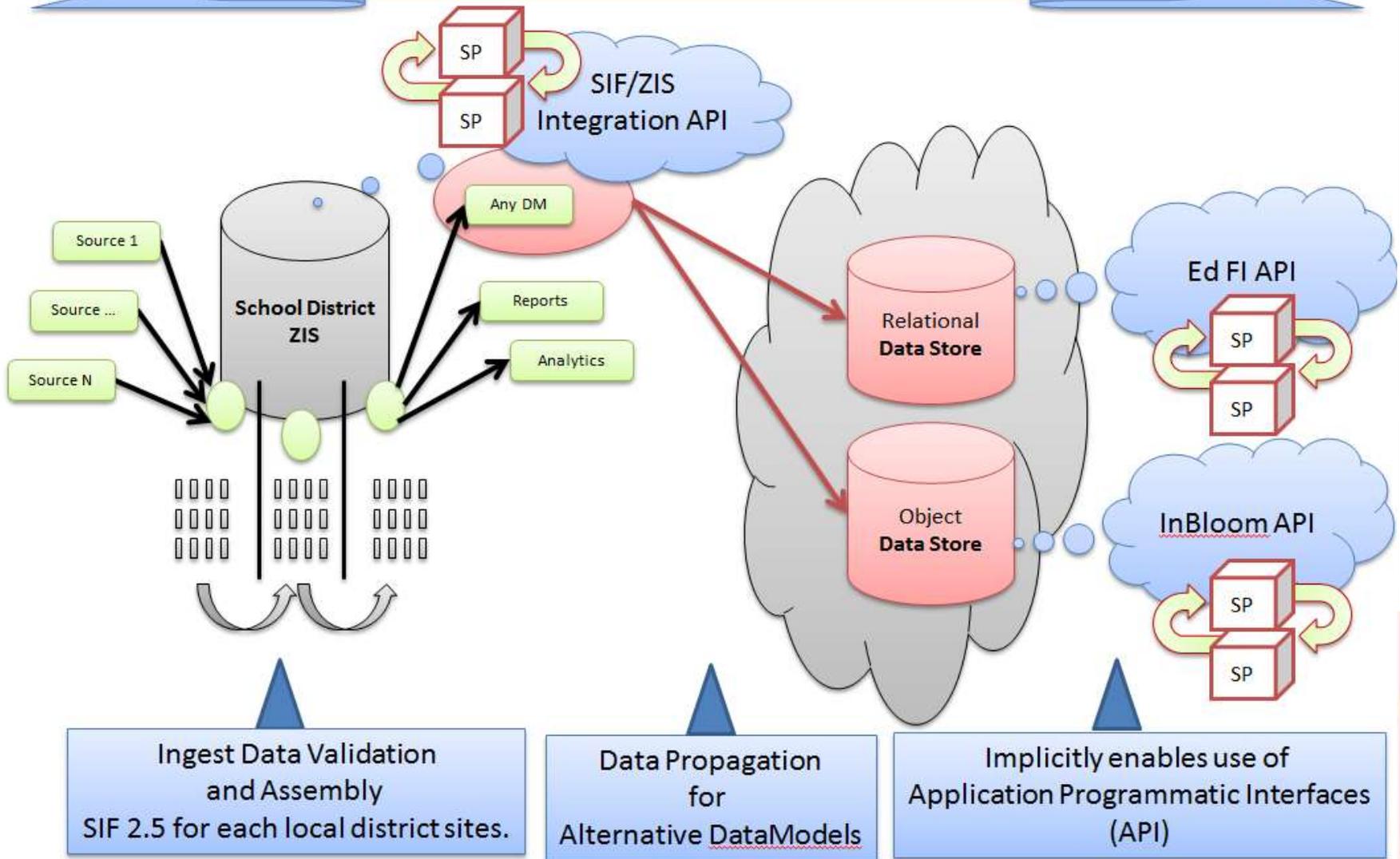
Presentation Service

Data

Identity

LEA Tenant

Known User with Affiliation assigned may use organizations informational content, services, and applications

CASE 3: Authenticated by IC IDP/P implies defined Domain and Affiliation with Authorities expressed in Entitlements
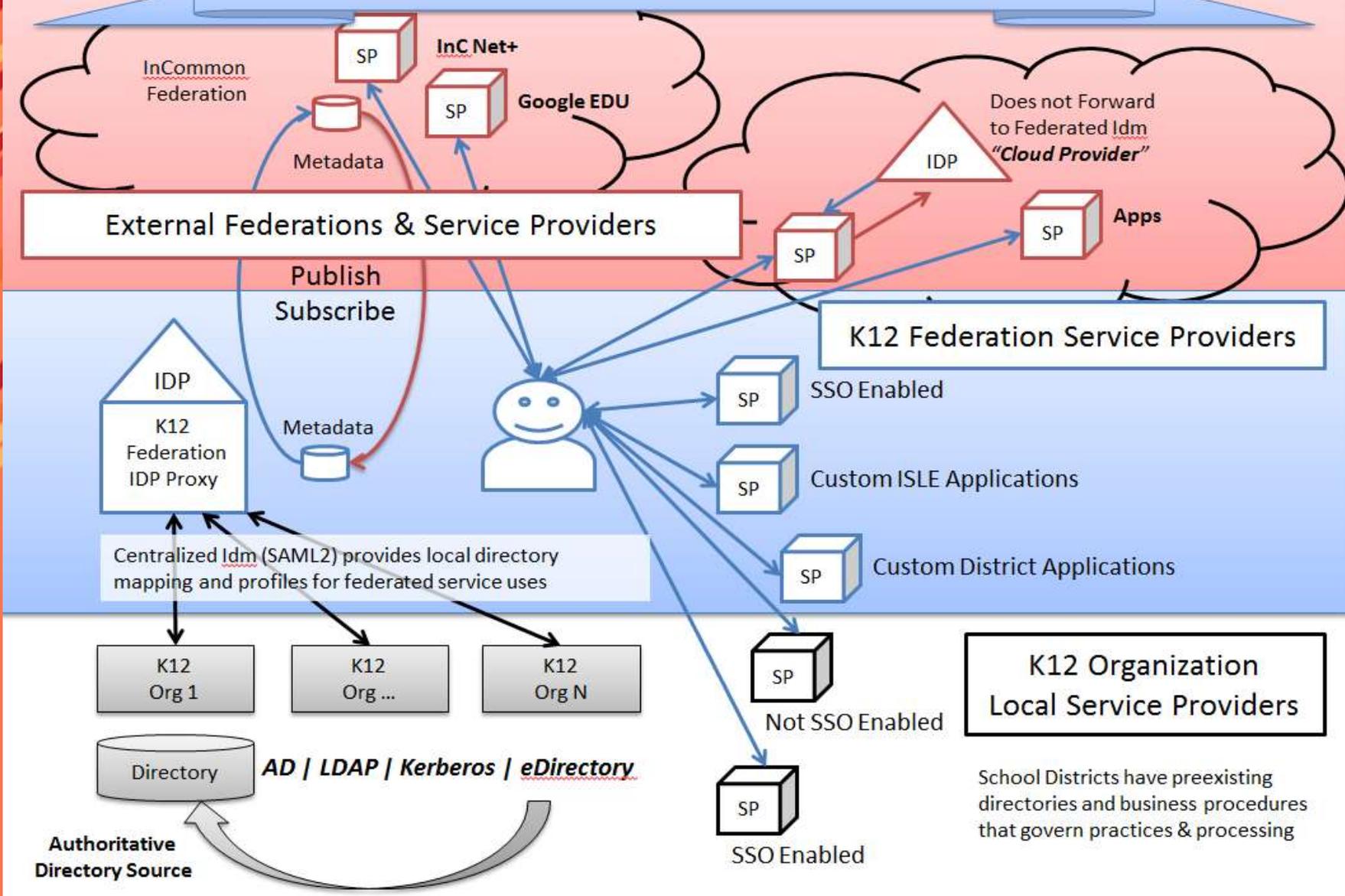
How Does Data Service Propagation Work for Apps?

What is the Federated Identity Service?
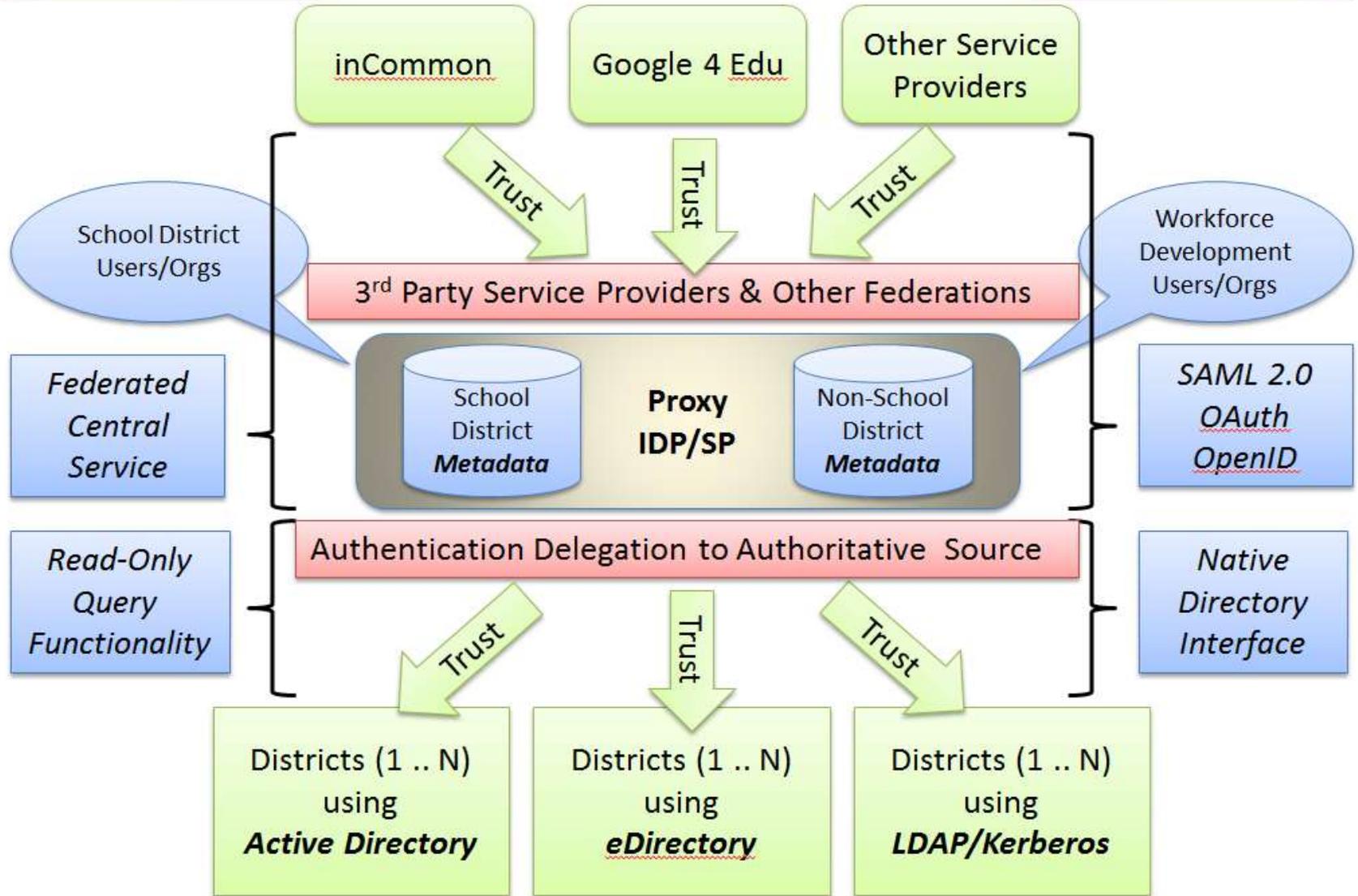
How Does the Federated Identity Service Work?

Questions

For More Information

Single Sign-On, Multiple Benefits

A COSN Primer on K–12 Federated Identity and Access Management

www.cosn.org/FederatedIdentity

Transforming Data into the Service of Learning

http://www.setda.org/wp-content/uploads/2013/11/Data-to-Information.pdf

http://www.setda.org/wp-content/uploads/2013/12/SETDA_standardsandinitiatives_May2013.pdf

A Day in the Life of Data….

http://www2.dataqualitycampaign.org/files/Data-Rich%20Year%20Infographic.pdf

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