SAML 2.0 – Standard-of-choice in the Public Sector
02/06/07 – STA-105

Moderator:
Brett McDowell - Liberty Alliance

Panelists:
Conn Crawford – Sunderland City Council, UK
Georgia K. Marsh – E-Authentication Initiative, U.S.
Søren Peter Nielsen - Danish Government
Tero Pernu – Presenting on the Finnish Board of Taxes, Finland
Welcome!

Today’s Objectives...

• Demonstrate why governments are adopting SAML 2.0 as panelists discuss the benefits and processes involved in SAML 2.0 migration

• Case studies will provide an overview of current deployment scenarios and roadmaps governments have put in place for the wide scale deployment of SAML 2.0

• Illustrate how open standards are helping governments meet regional regulatory demands and how vendors worldwide are helping to facilitate the adoption of SAML 2.0 technologies
SAML 2.0 - An Overview

“Phase 1”

ID-FF V1.1 (Liberty Federation)

ID-FF V1.2 (Liberty Federation)

SAML V1.0

SAML V1.1

SAML V2.0

OASIS SSTC

Nov 2002

OASIS Contribution

Apr 2005

OASIS Participation

Mar 2005

SAML2 adoption in Shib V2 APIs

Under way

Liberty Alliance

Jul 2002

Internet2 Shibboleth

Jul/Aug 2003

Shib 1.0/1.1 APIs

Shib 1.2 APIs

SAM L2 adoption and testing as Lib Federation

SAM L2 adoption in Shib V2 APIs Under way
SAML 2.0 – Driving Adoption

• Proven interoperability of vendor products is helping to drive global adoption
  — Nearly 80 products from vendors around the world have now passed Liberty Alliance interoperability testing

• One Billion and Growing! Over one Billion Liberty/SAML 2.0-enabled identities
  — IDDY Awards recognize outstanding deployments
  — UK Government Authentication Gateway, New York State Education Agencies and Deutsche Telekom receive awards in 2006
SAML 2.0 Case Study

Denmark

Promoting flexibility and interoperability between Danish public sector institutions as well as private companies -- based on a decentralized approach.
Case Study - Denmark

A "common" Danish family on a "common" day

E-Government services are delivered by many different organizations
Case Study - Denmark

• Requirements
  — Shared Login-services
  — SSO
  — Ability to carry authorization info
  — Support different mechanisms for authentication

• Deciding on SAML 2.0
  — Functionality, COTS support, Public sector usage, Analyst evaluations, Ratified Open Standard, “Composability”, Future development & ability to influence it, Interop Testing!
Case Study - Denmark

• Where are we now
  — Many new eGovernment solutions under development
  — Shared Login-service being established to support this
  — Trust organisation to vouch for the trust in relation to each participant
  — One (and over time probably several) operators delivering the IdP service

• Next Steps
  — Federation of web services, Federated provisioning, (Federated authorization)
The Finnish Board of Taxes – a phased SAML 2.0 deployment approach - phase one inaugurated in Nov. 2005 with SAML 2.0 supported Web-based single sign on and identity-enabled Web services.

Phase II released in January 2006 which included authorization elements. In February of this year, phase III was released, introducing federation.
Case Study - Finland

- **The Situation**
  - Need for e-services to increase productivity
  - Support e-government and information society program

- **The Challenges**
  - Promote easier taxation process
  - Security, reliability and audit-trail
  - Several separate and un-standardized solutions

- **The Potential Solutions**
  - Must be standard and open
Case Study - Finland

• **Deciding on SAML 2.0**
  — Layered security (channel security, message security)
  — Strong developer community

• **The Benefits**
  — Lower costs, efficiency, enables totally new approach for services

• **Where we are now**
  — November 2005 released SAML 2.0 and ID-WSF 2.0; January 2006 IDP and authorization; February 2006 federation

• **Next Steps**
  — To leverage Katso –authentication system as nationwide solution
Advantage of SAML & ID-WSF

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<thead>
<tr>
<th>EMPLOYER</th>
<th>MIDDLE-MAN (operator)</th>
<th>TAX OFFICE</th>
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<tr>
<td>Log in to Payroll</td>
<td>Search data (payroll system)</td>
<td>Open letters</td>
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<td>Write data to a paper form and send it by mail</td>
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<td>Type data from form to taxation system</td>
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<td>Open e-filing portal and authenticate yourself</td>
<td>Manual: 80%</td>
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<td>Fill-in web form</td>
<td>Automatic: 20%</td>
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<td>Open e-filing portal and authenticate yourself</td>
<td>Paper form diskette</td>
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<td>Log in to Payroll</td>
<td>Data transfer to taxation system</td>
<td>Manual: 50%</td>
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<td>Choose Employer payroll report</td>
<td>Fill-in web form</td>
<td>Automatic: 50%</td>
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<td>Up-load file</td>
<td>Web form</td>
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<td>Log in to Payroll</td>
<td>Data transfer to taxation system</td>
<td>Manual: 0%</td>
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<tr>
<td>Choose Employer payroll report and send data</td>
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<td>Automatic: 100%</td>
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<td>(authentication)</td>
<td>Data transfer to taxation system</td>
<td>FTP</td>
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<td>SAML 2.0</td>
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LIBERTY ALLIANCE PROJECT

RSA CONFERENCE 2007
The Sunderland City Council leads a regional partnership which has been deploying a prototype ‘trust services infrastructure’ incorporating Federated IDM, PKI, multi-application-multi-brand smartcard management since 2005.

The mission is to fast-track the creation of an effective marketplace for a citizen focused shared service infrastructure.
• The Situation
  — Sunderland operates the Trust Services Infrastructure (TSI); a prototype for region-wide (2.7 million people) infrastructure, offering secure registration, IDM, PKI and smartcard services to a variety of service providers in public and private sectors.

• The Challenges
  — must be consistent with development of national infrastructure (UK Gov Gateway), XGov IDM strategy including UK NHS NPfIT
  — need to meet requirements from University and college communities (Shibboleth),
  — trying to implement Liberty Trust Circle model – with a BANK, a Public Transport operator and other 3rd party Service Providers (including the universities).

• The Potential Solutions
  - WS*F
  - Stick with SAML 1.1
• Deciding on SAML 2.0
  — Peer recommendation
  — Multi-vendor support
  — Support for XACML (building privacy enhancing services)

• The Benefits
  — Future-proofing (!)
  — Recognition and confidence from a growing user community

• Where we are now
  — Upgrading from SAML1.1. Delay as we have legacy IDM which won’t support 2.0. UK Gov has the same issue and will be slower

• Next Steps
The U.S. E-Authentication Identity Federation, managed by the General Services Administration, relies on a “federated” operational model for providing authentication services.

The Federation is currently updating the E-Authentication architecture to support SAML 2.0 functionality, which will offer a standards-based approach for managing the Federation, enhanced usability and security, and reduced implementation and operational costs.
Case Study – U.S.

• **The Situation**
  — U.S. E-Authentication Identity Federation operational since 10/05
  — Initial implementation based on SAML 1.0 to avoid “one offs”
  — Federation members have requirements that SAML 1.0 cannot meet

• **The Challenges**
  — Multi-vendor interoperability essential
  — Usability considerations paramount
  — Still need to avoid “one offs”
  — Stakeholder Considerations
  — New business model drivers

• **The Potential Solutions**
  — SAML 2.0 – Web Services – One offs
Case Study – U.S.

• Deciding on SAML 2.0
  — Address current E-Authentication Architecture issues
  — Stakeholder Considerations
  — Interoperability considerations
  — Multi-vendor environment
  — Leverage existing product selections

• The Benefits
  — Standards-based approach for conducting SAML 2.0 based transactions
  — Lower operational costs by phasing out the Federation Portal
  — Reduced development & deployment costs for Federation members
  — More functionality which enhances end user experience and security
Case Study – U.S

• Current Achievements
  — Completed requirements gathering
  — Identified key architectural updates required to support SAML 2.0

• Next Steps
  — Vendor product testing to begin April
  — Deployments to begin May/June
Panel Q and A - Moderator

Moderator’s Q and A Session

Flags of Denmark, Finland, United Kingdom, and United States
Panel Q and A

Questions for the Panel?
Additional SAML 2.0 Information

Liberty Alliance eGovernment – Adoption and eGov Resources
http://projectliberty.org/index.php/liberty/adoption/egovernment

Liberty Alliance eGovernment SIG
http://projectliberty.org/index.php/liberty/strategic_initiatives/egovernment

Liberty Interoperable – Products that have passed Liberty testing
http://projectliberty.org/index.php/liberty/liberty_interoperable/interoperable_products

Case Studies

Presentations
http://projectliberty.org/index.php/liberty/resource_center/presentations_webcasts
Thank You!