Liberty Alliance Project

Paris Deployment Workshop

7 December 2005

Andrew Shikiar,
Liberty Alliance Membership Director
Goals for Today’s Workshop

- Provide you with expanded Liberty knowledge
  - Organizational
  - Implications of Liberty technology
- Focus on business & policy aspects of digital identity implementations
- Use real-life case studies to talk about benefits and challenges of identity federation
- You should leave today with actionable information about Liberty and digital identity
Driving Adoption
### Liberty Alliance: 2005 Accomplishments

#### Technology Standards and Guidelines

**February**
- Second Version of Web Services Framework Specifications

**April**
- Interface Specifications for Identity-based Web Services

**June**
- Formation of Messaging Service Interface Specifications Group

#### Business and Privacy Guidelines

**February**
- New Mobile Business Guidelines

**April**
- Legal Framework for Circles of Trust to Comply with European Union Data Protection and Privacy Laws

#### An Ecosystem of Interoperable Products & Services

**April**
- Liberty Extends Interoperable Testing Program to Include SAML 2.0

**May**
- Interoperable Certification Awarded to Eight Companies

**August**
- First Companies Pass SAML 2.0 Interoperability Testing

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Identity Theft Prevention -- Strong Authentication -- e-Health -- Japanese SIG
• 400M Liberty-enabled identities and devices in 2004
• Well-publicized federated Liberty deployments at GM, Orange, France Telecom, Fidelity, AOL and Nokia
• Early adopters set an excellent pace, uncovering new business opportunities as well as challenges to solve
Adoption Snapshots

**T-Online**
- Web-based SSO for 13M+ ISP customers
- Provides seamless login to service provider & content partners

**Star Alliance**
- A group of 17 airlines including Air Canada, Lufthansa and United, serving 382 million customers in 139 countries
- When a user becomes SA member he is federated, gaining SSO with any airline
- Additionally, through LAP specs, each airline can access a common set of passenger info, such as seat preference, etc.
Adoption Snapshots (cont)

SSO vendors report growing traction, such as:

• 10-20 enterprise customers deploying production, prototype and beta releases
• Multiple customers deploying hundreds of thousands of devices by 2006
• 20-30 major SSO supply-chain implementations by end of ’06, touching 10-20 partners each
• 15 major Liberty-related implementations currently underway
More than one billion Liberty-enabled identities and devices by the end of 2006…and that’s just what we know about
Liberty is becoming a centerpoint for all things identity

- Committed to facilitating solutions of all needs—technical, business and policy
- Enables our members to maximize & centralize standards investments
- Long-term stewardship for all activities related to our members’ business objectives
- Many new initiatives and programs are proposed regularly to address further aspects of identity
Today’s Agenda

13:00 – 13:15: **Welcome** – Andrew Shikiar, Membership Director Liberty Alliance

13:15 – 13:45: **Overview of Liberty Organization & Architecture** – Timo Skytta, Vice President Liberty Alliance - Director, Web Services, Nokia Technology Platforms


14:15 – 14:45: **Case Study**: ADAE - Benoît Boute

14:45 – 15:00: **Coffee Break**

15:00 – 15:30: **Case Study**: Bibliothèque Nationale de France – Cédric Ouvry, Ingénieur d'études

15:30 – 16:00: **Case Study**: France Telecom – Alexandre Nolle, R&D Identity Program Manager

16:00 – 16:45: **Roundtable**: Identity Deployment and Implementation Challenges

16:45 – 17:00: **Wrap up / Additional Q&A**
Thank You!

- Enjoy your time today!
- Ask questions, be interactive
- Contact for further discussions:
  - Andrew Shikiar, Membership Director
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http://www.projectliberty.org
Liberty Alliance Project

Overview of Liberty Organization & Architecture

Timo Skytta
Liberty Alliance Vice President
7 December 2005
The Liberty Alliance is the only global body working to define and drive open technology standards, privacy and business guidelines for digital identity management.
Who is the Liberty Alliance?

- ~150 diverse member companies and organizations representing leaders in IT, mobility, government, service provision, system integration and finance.
... the Crossroads of Identity

Mobile / Telephony
- Ericsson
- NTT
- DoCoMo
- Nokia
- NEC
- vodafone
- france telecom
- axalto
- epok
- Gemplus
- Sun
- InfoSpace
- NTT
- Intel
- NeuStar
- Giesecke & Devrient
- Online

Access Control / Corporate
- Entrust
- RSA
- veriSign
- HP
- SAP
- Novell
- Sun
- PingID
- Deloitte & Touche
- axalto
- SIGABA
- Intel
- Liberty Alliance
- Oracle

Financial
- Liberty Alliance
- Oracle
- InfoSpace
- HP
- HSBC
- Fidelity Investments
- Communicator Inc
- VeriSign
- Bank of America
- identrus
- Gemplus
- Citigroup
- ABN-AMRO
- Giesecke & Devrient

Government & Consumer
- Liberty Alliance
- Nokia
- HP
- Royal Mail
- GM
- NEC
- Sony
- BIPAC
- U.S. General Services Administration
- ADAE
Liberty Alliance delivers real word solutions to solve real world identity problems

Liberty’s Focus

Technology Standards and Guidelines

Business and Privacy Guidelines

An Ecosystem of Interoperable Products & Services

Trust

Liberty helps organizations build a foundation for trust -- critical for the overall success of identity-based services and efficiencies
Liberty Alliance Organization

Management Board

- Defines Mission / Scope
- Drives Execution Timetable
- Allocates Budget

Marketing
- Determines market requirements for Alliance core specifications
- Drives Business Guidelines
- Drives positioning and outreach to media, analysts and external organizations

Technology
- Understands current standards; drives convergence
- Delivers, maintains & evolves core Liberty specifications

Policy
- Policy / regulatory environment input
- Helps design audits compliance approach
- Liaison to govt. and external policy organizations

Services
- Defines & manages process for creating new service specifications
- Includes gathering of market requirements as well as specification development

Conformance
- Defines and manages process for validating vendor interoperability
- Manages Conformance Testing Program
Strong Authentication Expert Group (SAEG) will be responsible for defining a standard industry framework that enables interoperability of multiple authentication mechanisms in Federated and/or Web services and/or stand-alone digital identity architectures/environments. A working title for this deliverable is ID-SAFE (Identity Strong Authentication FramEwork).
Need for Stronger Authentication

- **ID Theft costs users $500 and 30 hours per incident (US FTC, 2003)**
- **70% of users would trade their password for chocolate**
- **Wireless LAN’s and VPN’s eliminate the security perimeter**
- **Crack once, spoof everywhere (my bank password is also my Yahoo! Mail password)**
- **Demonize-T Trojan Horse forwards password keystrokes to hacker websites**
- **On-line Commerce fastest growing method and twice the cost of in-person payment**
- **$3B in remote payment fraud**
- **Phishing successful 5-10% of the time**
- **In 2005, liability can be shifted to issuing banks... how will they pass-on the losses?**

As we begin to rely on shared credentials, the need for strong authentication will become even more important.
Liberty’s Architecture

Liberty Federation Framework (ID-FF and SAML 2.0)
Enables identity federation and management through features such as identity/account linkage, simplified sign on, and simple session management

Liberty Identity Services Interface Specifications (ID-SIS)
Enables interoperable identity services such as personal identity profile service, contact book service, geo-location service, presence service and so on.

Liberty Web Services Framework (ID-WSF)
Provides the framework for building interoperable identity services, permission based attribute sharing, identity service description and discovery, and the associated security profiles

Liberty specifications build on existing standards (SAML, SOAP, WS-Addressing, WS-Security, XML, etc.)
A Grand Convergence

Phase 1 → ID-FF V1.1 → ID-FF V1.2 → SAML V2.0

Liberty Alliance

SAML V1.0 → SAML V1.1 → SAML V2.0

OASIS SSTC

Shib V1.x → Shib V1.2

Internet2 Shibboleth


OASIS Contribution

OASIS Participation

Mar 2005

Sep 2003

Jul/Aug 2003

Apr 2004
ID-FF: The SP interacts with the IdP through Jane’s browser to obtain the identity credential for Jane.
Liberty Federation

Liberty Federation
(ID-FF and SAML 2.0)

Technology frameworks

Federation technology in place!

- Well defined
- Tested interoperable
- Certified GA products
- Cross-domain Simplified Sign-on
- Global Log-out
- Foundation for “Circles of Trust”
Liberty Web Services
Liberty Web Services

**Liberty Identity Services Interface Specifications (ID-SIS)**

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**Liberty Identity Web Services Framework (ID-WSF)**

Provides the framework for building interoperable identity services, permission based attribute sharing, identity service description and discovery, and the associated security profiles.

- **Identity-based Web services:**
  - Are associated with a Principal's Identity (e.g. My Calendar Service)
  - Can be invoked using a Principal’s identity

- **Permissions-based Attribute Sharing:**
  - Invoking Services under control of user
  - Service Requestor doing so on behalf (either directly or indirectly) of user

- **Discovery:**
  - Credentials to use when accessing information
  - Appropriately mapped identifiers for any principals involved (so that their pseudonyms can be protected)

Liberty specifications build on existing standards (SAML, SOAP, WS-Addressing WS-Security, XML, etc.)
Liberty Web Services - SOA Ready

• SOAs must incorporate identity

• ID-WSF components ready to deploy in SOA environment

• Cross-industry applications for jump-starting SOA implementations

• Available to any organization looking to implement responsive, flexible and secure SOAs

• Provide security and trust at the application level

• SOA security, identity and privacy enabled “out of the box”

- Discovery service
- Interaction service
- Authentication service
- Security Mechanisms
- SOAP Binding

Driving high functionality into Web services standards
"Sun is heavily invested in the ID-WSF 2.0 specification because it hits a sweetspot for defining highly-secure, identity-based Web services." - Joe Keller, Vice President of Marketing, Advanced Development Platforms, Sun Microsystems Inc.

"HP has long been committed to supporting and driving open standards including the recent work with the Liberty Alliance for ID-WSF version 2.0." - Todd DeLaughter, Vice President and General Manager, Management Software Business, Hewlett-Packard

"By adding the ability to leverage the SAML 2.0 protocol for single sign-on, ID-WSF version 2.0 has emerged as the leading standard for adding identity federation to Web services that span multiple domains." - Greg Whitehead, CTO, Trustgenix
ID-FF: The SP interacts with the IdP through Jane’s browser to obtain the identity credential for Jane.

ID-WSF: The SP (acting as a WSC) interacts with the DS and Jane’s WSPs in order to invoke services at the WSPs on Jane’s behalf.
Summary

• Liberty is a mature and thriving organization focused on creating technical and business standards for digital identity

• Liberty’s technical specifications for identity federation and web services bring a variety of business and technical benefits to companies

• The identity challenge goes beyond technology – Liberty’s members are working to address these policy, privacy and marketing issues
Thank You!

My contact info for further discussions:

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