Liberty Alliance Project

Berlin Deployment Workshop

1 February 2006

Brett McDowell
Director, Liberty Alliance
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
<table>
<thead>
<tr>
<th>Time</th>
<th>Event and Details</th>
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<tbody>
<tr>
<td>09:00</td>
<td>Registration and Demo Pods (Demo 30mins)</td>
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<tr>
<td></td>
<td>Tea, Coffee, Snack</td>
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<tr>
<td>09:30</td>
<td>Welcome and General Introduction</td>
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<td>Brett McDowell, Director, Liberty Alliance</td>
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<tr>
<td>09:45</td>
<td>Introduction to the Liberty Alliance</td>
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<td>– Roger Sullivan, Vice President, Liberty Alliance &amp; Vice President of Business</td>
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<td></td>
<td>Development, Oracle Identity Management solutions</td>
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<tr>
<td>10:45</td>
<td>Break</td>
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<tr>
<td>11:00</td>
<td>Business Implications of Liberty Technologies</td>
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<td></td>
<td>– Dr. Hellmuth Broda, Spokesperson, Liberty Alliance, Chief Technology Officer,</td>
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<td></td>
<td>Europe, Middle East &amp; Africa, Sun Microsystems Inc.</td>
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<tr>
<td>12:00</td>
<td>Lunch</td>
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<tr>
<td>12:45</td>
<td>Case Study/Presentation</td>
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<td></td>
<td>– T-Online</td>
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<td>13:30</td>
<td>Case Study/Presentation</td>
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<td></td>
<td>– National Board of Taxes, Finland</td>
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<td>14:15</td>
<td>Case Study/Presentation</td>
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<td>– Norwegian Government</td>
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<td>15:00</td>
<td>Demos</td>
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<td>Tea, Coffee, Snack</td>
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<td>15:30</td>
<td>Wrap-up</td>
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Thank You!

- Enjoy your time today!
- Ask questions, be interactive
- Contact for further discussions:
  - Andrew Shikiar, Membership Director
    +1.310.314.2131 / andrew@projectliberty.org

http://www.projectliberty.org
Overview of Liberty Organization & Architecture

Roger Sullivan, Oracle Corporation
Liberty Alliance Vice President
1 February 2006
Driving Adoption
## Liberty Alliance: 2005 Accomplishments

<table>
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<tr>
<th>Technology Standards and Guidelines</th>
<th>Business and Privacy Guidelines</th>
<th>An Ecosystem of Interoperable Products &amp; Services</th>
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<td><strong>February</strong></td>
<td><strong>February</strong></td>
<td><strong>April</strong></td>
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<tr>
<td>Second Version of Web Services</td>
<td>New Mobile Business Guidelines</td>
<td>Liberty Extends Interoperable Testing Program</td>
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<tr>
<td>Framework Specifications</td>
<td></td>
<td>to Include SAML 2.0</td>
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<tr>
<td><strong>April</strong></td>
<td><strong>April</strong></td>
<td><strong>May</strong></td>
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<td>Interface Specifications for</td>
<td></td>
<td>Interoperable Certification Awarded to Eight</td>
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<td>Identity-based Web Services</td>
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<td>Companies</td>
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<td><strong>June</strong></td>
<td><strong>June</strong></td>
<td><strong>August</strong></td>
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<tr>
<td>Formation of Messaging Service</td>
<td></td>
<td>First Companies Pass SAML 2.0 Interoperability</td>
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<td>Interface Specifications Group</td>
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<td>Testing</td>
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### Identity Theft Prevention -- Strong Authentication -- e-Health -- Japanese SIG
Liberty Adoption

• 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

Federation technology in place and adoption growing
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, Luthansa 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.
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
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
- vodafone
- Gemplus
- Neustar
- Telecom Lab

Access Control / Corporate
- RSA
- VeriSign
- HP
- SAP
- Novell
- Intel
- Deloitte & Touche
- ORACLE

Financial
- Oracle
- Fidelity
- HP

Government & Consumer
- Nokia
- HP
- GM
- NEC
- France Telecom
- Vero
- SKATT
- GSA
- U.S. General Services Administration
Liberty Alliance delivers real world 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).
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.)
Liberty Federation
A Grand Convergence

Liberty Alliance

OASIS SSTC

Internet2 Shibboleth

SAML V1.0

SAML V1.1

SAML V2.0

ID-FF V1.1

ID-FF V1.2

Shib V1.x

Shib V1.2

Phase 1

Jul 2002

Jan 2003

Nov 2003

Apr 2005

Nov 2002

Sep 2003

Jul/Aug 2003

Jul 2002

Jan 2003

Nov 2003

Apr 2004

OASIS Contribution

OASIS Participation
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 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 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.)
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

Logos represent member organizations passing ID-WSF interoperability testing
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.

It’s Jane

Jane using a browser

ID-FF/SAML2

SP/WSC

WSP

WSP

DS

IdP
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:

- Roger Sullivan, Vice President Identity Management, Oracle Corporation
- Roger.sullivan@oracle.com

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