



SCUR203 Why Do We Need Security Standards?

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THE BEST-RUN BUSINESSES RUN SAP



Learning Objectives

As a result of this workshop, you will be able to:

- Recognize the need for standardization
- Understand SAP's position with respect to security standards
- See how you can contribute to, and influence the standards



Why Standards?

Lowering total cost of ownership

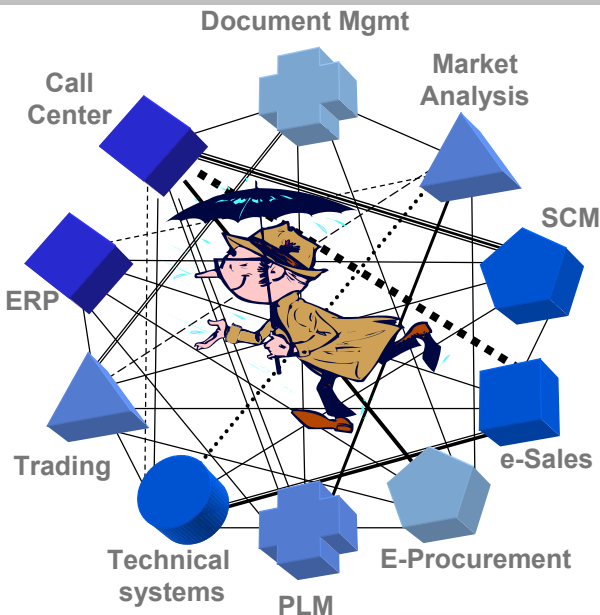
- In design, development and maintenance
- Less learning effort
- Much less adaptation effort

Creating trust

- Proven, wide in use, not proprietary
- Everybody uses the 'same'



Why Security Standards?



Agenda

Little helpers – the MLs of security

- SAML
- DSML
- XKMS

Changing the development platform

- JAAS

Standards for a new technology

- XML DigSig and XML Encrypt
- WS Security

Aligning identity management to reality

- Liberty Alliance

Who's Who?

- OASIS, W3C, Open Group

Wrap-Up

Summary

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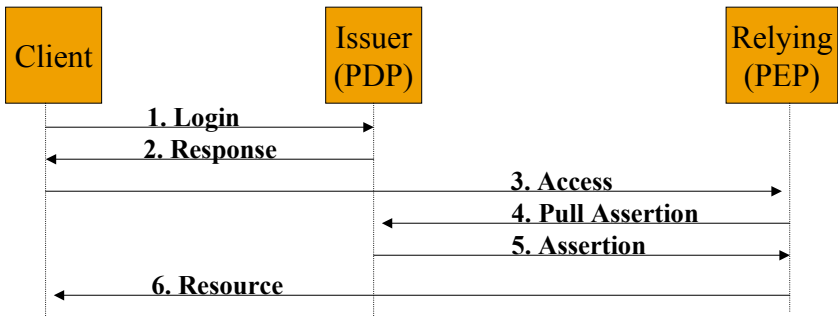
Who's Who?

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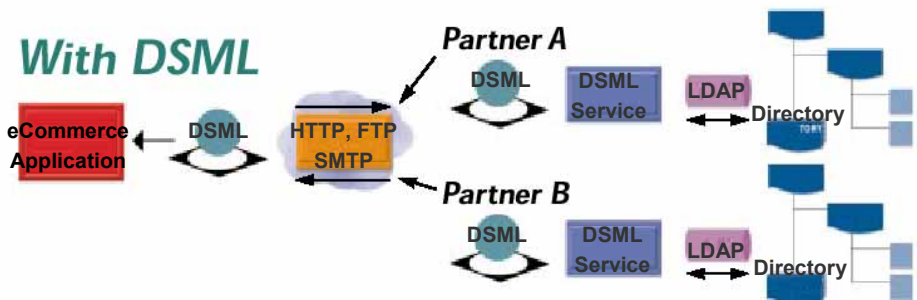
Summary

SAML



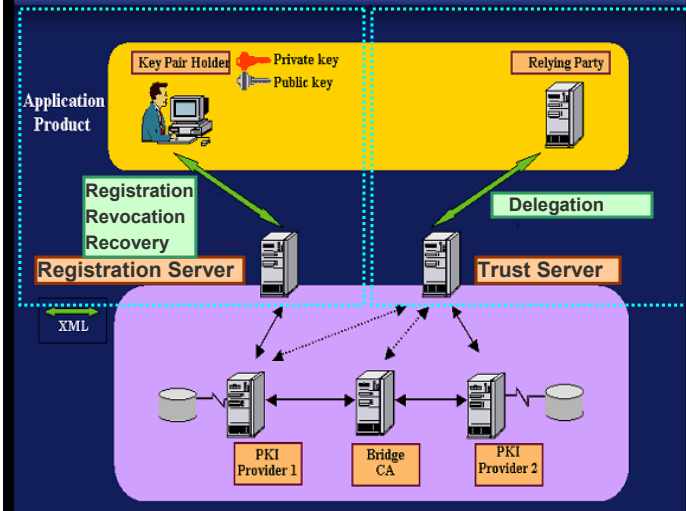
PDP: Policy Decision Point
PEP: Policy Enforcement Point

DSML



XKMS - Complex Configuration

X-KRSS



X-KISS

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Java Community

- Java platforms: Standard Edition, Enterprise Edition, Micro Edition
- Many Java API wrappings around other standards (Web services, security, transaction handling ...)

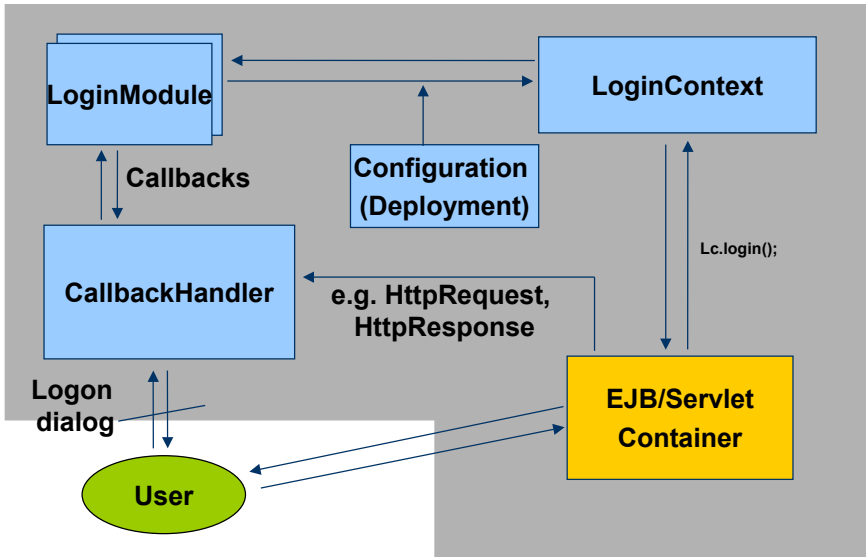


JAAS

JAAS

- Java Authentication and Authorization Service
- additional package to JDK 1.3, integral part of JDK 1.4
- pluggable and stacked authentication
- standardized Interfaces
- big variety of JAAS Login Modules available

JAAS Authentication Design



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What is a Web Service?

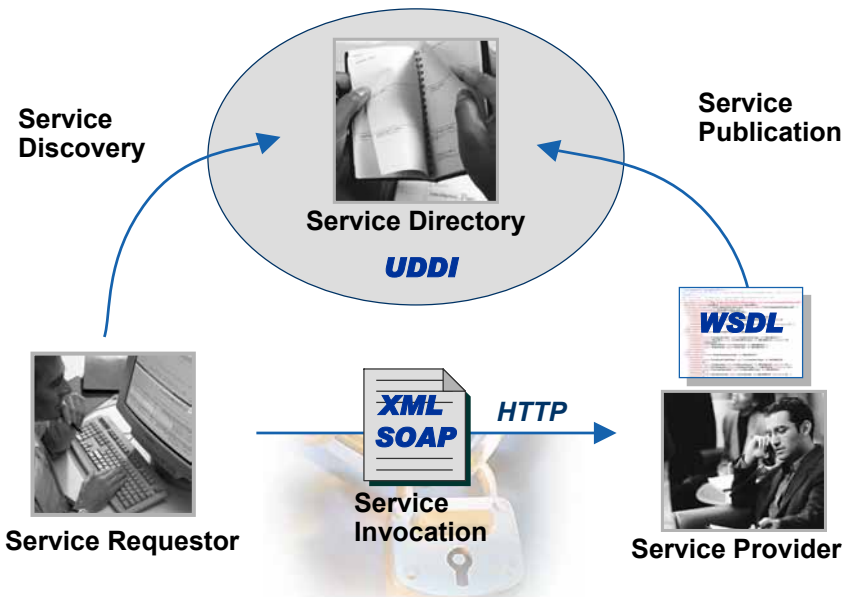


A Web service is a software component that can be

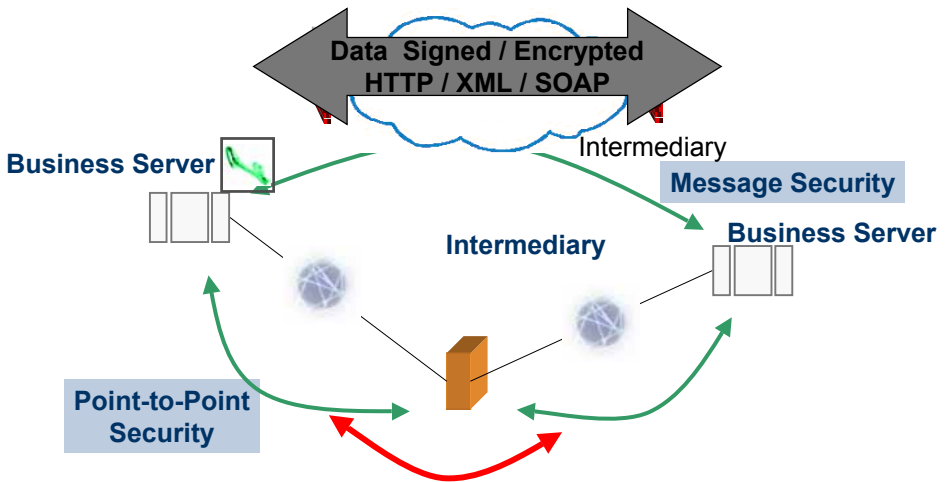
described,
discovered and
executed

using open Internet standards.

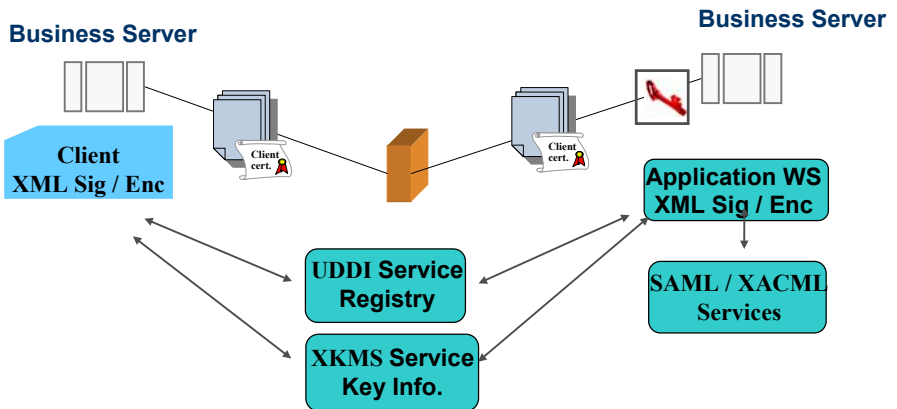
XML, WSDL, UDDI, SOAP and HTTP



Web Service Security



XML DigSig and XML Encrypt

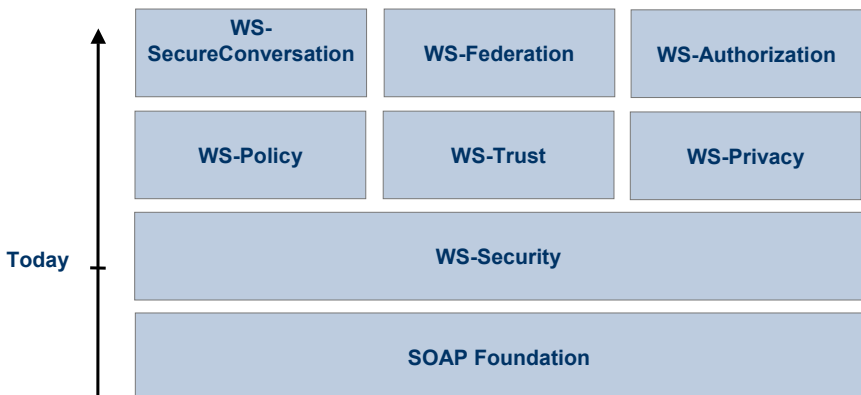


Mission statement:

WS-Security forms the necessary technical foundation for higher-level security services including Federation

within the context of the Web Services Security roadmap

WS-Security Roadmap



<http://msdn.microsoft.com/library/default.asp?url=/library/en-us/dnwssecur/html/securitywhitepaper.asp>

■ WS Security Scope

The scope of the Web Services Security technical committee is the support of security mechanisms in the following areas:

- Using XML signature to provide SOAP message integrity
- Using XML encryption to provide SOAP message confidentiality
- Attaching and referencing security tokens on headers or SOAP messages
- Carrying security information for potentially multiple, designated actors
- Associating signatures with security tokens

■ Standards Being Integrated

- Access control TC (XACML)
- XML Common Biometric Format TC (XCBF)
- Provisioning TC (PSTC)
- Rights Language TC (XrML)
- Security Services TC (SAML)
- XML Signature
- XML Encryption
- XML Key Management (XKMS)

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Why is Identity Management a Challenge?



Liberty Alliance Project

Mission statement:

Enable a networked world
in which individuals and businesses can
more easily conduct transactions
while allowing for the privacy
and security of identity information



<http://www.projectliberty.org>

Liberty Alliance Architecture

**LIBERTY
IDENTITY
FEDERATION
FRAMEWORK
(ID-FF)**

**LIBERTY IDENTITY SERVICES
INTERFACE SPECIFICATION
(ID-SIS)**

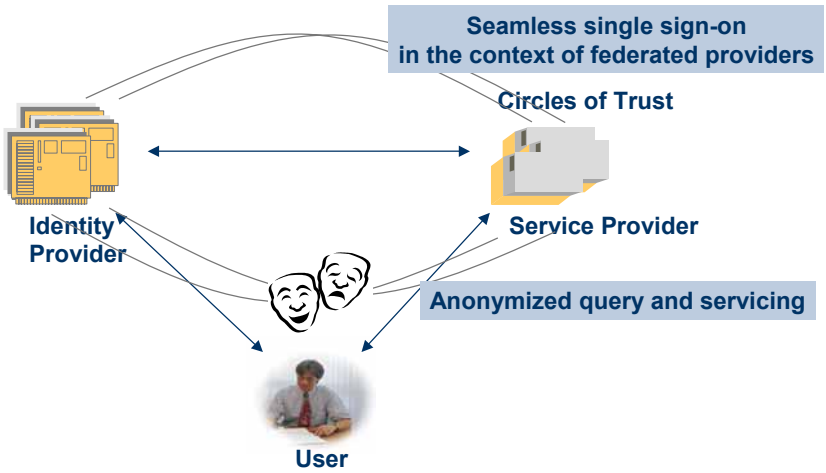
Specifications evolve in parallel
and rely upon each other

**LIBERTY IDENTITY WEB
SERVICES FRAMEWORK
(ID-WSF)**

SAML	HTTP	WSS	WSDL	XML Enc
WAP	XML	SSL/TLS	SOAP	XML Dsig

Federation Framework

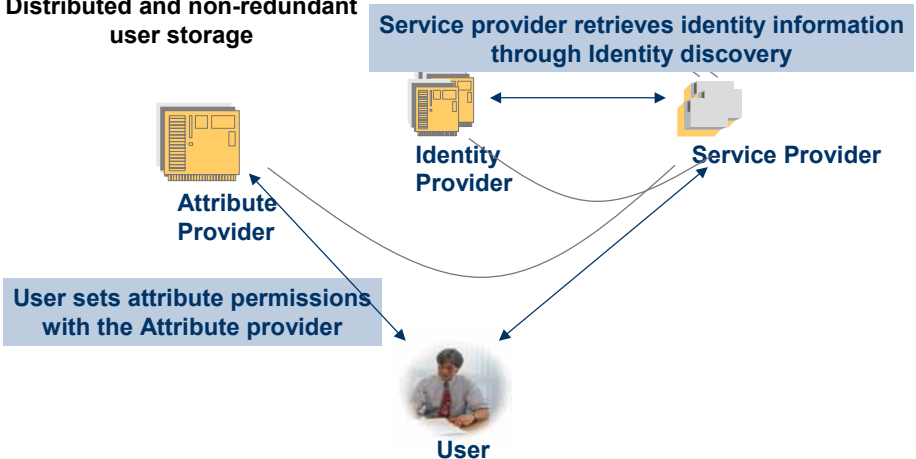
Simplified sign-on and account aggregation



Web Services Framework

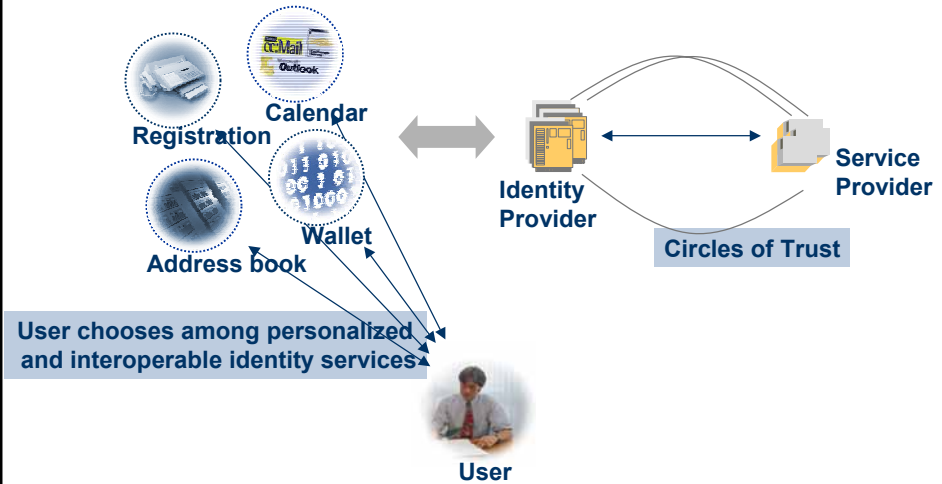
Interoperable identity-based web services

Distributed and non-redundant user storage



Service Interface Specification

Common identity services



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Mission statement:

OASIS is a not for profit, global consortium that drives the **development, convergence** and adoption of e-business standards



<http://www.oasis-open.org>

Mission statement:

The World Wide Web Consortium (W3C) **develops** interoperable technologies for the Web

Universal Access

Semantic Web

Web of Trust

<http://www.w3c.org>

Mission statement:

**Guide the development and
adoption of industry initiatives and standards**

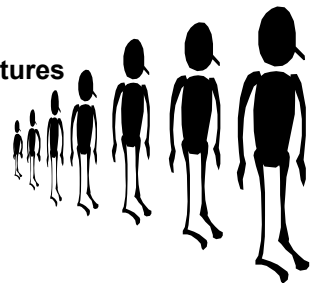


<http://www.opengroup.org>

Identity Management

**What is the link between identity management and
the Open Group?**

- Provides background information
- Defines the business problem
- Documents the objectives of end users and organizations
- Proposes common terminology
- Defines categories of requirements
- Explores various technology architectures



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SAP Security Standards Stack

Trust Relationship Management

Liberty Alliance

Application security framework

SAML

WS-Security

Transport and communication

XML-DSIG

XML-Encryption

HTTPS

GSS-API

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Target

- Standards lower your TCO
- SAP is both complying to and driving the security standards
- You can contribute to, and influence the standards



What Next?



**Use the standards implemented in SAP technology
Share your business case with us and we shall find the best
solution together**

Further Information

→ Public Web:

www.sap.com/netweaver → Key Capabilities → Security SAP
Customer Services Network: www.sap.com/services/

→ Consulting Contact

Frank Rambo, NetWeaver Security Consulting (frank.rambo@sap.com)

Questions?

Q&A

Feedback

Questionnaire

Please complete your session evaluation and
drop it in the box on your way out.

Thank You !

The SAP TechEd '03 Basel Team

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