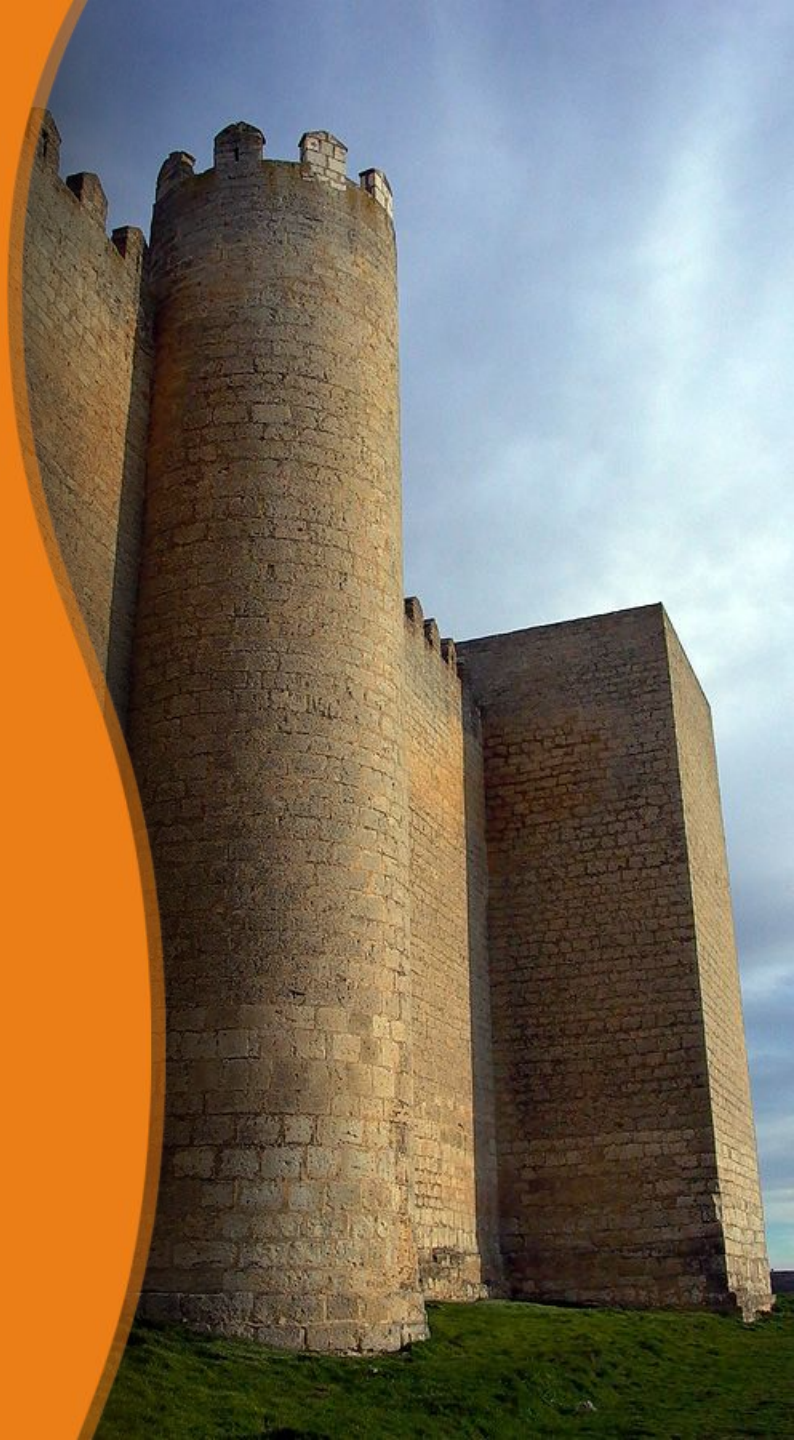


Open Source Identity Integration with OpenSSO

April 19, 2008

Pat Patterson
Federation Architect
pat.patterson@sun.com
blogs.sun.com/superpat

Agenda

- Web Access Management
  - The Problem
  - The Solution
  - How Does It Work?
- Federation
  - Single Sign-On Beyond a Single Enterprise
  - How Does It Work?
- OpenSSO
  - Project Overview

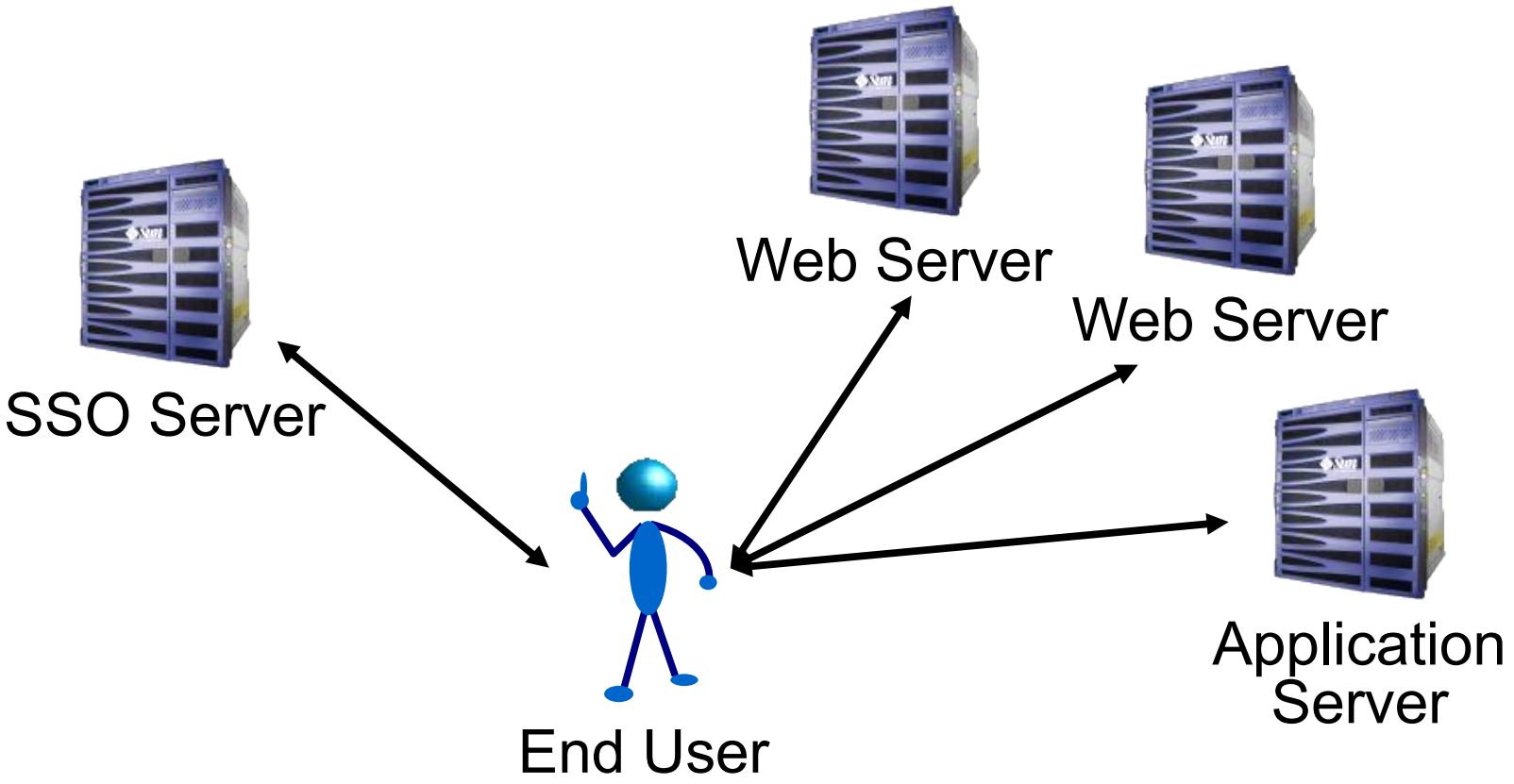
Typical Problems

- “Every application wants me to log in!”
- “I have too many passwords – my monitor is covered in Post-its!”
- “We're implementing Sarbanes-Oxley – we need to control access to applications!”
- “We need to access outsourced functions!”
- “Our partners need to access our applications!”

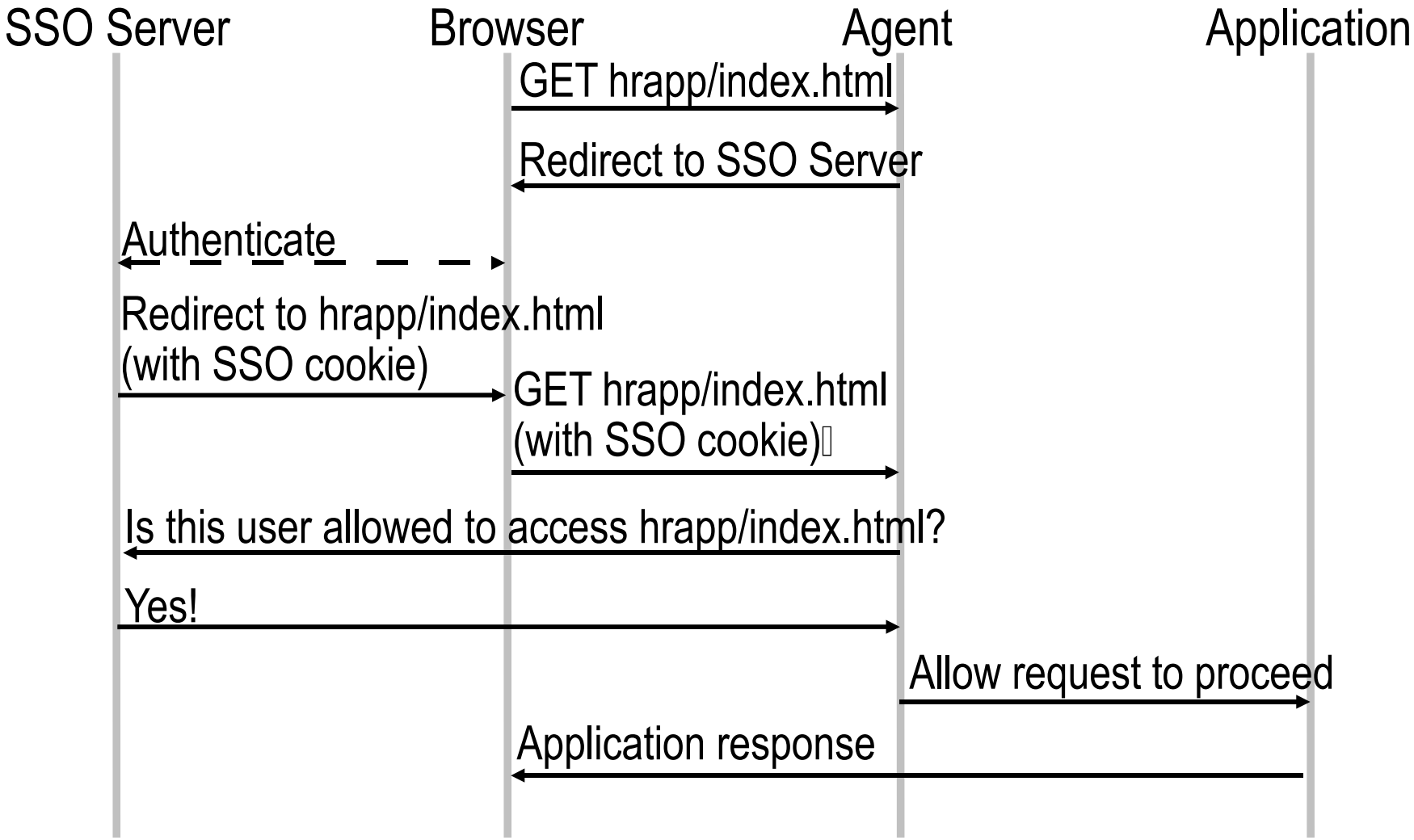
Web Access Management

- Simplest scenario is within a single organization
- Factor authentication and authorization out of web applications into web access management (WAM) solution
- Can use browser cookies within a DNS domain
- Proxy or Agent architecture implements role-based access control (RBAC)
- Users get single sign-on, IT gets control

Single Sign-On Within an Organization



How It Works


SSO Server
Browser
Agent
Application
GET hrapp/index.html
Redirect to SSO Server
Authenticate
Redirect to hrapp/index.html
(with SSO cookie)
GET hrapp/index.html
(with SSO cookie)
Is this user allowed to access hrapp/index.html?
Yes!
Allow request to proceed
Application response

Web Access Management Products

- Sun Java System Access Manager
  - OpenSSO
- CA (Netegrity) SiteMinder Access Manager
- IBM Tivoli Access Manager
- Oracle (Oblix) Access Manager
- Novell Access Maneger
- JA-SIG CAS
- JOSSO

Typical Problems

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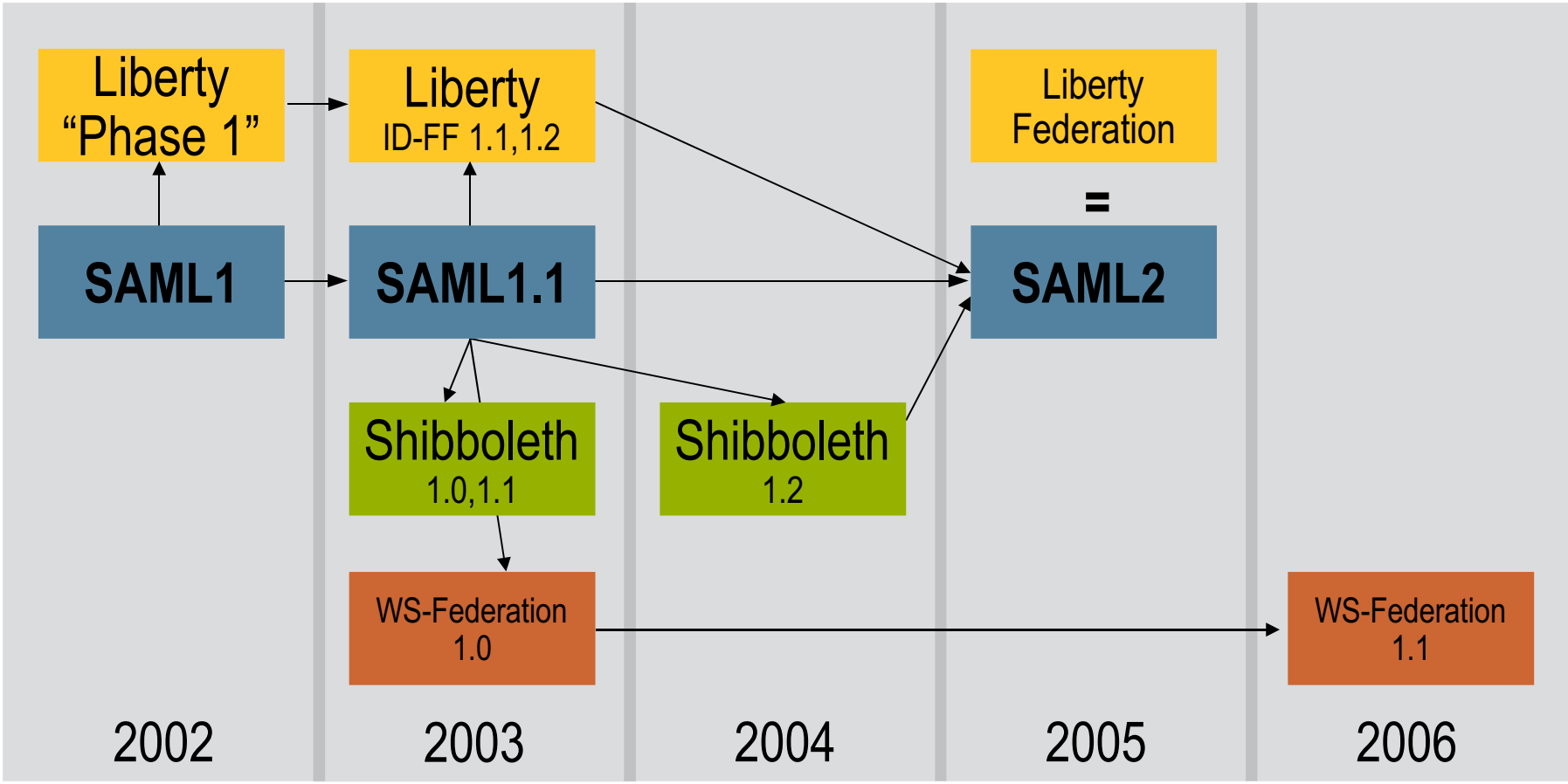
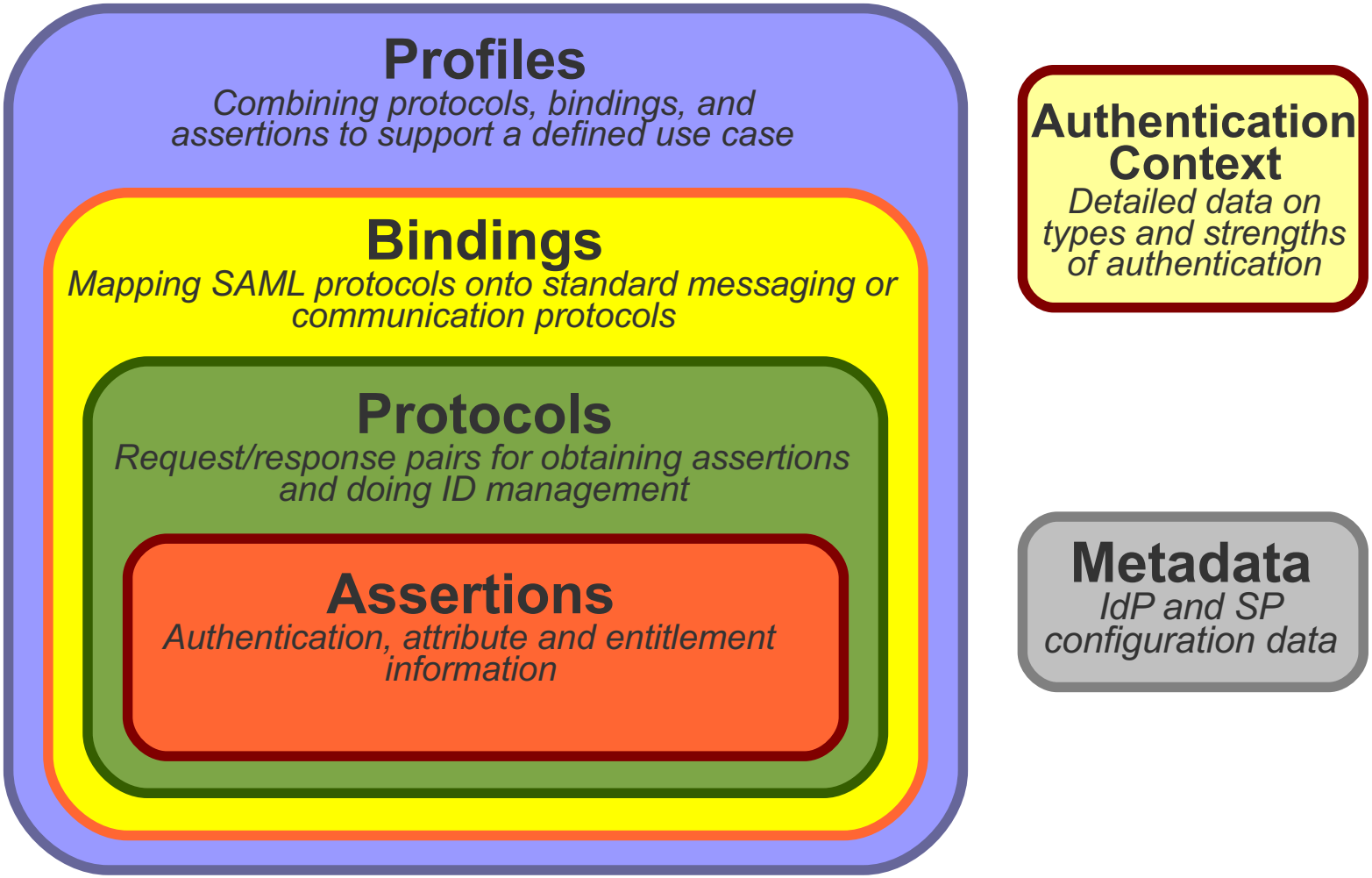
Single Sign-on *between* Organizations

- Cookies no longer work
  - Need a more sophisticated protocol
- Can't mandate single vendor solution
  - Need standards for interoperability

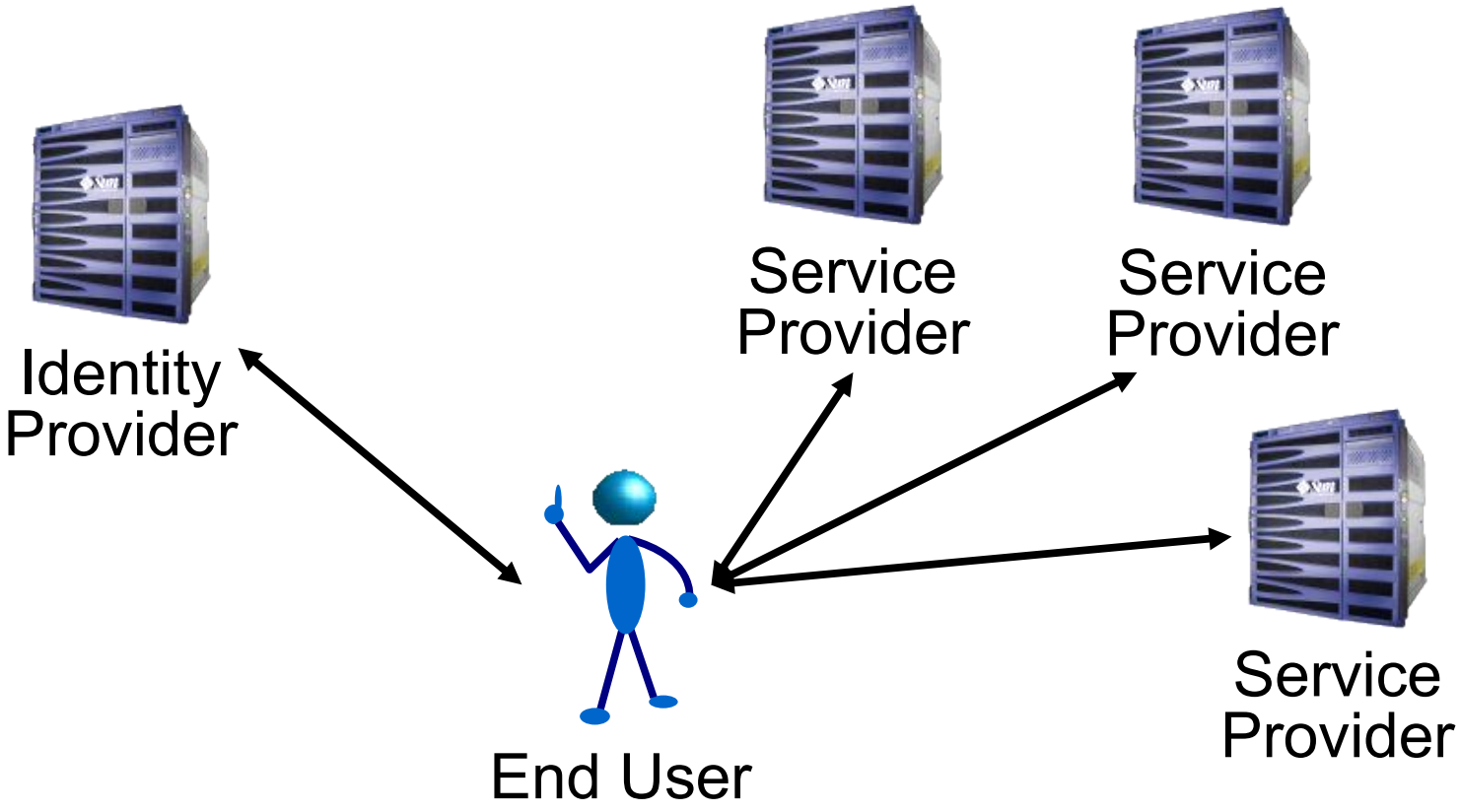
Single Sign-On Standards



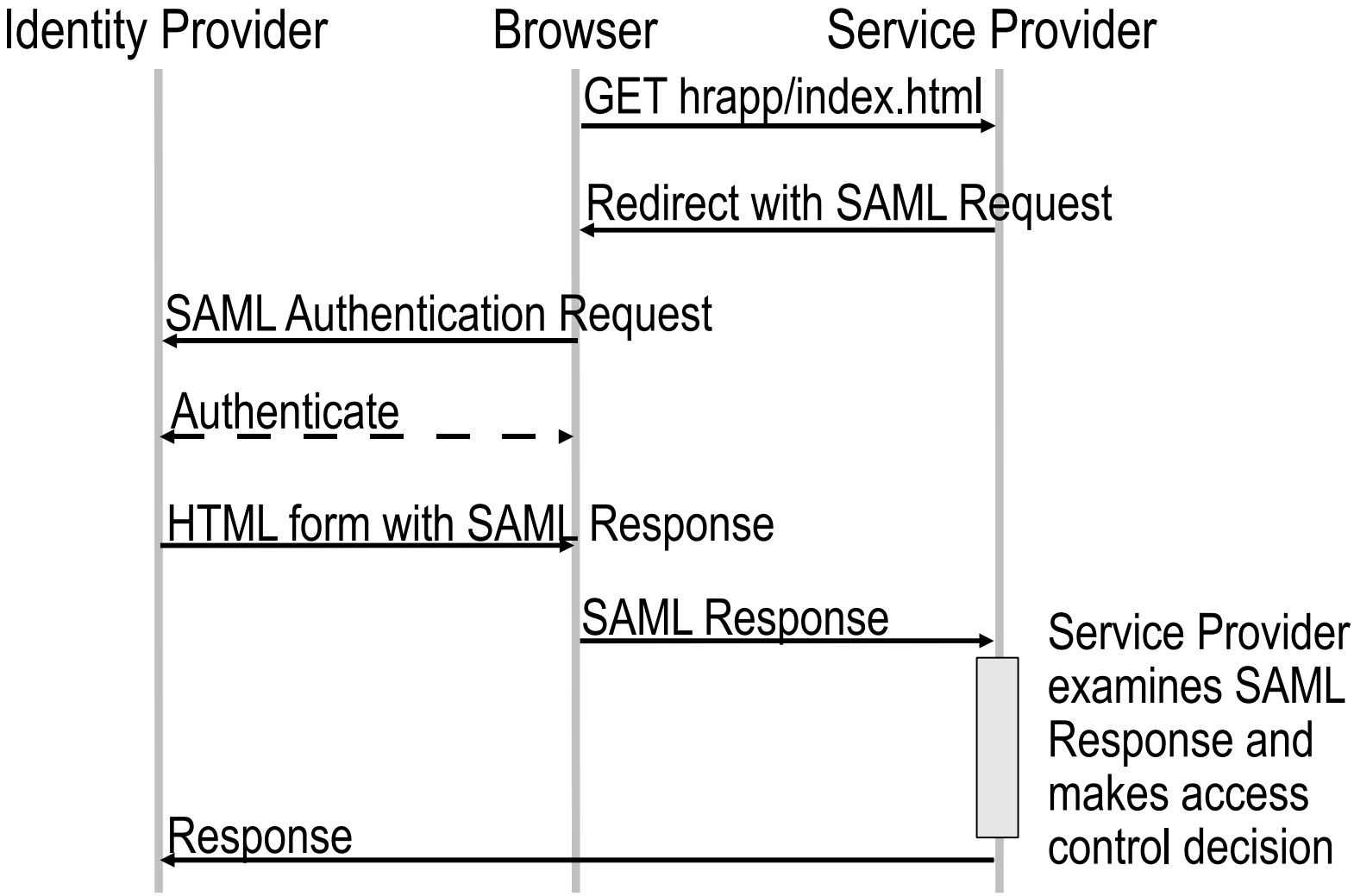
SAML 2.0 Concepts



SSO Across Organizations



SAML 2.0 SSO Basics



SAML 2.0 Assertion

(Abbreviated!)

```
<Assertion Version="2.0" ID="..." IssueInstant="2007-11-06T16:42:28Z">
    <Issuer>https://pat-pattersons-computer.local:8181/</Issuer>
    <Signature>...</Signature>
    <saml:Subject>
        <saml:NameID Format="urn:oasis:...:persistent" ...>
            ZG0OZ3JWP9yduIQ1zFJbVVGHlQ9M
        </saml:NameID>
        <saml:SubjectConfirmation Method="urn:oasis:...:bearer">
            <saml:SubjectConfirmationData .../>
        </saml:SubjectConfirmation>
    </saml:Subject>
    <saml:Conditions
      NotBefore="2007-11-06T16:42:28Z"
NotOnOrAfter="2007-11-06T16:52:28Z">
        <saml:AudienceRestriction>
            <saml:Audience>
                https://pat-pattersons-computer.local/example-pat/
            </saml:Audience>
        </saml:AudienceRestriction>
    </saml:Conditions>
    <saml:AuthnStatement AuthnInstant="2007-11-06T16:42:28Z" ...>
        <saml:AuthnContext>
            <saml:AuthnContextClassRef>
                urn:oasis:...:PasswordProtectedTransport
            </saml:AuthnContextClassRef>
        </saml:AuthnContext>
    </saml:AuthnStatement>
</saml:Assertion>
```

SAML 2.0 Adoption

- Sun, IBM, CA – all the usual suspects, except Microsoft
- OpenSAML (Internet2)
  - Java, C++
- OpenSSO (Sun)
  - Java, PHP, Ruby
- SimpleSAMLphp (Feide)
- LASSO (Entr'ouvert)
  - C/SWIG
- ZXID (Symlabs)
  - C/SWIG

What is OpenSSO?

Open Access.
Open Federation.

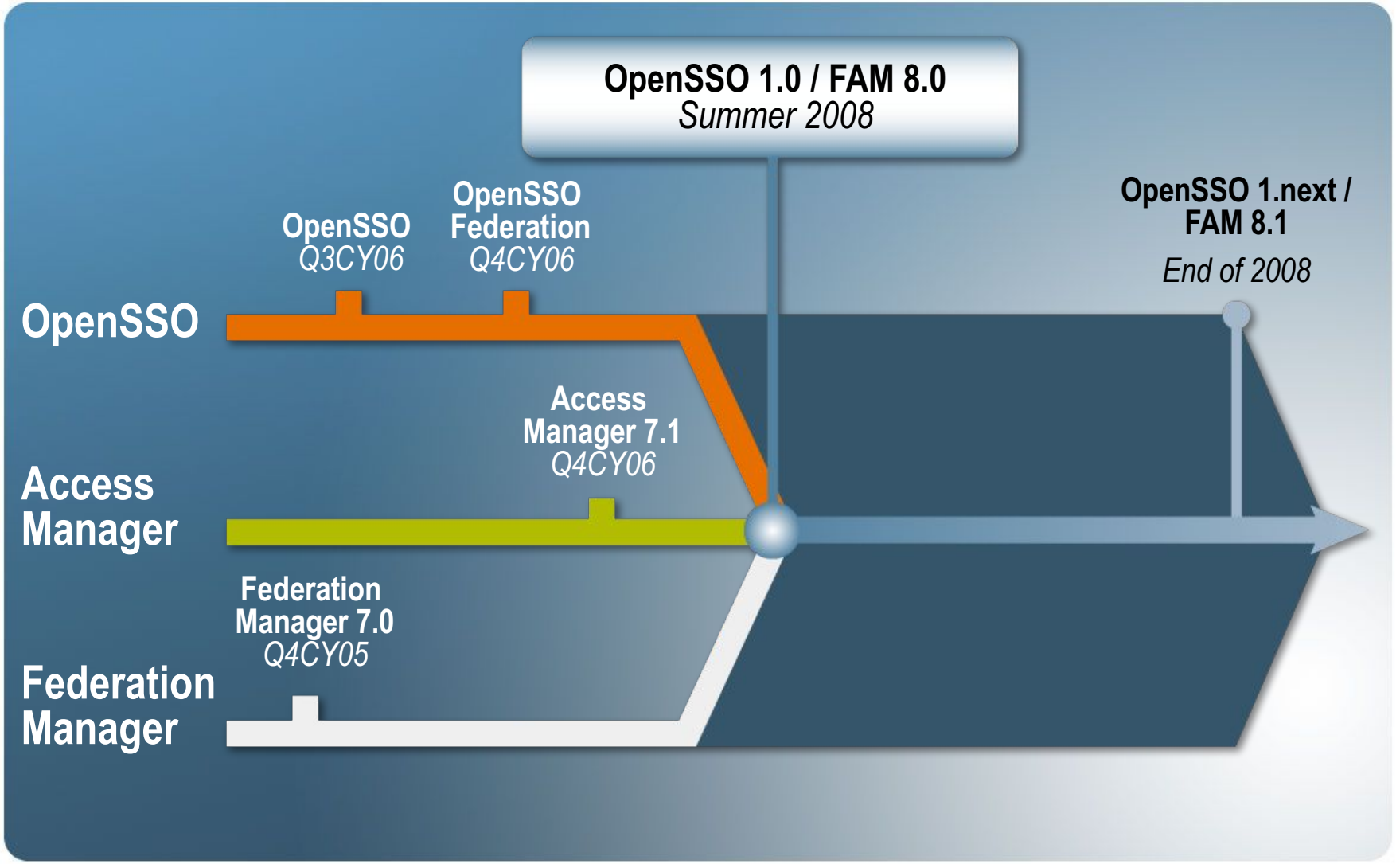
- OpenSSO 1.0 == Federated Access Manager 8.0
- All FAM 8.0 builds available via OpenSSO
- Preview Features
- Provide Feedback
- Review code security

OpenSSO Momentum

OpenSSO
Open Access . Open Federation

- In less than 2 years...
  - 650 project members at **opensso.org**
  - ~15 external committers
  - Consistently in Top 10* java.net projects by mail traffic
    - * of over 3000 projects
- Production deployments
  - **www.audi.co.uk**
    - 250,000 customer profiles
  - **openid.sun.com**
    - OpenID for Sun employees
  - **telenet.be**
    - Foundation for fine-grained authorization

OpenSSO Roadmap



OpenSSO 1.0

Access Management

- Centralized Agent Configuration & Deployment
- Centralized Configuration
- XACML Request/Response
- Wide choice of Application Servers

Federation

- Fedlet
- Virtual Federation
- Multi-Federation Protocol Hub
- WS-Federation 1.1
- 3rd Party WAM Interoperability

OpenSSO 1.0

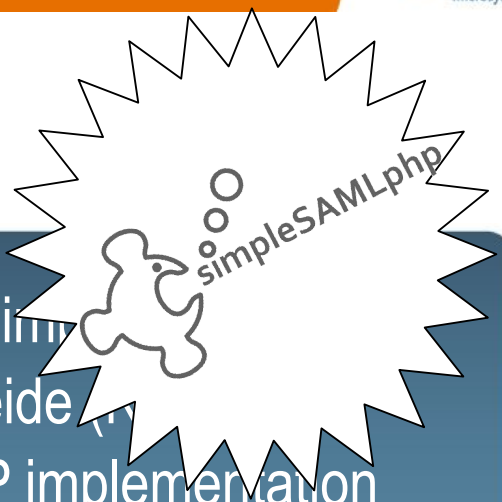
Identity Services

- Authentication as a service
- Authorization as a service
- Audit as a service
- Attribute Query as a service
- Secure Trust Authority
- Web Services Security Plug-ins
- SDK for Securing Web Services

But that's not all...

OpenSSO Extensions

https://opensso.dev.java.net/public/extensions/



SAML 2.0

- **PHP** SAML 2.0 SP im
  - > Picked up by Feide
- **Ruby** SAML 2.0 SP implementation
- SAML 2.0 ECP test rig

OpenID

- OpenID 1.1 Provider
  - > Deployed at openid.sun.com

Client SDK

- PHP Client SDK implementation

Authentication Modules

- ActivIdentity 4Tress
- Hitachi Finger Vein Biometric
- Information Card (aka CardSpace)

Participe!

Join

Sign up at
opensso.org

Download

OpenSSO 1.0
Build 4

Subscribe

OpenSSO Mailing Lists
dev, users, announce

Chat

#opensso
on
freenode.net

Resources

https://opensso.dev.java.net/public/extensions/

OpenSSO

- http://opensso.org/

SAML @ Globo.com

- André Bechara video
  - > http://tinyurl.com/6rugrm

Pat's Blog

- Superpatterns
  - > http://blogs.sun.com/superpat/

Daniel Raskin's Blog

- Virtual Daniel
  - > http://blogs.sun.com/raskin/

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