

# Information Card Interoperability



Michael B. Jones – Microsoft

October 2008

# Information Card Interop Pillars

- Existing Standards
- Identity Selector Interoperability Profile
- OSIS (Open Source Identity Systems) Interops
- Concordia demo of cards with SAML 2.0 tokens
- Information Card Foundation
- Shipping Information Card Software
- New OASIS Information Card Work

# Information Cards and Existing Standards

- Information Cards built using existing standards



- Relies on these WS-\* standards:

- SOAP
- WS-Addressing
- WS-MetadataExchange
- WS-Policy
- WS-Security
- WS-SecurityPolicy
- WS-Trust

# Identity Selector Interoperability Profile

- Documents protocols and data formats used by Windows CardSpace, enabling others to build interoperable software
  - ISIP V1.0 corresponds to CardSpace .NET Framework 3.0, published May 2007
  - ISIP V1.5 corresponds to CardSpace .NET Framework 3.5 SP1, published August 2008

# Microsoft Open Specification Promise (OSP)

- Perpetual legal promise that Microsoft will never bring legal action against anyone for using the protocols listed
  - Includes all the protocols underlying CardSpace
- Issued September 2006
- <http://www.microsoft.com/interop/osp/>

# OSIS (Open Source Identity Systems)

## User-Centric Identity Interops

- Opportunities for implementers to try their code against one another's
  - I1: San Francisco Catalyst, June 2007
    - (with warm-up at IIW, May 2007)
  - I2: Barcelona Catalyst, October 2007
  - I3: San Francisco RSA, April 2008
  - I4: Anaheim DIDW, September 2008
- Tests and results all public since I2
- Not conformance testing
  - Participation in all aspects of each Interop is voluntary
- I3 & I4 added OpenID solutions as well



# Barcelona OSIS Interop Oct '07

## Companies

**Microsoft**



Cordance™

**VeriSign**®

**Novell.**

**skip**  
IDENTITY

**ca**

**IBM**

**NetMesh**®

LINK  SAFE

**ORACLE**®

  
JANRAIN

**PARITY**



Fraunhofer  
Institute for Open  
Communication Systems

  
NULLI SECUNDUS INC.  
*second to none*



**ThoughtWorks**®

**WSO<sub>2</sub>**  
Oxygenating The Web Service Platform.

 **Sun**  
microsystems

**FuGen**  
Solutions

**PingIdentity**™

**SIEMENS**

# Barcelona OSIS Interop Oct '07

## Projects



**XMLDAP**

**i**names

**SourceID™**

**Bandit.**



**Shibboleth.**



identitycommons

*/\* THE Pamela PROJECT \*/*



**sxip** access

**OpenSSO**  
Open Access - Open Federation



Higgins



# San Francisco OSIS Interop Apr '08

## Companies



# San Francisco OSIS Interop Apr '08

## Projects



**XMLDAP**



/\* THE *Pamela* PROJECT \*/



Higgins



# Anaheim OSIS Interop Sep '08

- Shifted focus from previous Interops
  - I1 through I3 primarily cross-solution testing
  - I4 focused on systematically testing specific features of solutions
- Test coverage
  - Tests for > 50% of key Information Card features
  - Test for < 25% of key OpenID features
- By the numbers:
  - 58 Participants
  - 89 Solutions
  - 246 Features
  - 93 Feature Tests
  - O(1000) recorded test results
- Significant interop achievements but still plenty to do!



# Concordia demo of using SAML 2.0 tokens in Information Cards



- San Francisco RSA, April 2008
- Used Information Cards carrying SAML 2.0 tokens to authenticate to two federations
  - WS-Federation federation
  - SAML 2.0 federation
- 7 participating organizations
- [http://projectconcordia.org/index.php/RSA\\_IOP\\_Scenarios](http://projectconcordia.org/index.php/RSA_IOP_Scenarios)

# Information Card Foundation

Information Card  
Foundation



- Industry association to promote Information Cards – formed June 2008
- Corporate board members:



**EQUIFAX**

Google™



**Microsoft**

**Novell.**

**ORACLE**

**PayPal**™

- Sponsor members:



**gemalto**★



**P A R I T Y**

**PingIdentity**™



- Other members include: Arcot Systems, Aristotle, A.T.E. Software, CORISECIO, Crypto-Pro, Eduserv, ETRI, Figlo, Fraunhofer Institute FOKUS, FuGen Solutions, Fun Communications, Internet 2, Liberty Alliance, ooTao, Wisekey S.A., WSO2

# Information Card Foundation Initiatives

Information Card  
Foundation



- Issuing cards with Verified Claims
  - Claims such as Age, Name, Address
- Relying Party adoption campaign
  - Particularly to accept cards with verified claims
- Best practices recommendations for RPs
- Providing input to related standards efforts
  - OASIS IMI TC
  - OASIS SAML 2.0 Information Card Profile

# Shipping Information Card Software

- Shipped:
  - Windows CardSpace
  - IBM Tivoli Federated Identity Manager
  - Sun OpenSSO Enterprise 8.0
  - Bandit DigitalMe Identity Selector for Linux and Mac + IdP and RP software
  - Higgins Eclipse Rich Client Selector and Identity Framework
  - Open Source Relying Party packages:
    - Zend Framework (PHP)
    - Fraunhofer Institute FOKUS (Java)
    - ThoughtWorks (Ruby)
    - Ping Identity (C)
- In Beta:
  - Microsoft “Zermatt” Identity Framework and Visual Studio support
  - Shibboleth (Internet 2 academic federation software)
- Announced:
  - CA SiteMinder
  - Oracle Access Manager
  - Novell Identity Manager
  - Sun Access Manager
  - Siemens DirX

**Microsoft®**

**IBM**

**Sun**  
microsystems

**Novell®**

**ca** Transforming  
IT Management

**SIEMENS**

**ORACLE®**

# New OASIS Information Card Work



- Identity Metasystem Interoperability Technical Committee (IMI TC), September 2008
  - Identity Metasystem Interoperability 1.0 spec
  - Editors of the spec the presenters in this session
- Proposed SAML 2.0 token profile for Information Cards



Let's go online now...

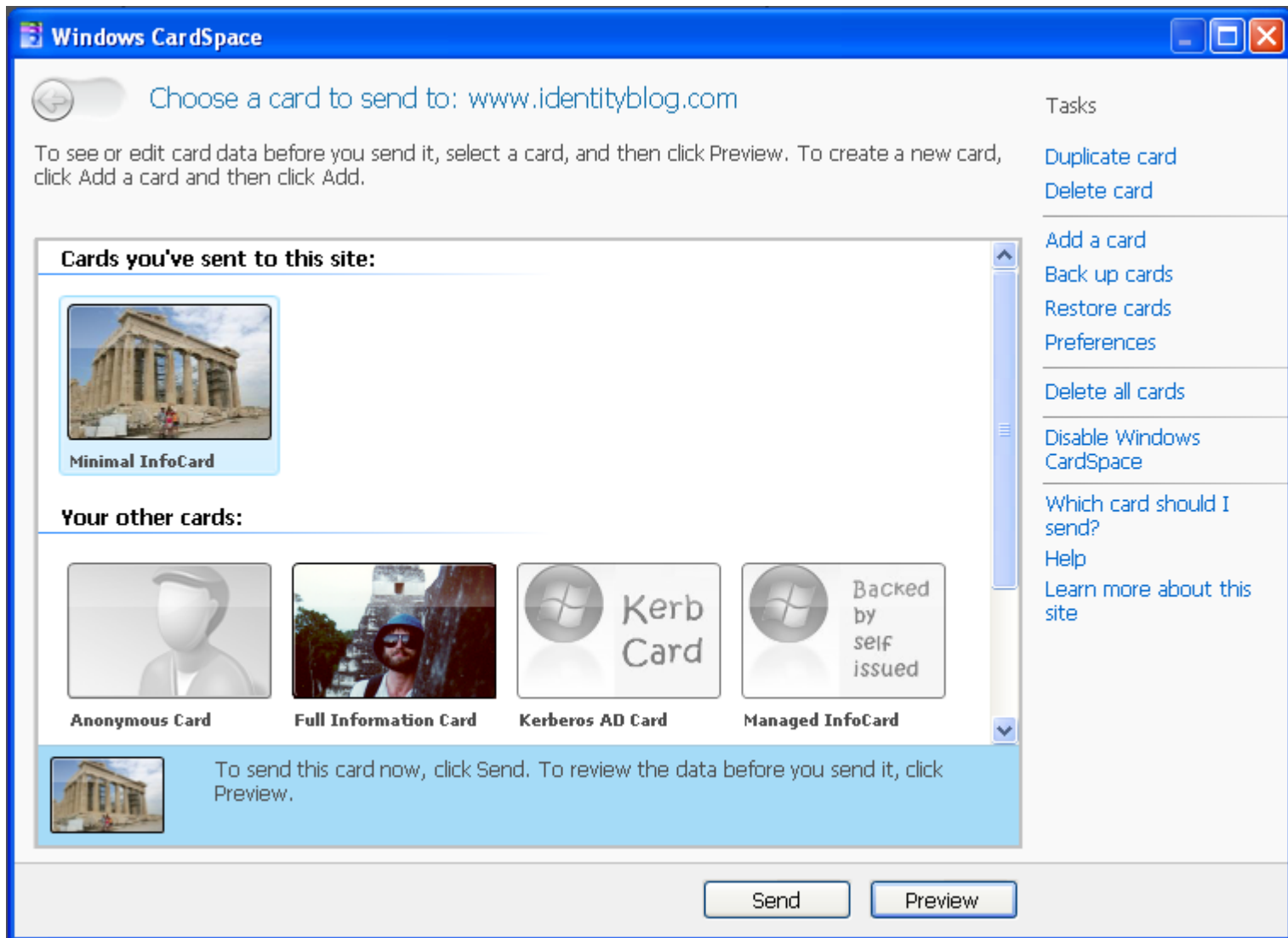
# For More Information



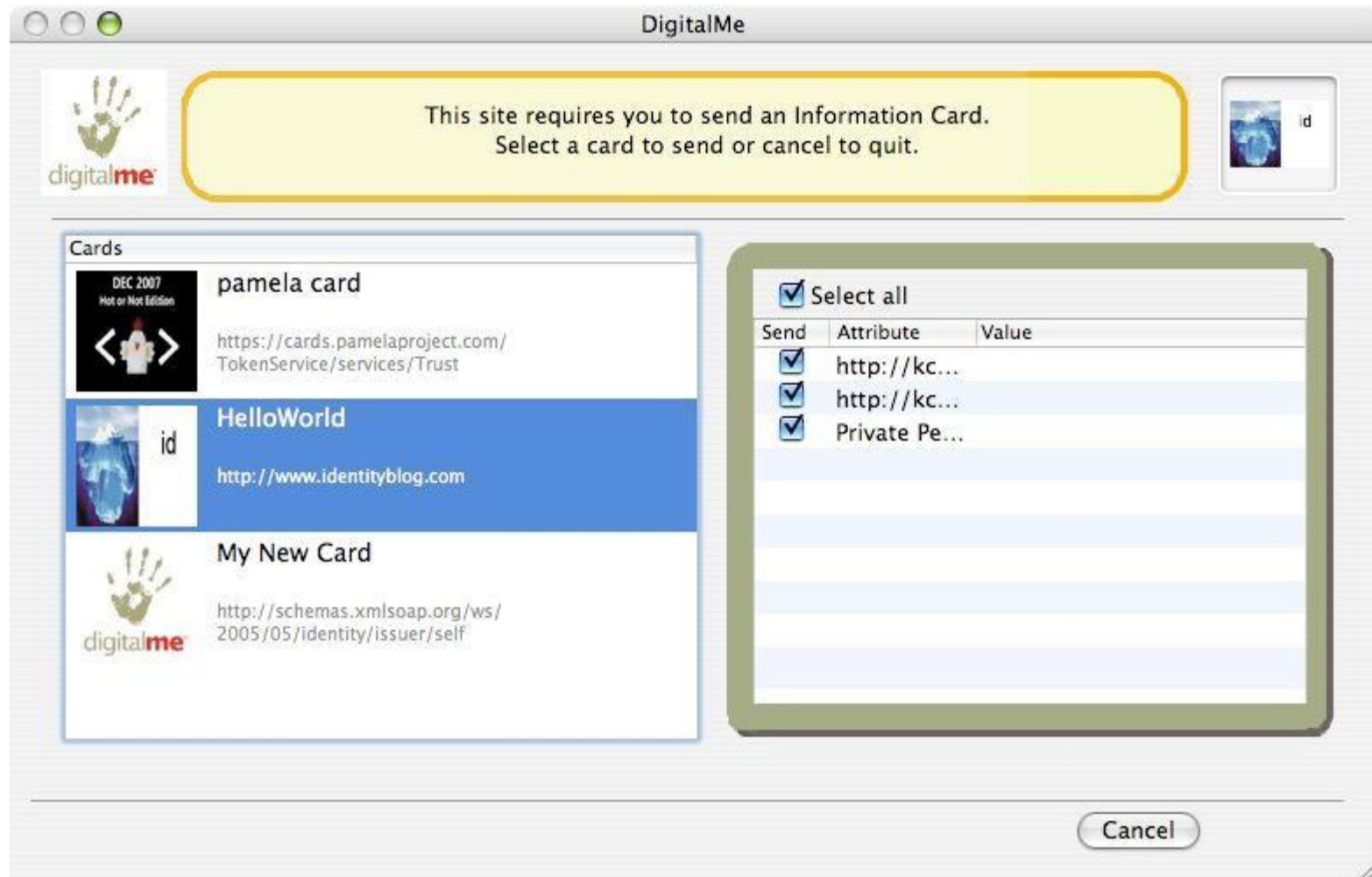
- Open Source Identity Systems (OSIS)
  - <http://osis.idcommons.net/>
- Information Card Foundation
  - <http://informationcard.net/>
- CardSpace Information
  - <http://msdn.microsoft.com/cardspace/>
- Kim Cameron's blog
  - <http://www.identityblog.com/>
- Mike Jones' blog
  - <http://self-issued.info/>
- Or e-mail Mike at
  - [mbj@microsoft.com](mailto:mbj@microsoft.com)

Backup Slides

# CardSpace User Experience



# DigitalMe User Experience



# Relying Party using an OBJECT Tag

```
<html>
<head>
  <title>Welcome to Fabrikam</title>
</head>
<body>
  <img src='fabrikam.jpg' />
  <form name="ctl00" id="ctl00" method="post"
    action="https://www.fabrikam.com/InfoCard-Browser/Main.aspx">
    <center>
      <img src='infocard.bmp' onClick='ctl00.submit()' />
      <input type="submit" name="InfoCardSignin" value="Log in"
        id="InfoCardSignin" />
    </center>
    <OBJECT type="application/x-informationCard" name="xmlToken">
      <PARAM Name="tokenType" Value="urn:oasis:names:tc:SAML:1.0:assertion">
      <PARAM Name="issuer" Value=
        "http://schemas.xmlsoap.org/ws/2005/05/identity/issuer/self">
      <PARAM Name="requiredClaims" Value=
        "http://schemas.xmlsoap.org/ws/2005/05/identity/claims/emailaddress
        http://schemas.xmlsoap.org/ws/2005/05/identity/claims/givenname
        http://schemas.xmlsoap.org/ws/2005/05/identity/claims/surname">
      </OBJECT>
    </form>
  </body>
</html>
```