Next Generation Person Registry with OpenRegistry

-or-



"The Fellowship of the Identity"







Agenda

- Project Overview
- What is OpenRegistry?
- OpenRegistry Approach
- Benefits
- Project Status
- Road Map
- How Can You Help?

Presenter And Contributors

- Presenter: Omer Almatary
 - Rutgers University New Jersey
 - Identity Management Consulting Application Manager
 - Joined Rutgers University in April 2010
 - Background: Identity Management and Directory Services (Telecommunications)
- Contributors to This Presentation:
 - Benjamin Oshrin : The Oshrinium LLC, OpenRegistry
 Pioneer
 - Jeremy Rosenberg: Simon Fraser University , IDM Architect
 - David Steiner: Rutgers University , IDM Architect

Project Overview

- Open source software application
 - Initiated by Rutgers University Mar 2008
 - Became a Jasig Incubator project Jan 2009
 - SFU joined the project late 2009

What Is OpenRegistry

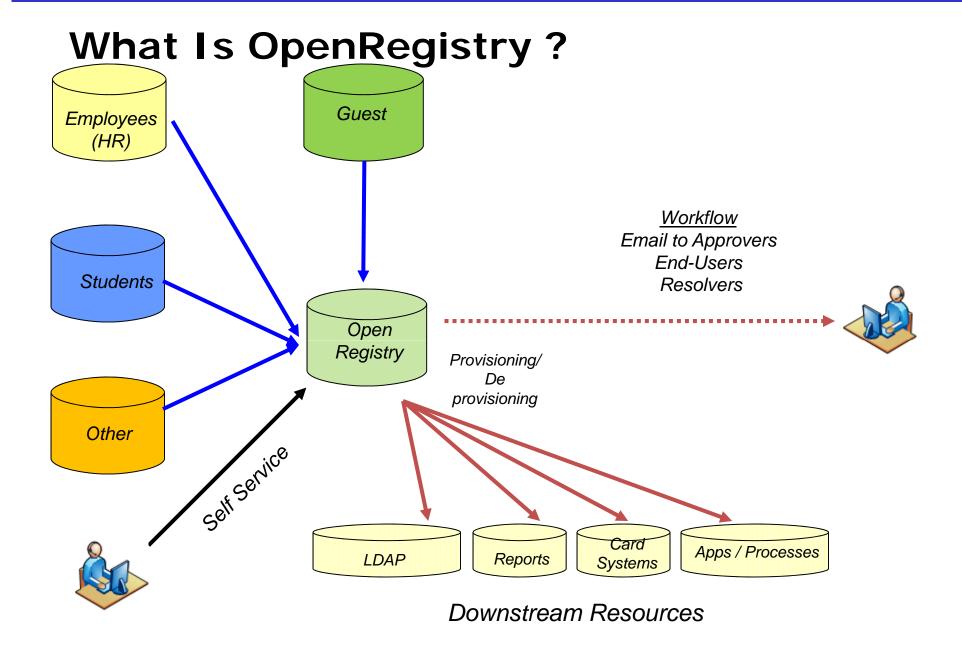
- An Open Source identity Management System, a place for data about people affiliated with your institution
- Identity store, but generally NOT authoritative
 - SoRs are authoritative for most data
- Identifier assignment (NetID,ID Card#,)
- Identity reconciliation for multiple SoRs. It combines distributed identity information into single identity records

What Is OpenRegistry

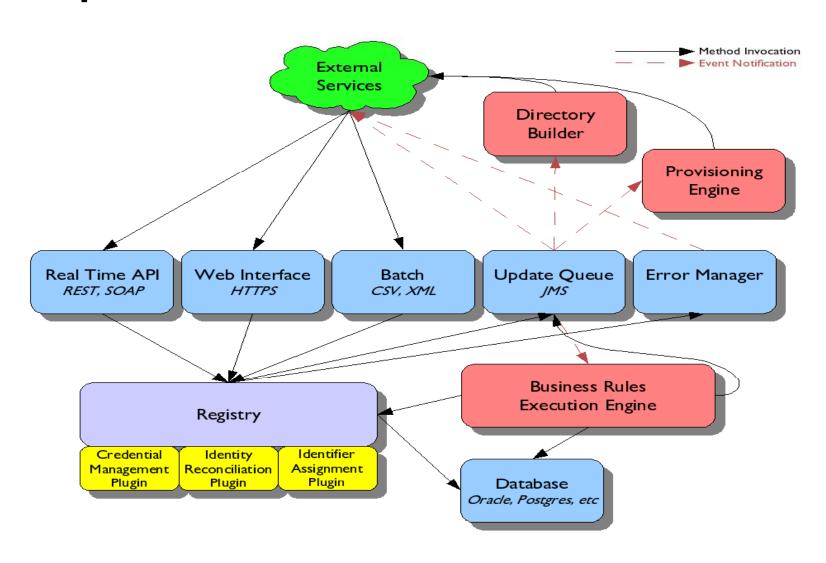
- Provisioning/De provisioning engine
 - Real time /Near Real time
- Workflow engine
 - Approvals for temporary affiliation (Guest)
 - Send Activation Keys
 - Send notification to resolvers
- Interfaces (In-bound):
 - Web (Self Service)
 - Batch
 - REST

What Is OpenRegistry

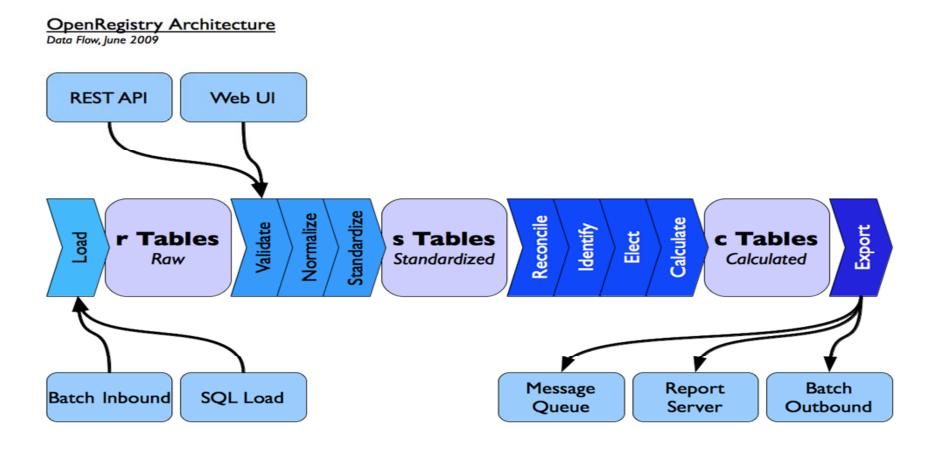
- Interfaces (Out-bound)
 - Queues (AMQ)
 - Batch
 - Directory , Reporting server, DB Views
- Reporting/Auditing engine
 - Report server
 - » Who has what access to what resource and why ?
 - » Attestation
- Directory builder
- Additional functionality
 - Data beyond Persons: Groups, Courses, Credentials,
 Service Accounts



Component Architecture



Component Architecture



- Capture information about all university populations (students, staff, faculty, guest, visitors, continuing ed, alumni, retirees, emeritus, etc...)
- Faster propagation of data from SoRs, real time where possible
 - RESTfull API's
- Role based access control
- Self service User Interface
 - Guest creation/sponsorship
 - Password reset via activation key
 - Help Desk/HR administration

- User settable privacy setting (disclosures)
- Automating User Lifecycle Management (On-Boarding, Off-Boarding, Approvals, etc.)
- Authorization model out of the box
- Modular system
 - Localize Your Web Interface for look and feel
 - Develope your own batch business logic
- Regulatory compliance
 - Provide timely audit and attestation
- Better user experience for every one

- "Off the shelf" solutions usually end up requiring significant customizations and integration work and/or solve only a portion of an institution's needs.
- Provides long term, sustainable model
- Combined institutional efforts better leverage scant resources and allow for learning from others' experience (eg: Sakai, uPortal, CAS, Shibboleth, Kuali)
- OpenRegistry is tailored to the needs of higher ed
- Decades of combined experience from before the field was called "Identity Management"

- Benefits of Migration to OR
 - Avoidance of vendor lock-in
 - Commercial solutions aren't drop-in, customization work needed
 - Easier to tailor to future needs
 - Community of similar institutions in similar situations

OpenRegistry Approach

- Generic architecture and data model
- Transparent, agile development process
- Multiple levels of engagement with the Higher ed community
 - Discuss: Review design documents, identify gaps and changes
 - Develop: Help write code, documentation, etc
 - Deploy: Run OR as an IDMS (when released)
 - Donate: Contribute resources to help with development and outreach
 - Encourage others to join the work force
- Build on lessons learned from other Jasig successful Open source projects (CAS, uPortal)

Project Status @RU(OpenRegistry Core)

- Generic data model designed and reasonable stable
- Core domain objects and base service layer code is stable
- Authorization module completed and tested
- Web UI authentication is integrated with CAS
- Reconciliation/Calculation Enhancement completed
- Normalization and Standardization completed
- RESTful API's majority designed
- Identifier assignments completed

Project Status @RU(Risk Factors)

- HCMS (HR) launched a new ERP (PeopleSoft) in January 2011
 - Too many moving parts
 - Integration with the Legacy People Data Base (PDB)
- Lost of key resources (Developers)
- Data Integrity
 - Need to certify OpenRegistry with real production data

Project Status (0.8 – Certification 1 Release)

- Scope :
 - Initial load from legacy People Data Base (PDB)
 - Student Record system batch feed
 - HR Record (PeopleSoft) system batch feed
 - OpenRegistry views (legacy PDB-like)

Project Status (0.8 – Certification 1 Release)

- Time Line: May, 16 2011
- Most of the work is Rutgers specific
- Deployed In Pre Production Environment
- Worked with Real production data from two SoRs (HR and Students)
- Worked In parallel with the legacy People Data Base (PDB)
- Run Validation every day
- Compare results from OpenRegistry repository and legacy PDB
- Use UI to view person for validation
- Use Views for validation

Project Status (0.9 - Certification 2 Release)

- Scope:
 - Help Desk UIs
 - Add/Update person
 - Add/Update role
 - Delete role/person
 - View complete person
 - Disclosure (OpenRegistry Jasig update)
 - Person level
 - Attribute level
 - Personal Info Application
 - Update User's information on behalf of SoRs (email address, emergency contacts, etc..)
 - REST API's
 - Email Address Update
 - NetID change

Project Status (0.9 – Certification 2 Release)

- Time Line: July, 29 2011
- Most of the work is Rutgers specific
- Deployed In Pre Production Environment
- Continue validation from previous release
- Test RSETful API for email update and NetID change
- Legacy PDB enabled applications system integration testing with the OpenRegistry Views

Project Status (1.0 – Beta Release)

Dependant on validation results from certification1 and 2

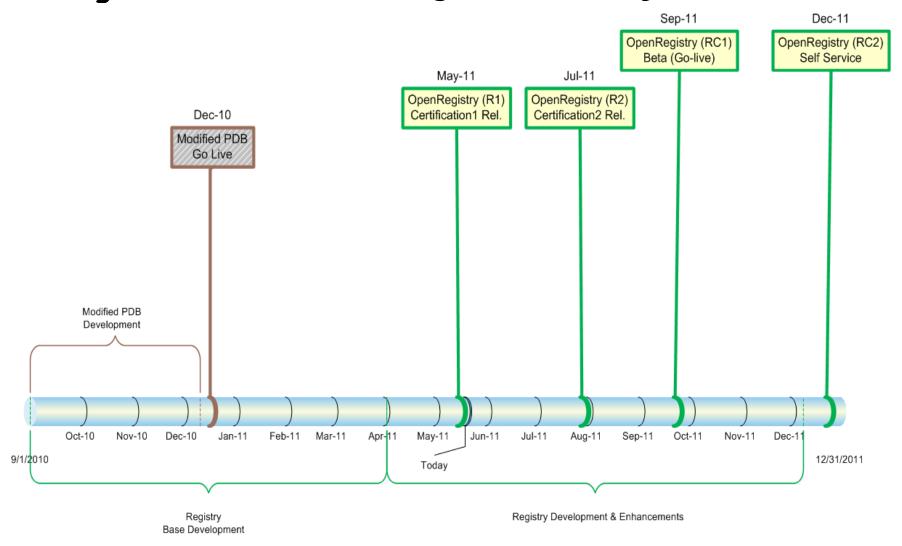
- Scope:
 - Help Desk UIs
 - Split/Join person
 - Authorization Tools (Administration/Delegation)
 - Generate activation key
 - Registry Feed to LDAP
 - AMQ Implementation
 - REST API's
 - Add/Delete Person/Role
 - Update Person/Role
 - Add non Person (Program accounts)
- Time Line: September, 23 2011
- Deployed In Production Environment Go-live

Project Status (1.1 – Release)

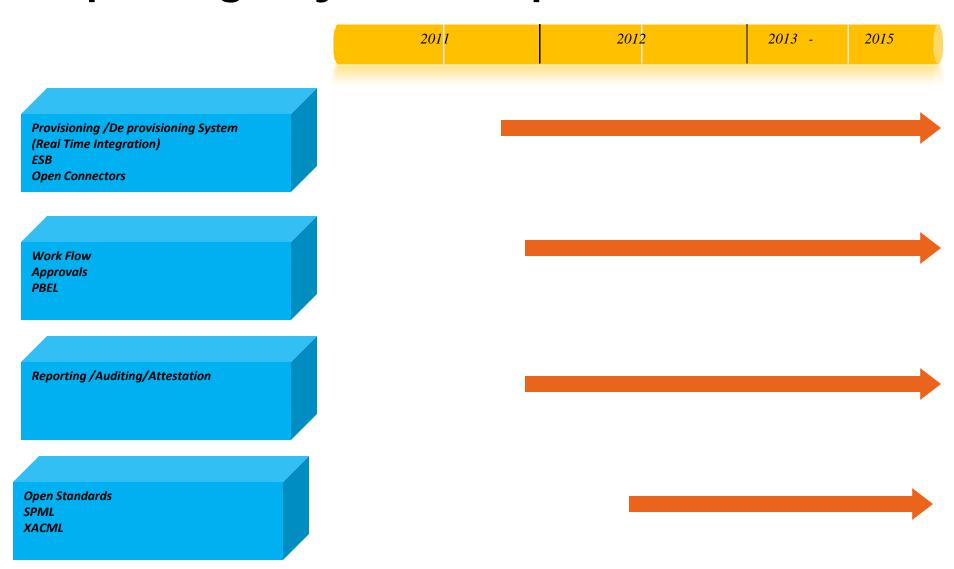
Dependant on validation results from certification1 and 2

- Scope:
 - NetID Management Tool
 - Password Set/Reset Self service
 - Activation key is sent to the end users
 - Real Time Provisioning via AMQ
 - ID Card System
- Time Line: December, 23 2011
- Deployed In Production Environment Go-live

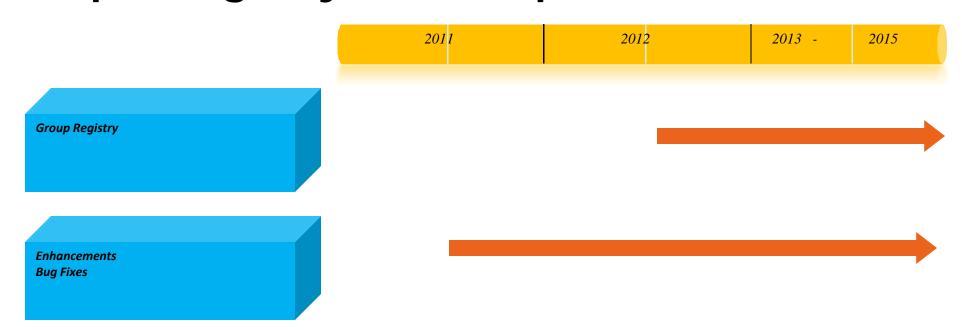
Project Status (@Rutgers University Timeline)



OpenRegistry Road Map



OpenRegistry Road Map



How Can You Help?

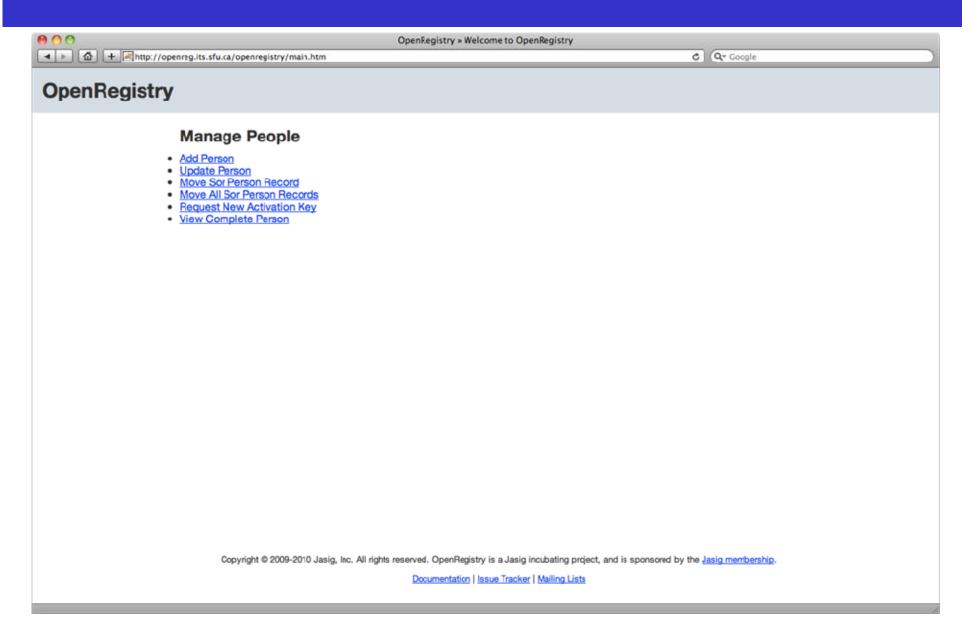
- Visit
 - https://wiki.jasig.org/display/OR/Home
 - https://wiki.jasig.org/display/ORUM/Home
- Join:
 - OpenRegistry Dev Mail List <u>openregistry-dev@lists.ja-sig.org</u>
 - OpenRegistry Monthly Call
- Attend a Jasig event http://www.jasig.org/
- Potential for collaboration could take many forms
 - Participation in or vetting of OR design
 - Evaluation for migration and adoption as OR matures
 - Adjustment of OR milestones according to your needs, with your resources

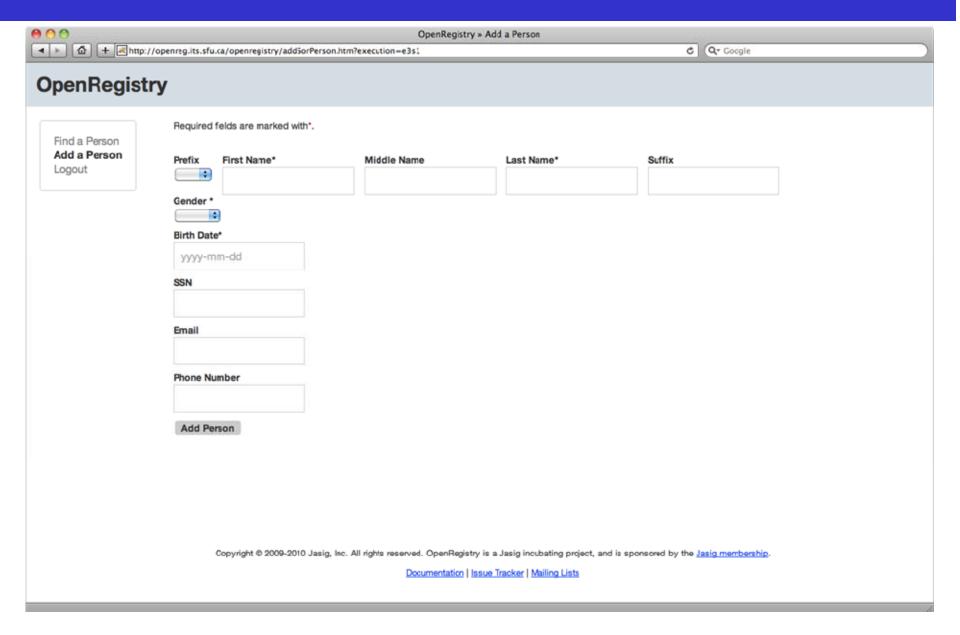
Miscellaneous

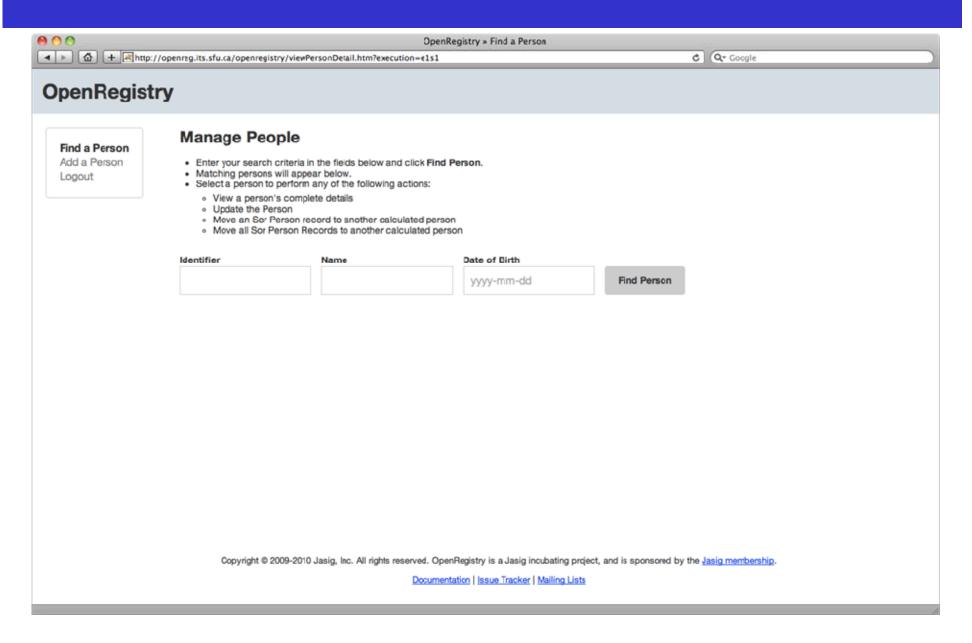
- Rutgers Implementation:
 - SpringFramework 3.0.5
 - Hibernate.version 3.5.5
 - Camel version 2.5.0
 - ActiveMQ version 5.4.2
 - Tomcast version 6.0.32
 - Java SDK 1.6
 - Database: Oracle 11g
 - HW: Sun

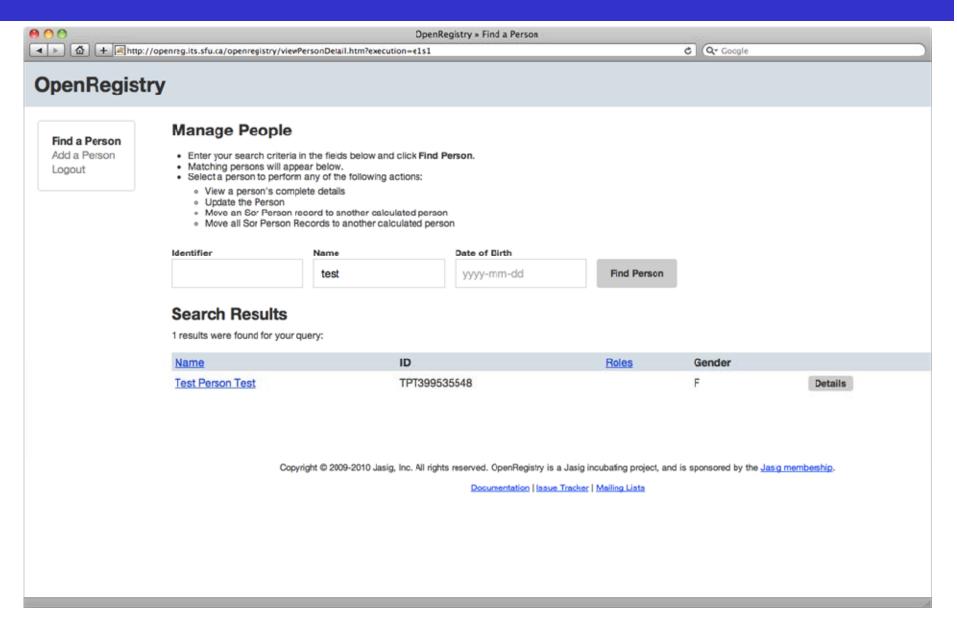
Data Model

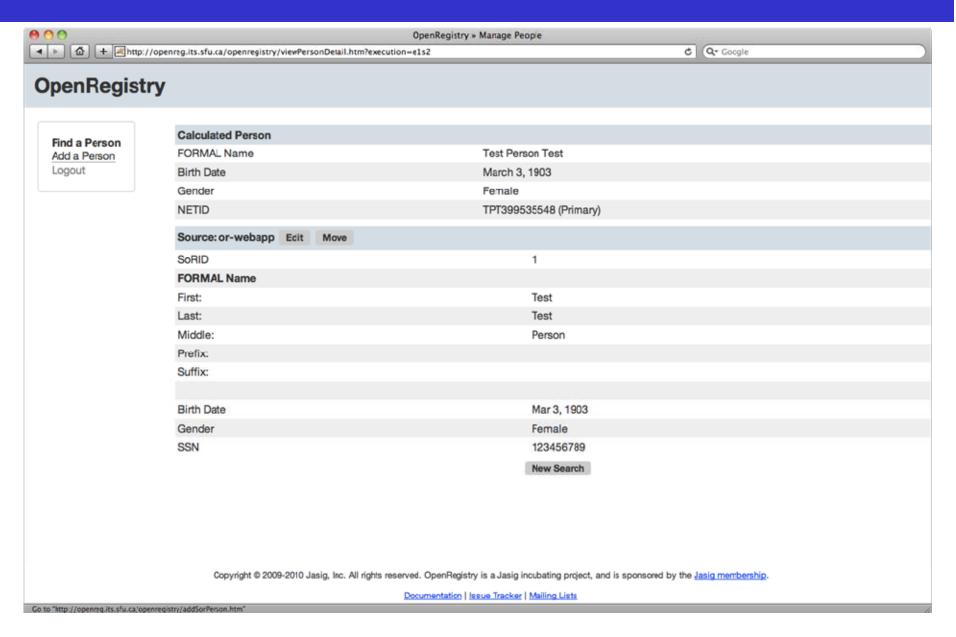
 https://wiki.jasig.org/download/attachments/17006634/or-db-04-2011_model.pdf











THANK YOU

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