How 20+ US universities are using Gluu to ease operation of a Shibboleth IdP

June 5, 2013
Today's Agenda

1. Introduction & Overview
2. Typical Gluu Deployments
3. The Business Case
4. Gluu Demo
5. Q&A

Hosted by:

Mike Schwartz
Gluu CEO and Founder
Gluu Overview

- Founded in 2009 to help organizations decrease the cost and increase the quality of authentication and authorization services.

- Authors of “OX”, a leading open source project that implements new OAuth2 protocols and older protocols like SAML and RADIUS.

- Gluu offers scalable “utility” services to large organizations who want to use OX

- Gluu eases the on-boarding of new IDPs to a federation
Market Trends

- **Current “WAM” Web Access Management platforms are old**
  - Commercial WAM products result in vendor lock-in
  - Very custom: too expensive to design, build and operate
  - Don’t play nice with mobile applications

- **Move to strong authentication**
  - New two-factor authentication mechanisms have better price and usability

- **Move to Open Standards**
  - OAuth2 and SAML make it possible to centralize authentication and authorization for both internal and SaaS applications

- **Move to Open Source**
  - Open source is the best. OX will be aligned with a major open source foundation like Apache or Shibboleth.
Rising Tide: OAuth 2.0 Profiles

Gluu supports two profiles of OAuth2: OpenID Connect and UMA.
The OX Platform is in this grey box!

Organizations can support multiple strong authentication providers.

Apps use open standards like SAML and OAuth2 to authenticate and authorize people using OX.

How OX Works

OX enables an organization to use existing LDAP or IDM infrastructure.
What is a Gluu Server?

- **Automatic “Puppet” deployment of OX**
  - Puppet is a central configuration platform that enables Gluu to create a recipe for a type of server
  - Gluu’s marginal cost per server is low

- **Shared operational model**
  - Gluu / Customer both have “root access” on IDP
  - Customer provides IAAS service
  - Customer interfaces with App Developers
  - Gluu manages OAuth2 / SAML configuration for IDP
  - Gluu provides monitoring / SLA Reporting
Typical Deployments:

Number of Gluu Servers

1 Server:
1 Production Server.

2 Server: *(More Stable)*
1 Production Server, 1 Development Server.

4 Servers: *(Most Stable)*
2 Production Servers, 2 Development Servers
w/ Clustering for High Availability
BOT Business Model

● **Build**
  - Help customers quickly deploy OX using our automatic puppet deployment model

● **Operate**
  - Customers can reduce the cost of “care and feeding” and leverage Gluu’s infrastructure for monitoring, reporting.

● **Transfer**
  - Provide training and certifications
The Business Case: **Buy vs. Build..?**

Typical Gluu EDU deployment:

2 Servers = $5,200/yr = ~ 8% FTE (Full Time Employee)

For 8% FTE resource:
- A GUI for Shibboleth (*No More Manual XML!!*)
- Expert support from team of federation specialists
- 24/7 Monitoring
- Configuration management
- Revision Control
- SLA reporting
## SLA Reporting

### Dashboard

#### Reporting Period:
- **This Year**
- **From 01/01/2012 00:00 to 11/07/2012 00:00**

#### Host State

<table>
<thead>
<tr>
<th>State</th>
<th>Duration</th>
<th>Total Time</th>
<th>Mean Time</th>
<th>Alerts</th>
</tr>
</thead>
<tbody>
<tr>
<td>UP</td>
<td>5M 3w 2d 20h 42m 14s</td>
<td>91.42%</td>
<td>91.42%</td>
<td>190</td>
</tr>
<tr>
<td>DOWN</td>
<td>2w 2d 11h 17m 46s</td>
<td>8.58%</td>
<td>8.58%</td>
<td>160</td>
</tr>
<tr>
<td>UNREACHABLE</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0</td>
</tr>
<tr>
<td>SCHEDULED DOWNTIME</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0</td>
</tr>
<tr>
<td>UNDETERMINED</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>6M 1w 3d</strong></td>
<td><strong>350%</strong></td>
<td><strong>350%</strong></td>
<td><strong>350</strong></td>
</tr>
</tbody>
</table>

#### State Breakdowns For Host Services

<table>
<thead>
<tr>
<th>Service</th>
<th>OK %</th>
<th>Alert %</th>
<th>Warning %</th>
<th>Critical %</th>
<th>Unknown %</th>
<th>Scheduled downtime %</th>
<th>Undetermined %</th>
</tr>
</thead>
<tbody>
<tr>
<td>check_idif_app_average_load</td>
<td>14.96% (28.05%)</td>
<td>784</td>
<td>2.56% (4.45%)</td>
<td>2459</td>
<td>39.00% (60.90%)</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>check_idif_app_ds_status</td>
<td>100% (100%)</td>
<td>61</td>
<td>0% (0%)</td>
<td>0</td>
<td>0% (0%)</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>check_idif_app_free_disk_space</td>
<td>100% (100%)</td>
<td>60</td>
<td>0% (0%)</td>
<td>0</td>
<td>0% (0%)</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>check_idif_app_free_memory</td>
<td>100% (100%)</td>
<td>61</td>
<td>0% (0%)</td>
<td>0</td>
<td>0% (0%)</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>check_idif_app_vds_status</td>
<td>81.52% (81.52%)</td>
<td>32</td>
<td>18.38% (18.38%)</td>
<td>38</td>
<td>0% (0%)</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>check_idif_app_free_swap</td>
<td>100% (100%)</td>
<td>61</td>
<td>0% (0%)</td>
<td>0</td>
<td>0% (0%)</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>check_idif_app_last_update</td>
<td>97.88% (97.88%)</td>
<td>86</td>
<td>0.05% (0.05%)</td>
<td>23</td>
<td>2.00% (2.00%)</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>check_idif_app_person_count</td>
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<td>62</td>
<td>0% (0%)</td>
<td>0</td>
<td>0% (0%)</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>check_idif_app_ssl_expiry</td>
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<td>61</td>
<td>0% (0%)</td>
<td>0</td>
<td>0% (0%)</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>check_idif_app_system_uptime</td>
<td>100% (100%)</td>
<td>62</td>
<td>0% (0%)</td>
<td>0</td>
<td>0% (0%)</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>check_idif_app_http_status</td>
<td>72.56% (72.56%)</td>
<td>66</td>
<td>1.93% (3.06%)</td>
<td>3</td>
<td>27.44% (42.44%)</td>
<td>3</td>
<td>0%</td>
</tr>
<tr>
<td><strong>Average</strong></td>
<td><strong>87.9% (88.91%)</strong></td>
<td><strong>1396</strong></td>
<td><strong>1.91% (2.06%)</strong></td>
<td><strong>2523</strong></td>
<td><strong>6.32% (6.01%)</strong></td>
<td><strong>0%</strong></td>
<td><strong>0%</strong></td>
</tr>
</tbody>
</table>
Gluu EDU Add-ons:

- Multi-Factor Authentication (vendor neutral)
- Clustering for High Availability (min. 4 Servers)
DEMO

- Authentication
- Identity Management
  - Attributes
  - LDAP Mapping
- Look and Feel
- SAML
  - Trust Relationships
  - Federation Hosting
- OpenID Connect
  - Two Factor Authentication
  - Scopes
  - Clients
  - Discovery
- UMA
Q & A

Learn More at
http://gluu.org/edu

Some Gluu EDU Customers:

- University of Kentucky
- Oklahoma State University
- The University of Oklahoma
- Georgia State University
- Franklin and Marshall
- Boise State University

We Support: