Secured Services Best Practices on ArcGIS for Server

Patrick Jackson & Harrold Sompotan
Agenda

- Security Store types (Built-in vs. AD or LDAP stores)
- Modes of authentication (GIS/Web Tier)
- Selecting the right Authentication Tier
- SSL Encryption
- Other considerations
ArcGIS for Server identity store types:

- Built-in Store
  - Create users and groups within ArcGIS Server
- Windows Active Directory
- LDAP store
  - Leverage the existing security store
- Other common security stores used:
  - SQL server Store
  - Custom ASP.NET providers
  - Portal for ArcGIS Federation
GIS Tier authentication

Authenticated using Esri's token-based authentication mechanism. The web adaptor can be used or can be omitted.
Web Tier authentication

- ArcGIS Server delegates authentication to the web server such as Microsoft IIS, Apache, etc.
- Requires the use of the Web Adaptor.
Determining the best authentication tier

GIS Tier authentication

- Both public and internal access required
- Services primarily consumed by clients built using ArcGIS Web APIs
- Token based support for printing secure services
Determining the best authentication tier (cont.)

**Web Tier authentication**
- Internal user access only.
- SSO (Single Sign On) requirement
- No support for Print Services
Encryption

- HTTPS end to end
  - Valid SSL certificate
  - SSL Cert on Web Adaptor
  - Not required on AGS
Other considerations when setting up secured services

- Disable the PSA (Primary Site Administrator)
- Limit access to the ArcGIS Server directories
- Encrypt the ArcGIS Server directories
Demo

Setting up ArcGIS Server with Windows Domain and Built in Roles
Demo
Setting up LDAP and Built in Roles
ArcGIS Server Security

ArcGIS Server security determines who can administer the GIS server, who can publish to the GIS server, and who can use the services.

General ArcGIS Server security settings are displayed below. To change the accounts recognized by ArcGIS Server and set their permissions, click the Users and Roles links above. To set access rules for a service, use the Services > Manage Services page.

Configuration Settings
User Store: 
Role Store: 
Authentication Tier: 
Authentication Mode: 
Primary Site Administra 
Username: 
Token Settings 
Lifespan of Short-lived Token 
Lifespan of Long-lived Token 

Enterprise Store Type
You have chosen to use users from your external system to be managed by ArcGIS Server.

Choose your Enterprise store type:
- Windows Domain
- LDAP

Primary Site Administra
Username: 

Token Settings 
Lifespan of Short-lived Token 
Lifespan of Long-lived Token 

LDAP User Store
Host name: 
Port: 
Base DN: 
URL: 
RDN attribute: 
Administrator's DN: 
Password: 

Test Connection
**It is recommended that you specify an administrator account with a password that does not expire.**

<table>
<thead>
<tr>
<th>Host name</th>
<th>Your Servers Hostname</th>
</tr>
</thead>
<tbody>
<tr>
<td>Port</td>
<td>389 normally</td>
</tr>
<tr>
<td>Base DN</td>
<td>The distinguished name (DN) of the node in the directory server under which user information is maintained. (ou=users,ou=arcgis,dc=mydomain,dc=com)</td>
</tr>
<tr>
<td>URL</td>
<td>This is created automatically based on the hostname and Base DN</td>
</tr>
<tr>
<td>RDN attribute</td>
<td>The relative distinguished name (RDN) attribute for user entries in the LDAP server. (For the DN &quot;cn=john,ou=users,ou=arcgis,dc=mydomain,dc=com&quot; the RDN is &quot;cn=john&quot; and the RDN attribute is cn.)</td>
</tr>
<tr>
<td>Administrator’s DN</td>
<td>The easiest way to get this for AD is to do a whoami /FQDN. (uid=admin,ou=administrators,dc=mydomain,dc=com)</td>
</tr>
</tbody>
</table>
Demo
Securing a service in Server Manager
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1. Download the Esri Events app and find your event.

**Select the session you attended**

2. Select the session you attended.

**Scroll down to find the survey**

3. Scroll down to find the survey.

**Complete Answers and Select “Submit”**

4. Complete Answers and Select “Submit”.

Add Reminder

**ArcPad - An Introduction**

SDCC - Room 32 A

**TIME**

- Jul 11, 8:30 AM - 9:45 AM

**DESCRIPTION**

This session will provide an overview of ArcPad, Esri's software for mobile GIS and field mapping, with an emphasis on the new...