

DevSummit DC

February 11, 2015 | Washington, DC



ArcGIS for Server: Security

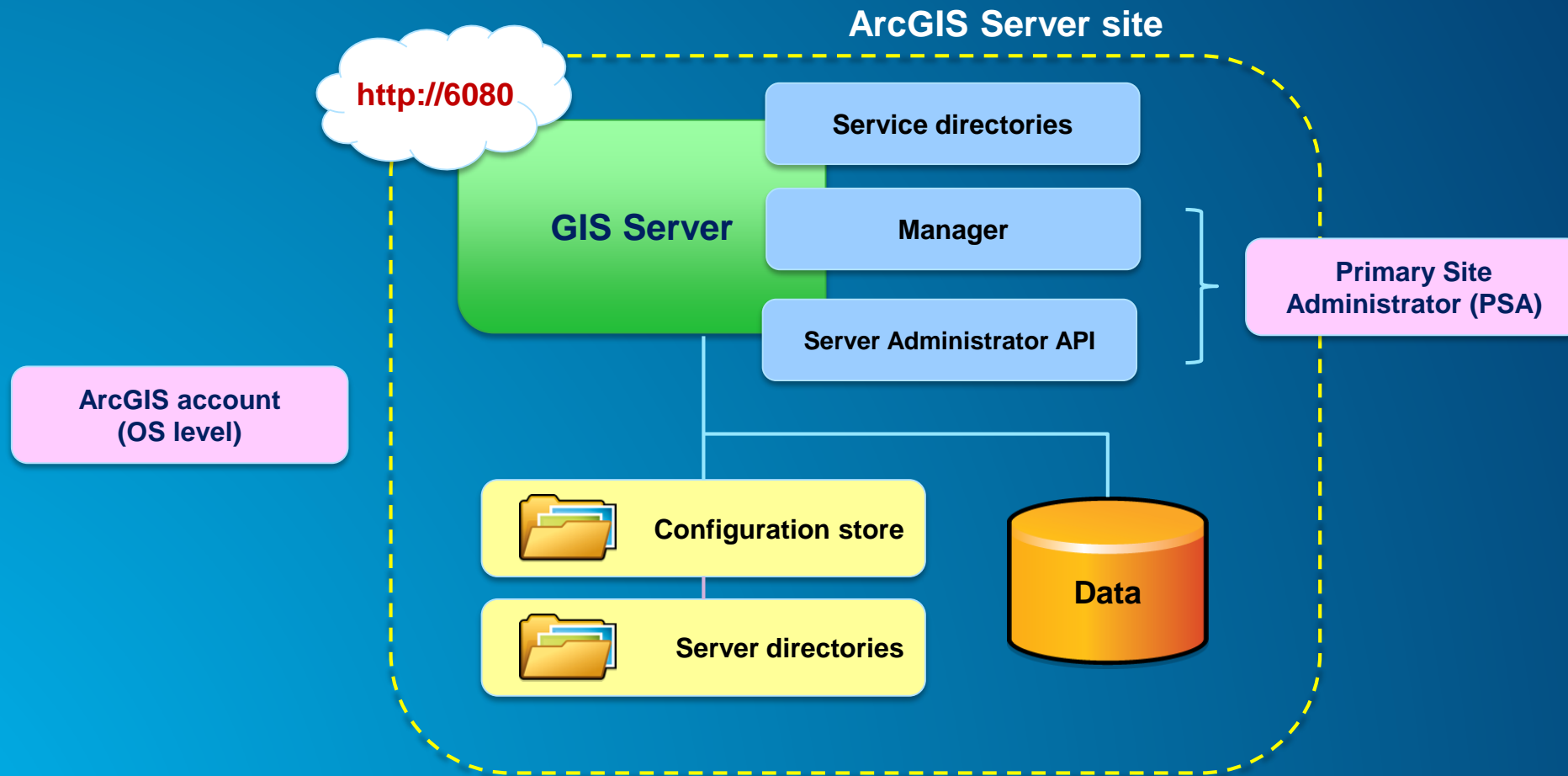
Michael Sarhan – Esri

msarhan@esri.com

Agenda

- **Review**
- **Basic Security Workflow**
 - **ArcGIS Server Roles and Identity Stores**
 - **Authentication**
 - **Authorization: Securing Web Services**

Review: ArcGIS for Server Architecture



Simple Security Workflow



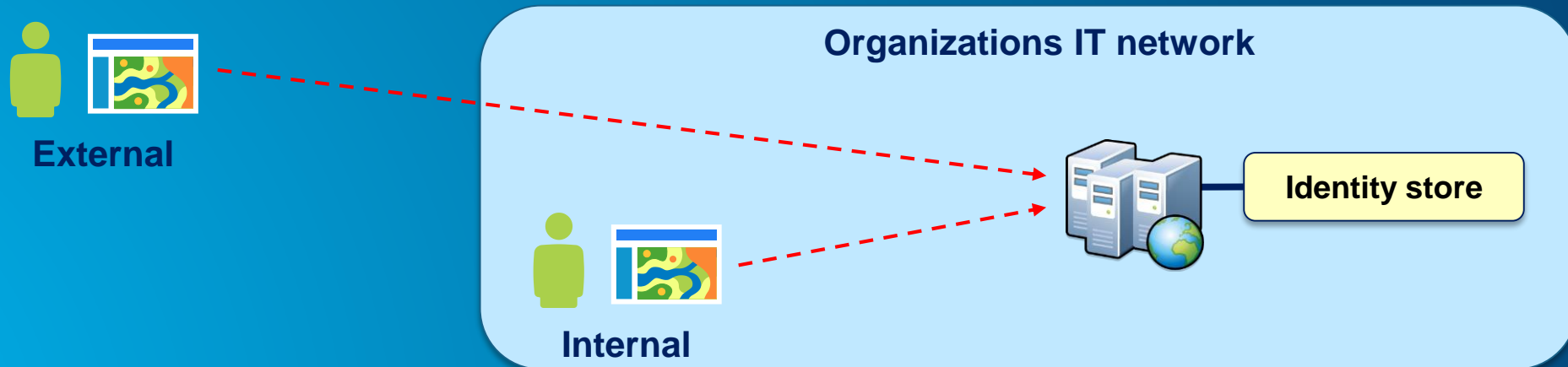
ArcGIS for Server Access

- **User** → Valid login to access
- **Role** → Grouping of users
 - 3 types
 1. **Administrators** – Full admin control
 2. **Publishers** – Publish web services
 3. **Users** – View web services
- **Identity store** → Defines your users and roles
 - User store + Role store



ArcGIS for Server: User considerations

- **Where are your users coming from?**
 - Determines which type of identity store you should use
- **Intranet → Windows Active Directory or LDAP**
- **Internet → Built-in or custom**



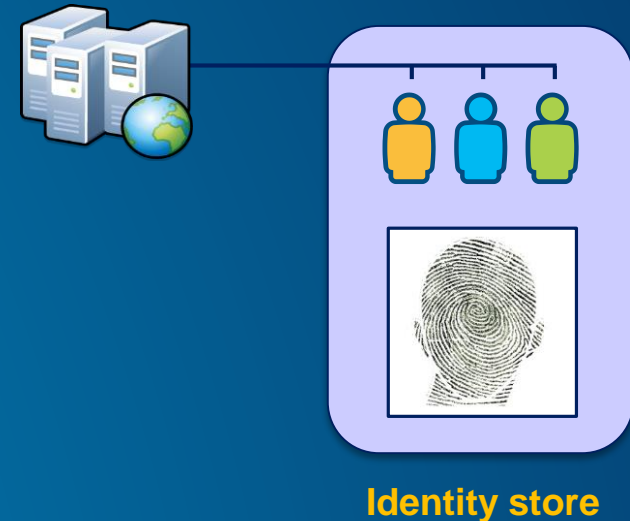
ArcGIS for Server: Role considerations

- How much control do I have on my ArcGIS Server site?
 - Managed by me, within my Dept? or
 - Managed by my organization's IT Dept
- May affect where you define your roles

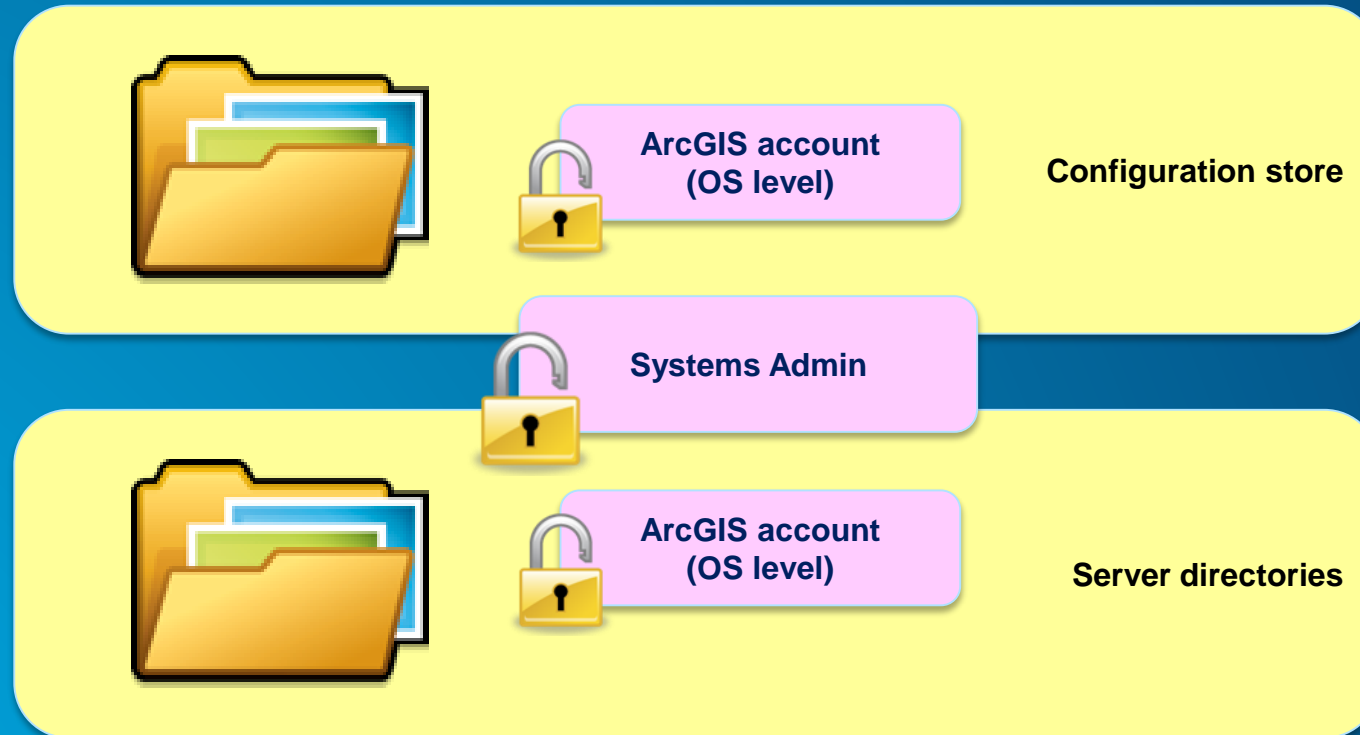


ArcGIS for Server: Identity Store

- **Identity Store** → Defines your users and roles
- 3 different options
 1. **Built-in** (default)
 2. **Register with an enterprise identity store**
 - Windows Active Directory
 - LDAP
 3. **“Mixed mode”**
 - Users from enterprise identity store
 - Roles from built-in store



Lock down Configuration Store and Server Directories



Simple Security Workflow



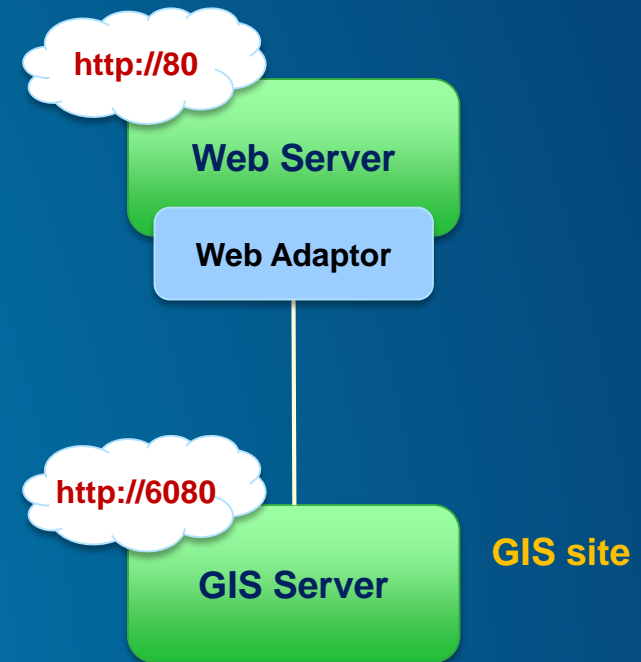
Authentication Tier/Method

- **Authentication** → Check and verify user identity
- 2 options
 1. **GIS Tier**
 - Uses tokens to authenticate
 2. **Web Tier**
 - Uses HTTP authentication
 - E.g., Basic, Digest, Integrated Windows, Client certificates (PKI), and Custom
 3. **Portal Tier**
 - Portal for ArcGIS handles the authentication
 - Managed by federating Server with Portal



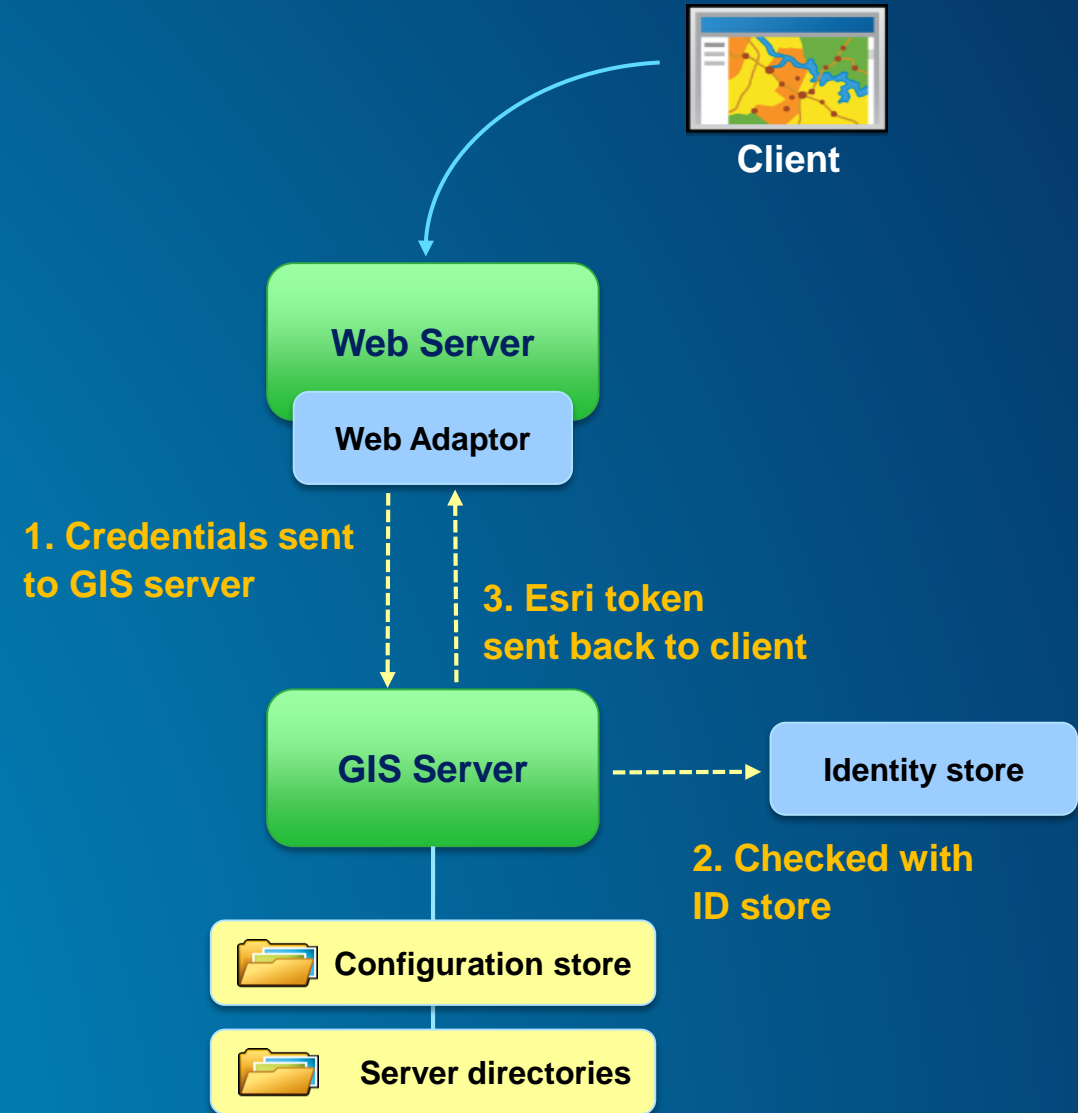
ArcGIS for Server – Web Adaptor

- Enables ArcGIS Server to work with 3rd party web server
 - E.g., IIS, Web Sphere, etc.
- Leverage web server features
- Provides more flexibility to control site access
- Conceptually like a reverse proxy



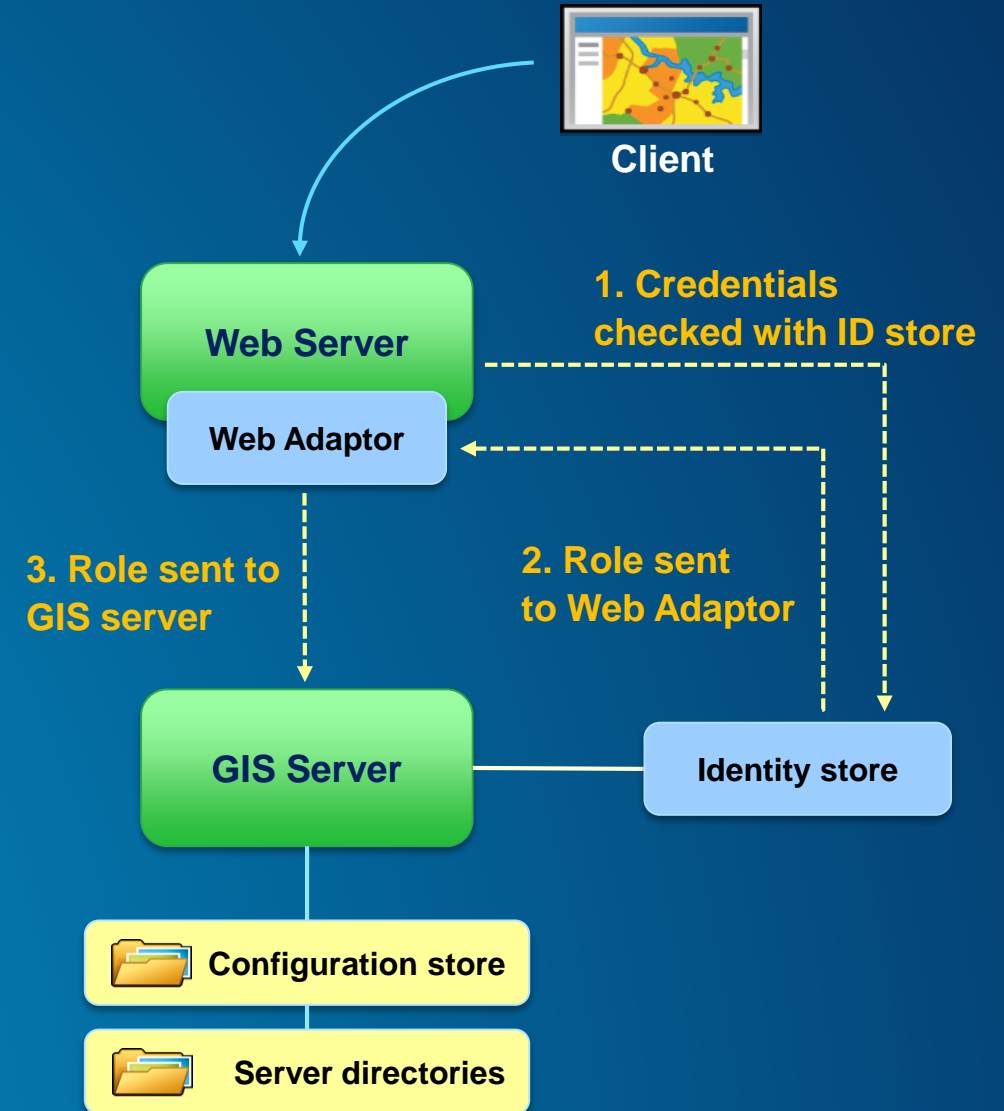
GIS Tier Authentication

- GIS Server checks credentials
- **Token** → Unique identifier sent from Server to client to identify an interaction session



Web Tier Authentication

- Web server checks credentials
- Must use Web Adaptor
- HTTP authentication

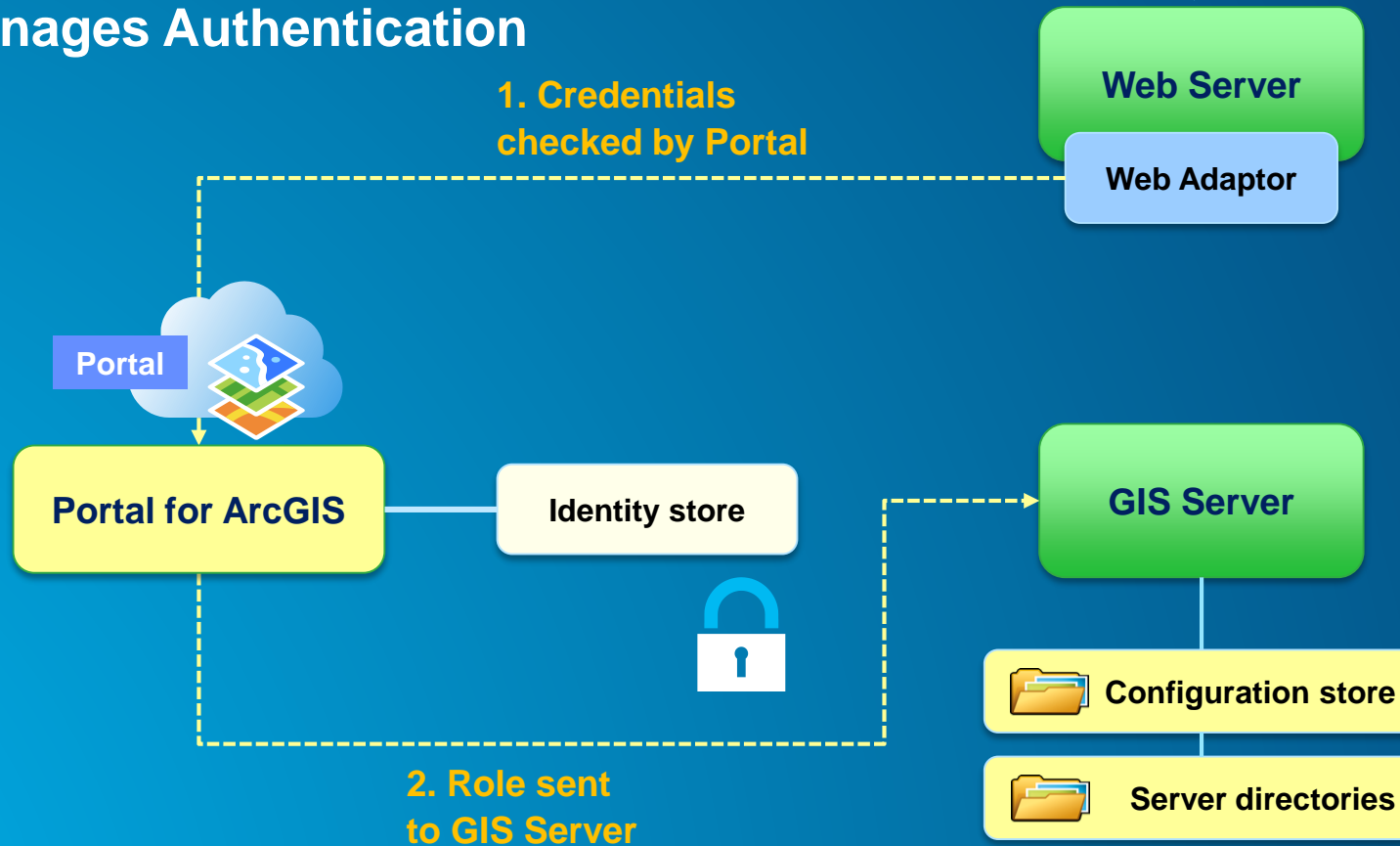


Portal for ArcGIS



Client

- Portal Manages Authentication



Authentication

Show identity store

Show options for authentication

Simple Security Workflow



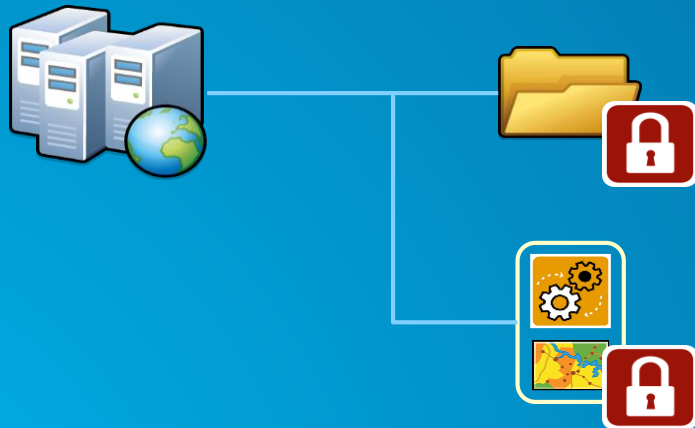


Authorization

What you are allowed to do

Securing GIS Web Services

- **Set permissions for roles on folders and services**
 - Administrators/Publishers grant permissions
- **All new services are public by default**
 - Anonymous access



Authorization

Show securing a web service

Show accessing a secured service in a client application

Summary

- **Review**
- **Basic Security Workflow**
 - **ArcGIS Server Roles and Identity Stores**
 - **Authentication**
 - **Authorization: Securing Web Services**



Understanding our world.