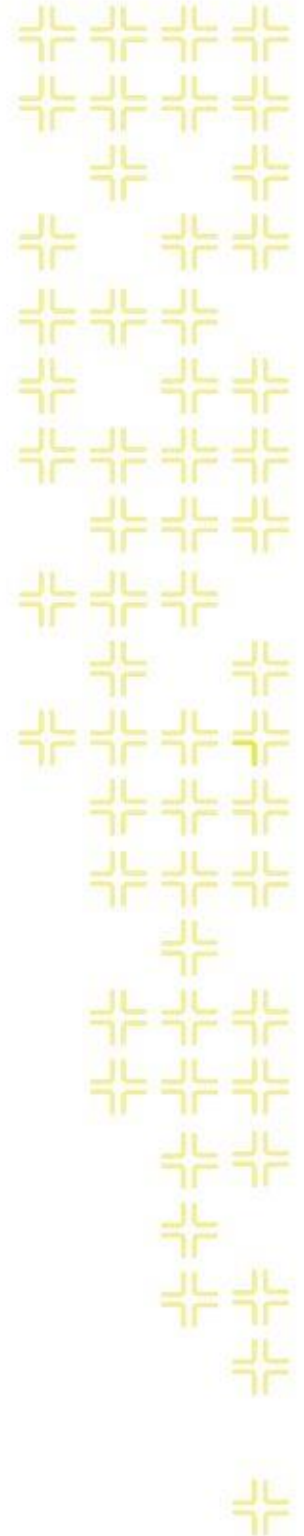# lucity™

TRAINING GUIDE

ArcGIS Enterprise Administration Part 3

ArcGIS Enterprise Administration - Part 3

This session touches on key elements of Portal for ArcGIS setup, configuration and maintenance techniques.

Table of Contents

Portal for ArcGIS

Portal for ArcGIS Design

- Support Windows Server 2008 R2 sp1 or higher
- For Virtualization, recommend Windows Server 2012 R2 or higher
- Machine name should not have an underscore
- Portal cannot be installed on a Domain Controller
- Server should have 4 cores minimum and 8GB of RAM. Depending on setup and the use of ArcGIS Data Store, IOPS could potentially be crucial in your design planning for Portal. Recommend M.2 SSD raid array.
- ArcGIS Enterprise Base Deployments should have more cores and RAM to compensate for the additional components.
- Ports 7080, 7443, 7005, 7099, 7199, and 7654 need to be open for communication with Portal on your firewall
- Domain needs to have the FQDN for the machine hosting Portal
- Signed SSL from a trusted certificate authority (CA) internal or commercial for Portal.
- It is recommended that all ArcGIS Enterprise web services use a signed SSL (Portal, ArcGIS Server, ArcGIS Web Adaptor).
- ArcGIS Web Adaptor is required for Portal
- For Federated Portal (ArcGIS Server connected to Portal as the security method), recommend using a second web adaptor for ArcGIS Server specifically.
- Space depends on use for Data Store. Portal and ArcGIS GeoEvent Server uses data store for content storage.
- Recommend not deploying Portal for ArcGIS on the same server as ArcGIS Server for more than 30 users.

Pre-Deployment Considerations

Portal for ArcGIS is an interface much like ArcGIS Online. Lucity needs Portal for ArcGIS if you are not using ArcGIS Online for Lucity WebMaps to function with all available WebMap tools. Portal for ArcGIS is generally used for internal use but can be used outside of your network as well.

- Signed SSL
- Federated versus Non-Federated
  - If federating, recommend creating web adaptors for both Portal and ArcGIS Server. In the installation process, we'll cover the registration of the web adaptor for Portal. This could reside in the DMZ (following the DMZ Web firewall rules and installing the web adaptor in the DMZ) or internally on a web server.
- Authentication Decision: ADFS integration, Standard Active Directory, Built-in Security, Gmail, Facebook, other SAML or OAuth Single Sign On Identity Providers. These are factors for authenticating your users. List of SSO Providers
- Internal Only or External (External will require network engineers to configure the firewall on your DMZ to the internal Portal server.)
- If using Portal for hosting content, relational data, tiled data, or spatiotemporal data, you will need to install ArcGIS Data Store.
- If active directory integration, portal needs e-mail addresses assigned to each user within Active Directory.
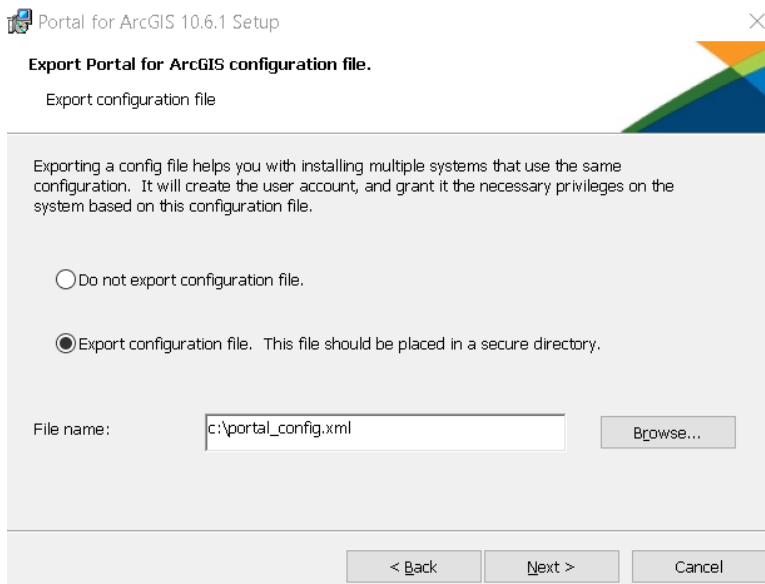
Portal for ArcGIS Installation

1. Click on the installation file of Portal for ArcGIS.

2. Once installation starts, click next, accept master agreement and continue.

3. Installation of portal should be in your installation directory. By default, it's on your C:\ drive.
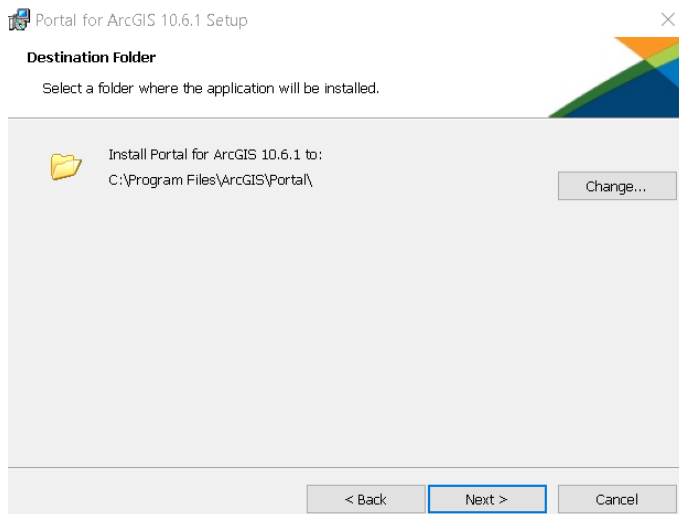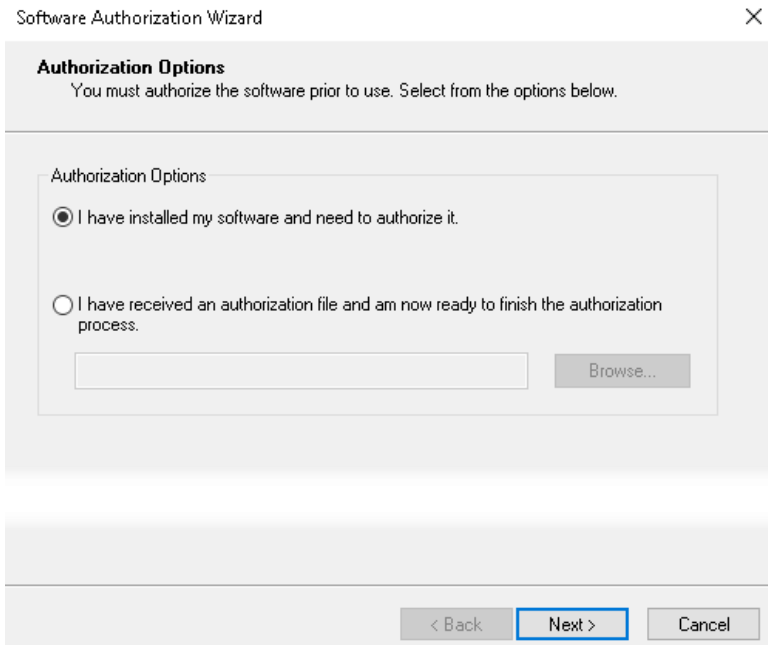

4. Click next and change arcgisportal location of the directory storage for log, index and temporary files if necessary.

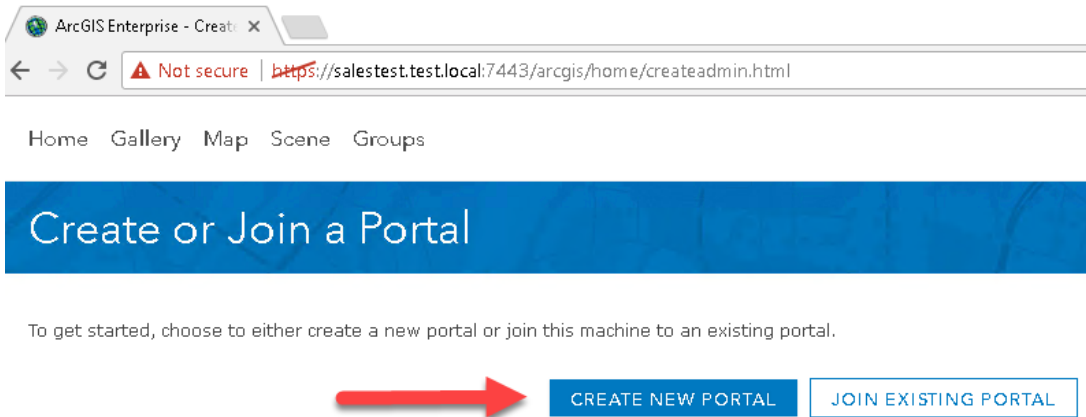5. Click next and choose your user to run the portal windows service.
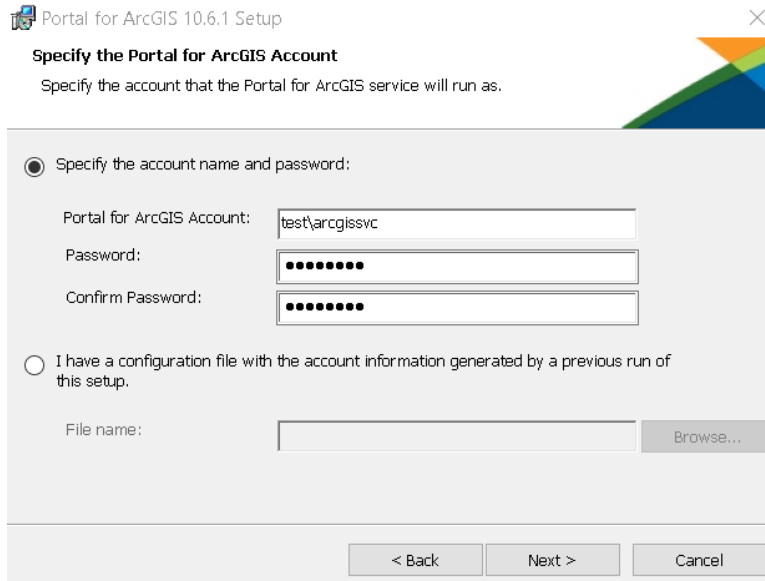
6. Click next and export your configuration file for use during upgrades and reinstallation if needed.

7. Click next and install. At this point, the installation can take some time to finish.

8. After installation, you'll need to authorize your Portal for ArcGIS installation.

Software Authorization Wizard   ✕

Authorization Options
    You must authorize the software prior to use. Select from the options below.

Authorization Options

⦿ I have installed my software and need to authorize it.

◯ I have received an authorization file and am now ready to finish the authorization
    process.

[   ]   [Browse...]

[< Back]   [Next >]   [Cancel]

9. Click Next, and go through the authorization process.
10. After authorization is finished, you will be routed to the URL of the self-signed certificate.

ArcGIS Enterprise - Create ✕

← → C   ⚠ Not secure | https://salestest.test.local:7443/arcgis/home/createadmin.html

Home   Gallery   Map   Scene   Groups

Create or Join a Portal

To get started, choose to either create a new portal or join this machine to an existing portal.

[CREATE NEW PORTAL]   [JOIN EXISTING PORTAL]

11. Click on Create New Portal
12. In the Create New Portal page, add your admin user account information. You must do this
    even if you are planning on creating an active directory connection or ADFS SSO. Click on
    Create.

ArcGIS Enterprise Administration - Part 3

Create a New Portal

Enter the username and password for the initial administrator account that will be created in your portal.

Use this account to configure a Web Adaptor with your portal and then sign in to the portal for the first time.

First Name	Luke
Last Name	Savage
E-mail	lsavagelucity@gmail.com
Confirm E-mail	lsavagelucity@gmail.com
Username	lsavage_sales
Password	••••••••
Confirm Password	••••••••
Security Question	What city were you born in?
Answer	Saskatoon

Enter the content directory where your portal will store default and user-generated content.

The content directory location must be accessible from each machine in your portal.

Content Directory	WbGB-8.","isConnectionStringEncrypted":true}

BACK   CREATE

13. At this point, you will be directed to creating a web adaptor for Portal. Click on to continue.

Account Created   ✕

The initial administrator account has been created.

Your portal is currently being restarted and will require a couple of minutes to complete.

When you click OK, you will be directed to install the Web Adaptor and configure it with your portal using the initial administrator account.

After configuring the Web Adaptor, you can sign in to your portal using the initial administrator account.

WAITING...

Portal for ArcGIS Web Adaptor

ArcGIS Web Adaptor is a critical piece for Portal to function. In this example, we will be installing the Web Adaptor on the internal Portal for ArcGIS Server in IIS. There are several ways to deploy for external interfacing. For IWA, you can use [reverse proxy](#), but for a more robust single sign on, you would use ADFS and WAP (Web Application Proxy) as your mechanism for authentication or any other SSO identity providers like BigIP F5 or Onelogin.

1. Copy the backend URL address from the installation of Portal. Usually, https://<FQDN of Server>:7443
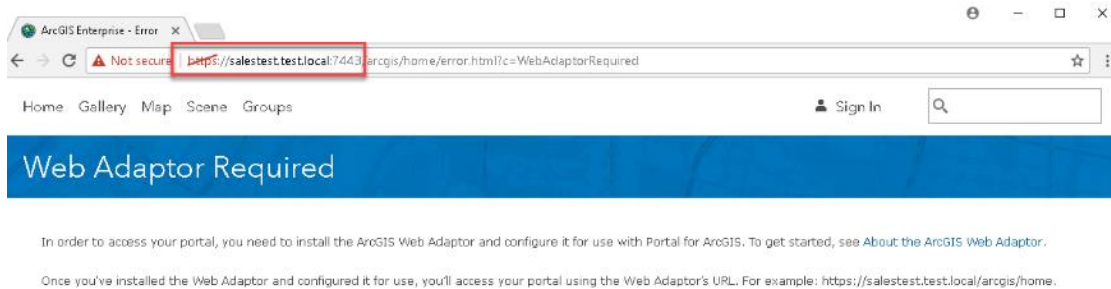
2. Start the ArcGIS Web Adaptor installation, click next and accept master agreement.

3. For Web Site (Port) dialog, make sure you select the web site using port 443. Again, a signed SSL is needed bound to IIS. Click next.
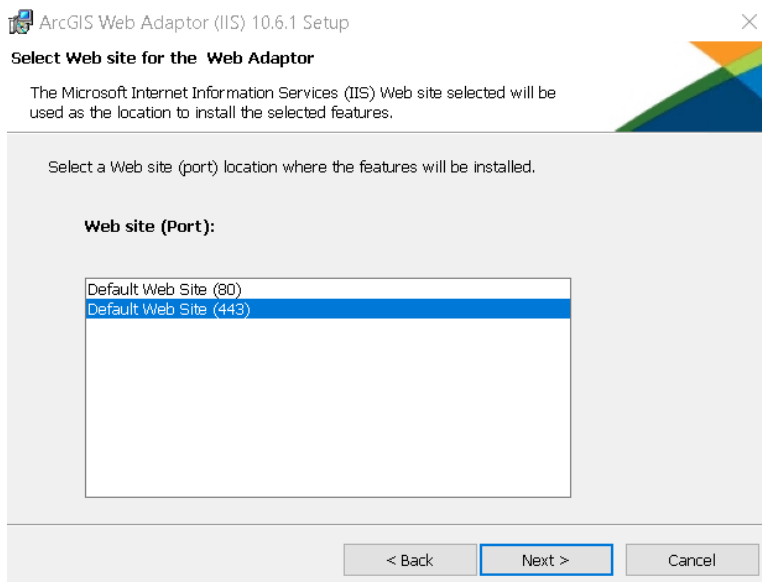
4. Assign a web adaptor directory name. In this example, we'll use 'Portal'.
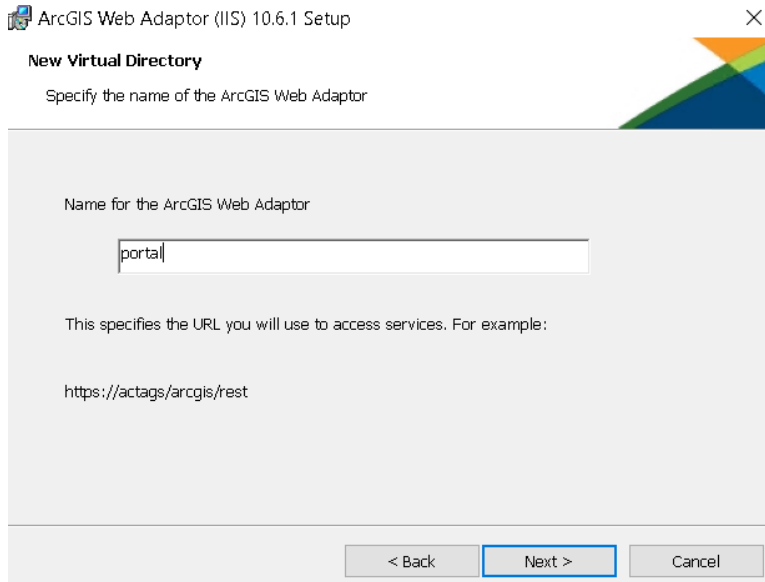
5. Click next and install

6. Once installed, you will see a browser with localhost in the URL. Change the localhost name to the FQDN URL of IIS. Choose Portal for ArcGIS and click next.
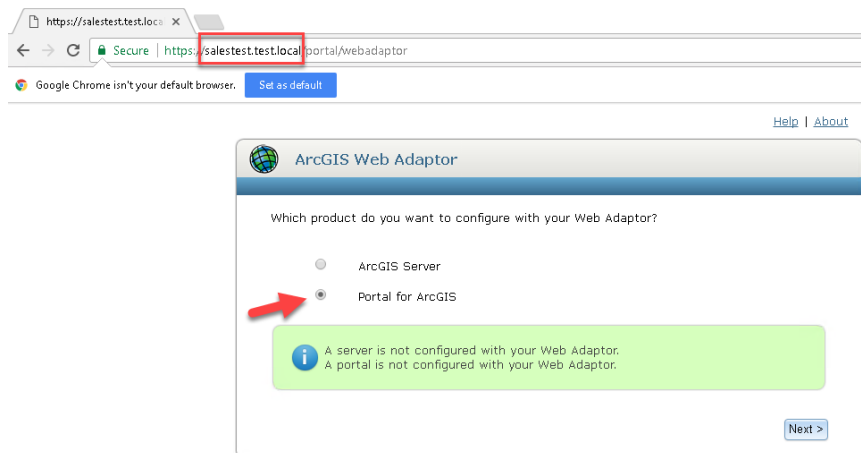
7. In the setup screen for the web adaptor, take the backend URL address you saved in step one and place it in Portal URL: input box. Add your Administrator Username and password and click Configure.

8. You are ready to start configuring Portal for ArcGIS. Go to your web adaptor address for portal. Below is an example.

ArcGIS Enterprise Administration - Part 3
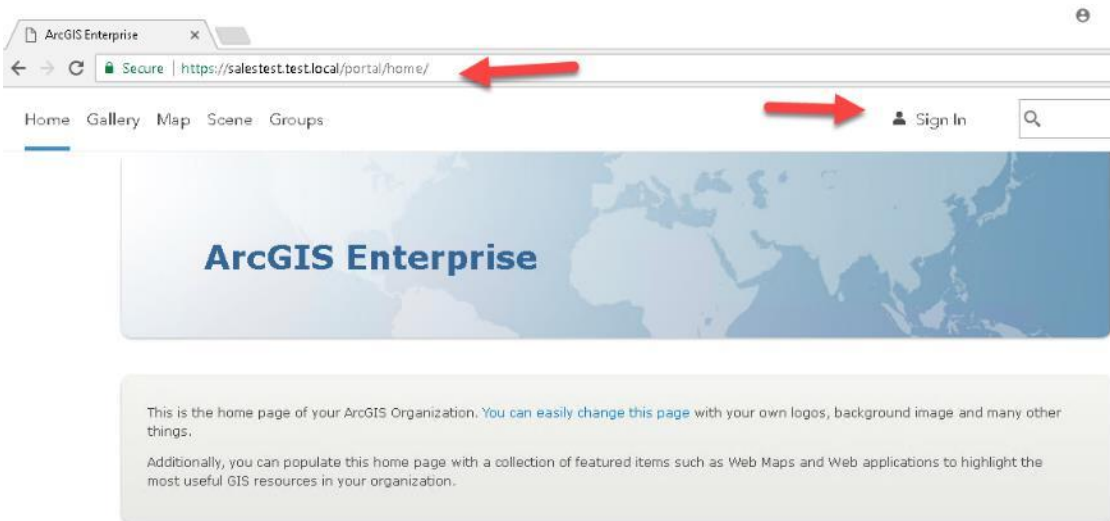
Adding SSL to Portal Backend

You may get tired of the annoying message from Chrome and Firefox that your site is not secure. Adding exceptions to the rule may be tiresome during setup or even administrating. Below are some steps you can take to setup the backend of Portal using a Signed SSL.

1. To start, we'll go to the portaladmin page. https://<server>:7443/arcgis/portaladmin
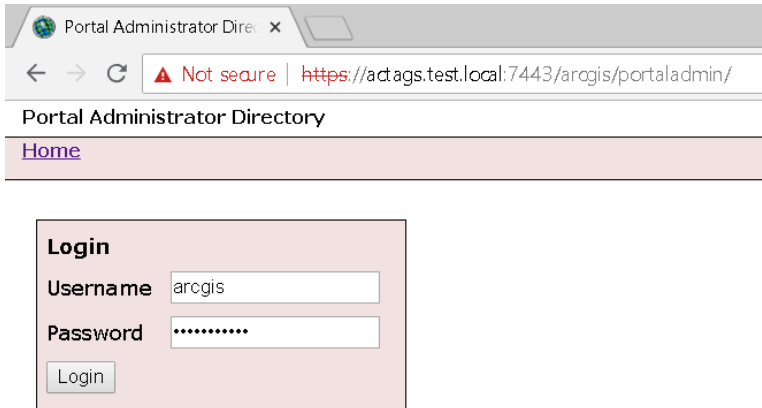
2. After you add the site admin credentials, go to security and ssl certificates.
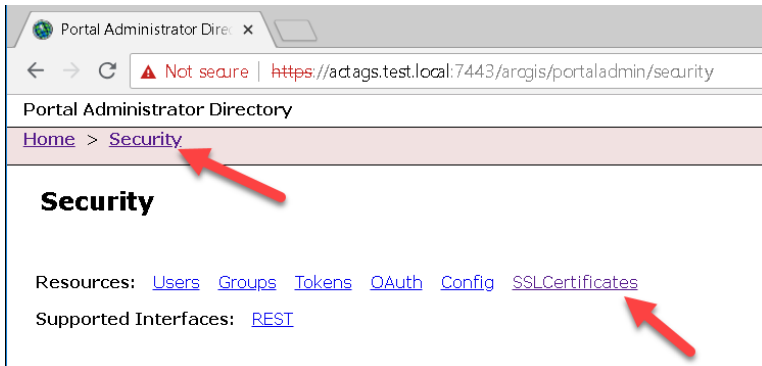
3. If you already have a web server certificate, import existing server certificate at the bottom of the page.

4. Add in the password of the certificate, the alias name of the configuration and choose the certificate from the 'choose file' button. After you have reviewed all steps are complete, click on the import.

5. After importing, go to the update link at the bottom of the ssl certificates page.

6. In the update page, we will be making the following changes.

- Removing the TLSv1.1 standard. This is an unnecessary vulnerability.

- Enabling HSTS to enforce SSL security protocols

- Click on the update button to save changes

ArcGIS Enterprise Administration - Part 3

7. Go to the home page for the backend of Portal to see if changes were successful.

   https://<server>:7443/arcgis/home

ArcGIS Enterprise Administration - Part 3

Portal for ArcGIS HTTPS Only

1. Sign into Portal URL and click on sign in. Add Credentials and click sign in in the next screen.

2. Go to Edit Settings

ArcGIS Enterprise Administration - Part 3

3. Go to Security and click on the checkbox 'Allow access to the portal through HTTPS only'. This will require https for communication with Portal.

4. Click on Save above the dashboard tabs to save configuration

# Federating Portal for ArcGIS

Federation means Portal for ArcGIS will control security and share content from ArcGIS Server sites. This is needed for SAML (Security Assertion Markup Language), hosting data like tiles and feature layers, or allowing users to perform Spatial Analysis within the ArcGIS Map viewer in Portal. In this example, we will be using simple built-in security for Portal. A non-federated portal site will require you to add Feature Services as layers within the content of portal manually for the services to be visible when adding layers from your organization. This process is much like what you would perform in ArcGIS Online with external facing feature services from an on-premise ArcGIS Server.

Add Data Store to ArcGIS Server

Used for Data Storage for hosting relational data, tile caching, and spatiotemporal big data. When calculating storage space, understand the uses will help determine the amount of data storage needed. You can split data stores between several servers for different purposes. Recommend spatiotemporal big data to be its own server. This is used for ArcGIS GeoEvent Server. This does not currently connect to any enterprise or file geodatabases. This product is its own container.

5. Start installation of ArcGIS Data Store, next and agree to the master agreement. In the next dialog, select features. By default, it selects everything. Click next.
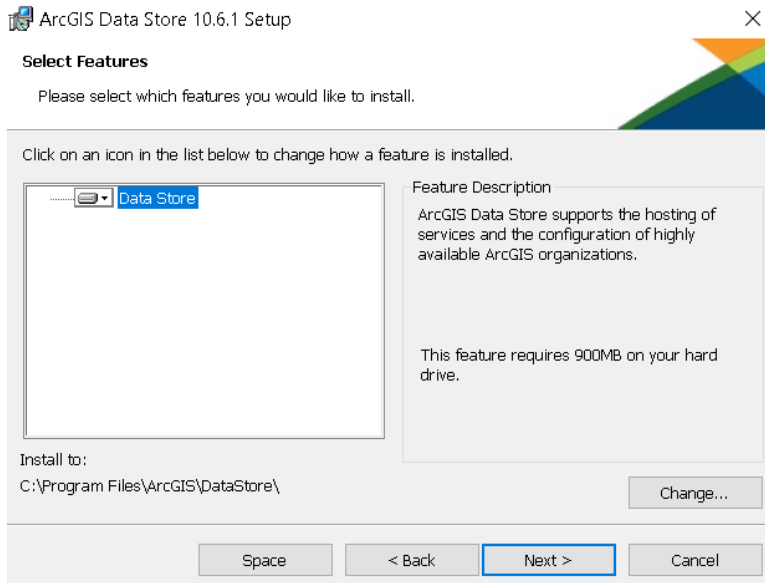
6. In the specify ArcGIS data store account, this is a windows service that will run the data store. Click next when complete.
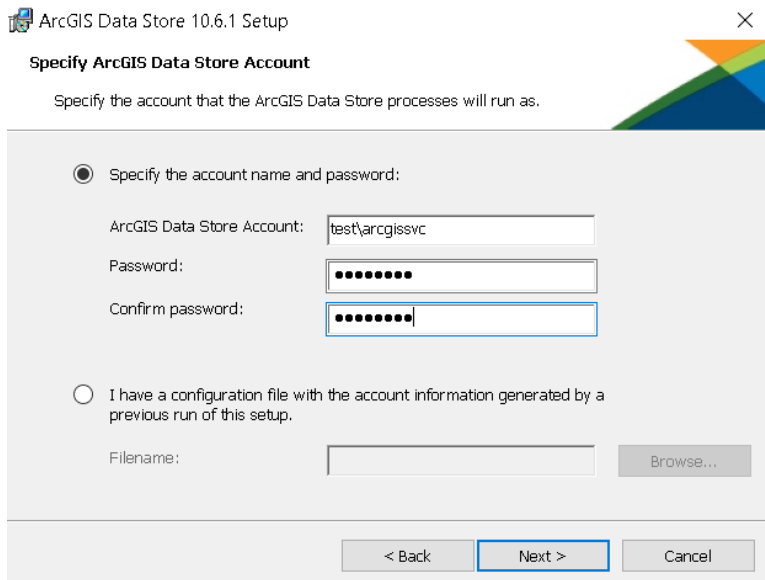

7. In the export account configuration file dialog, export your configuration to a known location for upgrades and reinstalls.
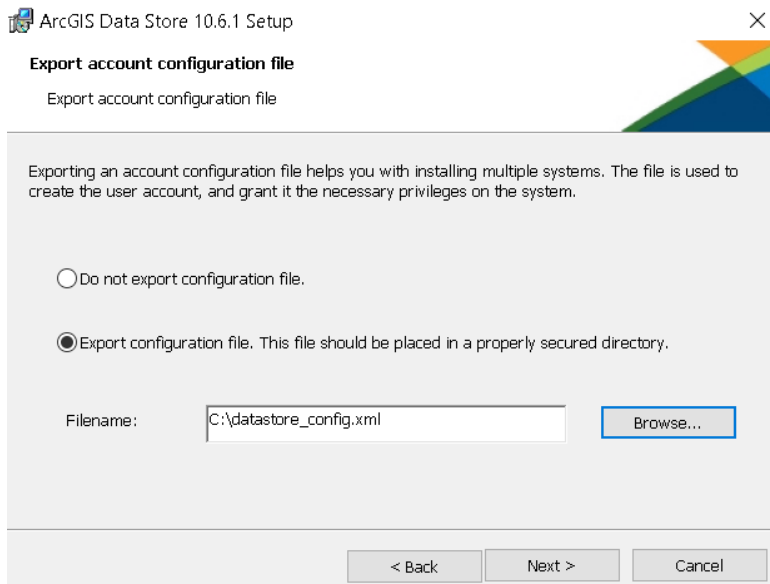
8. Click install when ready.

9. After installation, a browser will load with the ArcGIS Data Store configuration site. Point to the ArcGIS Server backend URL for port 6443. *Note: ArcGIS Server should be set to both http and https in the site configuration. This will enable https connections to ArcGIS Server.* Give the ArcGIS Server username and password credentials. Click next
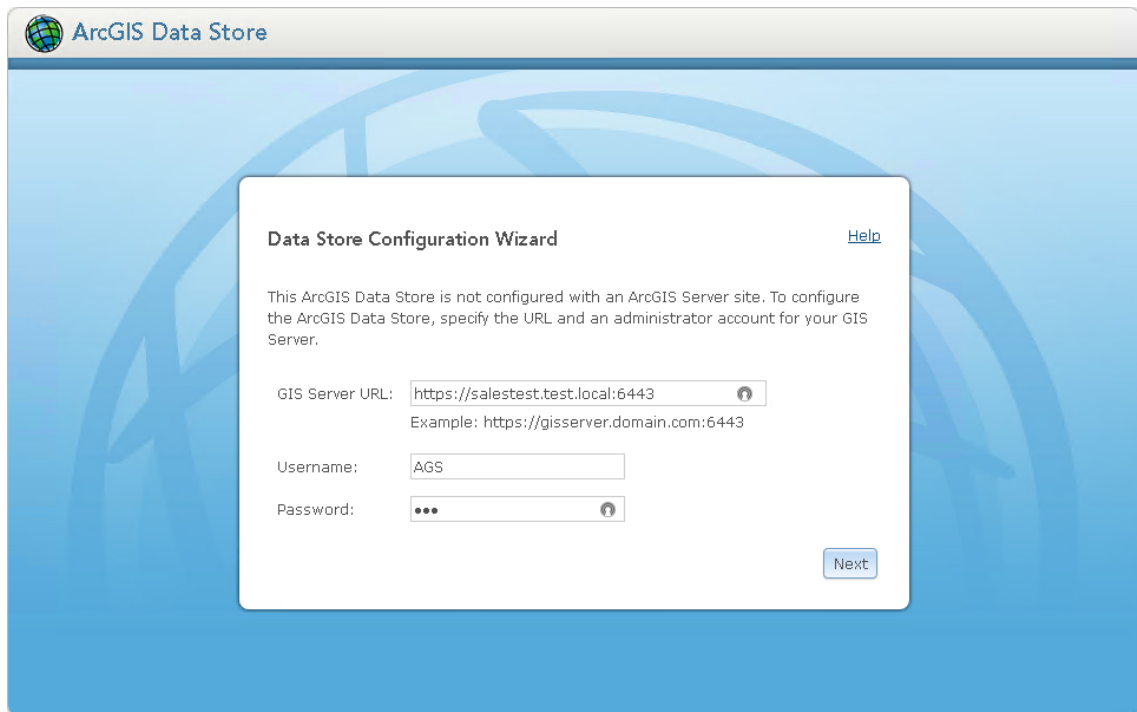
10. In the specify content directory dialog, point to a location in which the data store will store its files. Note: this could be very large depending if you use tile caches as a hosted service. For big data, point to a file server with scalability for added file storage. Click next.
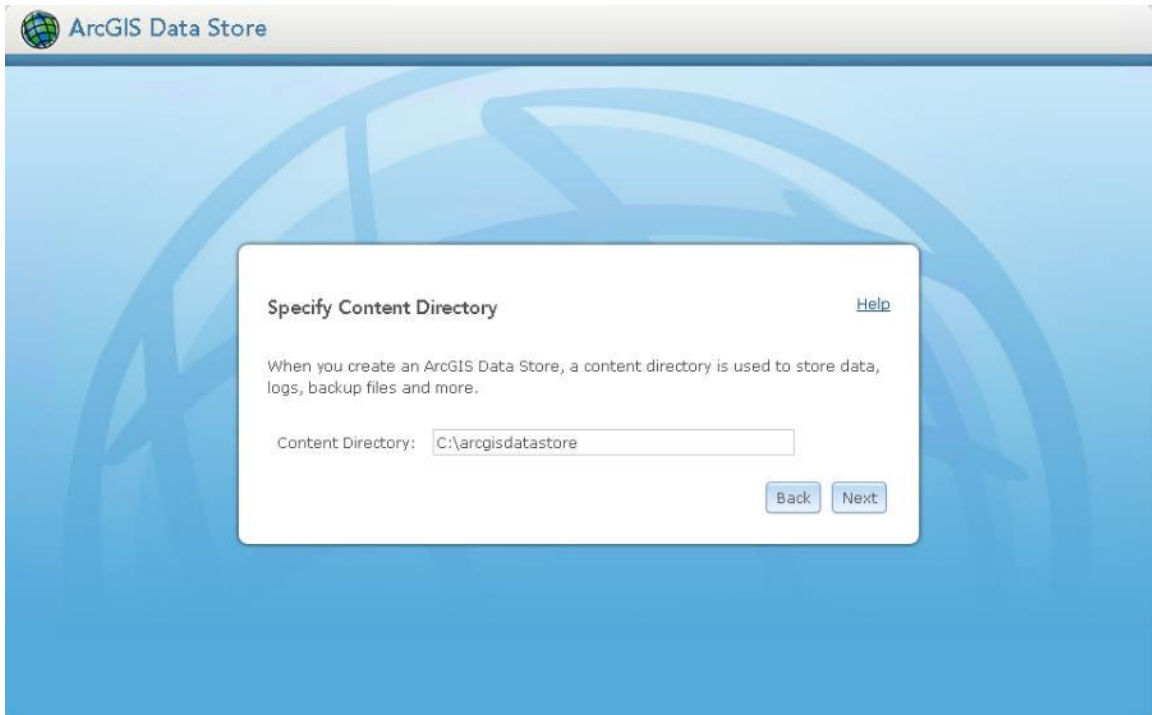
11. In the ArcGIS Data Store Type dialog, choose the types of storage you would like to use. Since we're not configuring Spatiotemporal in this example, we'll only check the relational and tile cache. Click next.
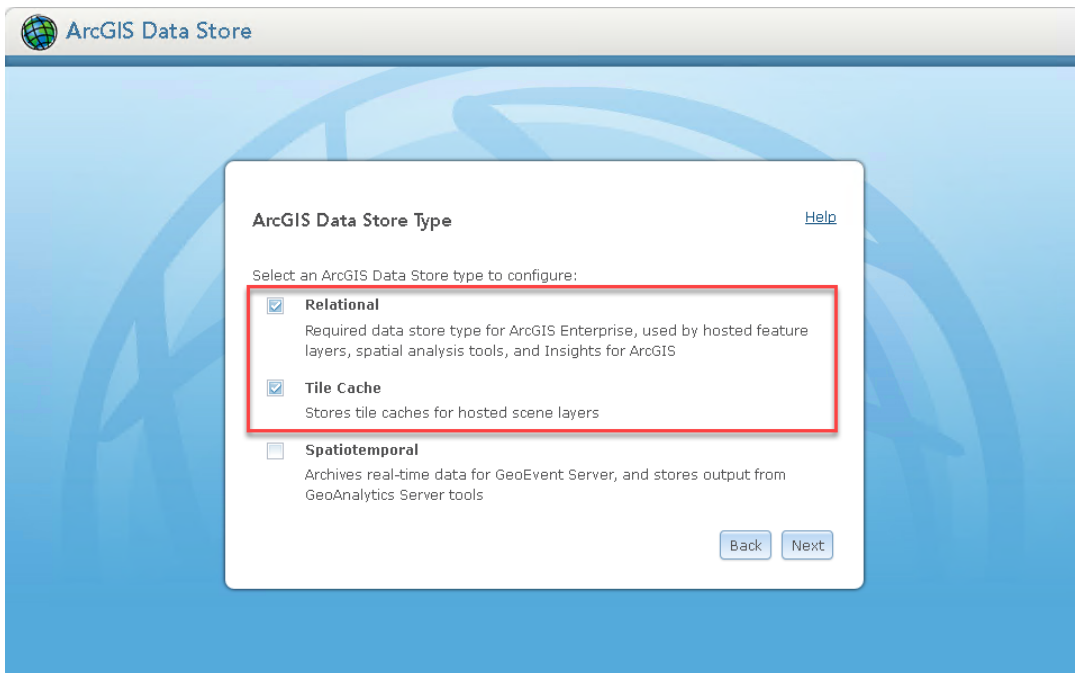
12. In Configuration Summary, double check your input values and click finish when ready.
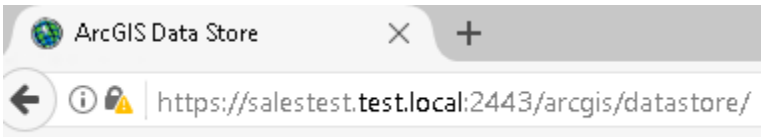
Configuration Summary

Help

Your ArcGIS Data Store configuration is ready to be completed.

GIS Server URL:	https://salestest.test.local:6443
Content Directory:	C:\arcgisdatastore
High Availability Role (Relational):	Primary
High Availability Role (Tile Cache):	Primary

Click Finish to create the ArcGIS Data Store and configure it with your ArcGIS Server site.

Back   Finish

13. Document the backend URL of data store just in case you need to troubleshoot. Below is an example.

ArcGIS Data Store   ×   +

← ⓘ 🔒 https://salestest.test.local:2443/arcgis/datastore/

14. After configuration is complete, you will need to complete the federation task within Portal.

Configuration Status   Help

The following component(s) of ArcGIS Data Store are configured with ArcGIS Server site(s).

- Relational
- Tile Cache

To complete the configuration process, you must now federate the ArcGIS Server site with your Portal and set it as the hosting server.

Please sign in to your Portal as an administrator and navigate to My Organization > Edit Settings > Servers. Use the Add Server option to federate the site. Then set the site as the hosting server and click Save.

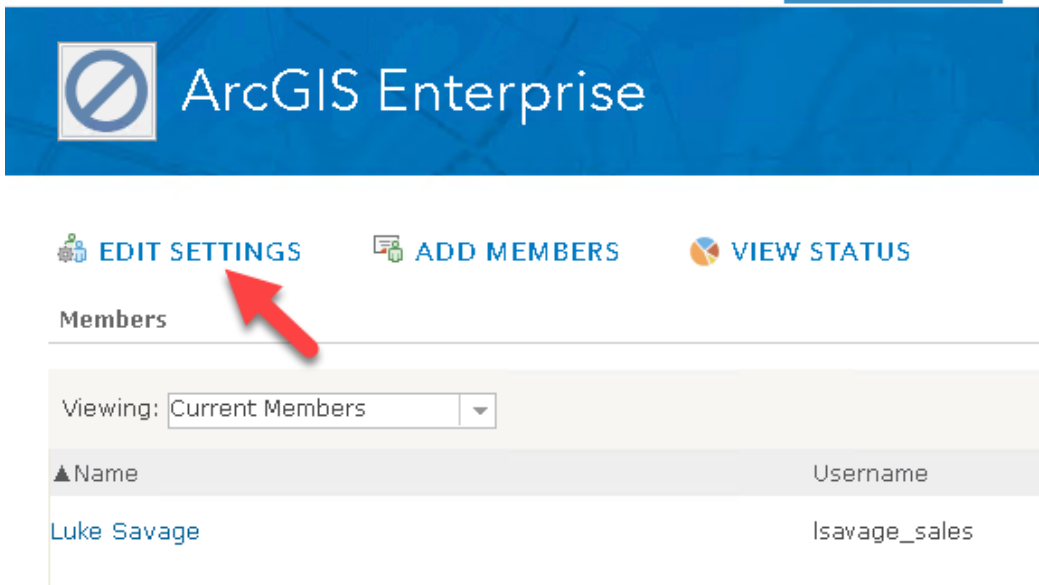Configure Additional Data Stores

Federate Configuration Settings

15. Sign into Portal URL and click on sign in. Add Credentials and click sign in in the next screen.

Home Gallery Map Scene Groups   Sign In

ArcGIS Enterprise

This is the home page of your ArcGIS Organization. You can easily change this page with your own logos, background image and many other things.

Additionally, you can populate this home page with a collection of featured items such as Web Maps and Web applications to highlight the most useful GIS resources in your organization.
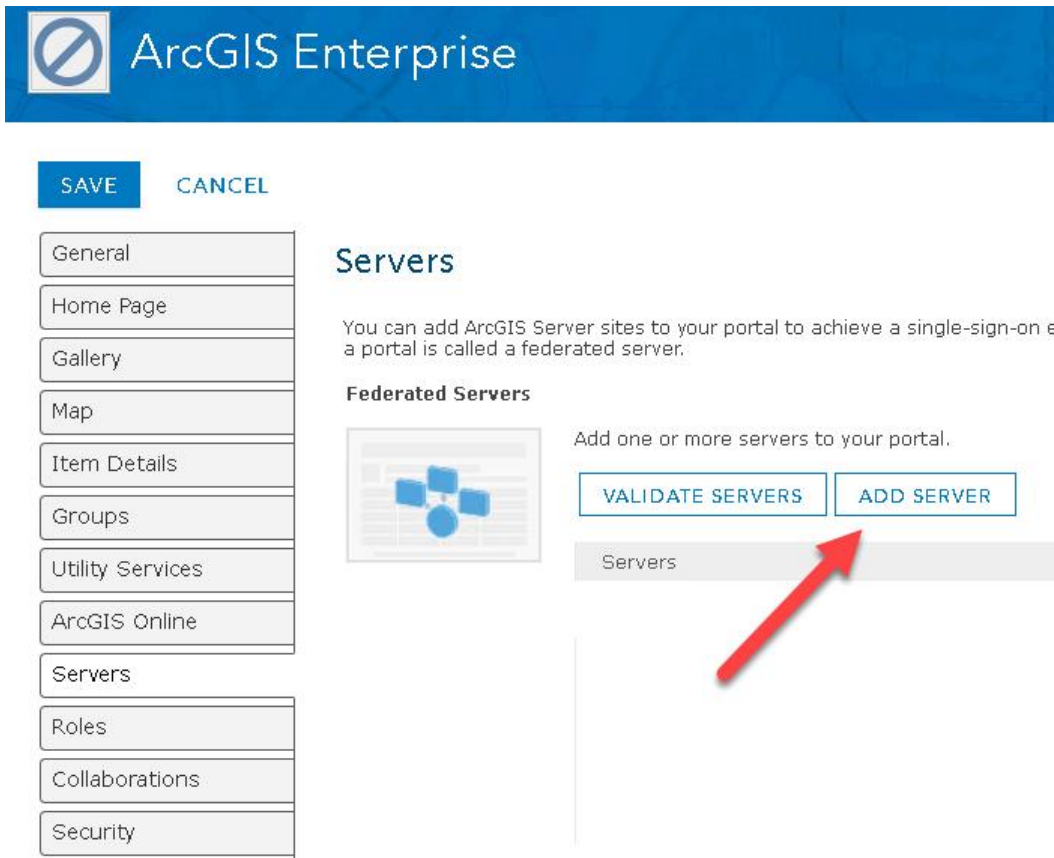
Sign In

First time signing in?   Sign in

CREATE AN ACCOUNT

Sign in to ArcGIS Enterprise   **esri**

Username

lsavage_sales

Password

•••••••••••

☐ Keep me signed in

SIGN IN

Forgot password?

ArcGIS Enterprise Administration - Part 3

16. Go to Edit Settings

17. In the list of items, go to Servers and click on Add Server.

ArcGIS Enterprise Administration - Part 3

18. Enter the ArcGIS Server Web Adaptor URL and the backend ArcGIS Server URL with the username and password for the ArcGIS Server Site. Click on Add, click OK on the notice and click on Add again. It's a failsafe process.

Add ArcGIS Server

Enter the URLs for accessing and administering your ArcGIS Server site. Also enter credentials for an administrator of the ArcGIS Server site.

Services URL:

https://salestest.test.local/map

Example: https://webadaptorhost.domain.com/webadaptorname

Administration URL:

https://salestest.test.local:6443/arcgis

Example: https://gisserver.domain.com:6443/arcgis

Username:

AGS

Password:

•••

ADD   CANCEL

19. Configure your hosting server. This setting within the server tab allows you to configure the hosting server to publish services directly to portal. We will be discussing later in workshop the difference between portal hosted services versus feature services that serve data from the enterprise geodatabase.
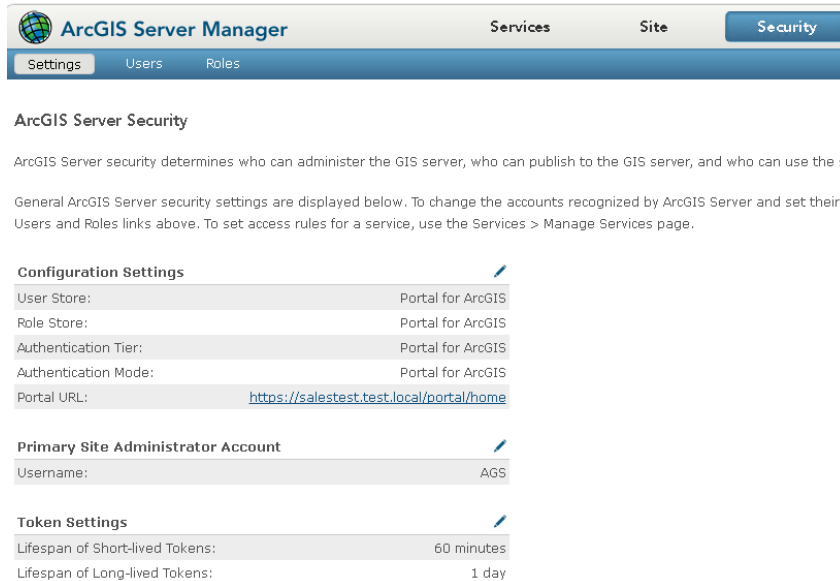
Hosting Server
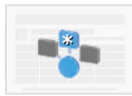
Optionally choose one of your servers to act as your portal's hosting server. Your portal members will be able to publish services to this server. ArcGIS Server's Managed Database must be configured on the site before it can be designated as the portal's hosting server.

No hosting server

No hosting server

salestest.test.local/map

20. Click on save at the top of the browser window.

21. After completing these steps, your ArcGIS Enterprise environment is now federated. Here is an example result of ArcGIS Server security when federating. Notice that authentication stores are now funneled through Portal for ArcGIS.

Working with Portal

Publishing to Portal

We will tackle both scenarios publishing to Portal. One of those scenarios will demonstrate how to publish feature services using the enterprise geodatabase. The second scenario will demonstrate how to publish hosted services to Portal.

### Publish Features Services Using the Enterprise Geodatabase

1. In ArcCatalog, create a connection to your ArcGIS Server Web Adaptor using the portal user and password. Remember, Portal is now controlling authentication to ArcGIS Server. This example will spawn the traditional ArcSOC.exe pool (ArcObjects Server executable).
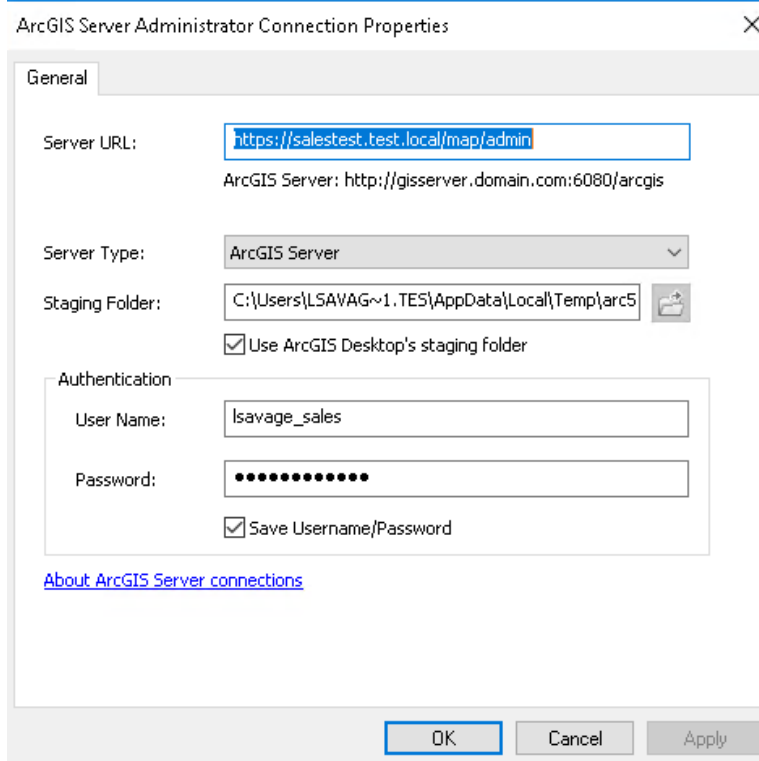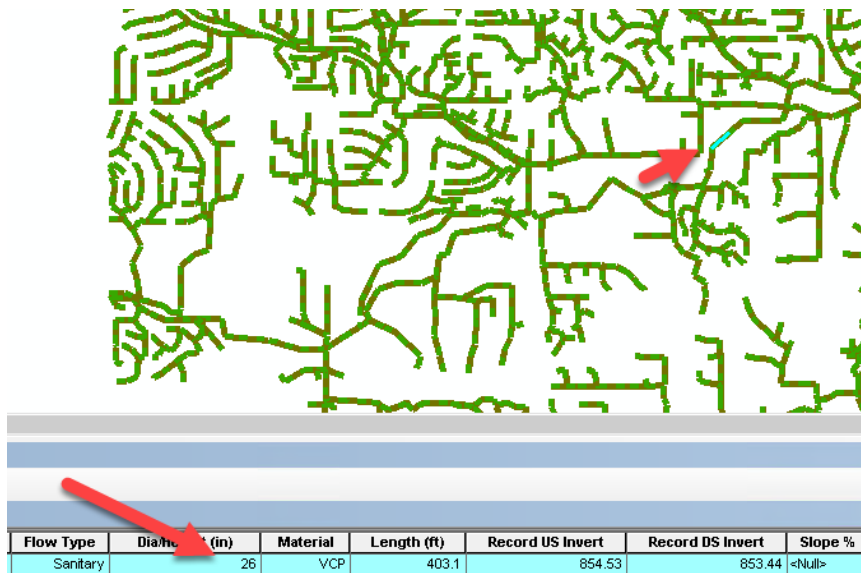

2. Go to your MXD document that points each layer to the enterprise geodatabase.

3. Publish service using the new connection you created for ArcGIS Server
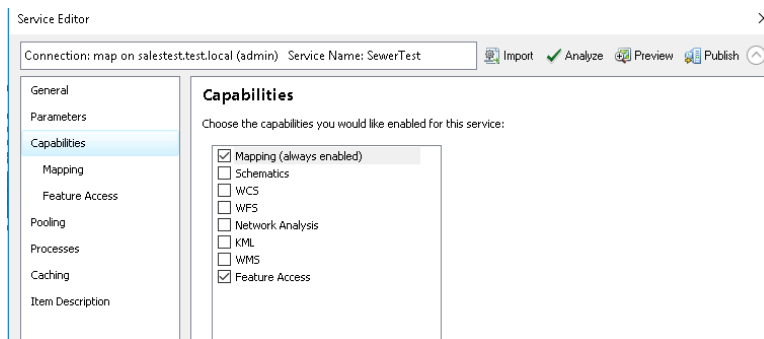

4. Sign in to Portal and Edit data
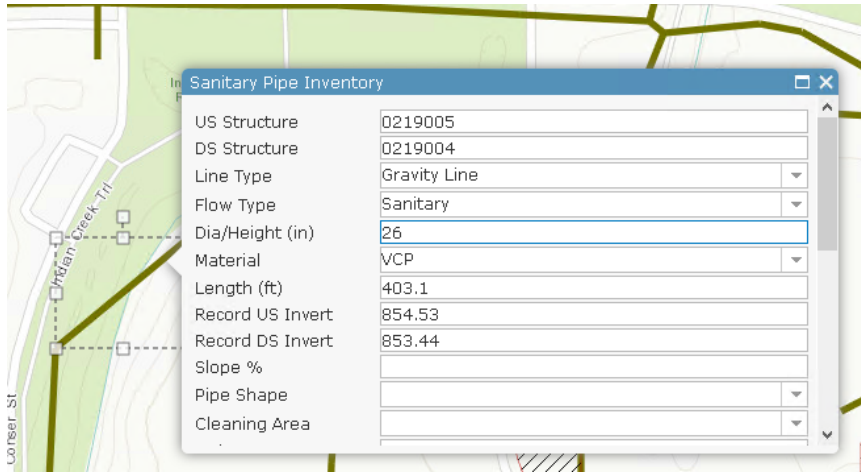
5. Your edits will now show up in the enterprise geodatabase.

ArcGIS Enterprise Administration - Part 3

Publish Map to Portal using ArcGIS Pro

Make sure the workstation you are using ArcGIS Pro has the ODBC v17 driver installed.

1. Connect ArcGIS Pro to your new Portal site
2. Open ArcGIS Pro
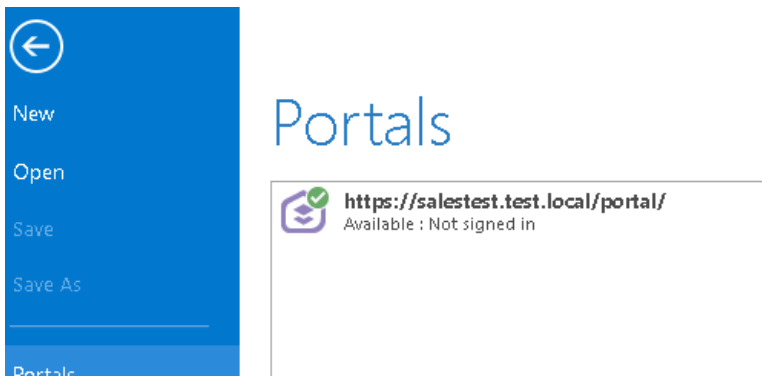3. Click on the lower left-hand corner dialog in ArcGIS Pro 'About ArcGIS Pro'
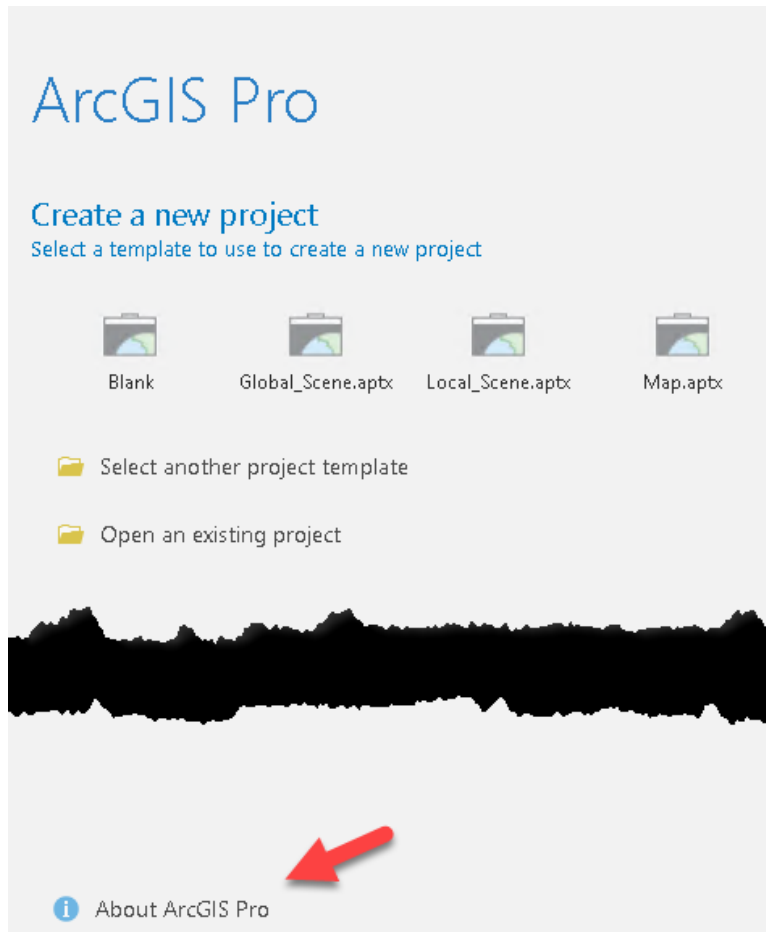
4. On the left-hand TOC menu, click on Portals and click on the Add Portal button. Use the Web Adaptor name of your portal site. Click ok when done.

Note: You can change your licensing options for Pro in the same TOC menu
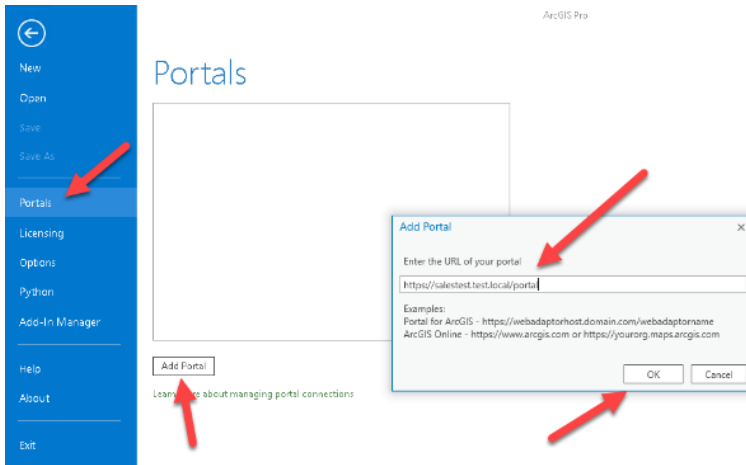
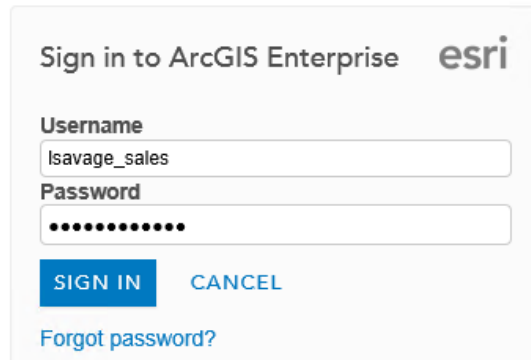5. You should see a green checkbox next to your Portal site if successful.

6. Click on the back button when finished in the top left of the ArcGIS Pro window, and sign into your Portal at the top right corner.

ArcGIS Enterprise Administration - Part 3

7. Logging in information will change in case you decide to use ADFS or Active Directory for your Portal.
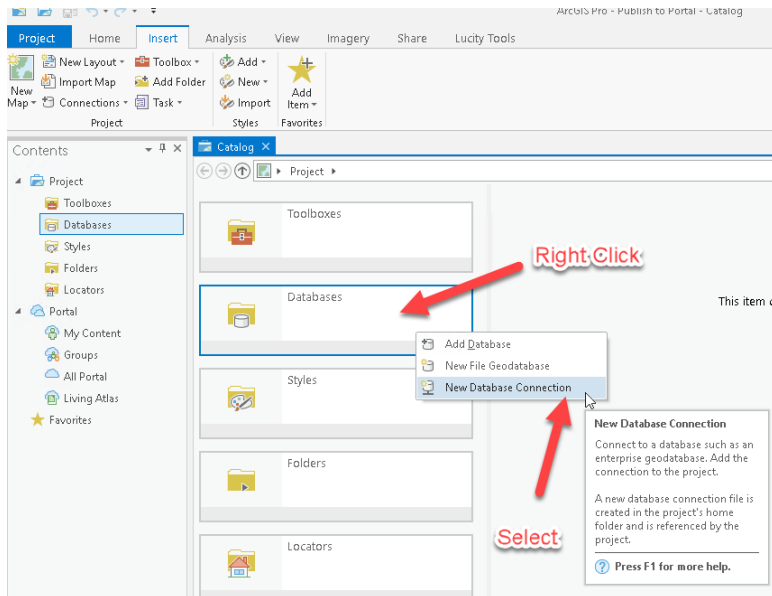

8. In this exercise, we'll create a Blank project and publish a hosted service to Portal.
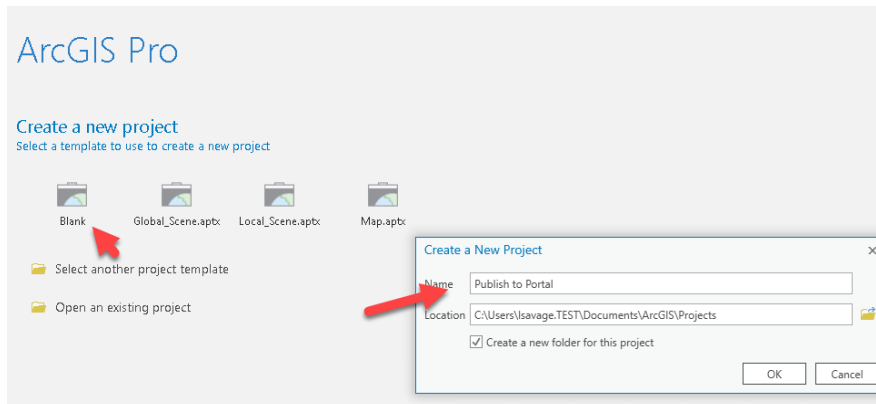
9. When ArcGIS Pro project starts, right click on the database to add database connection to your enterprise geodatabase.

ArcGIS Enterprise Administration - Part 3

10. Add a database connection, change the database connection to sql server, instance name, Authentication type, and database connection info. Click ok when finished.
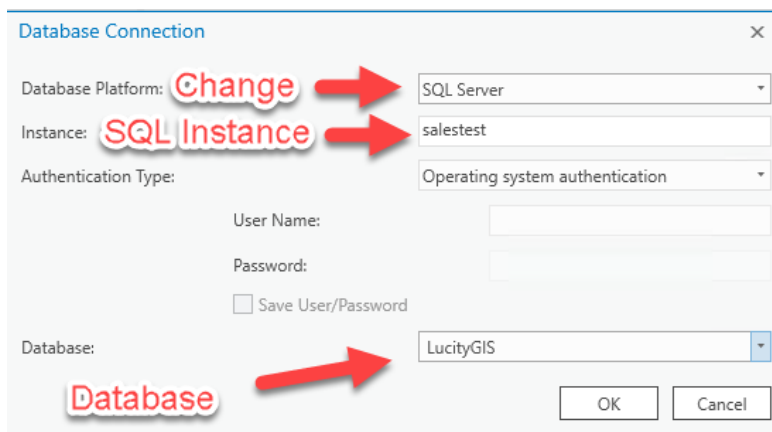

11. You are now connected to the database. On the right side of ArcGIS Pro, go to the databases expandable item, expand and select the new database connection. '<instance>.sde.
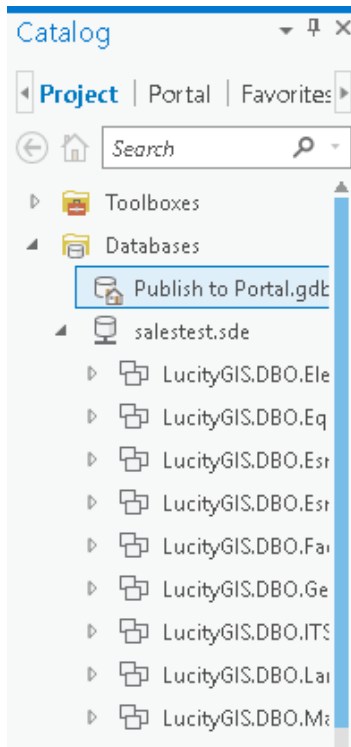
12. Start a new Map by selecting the New Map at the top left corner of ArcGIS Pro

ArcGIS Enterprise Administration - Part 3
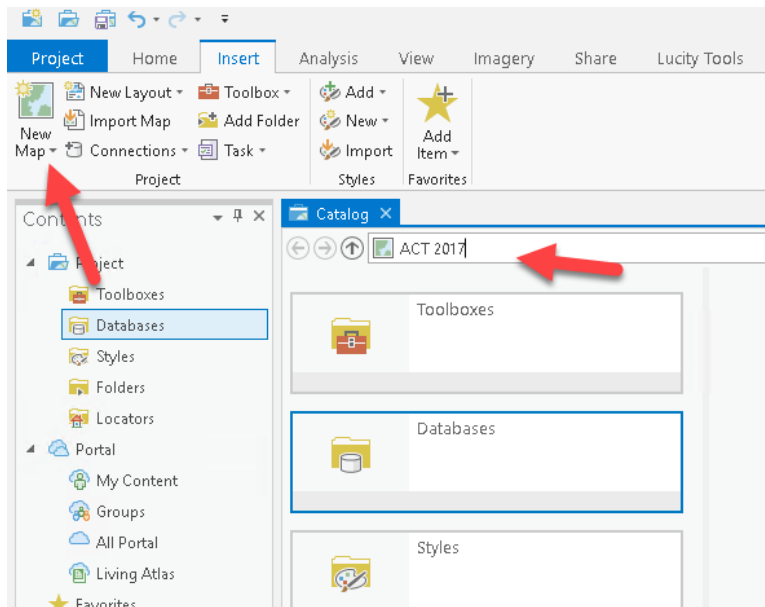
13. Once map loads, you will see a basemap in the map window. Go to the map menu at the top and select Add Data. Point to your database connection and click on the link to see the data layers.
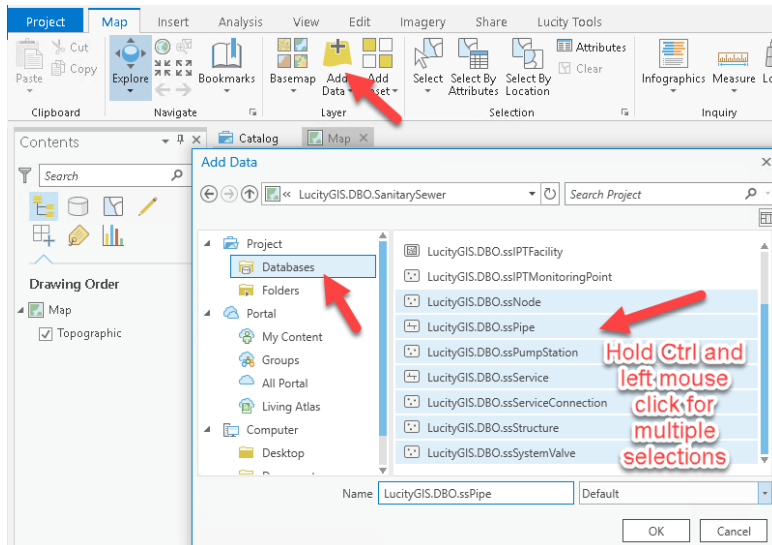
14. Click on Web Layer and publish web layer if you want to create a feature service either hosted or federated with ArcGIS Server. In this example, we are creating a hosted feature service where the data resides in ArcGIS Data Store.

Note: Publishing hosted feature services into Portal using ArcGIS Data Store creates javaw.exe multi-threaded services. This has better performance and is more scalable than that ArcSOC.exe services for ArcGIS Server.
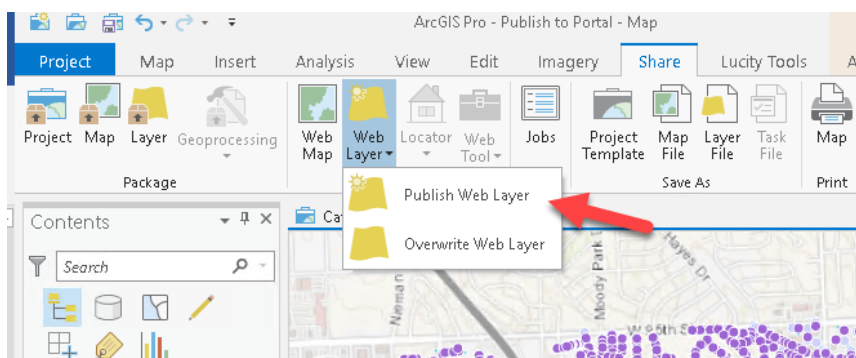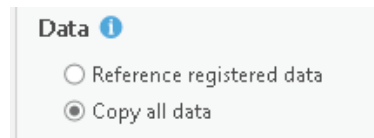
15. Change data connection to copy all data and select feature to add a feature service. You can use this after publishing to create WebMaps.

ArcGIS Enterprise Administration - Part 3

16. Analyze and publish once errors are fixed.

*Note: You need to remove the basemap to publish your data as a feature service.*

17. Once Publishing is complete, go to your Portal, my content and click on your newly created feature layer. Notice that your feature layer is distinguished as a hosted feature layer rather than an ArcGIS Server feature service referencing data from the geodatabase.

18. In the information window of the newly created feature layer, you can see the feature service URL at the bottom of the dialog.

19. To create an Esri WebMap at the same time creating a feature service, go to the Web Map icon at the top of ArcGIS Pro and select it. On the right, you will have several choices for deployment under 'Select a Configuration'. Reference registered data exploratory will allow you to create it using a registered enterprise geodatabase or use copy all data to create a hosted service with hosted data in the ArcGIS Data Store.
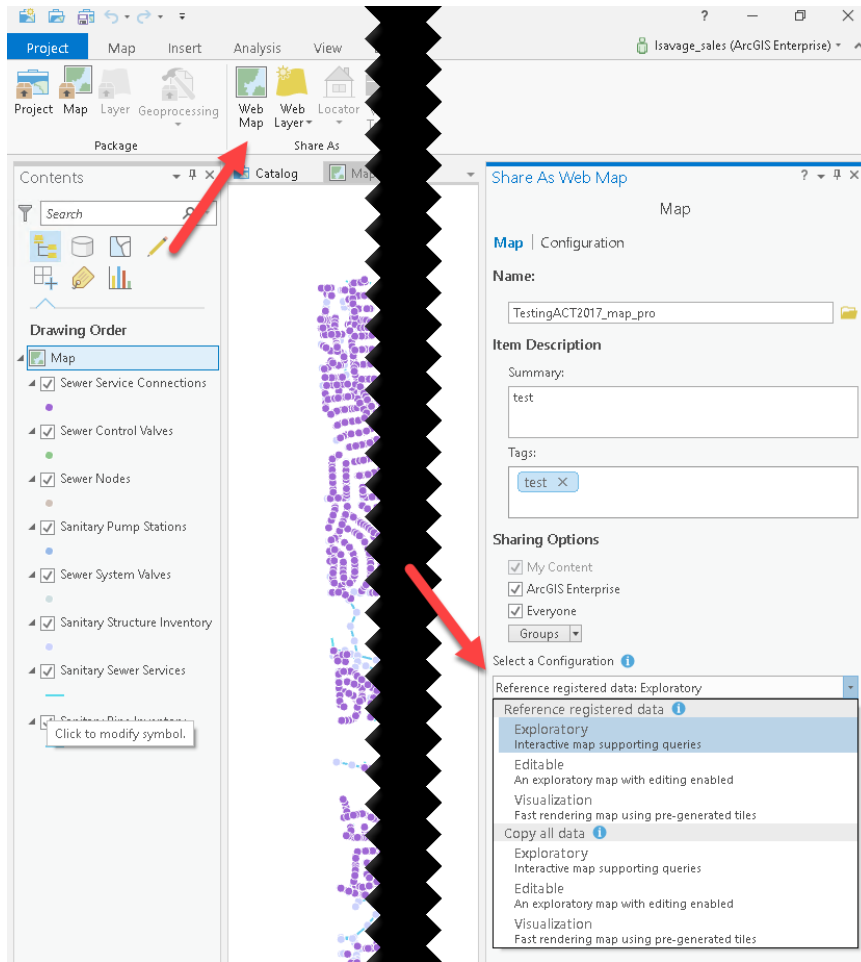
Note: Using the Esri WebMap feature and to publish, make sure you have your layers set to WGS 1984 Web Mercator.

ArcGIS Enterprise Administration - Part 3

Backup/Restore ArcGIS Enterprise Federated

Backup

1. Go to c:\program files\arcgis\portal\tools\webgisdr or the directory in which you install portal and copy the webgisdr.properties in a folder you can run PowerShell or command line. In this example, I copied the file to c:\temp.

2. In this utility, you can create a full and incremental backup of the ArcGIS Enterprise system (ArcGIS Server, DataStore and Portal).

3. Modify the file and save. Full detail of the configuration is in the link below. In this example, we'll summarize the changes.
http://server.arcgis.com/en/portal/latest/administer/windows/create-web-gis-backup.htm

```
# Specify a shared location to store the Web GIS backup file. This is where the backups for
# individual components will be saved to before being moved to the storage that you specify
# for the BACKUP_STORE_PROVIDER property
# The following accounts must have read and write permissions on the shared location:
# 1) The domain account used to run the web GIS software.
# 2) The account to run this tool.                    ← Working temp folder
SHARED_LOCATION=\\\\test-m\\dbbackup\\temp

# Specify a storage provider: FileSystem, or AmazonS3.  ← FileSystem = Using a File Server
BACKUP_STORE_PROVIDER = FileSystem

# Specify the Web GIS backup location if you've set the BACKUP_STORE_PROVIDER to FileSystem.
BACKUP_LOCATION = \\\\test-m\\dbbackup\\portalsales  ← Actual Backup Location

# Specify Amazon S3 Storage properties if you've set the BACKUP_STORE_PROVIDER to AmazonS3.
S3_ACCESSKEY =
S3_SECRETKEY =
S3_ENCRYPTED =
S3_BUCKET =
# IAMRole or accessKey
S3_CREDENTIALTYPE =
S3_REGION =
# Specify a backup name used for the Web GIS restore only.
# Example:
# April-20-2017-5-04-14-PM-PDT-FULL
# or
# webgisdr-backup/10-5-1/full/April-20-2017-5-04-14-PM-PDT-FULL
S3_BACKUP_NAME =

# Specify the URL to your portal.
# Example:
# https://webadaptor.domain.com/context
# or
# https://portalmachine.domain.com:7443/arcgis        ← Backend Portal
PORTAL_ADMIN_URL = https://salestest.test.local:7443/arcgis    URL

# Provide credentials for the portal administrator.
# Initially, leave PORTAL_ADMIN_PASSWORD_ENCRYPTED set to false.
# When you run the tool the first time, the password will be
# encrypted and PORTAL_ADMIN_PASSWORD_ENCRYPTED will change to true.
PORTAL_ADMIN_USERNAME = lsavage_sales
PORTAL_ADMIN_PASSWORD = LucityRocks1         ← Admin user and password
PORTAL_ADMIN_PASSWORD_ENCRYPTED = false         Encrypted set to false.  Once
                                                you've run the utility, it will be
# Specify whether to include scene tile caches.   encrypted and set to true
INCLUDE_SCENE_TILE_CACHES = false                      automatically.

# Specify the Web GIS backup mode: full or incremental.
BACKUP_RESTORE_MODE = full        ← full or incremental

# If your portal content directory is in Amazon S3, specify Amazon S3 Storage properties for portal backups.
PORTAL_BACKUP_S3_BUCKET =
PORTAL_BACKUP_S3_REGION =
```

4. Example of the encryption that occurs after the first run.

```
# Provide credentials for the portal administrator.
# Initially, leave PORTAL_ADMIN_PASSWORD_ENCRYPTED set to false.
# When you run the tool the first time, the password will be
# encrypted and PORTAL_ADMIN_PASSWORD_ENCRYPTED will change to true.
PORTAL_ADMIN_USERNAME = lsavage_sales
PORTAL_ADMIN_PASSWORD = iEWMjOQ/mdOSTGunxRFCag==
PORTAL_ADMIN_PASSWORD_ENCRYPTED = true
```

5. Go to PowerShell or command line and run the utility from the portal webgisdr location. If using PowerShell, make sure to preface .\ before webgisdir. Use the file you modified as the export file. Below is an example

```
PS C:\program files\arcgis\portal\tools\webgisdr> .\webgisdr --export --file c:\temp\salesportal.properties
========================================
Starting the webgisdr utility.
========================================
```

6. Like the previous chapters, you can setup windows scheduled task to accomplish full and incremental backups on a regular basis. For incremental, copy the file you created and create a new one with the restore mode set to incremental.

Restore

1. Recommend you create a test system that you can test the restore process at least every release. In a VM Environment, backup VM before upgrade and backup VM after upgrade. Afterwards, test the backup and restore functionality.

2. Go to PowerShell or command line and run the utility from the portal webgisdr location. Below is an example.

```
r> .\webgisdr --import --file C:\temp\salesportal.properties
```

3. More detailed restore information in the below link. We will not be covering the backup and restore functionality of data store but the link for this is below as well.

   http://server.arcgis.com/en/portal/latest/administer/windows/restore-web-gis.htm
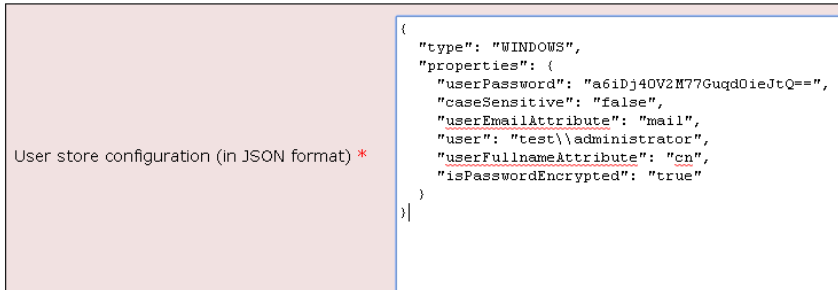
   Backup DataStore

Portal for ArcGIS Windows Authentication

1. Go to Portal Admin. Usually https://<FQDN>/<WebAdaptorforPortal>/portaladmin

2. Go to Security/Config

3. Click on Update Identity Store

4. There are many uses to create an identity store to enable windows authentication. The example above lists one way to add a single user account as the Portal admin. You can also use an Active Directory Group if you wish. More information about this is in the link below.

   http://server.arcgis.com/en/portal/latest/administer/windows/use-integrated-windows-authentication-with-your-portal.htm

5. Click on Update Configuration

6. Now click on test identity store configuration. Go to the test identity store link.

7. Click on Test Configuration. You should see connection successful.

Home > Security > Config > Test Identity Store

Test Identity Store

User store configuration (in JSON format) *

```
{
  "type": "WINDOWS",
  "properties": {
    "userPassword": "a6iDj4OV2M77GuqdOieJtQ==",
    "caseSensitive": "false",
    "userEmailAttribute": "mail",
    "user": "test\\administrator",
    "userFullnameAttribute": "cn",
    "isPasswordEncrypted": "true"
  }
}
```

Group store configuration (in JSON format) *

```
{
  "type": "BUILTIN",
  "properties": {"isPasswordEncrypted": "true"}
}
```

Format   HTML ▼

Test Configuration

Connection successful!

8. You'll be able to login now using your '<domain>\<Active Directory User> account.
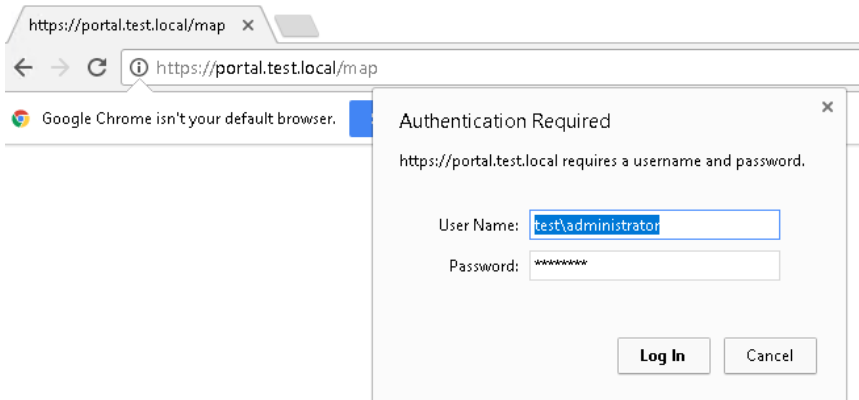
9. Login and you should see your admin page.

ArcGIS Enterprise Administration - Part 3
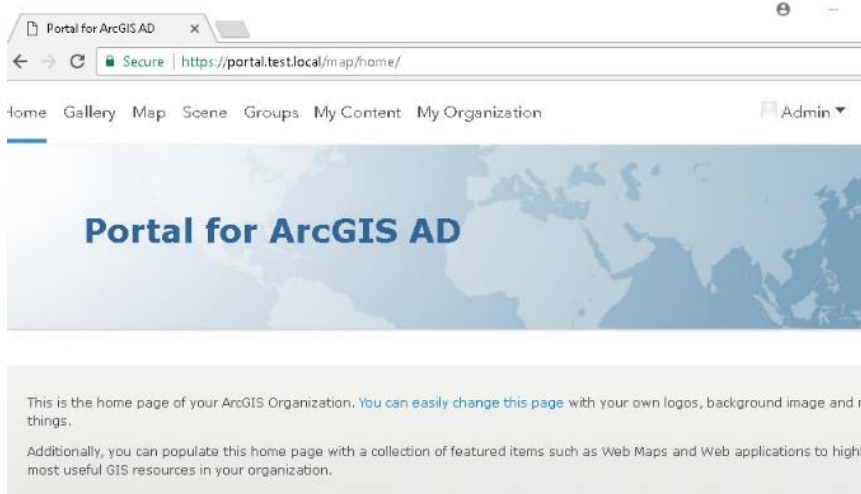
Identity Stores using SAML 2.0

Portal using ADFS 4.0

1. Go to Portal/Organization/Security tab and click on Get Service Provider.
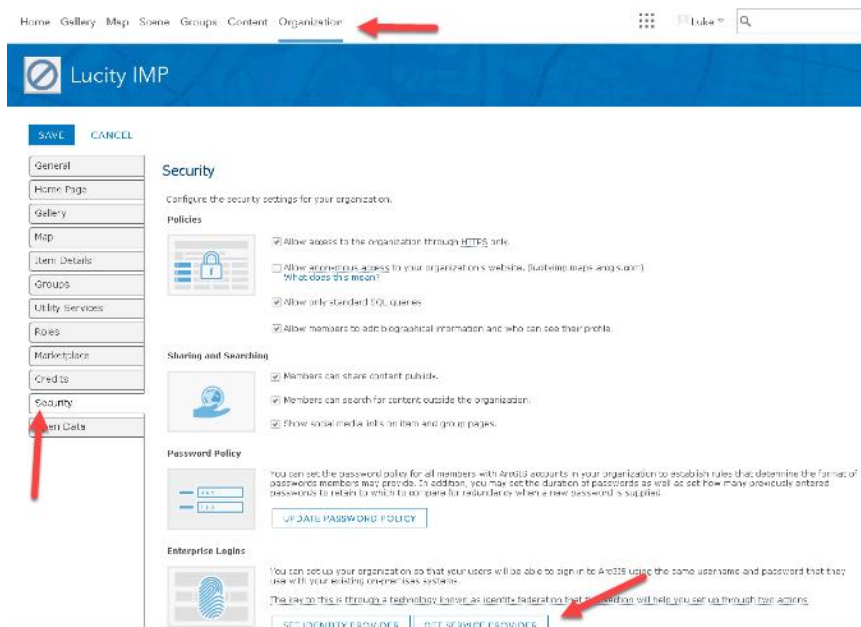
2. This will download a metadata file you will use in the ADFS Management Console. Copy the metadata.xml to your ADFS server.

3. Go to your ADFS server and configure your Claims for Portal by opening AD FS Management Console.
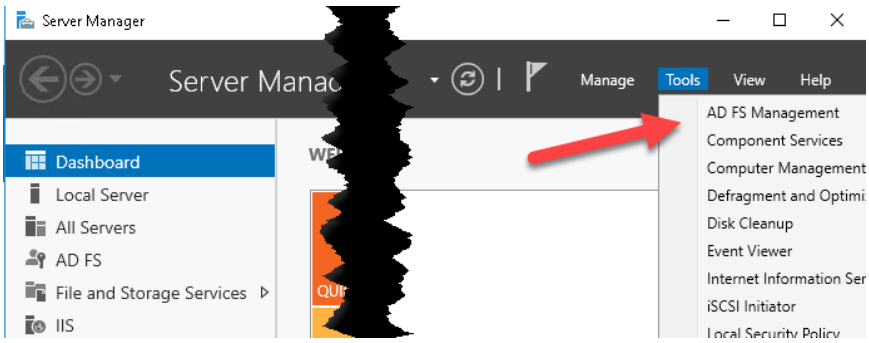
4. Right clicking on Relying Party Trust. Click on Add Relying Party Trust.
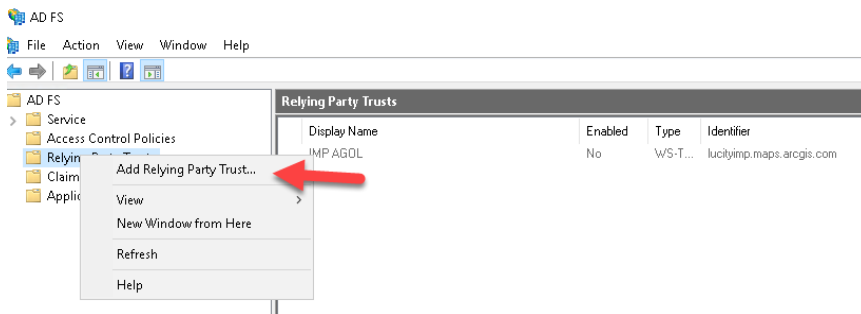
5. This will be a claims aware trust. Click on start at the bottom
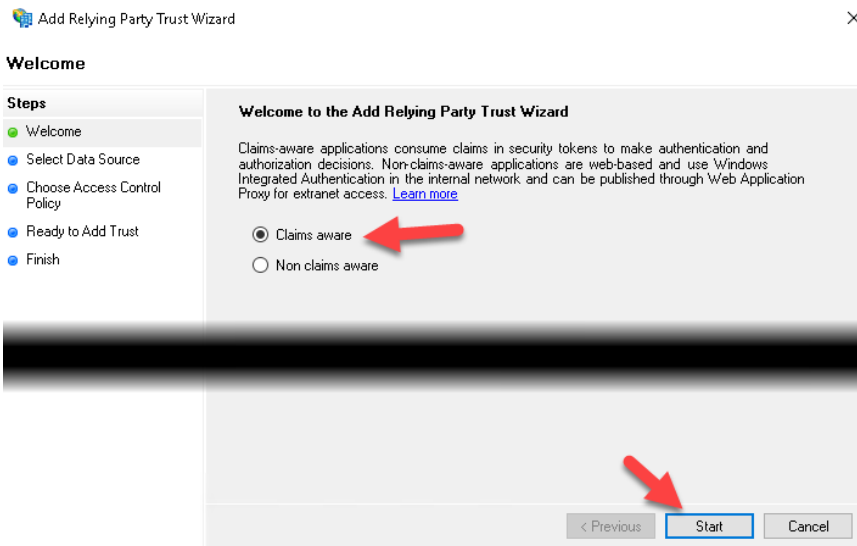
6. In the Select Data Source, click on the radio button for 'Import data about the relying part from a file'. Browse to the metadata.xml file you copied to your ADFS server. Click next when complete.
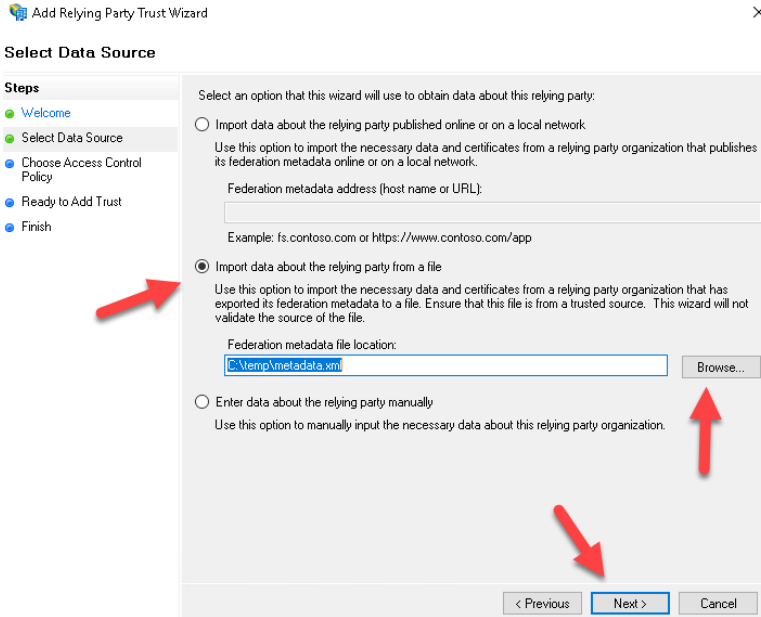
7. In the Choose Access Control Policy, Give the ADFS claims a name for Portal. Add notes if you have more than one connection to Portal internal and external. Click next when complete.
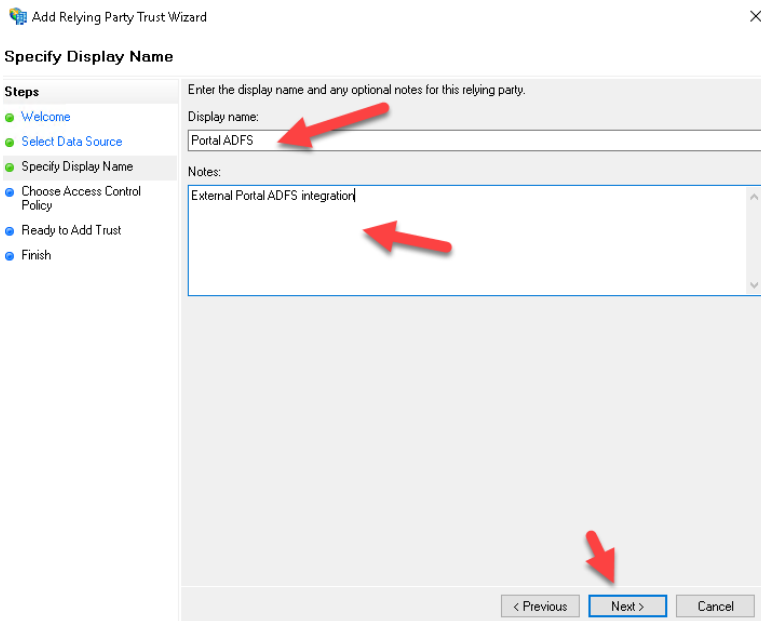
8. For Access Control, you can choose everyone or limit groups. In this example, we'll choose the defaults. Click next when complete.

ArcGIS Enterprise Administration - Part 3
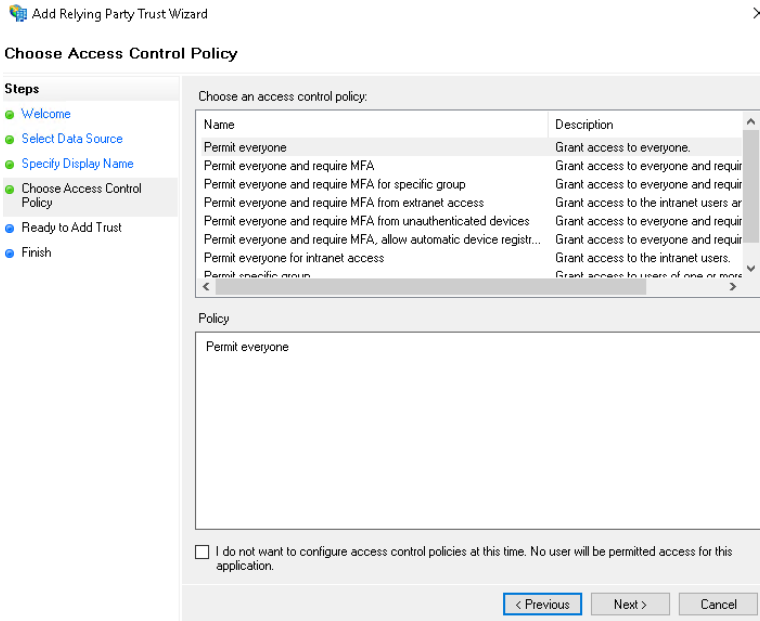
9. Click Next on the Ready to Add Trust.
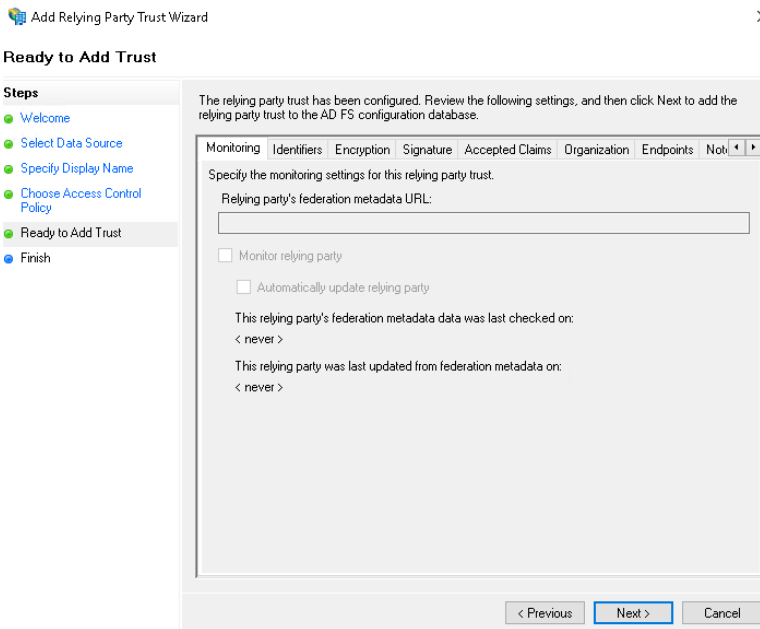
10. Click Next, accept defaults and Close when finished. This will prompt another dialog to appear.

ArcGIS Enterprise Administration - Part 3
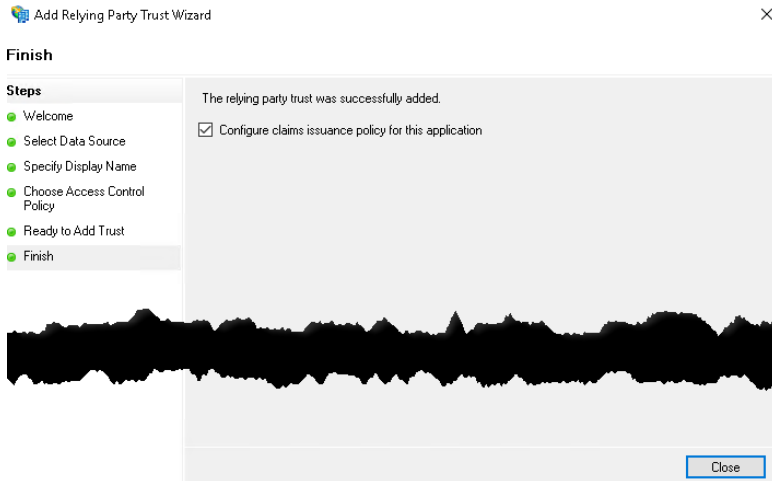
11. In the 'Edit Claim Issuance Policy for Portal ADFS, click on the 'Add Rule' button.
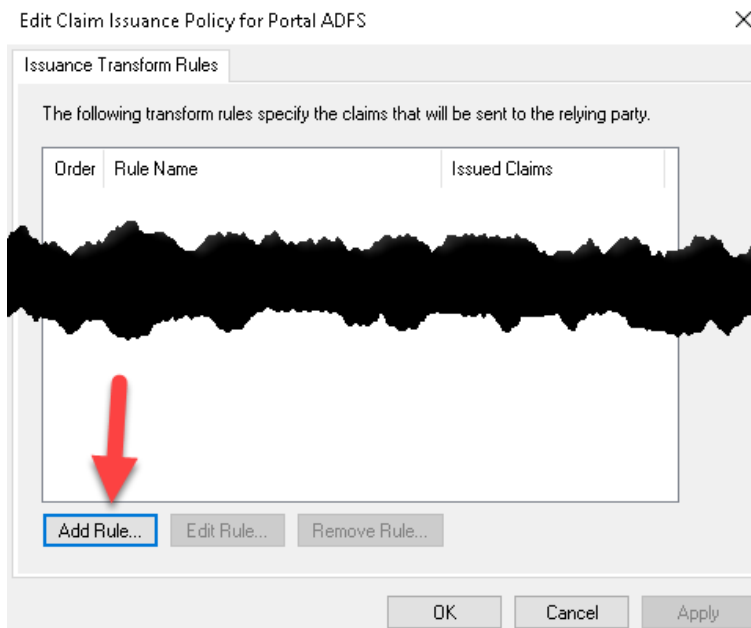
12. In this example, we'll accept the defaults for 'Send LDAP Attributes as Claims'
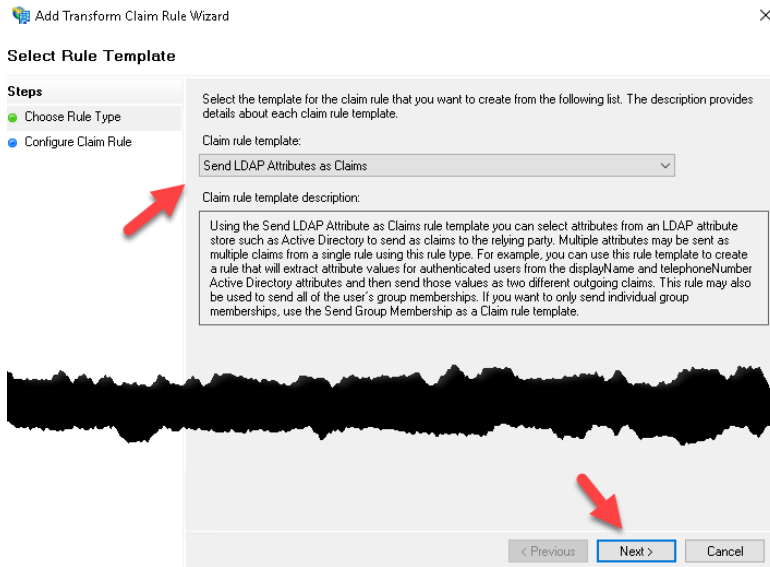
13. In the 'Configure Role' dialog, change the Attribute store to Active Directory in the drop down and give the Claim rule name a name. Also, go to the Mapping of LDAP attributes to outgoing claim types and add items like 'User-Principle-Name' connected to Name ID and Display-Name connected to Given Name. Below is an example. You could add more if needed. After all information has been entered, click on finish and ok.

ArcGIS Enterprise Administration - Part 3
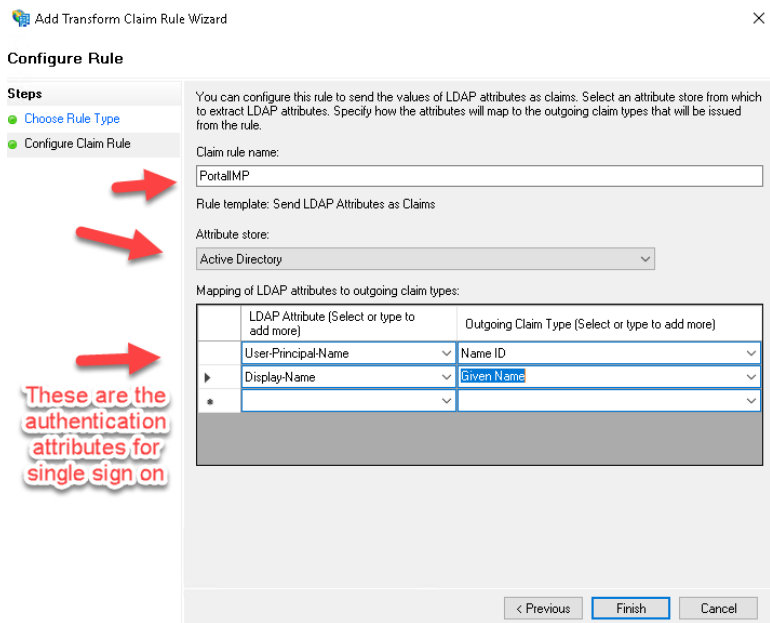
14. You should now see the new relying party trusts entered.
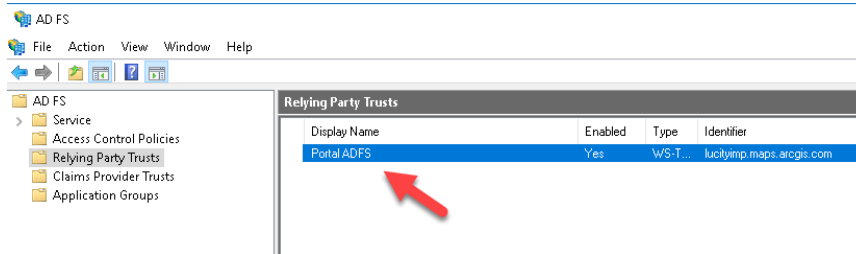
15. Go to the ADFS metadata URL and download your ADFS metadata. Take the FederationMetdata.xml and copy it to a known location.

    https://FQDN or the ADFS Server>/FederationMetadata/2007-06/FederationMetadata.xml

    Example: https://adfs.test.local/FederationMetadata/2007-06/FederationMetadata.xml

16. Login to your Portal. Go to Organization/edit settings/Security tab and click on Set Identity Provider.
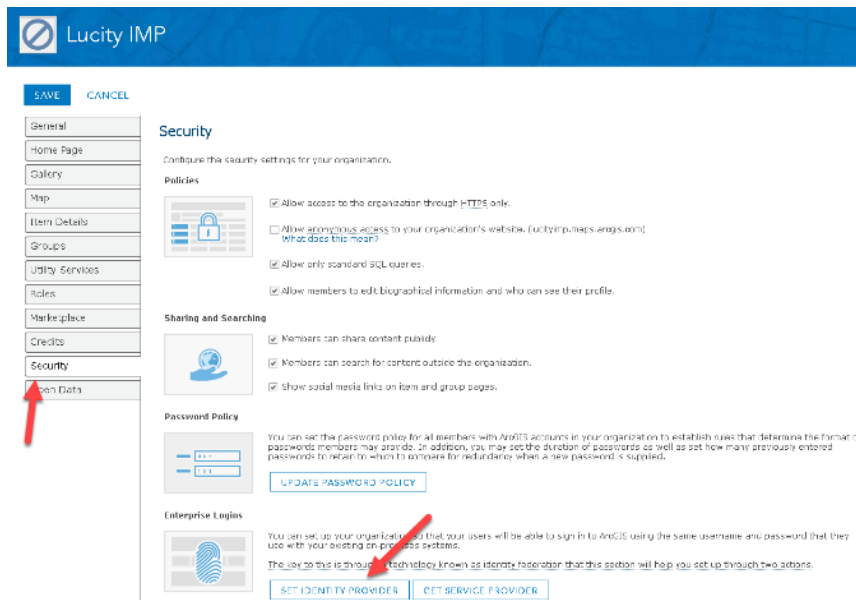
17. In the Set Identity Provider dialog, you can change the behavior of signing up users. In this example, we'll automatically join users to a Level 2 license with the role user. Also, click on the 'A File' radio button and choose file 'FederationMetadata.xml' you downloaded from the URL above. Afterwards, click on set identity provider.

ArcGIS Enterprise Administration - Part 3

Set Identity Provider

×

Specify the properties to establish your organization's Enterprise Identity Provider.

Name:

Lucity Imp Team

Your users will be able to join:
◉ Automatically ○ Upon invitation from an administrator

Default License Level:
○ (1) ◉ (2)

Role they will be assigned: User ▾

You have not specified any groups to which to assign users.

SPECIFY GROUPS

Metadata for the Enterprise Identity Provider will be supplied using:
○ A URL ◉ A File ○ Parameters specified here

File:
Choose File | FederationMetadata.xml

Show advanced settings

SET IDENTITY PROVIDER   CANCEL

18. Click on the 'save' button at the top of the Portal page to save changes.

Home Gallery Map Scene Groups Content Organization

Lucity IMP

SAVE   CANCEL

19. At the top of the portal dialog, click on invite members.

Lucity IMP

EDIT SETTINGS   INVITE MEMBERS   VIEW STATUS   VIEW SYSTEM HEALTH

Members

20. In the 'Add or Invite Members to <organization> page, make sure the 'Invite Members to join using their enterprise logins' is selected. Click next.

ArcGIS Enterprise Administration - Part 3

21. Type in the e-mail and click next. Click next.

Note: need to have e-mail attached to your Active Directory user accounts for this to work.

22. You can send invitation without specifying group but this dialog allows you to do this within one operation. Click on send invitation.

Step 3 of 4

Verify that these are the members you want to invite.
If you want to specify one or more groups to which to add these member logins, click Specify Groups below;
otherwise, click Send Invitations.

▲Email	Level	Role	Edit
lsavagelucity@gmail.com	(2)	User	Edit Remove

BACK   SPECIFY GROUPS   SEND INVITATIONS

23. User can go to their e-mail account and accept the invite. Once invite is accepted, you can go to Portal and use your Windows Account information.
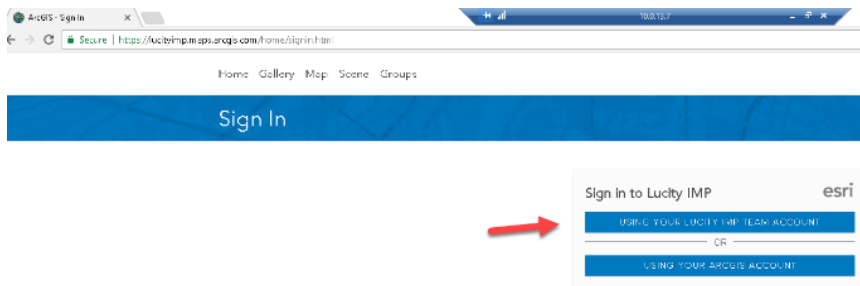
24. This will reroute you to your ADFS SSO. You can set your browser to autosign with your AD account info.

IMP ADFS

Sign in with your organizational account

test\lsavage

....

☑ Keep me signed in

Sign in

25. Once signed in, it will reroute you to the Portal organization. If you don't clear browser cache, it will remember your login information.

Portal using OneLogin

1. Go to Onelogin for your organization, administration, apps, and add apps.
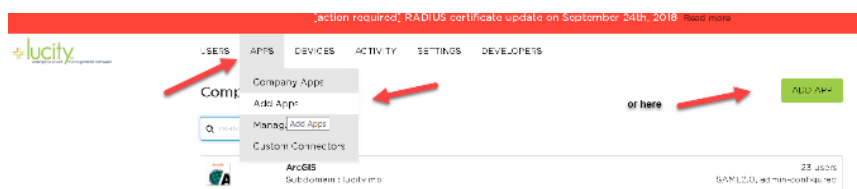
2. In find applications, go to the search menu and type in Portal. Click on the results for ArcGIS Portal.
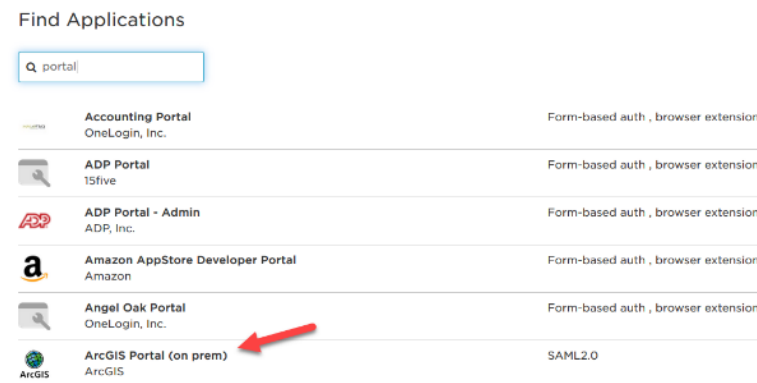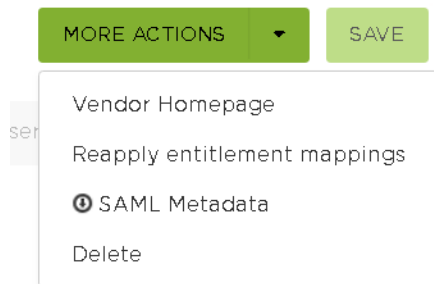

3. Give it a display name and save

ArcGIS Enterprise Administration - Part 3

49
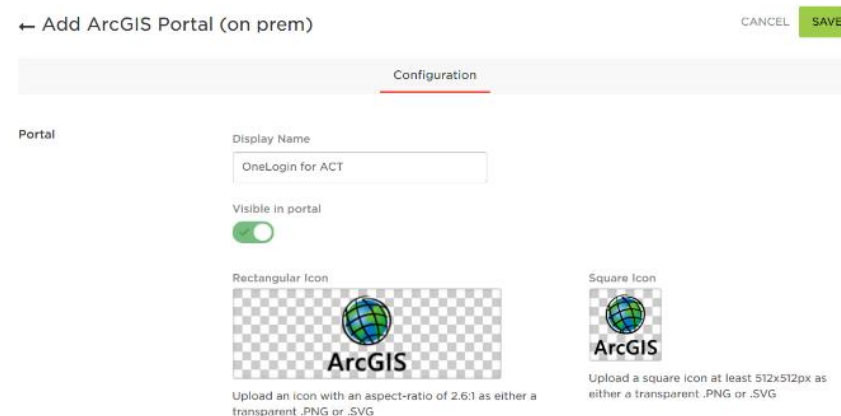
4. Once added, you need to configure the app integration. Go to configuration and add the Domain and EntityID. (example: Domain = FQDN/PortalWebAdaptor, EntityID = FQDN.PortalWebAdaptor)
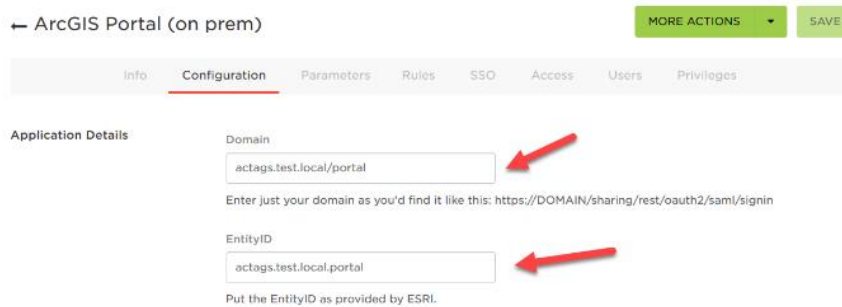
5. Save configuration

6. Go to more actions and click on the drop down and choose SAML Metadata.

7. Go to Portal for ArcGIS login, organization, edit settings, security. Scroll down to Enterprise Logins via SAML.

8. Click on Set Identity Provider

9. Give it a name, choose 'A file' under Metadata for the Enterprise Identity Provider will be supplied using: click on choose file and navigate to the Onelogin SAML xml that was downloaded from the previous steps.

10. Save configuration in Portal

11. Go to add members

12. We will be adding members for the enterprise login via SAML. Click next when finished

Add Members

CANCEL

Step 1 of 4

What type of member would you like to add to your Portal?

○ Add built-in portal members.

◉ Add members for OneLogin for ACT enterprise logins via SAML.

○ Add members based on existing enterprise users.

NEXT

13. Add credentials and click next

| One at a time | From a file |

Enterprise Logins via SAML

Email:	jmorocco@lucity.com	*
First Name:	Joe	*
Last Name:	Morocco	*
Username:	jmorocco	*

Level: ○ ① ◉ ②

Role: Administrator ▾

BACK   ADD ANOTHER   NEXT

14. You can specify groups or just add members and add them to a group later if you wish. Click on Add Members when finished.

ArcGIS Enterprise Administration - Part 3

15. You can add another member or return to organization when complete.

16. You should now see the new member added to Portal

17. Test a user. When signing in as the user, you will see two separate logins. One of the great things about SAML integration is the ability to continue to use built-in logins as well.

ArcGIS Enterprise Administration - Part 3
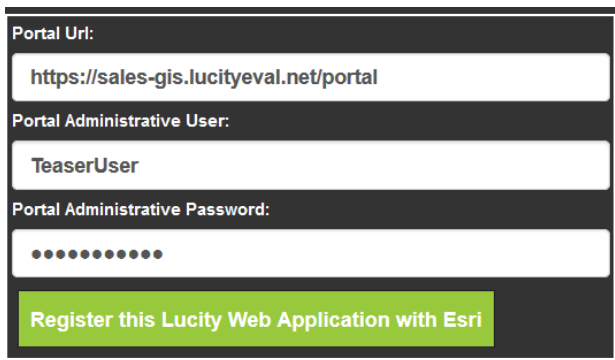
Registering Portal in Lucity

You will need to register Lucity with a built-in account with admin privileges for SSO (single sign on) to work with Lucity.
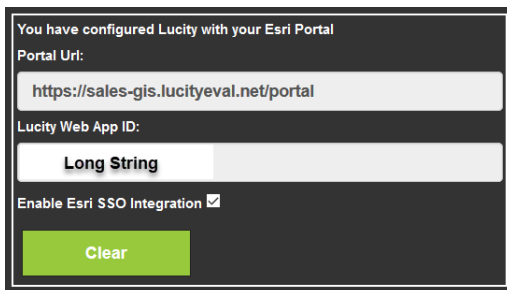
1. Go to Lucity Web Admin Portal ⚙ and expand Web App Management in the TOC. Click on Esri Portal Integration.
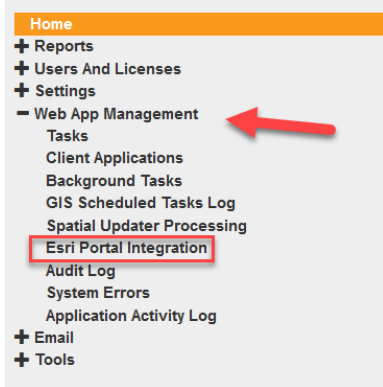
2. In the Esri Portal Integration dialog, add in your Portal URL, built-in admin user and password. (https://<FQDN>/<Portal Web Adaptor>; for AGOL use https://arcgis.com). This will register your Lucity client to Portal. Click on 'Register this Lucity Web Application with Esri'.

3. Make sure the Enable Esri SSO Integration is checked. It should be checked by default. The clear button will clear the integration and relaunch the registration process.

4. Afterwards, open Lucity Security and add in the Esri userID for each user. Make sure the checkbox 'Allow Logging on to Lucity with Esri Logon' is checked.

5. After caching is cleared, you are ready to start using the Lucity SSO functionality.