



ESRI
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**ESRI SUPPORT
SERVICES**

Installing ArcGIS Enterprise

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Introduction

Today we will be walking through an installation of the four components that make up the ArcGIS Enterprise Deployment. The four components are:

- [ArcGIS Server](#)
- [ArcGIS Data Store](#)
- [ArcGIS Enterprise portal](#)
- [ArcGIS Web Adaptor](#)

This exercise will allow you to familiarize yourself with the installation process. At the end of this exercise, you will have a complete ArcGIS Enterprise deployment on your machine for learning and testing.

The installation can be done on your local machine or a Virtual Machine. For the installation we will be using your AVWORLD credentials.

You will need to know your machine name and AVWORLD credentials

All software installation files, and authorization files can be found in the Esri Directory. ([\\esri.com\software\esri\released](http://esri.com/software/esri/released)).

There will be checkpoints during this exercise, if at any point you are not matching the checkpoint contact your mentor, Noah(nkrach@esri.com), or Faris (fbouran@esri.com) for help!

Create a Virtual Machine in ECS

Virtual Machines are a resource for testing. Creating a Virtual Machine can be deployed to match the OS, Version, and Locale of the user. Using a Virtual Machine allows you to complete destructive testing without destroying your local installations.

CONSIDERATIONS WHEN REQUESTING A VIRTUAL MACHINE

Virtual Machine resources are not unlimited. When no resources are available you and others will not be able to request new machines. To ensure that you and your team have resources when needed, we must follow the ECS policy. The full policy can be found in the ECS Policy folder within Teams.

Virtual Machines should be used when an existing shared environment is not sufficient for testing. Shared environments are managed by Tech Leads, or others in support, and can be used for non-destructive testing. For additional information on shared environment, discuss with your mentor or Group Lead.

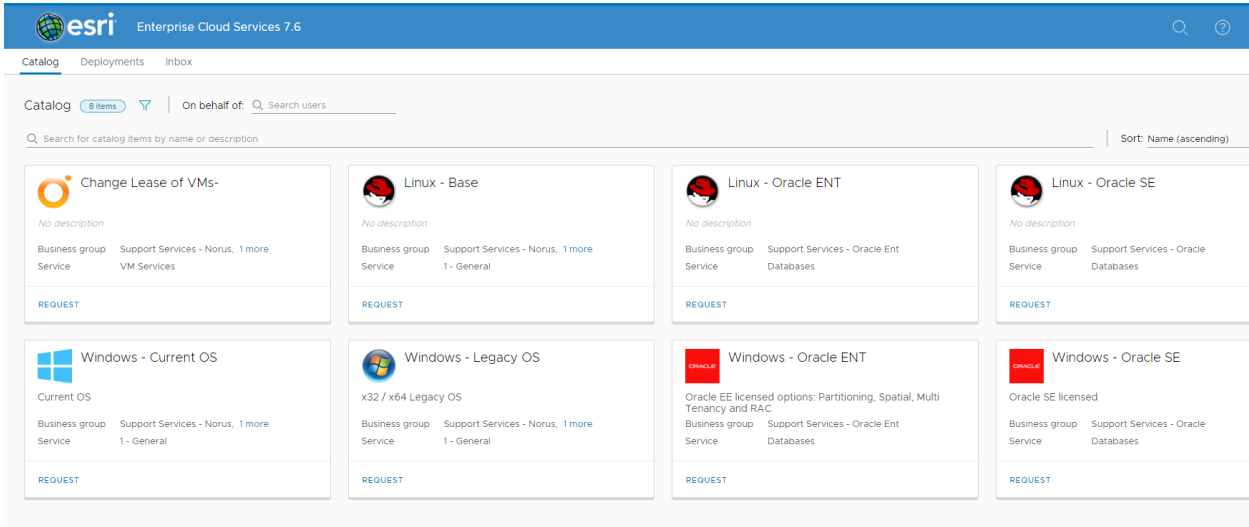
Use the minimum number of resources necessary for testing. The size and footprint should be justified by the software and testing needed on the machine.

VMs should be turned off when not in use. Turning off the machine will free up resources so that others can use and create their machines for testing.

REQUESTING A VM THROUGH ESRI CLOUD SERVICES

Virtual Machines are made available through Esri Cloud Services (ECS). ECS is accessed through a web browser, you will need your AVWORLD credentials to login.

1. Navigate to <https://ecsprd.esri.com/>



3. Under the Catalog tab, click “Request” for the base operating system you need for your VM.

A new page will open with multiple specifications. Your choice will be dependent on the test that you are completing.

- a. **Number of Compute Units Left** - This specifies the resources currently available in your business group. The amount of CPU you are requesting must be able to be fulfilled by what is available in this section.
- b. **Lease Duration** - How long would you like your VM to be available for use? You can specify up to 30 days.
- c. **Machines** - no user input needed. Field is ‘1’ by default and cannot be changed.
- d. **Size of VM** - specify how much CPU and RAM you would like to have on your machine. The minimum requirements for the software you intend to install should be considered when selecting the size.
- e. **Select Hard drive Size (GB)** - Specify the size desired for the VM hard drive.
- f. **Select Language** - Select the language you would like for your operating system.
- g. **Select OS** - Select the operating system version you would like to use. Make sure that the operating system you choose is compatible with the version of software you intend to install.
- h. **Select Software (optional)** – Ignore this section. Manually move all software onto your machines.

a.

- i. **Description** - provide a description of your VM. It is helpful in many cases to list what you intend to install on the machine in this section.

4. Click Submit.

You will receive an email with the details of your VM once it has successfully been activated.

ACCESSING YOUR VIRTUAL MACHINE

1. You will need to login to the Customer Protected Data Enclave (CPDE) to access your newly created machine. The CPDE [info sheet](#) shows how to install/configure the CPDE jump host as well as answer FAQs.
2. Using the information provided in the email, you can remote into your virtual machine once you connect to CPDE jump host.

INSTALLING ARCGIS SERVER

We will begin by installing an ArcGIS GIS Server. We will be extracting the installation files, installing the software, authorizing the software, and creating an ArcGIS Server site.

EXTRACTING INSTALLATION FILES

1. Locate the install file titled for the most recently released version of ArcGIS Server. For example: "ArcGIS_Server_Windows_110_182874".
 - a) Hint: look in the folder named "{version}_Final"

- Example: "110_Final"
 - The additional numbers following the version, is the build number
2. From the Esri Directory copy the installation file, paste the file on your local machine.
 3. Double click the copied file to launch the file extraction.
 - a) We do not need to change the default destination folder so select "Next."
 - b) Once the extraction is completed it will automatically move to the next dialogue box. You will get a message that the "Installation files have been successfully extracted on your computer."
 - Make sure that the box to "Launch the setup program" is checked and select "Close."
 - After clicking "Close" the "User Account Control" dialogue box may appear asking if you would like to allow ArcGIS Server to make changes to the computer. Select "Yes."

CHECKPOINT 1: After the "User Account Control" box is gone the "ArcGIS Server {version} Setup" dialogue box will pop up on the screen. If this does not appear please contact your mentor, or a Readiness Lead for help. If the dialogue box pops up, continue to step 4.

RUNNING THE INSTALLATION PROGRAM

4. Now that the installation program has launched, we will begin to install ArcGIS Server on your machine.
 - a) On the "Welcome to ArcGIS Server {Version} Setup Program" screen click "Next."
 - b) This will take us to the Master Agreement. If you agree, select the "I accept the master agreement" radio button and select "Next."
 - c) From the Select Features page keep the default settings and select "Next."
 - d) The "Specify ArcGIS Server Account" page will appear. **It is important for ESS Enterprise Supplemental exercises that we follow these steps exactly. If you have any questions please contact a Readiness Lead, or your mentor!**
 - Make sure that the "Specify the account name and password:" radio button is selected.
 - For the user name specified for the ArcGIS Server Account you will change the default "arcgis" to your AVWORLD account. This will look like AVWORLD\abcd12345.

- Type in the password associated with your AVWORLD account (the password used to login to you machine).

- Select “Next.”
- e) Next, the “Export Server Configuration File” screen will appear. Select “Do not export configuration file” and then click “Next.”
5. From the “Ready to Install” page select “Install” allow the installation to run fully. Once completed select “Finish.”

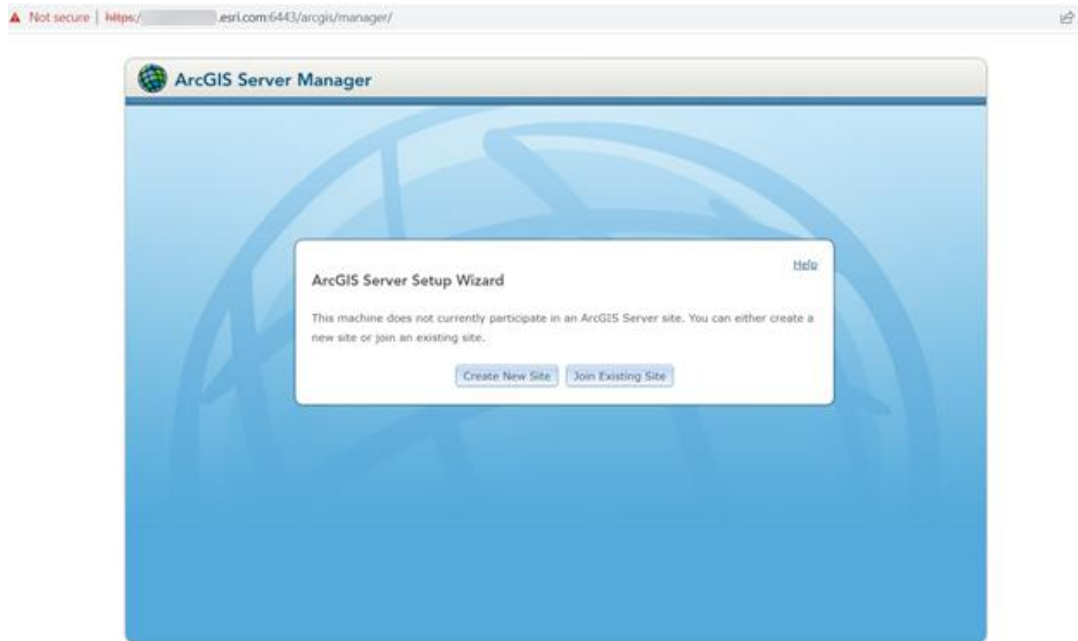
CHECKPOINT 2: Open your Start menu and search for “Services.” Open “Services (Local)” and locate the “ArcGIS Server” service. Find the “Log on As” column and make sure that this says “AVWORLD\<yourID>”

AUTHORIZING THE SOFTWARE

6. Now that the install is completed, the “Software Authorization Wizard” will appear.
 - a) The authorization file can be found in “\\metro\released\Authorization_Files”.
 - b) Once you are in the Esri Directory Authorization_Files folder navigate to {Version} > ArcGIS_Server > Advanced.
 - c) Copy the “Server_Ent_Adv.ecp” file to your machine.
7. We now have an Authorization File and can complete the Authorization Wizard.
 - a) Select the radio button for “I have received an authorization file and am now ready to finish the authorization process.”
 - b) Select Browse and locate the authorization file copied to your machine from step 6. Select “Next.”
 - c) Select “Finish”. The Authorization wizard will disappear. Select “Finish” from the installation program.

CREATING THE SITE

8. The ArcGIS Server Manager Site Creation page will launch in a web browser.
 - a) You may get a warning that “Your connection is not private.” If this happens click “Advanced” > “Proceed to localhost (unsafe).”
 - b) Select to Create New Site.



- c) You will be prompted to create a Primary Site Administrator Account. You will hear this account referred to as your **Site Admin** account.
 - You can choose any username and password you would like. Be sure to pick a username and password that you will remember is your ArcGIS Server Site Admin account.
 - Generally, in support, people make username and password: siteadmin
 - d) Once you have typed your username and password select “Next.”
 - e) Next, we will select the location of our directories. Keep the default for the Root Server Directory and the Configuration Store.
 - f) Click “Next” and review the Configuration Summary, then select “Finish.”

CHECKPOINT 3: Once the site has been created you will be directed to login. Login and explore ArcGIS Server Manager.

- Your ArcGIS Server Site can now be accessed via [“https://machinename.esri.com:6443/arcgis/manager”](https://machinename.esri.com:6443/arcgis/manager) or “localhost:6443/arcgis/manager” when directly on the ArcGIS Server machine.

INSTALLING ARCGIS DATA STORE

Our second installation will be the ArcGIS Data Store. We will extract the installation files, install the ArcGIS Data Store, and configure the ArcGIS Data Store with ArcGIS Server.

EXTRACTING INSTALLATION FILES

1. Locate the install file titled for the most recently released version of ArcGIS Data Store. For example: "ArcGIS_DataStore_Windows_110_182887"
 - a) Hint: look in the folder named "{version}_Final"
 - Example: "110_Final"
2. Copy and paste the file on your local machine.
3. Double click the copied file to launch the file extraction.
 - a) Do not change the default destination folder. Select "Next."
 - b) Once the extraction is complete the next dialogue box will be launched. You will get a message that "Installation files have been successfully extracted on your computer."
 - Make sure that the box to "Launch the setup program" is checked and select "Close."
 - After clicking "Close" the "User Account Control" dialogue box may pop up asking if you would like to allow ArcGIS Data Store to make changes to the computer. Select Yes.
 - The "ArcGIS Data Store Setup program" will launch.

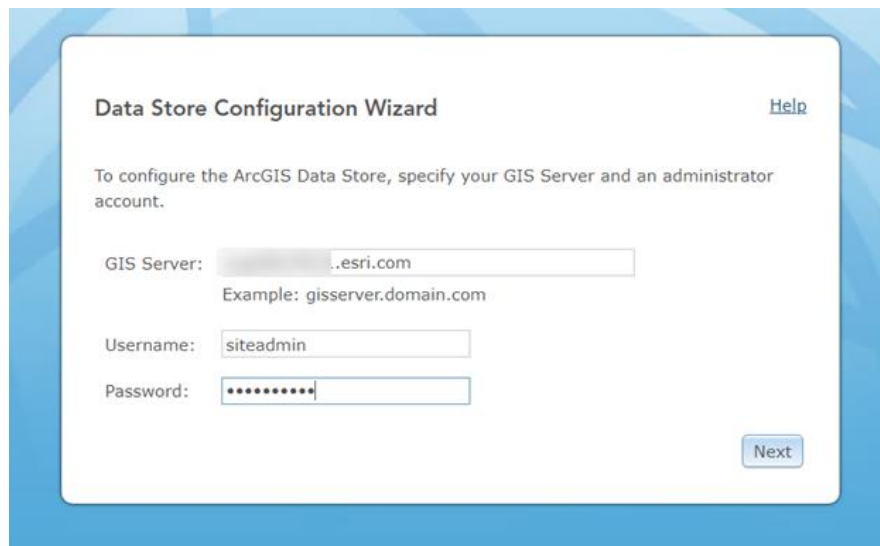
CHECKPOINT 4: After the "User Account Control" box is gone the "ArcGIS Data Store {Version} Setup" dialogue box will pop up on the screen. If this does not appear please contact your mentor, or a Readiness Lead for help. If the dialogue box pops up, continue to step 4.

RUNNING THE INSTALLATION PROGRAM

4. Now that the installation program has launched, we will begin to Install ArcGIS Data Store on your machine.
 - a) On the "Welcome to ArcGIS Data Store {version} Setup Program" screen click "Next."
 - b) This will take us to the Master Agreement. If you agree, select the "I accept the master agreement" radio button and select "Next."
 - c) Leave the default "Selected Features" and select "Next"
 - d) The "Specify ArcGIS Server Account" page will be next. We will be using our AVWORLD account for this. The format should be AVWORLD\abcd12345. For additional details please see step 4e from the "Installing ArcGIS Server" section above.
 - Make sure that the "Specify the account name and password:" radio button is selected.
 - Input your AVWORLD username password and select "Next."
 - e) For the "Export Server Configuration File" select "Do not export configuration file" and select "Next."
5. From the "Ready to Install" page select "Install" and allow the installation to run fully. Once completed select "Finish."

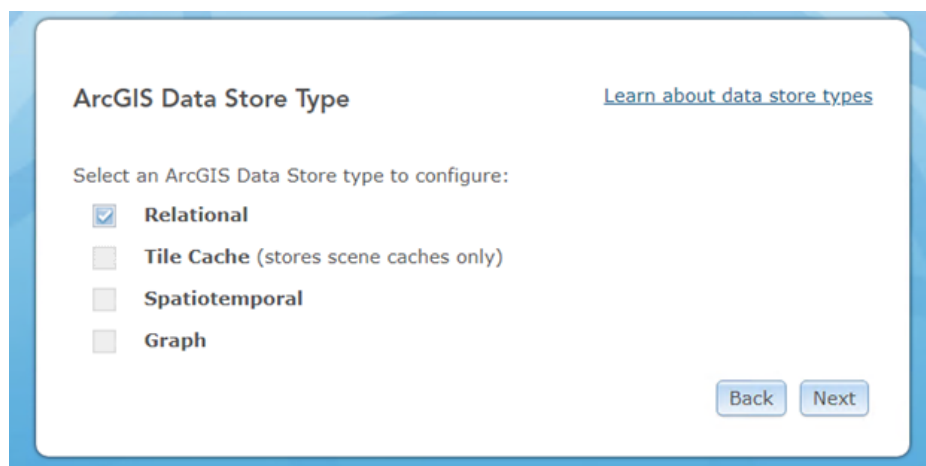
CREATING THE DATA STORE

6. The ArcGIS Data Store Configuration Wizard Creation page will launch in a web browser.
 - a) You may get a warning that “Your connection is not private.” If this happens click “Advanced” > “Proceed to localhost (unsafe).”
7. Fill out the Data Store Configuration wizards as listed below:
 - a) GIS Server URL: this will be the URL that you identified in checkpoint 3.
 - Be sure to use <yourMachineName>.esri.com, do NOT use localhost.
 - Example: machinename.esri.com
 - b) Input your Site Admin credentials (see step 8c of the “Creating the Site” section for ArcGIS Server for reference)



The screenshot shows the 'Data Store Configuration Wizard' window. It has a title bar and a 'Help' link in the top right. The main text says: 'To configure the ArcGIS Data Store, specify your GIS Server and an administrator account.' Below this are three input fields: 'GIS Server:' with a text box containing '.esri.com' and an example 'gissERVER.domain.com' below it; 'Username:' with a text box containing 'siteadmin'; and 'Password:' with a text box containing eight dots. A 'Next' button is in the bottom right corner.

- c) Click “Next.”
 - d) Do not change the Content Directory.
 - e) Click “Next.”
8. Select the ArcGIS Data Store Type:
 - a) We will be selecting the “Relational” Data Store type and clicking “Next”



The screenshot shows the 'ArcGIS Data Store Type' window. It has a title bar and a 'Learn about data store types' link in the top right. The main text says: 'Select an ArcGIS Data Store type to configure:'. Below this are four radio button options: 'Relational' (which is selected with a checked box), 'Tile Cache (stores scene caches only)', 'Spatiotemporal', and 'Graph'. At the bottom right are 'Back' and 'Next' buttons.

9. Confirm the Configuration Summary is correct and click “Finish.” Once completed you may close out of the Configuration Wizard.

CHECKPOINT 4: Navigate to ArcGIS Server Manager (Using the URL from checkpoint 3). If prompted, sign in using your Site Admin credentials. Once logged in navigate to Site > Data Stores. You should see a data store listed in this section.

Check the box next to the data store and click “Validate,” you should see a green check box appear under the status column. If you do not see the data store or get a green check box, contact your mentor or a Readiness Lead.

INSTALLING PORTAL FOR ARCGIS

We will be installing Portal for ArcGIS. This is the largest install; you can expect that this installation may take longer than ArcGIS Server or ArcGIS Data Store. We will extract the installation files, run the installation program, authorize the software, and create the portal.

A note on terminology: **Portal for ArcGIS** should be used when referring to the software component that is installed and configured while deploying ArcGIS Enterprise. Once the software component has been installed and configured, it activates what is called the **ArcGIS Enterprise portal**. For additional information on ArcGIS Enterprise Terminology see the [ArcGIS Enterprise Terminology Guide](#).

EXTRACTING INSTALLATION FILES

1. Locate the install file titled for the most recently released version of Portal for ArcGIS
 - a) For example: “Portal_for_ArcGIS_Windows_110_182885”
2. Copy and paste the file to your local machine.
3. Once the installation file has been copied to your machine, double click the file to launch the file extraction.
 - a) Do not change the default destination folder > select “Next.”
 - b) Once the extraction is completed it will take you to the next dialogue box. You will get a message that the “Installation files have been successfully extracted to your computer.”
 - Make sure that the box to “Launch the setup program” is checked and select “Close.”
 - After clicking “Close” the “User Account Control” dialogue box may pop up asking if you would like to allow Portal for ArcGIS to make changes to the computer. Select Yes.
 - The “Portal for ArcGIS Setup Program” will launch.

RUNNING THE INSTALLATION PROGRAM

4. Now that the installation program has launched, we will begin to Install Portal for ArcGIS on your machine.
 - a) On the “Welcome to Portal for ArcGIS {version} Setup Program” screen click “Next.”
 - b) This will take us to the Master Agreement. If you agree, select the “I accept the master agreement” radio box and select “Next.”
 - c) For the Destination Folder use the default location. Select “Next.”

- d) For the “Specify the Portal for ArcGIS directory” keep the default location and select “Next.”
- e) The “Specify Portal for ArcGIS Account” page will be next. We will be using our AVWORLD account for this. The format should be AVWORLD\abcd12345. For additional details please see step 4e from the “Installing ArcGIS Server” section above.
 - Make sure that the “Specify the account name and password:” radio button is selected.
 - Input your AVWORLD username password.

- f) Click “Next.”
 - g) For the “Export Server Configuration File” select “Do not export configuration file” and select “Next.”
5. From the “Ready to Install” page select “Install” and allow the installation to run fully.
 - a) Once completed select “Finish.”

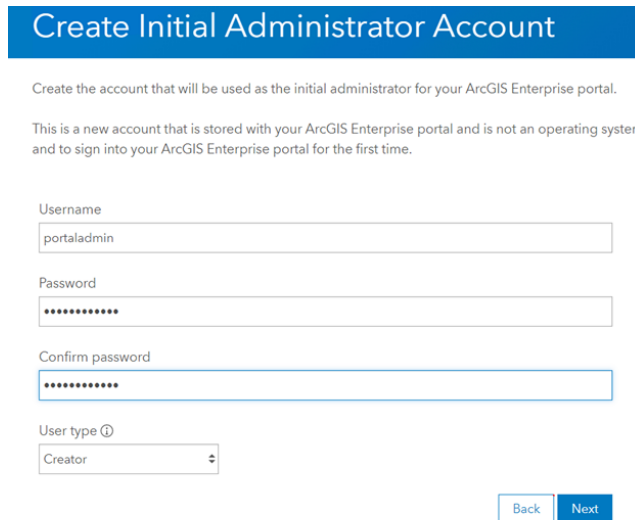
CREATING THE PORTAL

6. The Portal for ArcGIS Portal Creation page will launch in a web browser.
 - a) You may get a warning that “Your connection is not private.” If this happens click “Advanced” > “Proceed to localhost (unsafe).”
7. Locate the License File
 - a) We will be getting the authorization file from \\metro\released\Authorization_Files.
 - Hint: Version_xx
 - b) Once you are in the Esri Directory Authorization_Files folder navigate to Version_xx > Portal_for_ArcGIS_{version}
 - Copy the “CreatorViewerUTs_AllAddOnApps.json” file to your machine.

8. Select to “Create New Portal.”



9. Click Browse and navigate to the license file copied in step 7. Click Next.
10. You will be prompted to create a Primary Portal Administrator Account. You will hear this account referred to as your **Portal Admin account**.
- Pick a username and password that you will remember!
 - Hint: Most people in Support use username: portaladmin password: portaladmin1
 - Click “Next”



11. Fill out the information
- a) First Name: Type your first name
 - b) Last Name: Type the last name
 - c) Email: Use your Esri email
 - d) Confirm Email: Re-enter your Esri email address
 - e) Security Question: select the security question you would like to use
 - f) Answer: Answer your security question
 - g) Select “Next.”

Enter Additional Account Information

Enter additional information for the initial administrator account you specified on the previous page.

First name
Portal

Last name
Admin ✓

Email
@esri.com ✓

Confirm email
@esri.com ✓

Security question
What is your dream job? ✓

Answer
esri ✓

Back Next

- h) Content Directory: leave the default
- i) Select “Next.”
- j) Click “Create”. The portal creation may take a bit of time. While the portal is being created, you can begin the installation of your ArcGIS Web Adaptors.

CHECKPOINT 5: Once the portal has been created you will see a pop-up box saying, “Account Created”. Click “OK.”

You can access your portal over “https://machinename.esri.com:7443/arcgis”

You will see a notice saying “Next Steps” – before using Portal for ArcGIS we must install and configure Web Adaptor for ArcGIS. Continue to the next section.

INSTALLING WEB ADAPTOR FOR ARCGIS

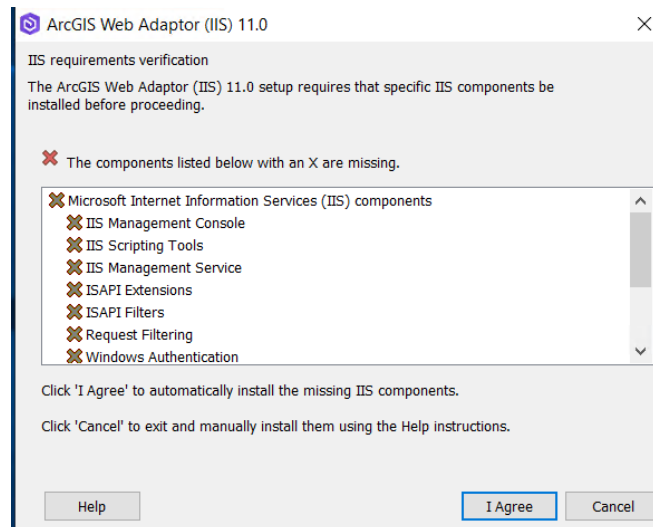
It is now time to install the final component of the ArcGIS Enterprise deployment. We will be installing **two** ArcGIS Web Adaptors. The first web adaptor will be installed and configured with the ArcGIS Enterprise portal. The Second Web Adaptor will be installed and configured with ArcGIS Server. We will also be creating and binding certificates so that our Enterprise deployment will be trusted on the Esri Network.

EXTRACTING INSTALLATION FILES

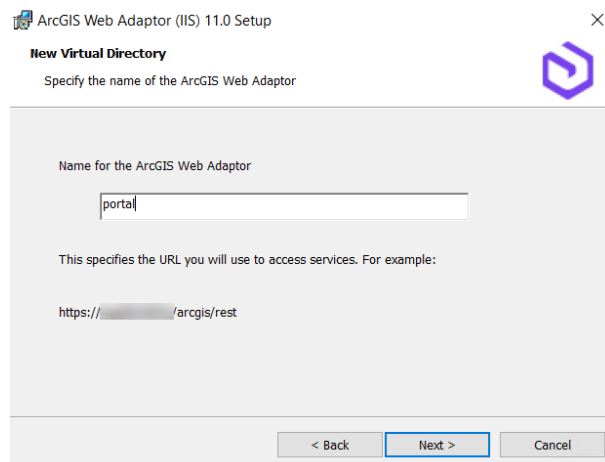
1. Locate the install file titled for the most recently released version of Web Adaptor
 - a) For example: “ArcGIS_Web_Adaptor_for_Microsoft_IIS_110_182888
2. Copy the file to your local machine.
3. Once the installation file has been copied to your machine, launch the file extraction. Keep all default destination folders.
 - a) When the “Installation files have been successfully extracted on your computer,” make sure the box to “Launch the setup program” is checked and select “Close.”
 - After clicking “Close” the “User Account Control” dialogue box may pop up asking if you would like to allow ArcGIS Web Adaptor to make changes to the computer. Select Yes.
 - The “ArcGIS Web Adaptor Setup Program” will launch.

RUNNING THE INSTALLATION PROGRAM

4. Now that the installation program has launched, we will begin to Install ArcGIS Web Adaptor on your machine.
 - a) You may see an IIS requirement verification window pop up. If you agree, click “I Agree.”



- b) Click “Next” on the “ArcGIS Web Adaptor (IIS) welcome page.”
 - c) This will take us to the Master Agreement. If you agree, select the “I accept the master agreement” radio button and select “Next”.
 - d) You may see an option to “Select a Web site (port) location where the features will be installed.” Select “Default Web Site (443).” Click “Next.”
 - e) Chose a name for your Web Adaptor.
 - Hint: this can be anything, but most people in Support use “portal.”



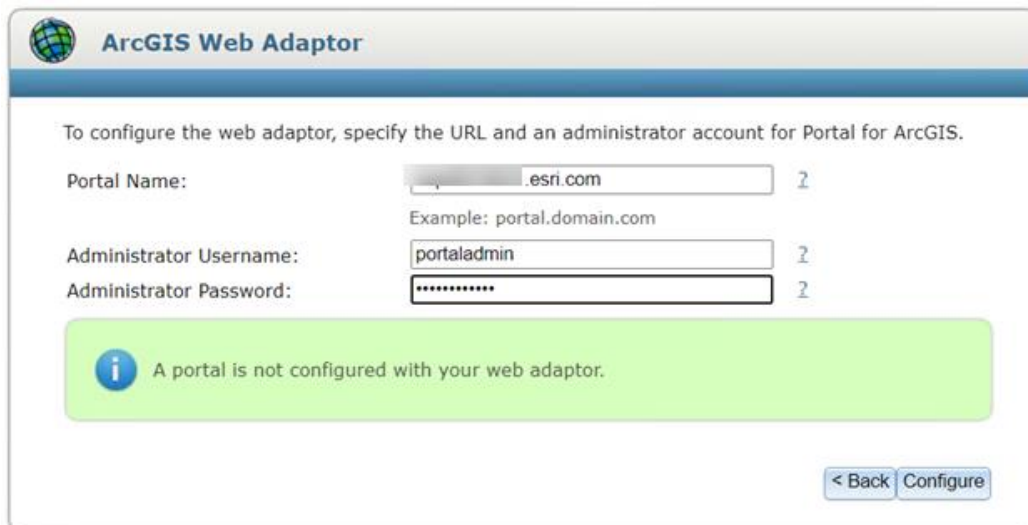
- f) Select "Next."
- g) From the "Ready to Install" page click "Install." Once completed select "Finish."
 - The Web Adaptor configuration will load in a browser. Leave this loaded in the browser and move to the next section.

CREATING A CERTIFICATE

5. We will now want to create a domain certificate for our Enterprise system.
 - a) Follow the documents below in order, be sure to follow each step carefully. If you have any questions, please reach out to your mentor or a Readiness Lead.
 - [Create Domain Certificate and bind it to Microsoft Internet Information Services \(IIS\)](#)
 - [How to export an Esri Domain Certificate to a file](#)
 - [How to export the Esri Enterprise Root Certificate to a file](#)
- *Be sure to also import the intermediate certificate*

CONFIGURING THE ARCGIS WEB ADAPTOR WITH PORTAL FOR ARCGIS

6. Navigate back to the Configure ArcGIS Web Adaptor page that was launched previously.
 - a) You will be prompted to select which product you want to configure with your Web Adaptor – select "Portal for ArcGIS" and click "Next."
 - b) Type your Portal URL (see the URL from checkpoint 5)
 - c) Input your Portal Admin credentials created in step 10e of the "Creating the Portal" section of Installing Portal for ArcGIS.



The screenshot shows the "ArcGIS Web Adaptor" configuration window. The title bar includes the ArcGIS logo and the text "ArcGIS Web Adaptor". The main content area has a header that reads: "To configure the web adaptor, specify the URL and an administrator account for Portal for ArcGIS." Below this, there are three input fields: "Portal Name:" with a text box containing ".esri.com" and a help icon; "Administrator Username:" with a text box containing "portaladmin" and a help icon; and "Administrator Password:" with a password box (masked with dots) and a help icon. Below the input fields is a green information box with an "i" icon and the text: "A portal is not configured with your web adaptor." At the bottom right, there are two buttons: "< Back" and "Configure".

7. Click "Configure."

CHECKPOINT 6: You will see a new URL to access the Portal Home site. Click this URL and make sure it loads in your browser. Login using the credentials you created for the Portal Admin account. Take some time to explore the Portal Home site.

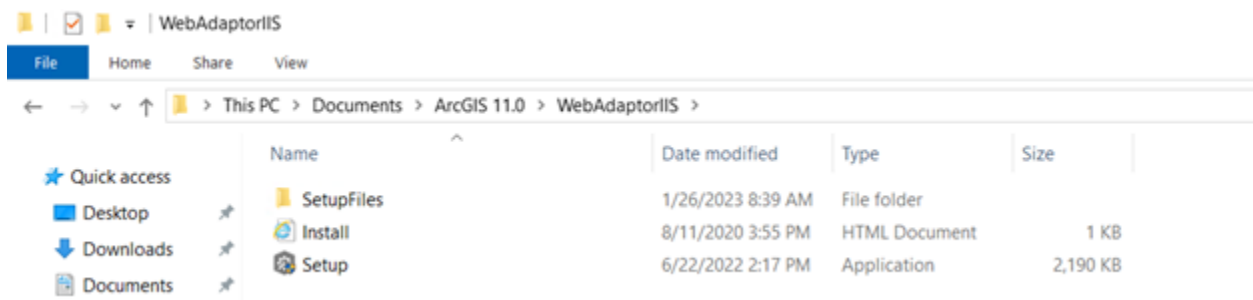
Your new portal url will be <https://webadaptormachine.esri.com/webadptorname>

INSTALLING A SECOND WEB ADAPTOR FOR ARCGIS SERVER

We now want to install a second Web Adaptor to be configured with ArcGIS Server.

8. Using the same Web Adaptor file from step 1 of “Extracting the Installation Files” section, double click to start the extraction process. Click “Next”.
 - a) You will see a warning that “There is already a file with the same name in the destination folder.”
 - b) Click the “Do this for all conflicts” check box.
 - c) Select “No, skip it.”
9. Once the “Installation files have been successfully extracted on your computer.” Make sure that the box to “Launch the setup program” is checked and select “Close.”
 - a) The “ArcGIS Web Adaptor Setup Program” will launch.

The web adaptor setup.exe can be found at “Documents > ArcGIS{version} > WebAdaptorIIS > setup.exe to skip having to re-extract the files



RUNNING THE INSTALLATION PROGRAM

10. Run the set up using the directions listed before. **Make only the changes listed below:**
 - a) When naming the ArcGIS Web Adaptor chose a name to identify your ArcGIS Server.
 - Hint: Most people in support use the name “server”

CONFIGURING THE ARCGIS WEB ADAPTOR WITH ARCGIS SERVER

11. The ArcGIS Web Adaptor Configuration Wizard Creation page will launch in a web browser.
 - a) You will be prompted to select which product you want to configure with your Web Adaptor – select “GIS, Image, Workflow Manager or GeoAnalytics Server” and click “Next.”
 - b) Type your ArcGIS Server URL.
 - c) Type your ArcGIS Server Site Admin credentials.

- Hint: Both the URL and the Site Admin credentials can be found in step 8 of the “Creating a Site” section when installing ArcGIS Server.
- d) Leave the “Enable administrative access to your site through the Web Adaptor” box checked.
 - e) Click “configure.”

CHECKPOINT 7: Once configured, we will see a new URL using the Web Adaptor.

Your server can now be reached at <https://webadptormachine.esri.com/webadaptorname>

CONFIGURING YOUR CERTIFICATES WITH ARCGIS SERVER

We will now go in and import the certificates to the ArcGIS Server and Portal for ArcGIS admin endpoints.

12. Access the site: <https://<yourMachineName>.esri.com/<webadaptorname>/admin>.
 - a) Login using your ArcGIS Server Admin credentials.
 - b) Navigate to machines > click your machine name > sslcertificates > importRootorIntermediate.
 - c) For the Alias type “Root.”
 - d) Select “Browse” and navigate to the Root certificate you exported in step 5b.
 - e) Click “Import.”
13. Click “ImportExistingServerCertificate.”
 - a) Type the password used when you exported the certificate in step 5b.”
 - b) Type “Domain” for your Alias.
 - c) Browse to and select the certificate file created in step 5b.
 - d) Click “Submit.”
14. You will now see 3 certificates listed for the SSL Certificates.
15. Navigate to home > machines > your machine name and select “edit.”

- a) Find the box with “Web Server SSL Certificate:” and delete the “SelfSignedCertificate.”
- b) Replace this with “Domain.”

Server Machine Properties

Machine name: ESRI.COM

Admin URL: https://ESRI.COM:6443/arcgis/admin

Web server maximum heap size (in MB): -1

Web server SSL Certificate : Domain

SOC maximum heap size (in MB): 64

Under Maintenance: false

Ports

Format: HTML


Save Edits

- c) Click “Save Edits.”

CONFIGURING YOUR CERTIFICATES WITH PORTAL FOR ARCGIS

16. Access the site: <https://<yourMachineName>.esri.com/<webadaptorname>/portaladmin>.
 - a) Login using your Portal Admin credentials.
17. Navigate to security > SSLCertificates > Import Root or Intermediate.
 - a) For the Alias type “Root.”
 - b) Select “Browse” and navigate to the Root certificate you exported in step 5b.
 - c) Do not check the “Do not restart the portal after import” box.
 - d) Click “Import.”
18. Click “Import Existing Server Certificate.”
 - a) Type the password used when you exported the certificate in step 5b.
 - b) Type “Domain” for your Alias.
 - c) Browse to and select the certificate file created in step 5b of this section.
 - d) Click “Import.”
19. You will now see 4 certificates listed for the SSL Certificates.
20. From the SSLCertificates page select “Update.”
 - a) Find the box with “Web Server SSL Certificate:” and delete the “portal.”
 - b) Replace this with “Domain.”

Update Web Server Certificate

 **Warning**

Executing this operation will automatically restart the portal.
This restart will take a couple minutes to complete and cause your portal resources to be temporarily unavailable.
To verify that the restart has completed, log in to the Portal Administrator Directory again before continuing.

Web server SSL Certificate:*

DomainCert

SSL Protocols:

TLSv1.2, TLSv1.3

SSL Cipher Suites:

TLS_ECDHE_RSA_WITH_AES_256_GCM_SHA384,
TLS_ECDHE_RSA_WITH_AES_256_CBC_SHA384,
TLS_ECDHE_RSA_WITH_AES_256_CBC_SHA,
TLS_RSA_WITH_AES_256_GCM_SHA384,
TLS_RSA_WITH_AES_256_CBC_SHA256,
TLS_RSA_WITH_AES_256_CBC_SHA,
TLS_ECDHE_RSA_WITH_AES_128_GCM_SHA256,
TLS_ECDHE_RSA_WITH_AES_128_CBC_SHA256,
TLS_ECDHE_RSA_WITH_AES_128_CBC_SHA,
TLS_RSA_WITH_AES_128_GCM_SHA256,
TLS_RSA_WITH_AES_128_CBC_SHA256,
TLS_RSA_WITH_AES_128_CBC_SHA,
TLS_AES_256_GCM_SHA384,

HTTP Strict Transport Security (HSTS) enabled:

☐

Format

HTML

Update

c) Click "Update."

CHECKPOINT 8: Reload your ArcGIS Server Manager site, and your Portal Home site in a web browser. Check that the certificates are trusted. You should see a lock symbol or a green bar in the URL section of the browser.

Congratulations!!!! You have successfully installed ArcGIS Enterprise!

FEDERATING AND HOSTING ARCGIS SERVER AND PORTAL FOR ARCGIS

You may recall at the end of our Data Store configuration we received the following message:



ArcGIS Data Store

Configuration Status

[Help](#)

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

- Relational

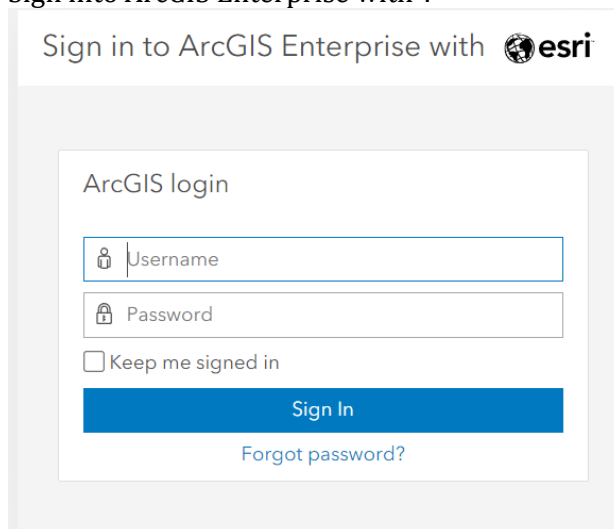
To complete the configuration process, you must now federate the ArcGIS Server site with your Portal and set it as the hosting server.


Please sign in to your Portal as an administrator and navigate to Organization > 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


Federating allows you to achieve a single-sign-on experience, share items, and optionally host services. We will now go through the process of federating and hosting our ArcGIS Server and Portal for ArcGIS.


1. Navigate to the home page of your ArcGIS Enterprise portal and click on “Content.” <https://<webadaptorhost.domain.com>/<PortalWebAdaptorName>/home>
2. We will add our server to Portal now (Federate) to see if anything changes.
 - Navigate to “Organization” > “Settings” > “Servers” then select “Add Server.”
 - Enter your ArcGIS Server admin URL and services URL. Save your changes.
3. Now we will designate the Hosting Server role to our federated server and see the changes that result from this action.
 - Navigate back to “Organization” > “Settings” > “Servers” then select the ArcGIS Server as the Hosting Server.
4. Navigate to the ArcGIS Server Manager URL:
<https://<webadaptorhost.domain.com>/<serverwebadaptorname>/manager>.
5. If you are signed in, sign out.
6. Signing in with the siteadmin account will no longer work at server manager. It will redirect you to the federated portal to use portal credentials.
7. Note that the website address bar has redirected to a Portal authentication page requesting you to “Sign into ArcGIS Enterprise with”.



Sign in to ArcGIS Enterprise with 

ArcGIS login

 Username

 Password

☐ Keep me signed in

[Sign In](#)

[Forgot password?](#)

Note that now you have federated and designated this server with the hosting server role in portal that you will need to use the portaladmin credentials to login to server manager.

The server admin endpoint is the only endpoint in a federated server, that allows you to use the siteadmin credentials. The admin endpoint does not authenticate through portal. This allows you access to your server, even if portal is down.

ArcGIS Server Administrator Directory

[Home](#) > [login](#)

You should use [ArcGIS Server Manager](#) for managing services and GIS servers.
The Administrator Directory is intended for advanced, programmatic access to the server, likely through the use of scripts.

This server is currently federated with Portal for ArcGIS. You can log in as primary site administrator or provide a token acquired from Portal.

Primary Site Administrator Login:

User name:

Password:

Portal Federation Login:

To acquire portal token, open [https://\[url\].esri.com/portal](https://[url].esri.com/portal)
and enter 'https://[url].esri.com/server/admin' for the 'Webapp URL' parameter.

Portal token:

Login

Congratulations!!!! You have successfully federated your ArcGIS Server and Portal for ArcGIS!