# Introduction to ArcGIS 10.1 for Server

# **Connecting to an ArcGIS Server**

#### View REST services in browser

In your browser, go to <u>http://sampleserver6.arcgisonline.com/ArcGIS/rest/services</u> to see an example of the REST services.

#### View ArcGIS services in ArcCatalog

 In ArcCatalog, go to GIS Servers > Add ArcGIS Server, and choose to Use GIS services and click Next.

File Edit View Go Geoprocessing Customize Windows Help   GIS Servers Gis Servers Gis Servers Gis Servers Gis Servers   Gotalog Tree # × Contents Preview Desc   Database Connections Gis Servers Gis Servers What would y   Gis Servers Gis Servers Gis Servers What would y   Gis Servers Gis Servers Gis Servers What would y   Gis Servers Gis Servers Gis Servers Gis Server   Gis Gis Servers Gis Servers Gis Add WMS Server Add WMTS Server   Add WMTS Server Add WMTS Server Add Mini	uides you through the process of nection to an ArcGIS Server. You can nection to use, publish, or administer you like to do? IS services in GIS services ister GIS server
selected	

Enter <u>http://sampleserver6.arcgisonline.com/arcgis/services</u> into the Server URL and click
 Finish. You should be able to double-click the connection and browse the available services.

General		x
Server URL:	http://sampleserver6.arcgisonline.com/arcgis/services	
	ArcGIS Server: http://myserver:6080/arcgis/services Spatial Data Server: http://myserver:8080/arcgis/rest/services	
Authentication (Optic	onal)	
User Name:		
Deserved		
Password:		
	Save Username/Password	
About ArcGIS Server c	onnections	
About Spatial Data Ser	ver connections	
	< Back Finish Can	icel

# Installing ArcGIS Server 10.1 (SP1) on Windows 7

- 1. Navigate to the installation folder on your computer (instructors will have this information). Double-click **ESRI.exe** to launch the setup program.
- 2. Click Run, if prompted.



3. Next to the **ArcGIS for Server** item (the first unbolded item in the list), click on the word **Setup**. At this point you may be prompted for administrative credentials, enter them and then proceed.

	ArcGIS for Ser	ver Enterprise
		10.1 Service Pack 1
Quick Start Guide		Readme
Identify versions of installed ArcGIS software	Run Utility	
Uninstall Existing ArcGIS Software prior to ArcGIS 10.1	Run Utility	Readme
ArcGIS 10.1 Service Pack 1 for Server		
ArcGIS for Server	Setup	Install Guide
ArcGIS Web Adaptor (IIS)	Setup	Install Guide
ArcGIS Web Adaptor (Java Platform)	Setup	Install Guide
ArcGIS Data Reviewer for Server	Setup	Install Guide
ArcGIS Workflow Manager for Server	Setup	Install Guide
ArcGIS Server Cloud Builder on Amazon Web Services	Setup	Quick Start Guide
ArcObjects SDK for Microsoft .NET Framework	Setup 10.1	Apply SP1
ArcObjects SDK for Java	Setup 10.1	Apply SP1
ArcGIS 10.1 for Server (Setups not updated for SP1)		
ArcGIS Spatial Data Server (IIS)	Setup	Install Guide
ArcGIS Spatial Data Server (Java Platform)	Setup	Install Guide
ArcGIS Data Interoperability for Server	Setup	
ArcGIS Web ADF (Microsoft .NET Framework)	Setup	Install Guide
ArcGIS Web ADF (Java Platform)	Setup	Install Guide
ArcGIS Web ADF Runtime (Microsoft .NET Framework)	Setup	Install Guide
		Browse

- 4. Click Next to continue
- 5. Accept the license agreement and then click Next to continue.
- 6. Notice that program will be installed in the 64-bit Program Files directory (C:\Program Files\ArcGIS\Server\). Click **Next** to continue.
- 7. Accept the default Python Folder for installation.
- 8. The arcgis account runs the ArcGIS Server Service, it can be a local or domain account and does not need administrative privileges. By default the account is a local account called arcgis, and will be created for you. It will be given the necessary permissions to run ArcGIS Server Services. File permissions on data files and folders on the server must be granted manually after

installation.

HrcGIS 10.1 SP1 for Server Setup	
Specify ArcGIS Server Account	
Specify the account that the ArcGIS Serve	r processes will run as.
Specify the account name and pass	sword:
ArcGIS Server Account:	arcgis
Password:	•••••
Confirm password:	
	·
<ul> <li>I have a configuration file with the previous run of this setup.</li> </ul>	account information generated by a
Filename:	
	_
Help	< Back Next > Cancel

- 9. Do not export configuration file.
- 10. Click **Install**. Installation time takes approximately 5 minutes (for reference, that's on a desktop machine running 64-bit Windows 7 with 8GB of RAM and a 3.00 GHz, quad core).

r to Install the Program wizard is ready to begin installation.	ArcGIS 10.1 SP1 for Server has been successfully installed.
Install to begin the installation.	Click the Finish button to exit this installation.
u want to review or change any of your installation settings, click Back. Click Cancel to the wizard.	
< Back Install Cancel	< Back Finish Cancel

#### Software Authorization

The software authorization wizard should automatically launch. This procedure will authorize the ArcGIS Server software with Esri so that it functions properly.

1. In the **Software Authorization Wizard**, under **Authorization Options**, choose "*I have installed my software and need to authorize it*". Click **Next**.

- Choose "I have received an authorization file from Esri and am now ready to finish the authorization process". Browse to the course folder and select the file named ArcGISforServerAdvancedEnterprise\_server.prvc. Click Next.
- 3. Choose "Authorize with Esri now using the Internet". Click Next.
- 4. Use the default information supplied by the .prvc file. Click Next.

uthorization Information We will use the following the software. (* required	on ig information to verify our records and authorize your use of field)
*First Name:	U of I
*Last Name:	WebStore
*Organization:	UNIVERSITY OF ILLINOIS
Department:	WebStore .
*Address 1:	1304 W SPRINGFIELD AVE
Address 2:	
*City:	URBANA
*State/Province:	IL
*Zip/Postal Code:	61801
*Location:	United States
*Phone Number:	webstoremanager@illinois.edu
*Email:	webstoremanager@illinois.edu
Comment:	10 try 100
	Optional user-defined authorization description.
	< Back Next > Cancel

5. Select appropriate values for Your Organization, Your Industry, and Yourself. Click Next.

ftware Authorization Wizard	d 🖉	x
Authorization information We will use the following the software. (* required to	<ul> <li>(continued) information to verify our records and authorize your use of field)</li> </ul>	
*Your Organization:	Education-Student -	
*Your Industry:	Higher Education	
*Yourself:	Student -	]
The personal information to view Esn's privacy polic	you supplied is protected under Esri's privacy policy. If you want cy, click the View button below.	
View		
	< Back Next > Cancel	

6. The authorization number should be already entered for you as it was included in the authorization file. Click **Next** through the dialogs, and do not Evaluate Software Extensions.

7. Wait while the software is being authorized.



# **Creating a site**

1. Open <u>http://localhost:6080/arcgis/manager</u>. On your first site, you will be asked to Create New Site or Join Existing Site. Click **Create New Site**.



2. Create a **Primary Site Administrator Account**. This account is required by ArcGIS Server to login to Manager, setup the site, and setup security. It is NOT the **arcgis** server account, NOT an OS account; it is stored by ArcGIS Server and controls access to ArcGIS Server ONLY!! *Note: You can change this users password later by logging into ArcGIS Server Manager, and going to* 

ArcGIS Server	Manager				
ß	Primary Site Admi Create the account th is a new account th will use this account to username: Desmord: Confirm Password:	inistrator Account nat will be the primary as the stored with the site a when logging in to Mana siteadmin	aministrator for this Arot and is not an operating ger.	Help 315 Server site. This system account. You	
				Back Next	

Security > Settings and clicking the Edit (pencil) icon next to Primary Site Administrator Account.

3. Specify location for **Root Server Directory** and **Configuration Store**. In this lab, we'll stick to the default locations on the C:\ drive.

ArcGIS Server	Manager			
	Æ			
			Help	
	Specify Root Server Dire	ctory and Configuration Store		
	When you create an ArcGIS S images, geoprocessing job ro location, but it must be acces	Server site, several directories are installed to s asults, cached images, and more. You can choo ssible from each machine in your site.	store output use this	
	Root Server Directory:	C:\arcgisserver\directories		
	The config store holds inform directories. You can choose t from each machine in your sil	ation about the GIS server's machines, service he location of the config store, but it must be a te.	s, and accessible	
	Configuration Store:	C:\arcgisserver\config-store		
		В	ack Next	

4. Click **Finish** to complete installation. This may take a few minutes.

### **Post-installation configuration**

### ArcGIS Server system folders

Now you will give the appropriate permissions to the arcgis server account for the arcgisserver system folders. They were created in the setup process, but the arcgis account on the local system needs to be manually configured.

- 1. Navigate to the arcgisserver folder (C:\arcgisserver). **Right-click** on the folder and choose **Properties**...
- 2. On the **Security** tab, click **Edit**.
- 3. In the **Permissions** dialog, click **Add** and search for the arcgis user (or whatever was specified as the ArcGIS System Account in the setup).
- 4. Give this user Full control over this folder. Click OK to exit dialogs.

arcgisserver Properties	Permissions for arcgisserver
General Sharing Security Previous Versions Customize	
Object name: C:\arcgisserver	Object name: C:\arcgisserver
Group or user names:	Group or user names:
Administrators (WIN-7E5JHNHSI9N\Administrators)     & Users (WIN-7E5JHNHSI9N\Users)	Authenticated Users     SYSTEM
↓ ↓	ArcGIS Server Account (WIN-7E5JHNHSI9N\arcgis)
To change permissions, click Edit.	
Account Allow Deny	Add Remove
Modify V	Permissions for ArcGIS Server Account Allow Deny
Read & execute  List folder contents	Full control
Read 🗸	■ Read & execute ■ List folder contents
For special permissions or advanced settings, click Advanced.	Read
Leam about access control and permissions	Learn about access control and permissions
OK Cancel Ap	OK Cancel Apply

### Data Store configuration

Follow these steps to copy the course data and set it up so ArcGIS Server can access and display this data.

- 1. In Windows Explorer, copy EDC\_Courses to the C:\ drive.
- Right-click folder, and on Security tab set permissions so that ArcGIS System account has read privileges (similar process as the arcgisserver folder previously)
- Login to ArcGIS Manager (<u>http://localhost:6080/arcgis/manager/</u>)
- 4. Click on **Site**, then **Data Store**.
- 5. Click **Register Folder** and enter the following data, then click Create:
  - Name: EDC\_Courses (can be any text of your choosing)
  - Publisher Folder Path: C:\EDC\_Courses (the directory to publish)
  - Publisher Folder Hostname: your computer hostname (you can find this by pressing WinKEY+Pause/Break)
  - Same as publisher folder path: checked
- 6. Click the Validate All button to check that your folder is accessible to ArcGIS Server.

### **Firewall**

In a production setting, you may need to open up firewall ports. Common ports are 4000 to 4004, 6080, and 6443. You can view ports in use at <u>http://localhost:6080/arcgis/admin/machines</u> (click on machine name and then expand Ports).

### Administrative connections to ArcGIS Server

There are three main interfaces for managing ArcGIS Server:

**Manager (web):** <u>http://localhost:6080/arcgis/manager</u>. This is the web interface you can use to manage your server from any accessible web browser.

**Manager (ArcCatalog):** A convenient way to administer ArcGIS Server with ArcCatalog. To create an administrative connection:

- In ArcCatalog go to GIS Servers > Add ArcGIS Server
- Choose Administer GIS server

ter Folder	
	Help
Register a folder on your ArcGIS Server	
Name:	
EDC_Courses	
Publisher Folder Path:	
c:\EDC_Courses	
Publisher Folder Hostname:	
YOURHOSTNAME	
Required when Publisher Folder Path is a drive letter location.	
Server Folder Path:	
Same as publisher folder path	
	Create Cancel

• Enter the following:

General	hanna hannan	x
Server URL:	http://localhost:6080/arcgis	
	ArcGIS Server: http://myserver:6080/arcgis Spatial Data Server: http://myserver:8080/arcgis	
Server Type:	ArcGIS Server	
Staging Folder:	ers\deleteme\AppData\Local\Temp\arcE62\Staging	
	Use ArcGIS Desktop's staging folder	
Authentication		
User Name:	siteadmin	
Password:	••••••	
	Save Username/Password	
About ArcGIS Server	connections	
About Spatial Data Se	erver connections	
	< Back Finish Ca	incel

**REST Admin (web):** <u>http://localhost:6080/arcgis/admin/</u>. This is the admin interface through the REST endpoint. It is recommended to use Manager when possible, but some advanced settings and diagnostics can only be accessed through this interface.

# **Publishing Services with ArcGIS 10.1 for Server**

In this exercise, you will:

- Prepare a map for publishing.
- Edit your service's Item Description.
- Analyze the map, and correct any errors.
- Publish the service.

You will take the following map document depicting surficial geology in Illinois and make it available as a web service so that it can be consumed on a client computer using desktop GIS software, or a web application. Examples include ArcMap, ArcGIS.com, or a custom application configured or programmed using the ArcGIS API for JavaScript.

#### **Process Steps**

- In ArcMap, open the Surficial\_Geology\_24K.mxd located in your C:\EDC\_Courses folder, and take a couple of minutes to look over the content of the map. Take special note of the following:
  - a. File > Map Document Properties...

- b. View > Data Frame Properties...
- c. Layer Properties for each layer
  - i. General tab Description, Credits, and Scale Range
  - ii. Labels tab Are there labels?
- d. Zoom in and out to see when the layers with Scale Ranges set turn on or turn off.



- 2. Finally, right-click on the Counties layer and choose **Zoom to Layer**.
- 3. From the **File** menu, chose **Share As** > **Service...**



4. In the Share as Service dialog, choose Publish a service, and click Next.

- 5. In the **Publish a Service** dialog, click on the and make a connection to your **ArcGIS Server**. Alternatively, you can choose the Administrative connection previously created.
- 6. In the General dialog box, choose Publish GIS services. Click Next.
- 7. Enter your Server URL, and supply your User Name and Password. Click Finish.

ciai	
Server URL:	http://barrett:6080/arcgis
	ArcGIS Server: http://myserver:6080/arcgis Spatial Data Server: http://myserver:8080/arcgis
Server Type:	ArcGIS Server
Staging Folder:	rs\mebarret\AppData\Local\Temp\arc7A2B\Staging
	Use ArcGIS Desktop's staging folder
Authentication	
User <u>N</u> ame:	melonyb
Password:	•••••
	☑ Save Username/Password
About ArcGIS Serv	er connections
About Spatial Data	Server connections
	< Back Finish Cancel

8. You will be returned to the **Publish a Service** wizard, where you can accept the default **Service name**, and click **Next**.

Choose a connection	
arcgis on barrett_6080 (publisher)	-
Server type: ArcGIS Server	
Service name	
Surficial_Geology_24K	
	< Back Next > Cancel

- 9. Select the **Create new folder** radio button, and name the new folder **Geology**. Click **Continue**.
- 10. You are now in the **Service Editor**. Set the properties that you want for your map service. Here, you can choose what users can do with your service and take fine-grained control of how the server will expose your service. For details on how to manually set map service properties, see the topic <u>Setting map service properties</u>. For information on how to best configure your service for deployment, see the help topic Tuning and configuring services.
- 11. Click on the **Item Description** tab. This information should look familiar because the only element that is not extracted from the **Map Document Properties** is the **Access and Use Constraints**.

onnection: arcgis on barret	t_6080 (publisher) Service Name: Surficial_Geology_2 🖳 Import 🖌 Analyze 🙀 Preview 🔬 Publish 🔿
General	Item Description
Parameters	Summary:
Capabilities	This is a compilation of surficial geology maps created from individual ArcGIS
Mapping	geodatabases of corresponding ISGS geologic maps.
KML	Tags:
Pooling	surficial, geology, ISGS, map
Processes	Choose Your Tags
Caching	Description:
Item Description	The data model on which this data compliation is based is relatively simple and narrow in
Sharing	scoper, minest of views common common rules cereined of polariset basis geologic maps. In this y grow in comparisely as new elements are added. The version used in this complation (ver- 20091213) supports the following features; geologic units, structure, landforms, geophysical profiles, outcrops, and wells and borings. Not all are present on any given to the structure of the structure and the structure of the
	Access and Use Constraints:
	stitute for surveyed locations such as can be determined by a registered Public Land Surveyor
	Credits:
	Ilinois State Geological Survey
	Update missing metadata in document based on item description.

12. Input the following text in the Access and Use Constraints box:

"This data compilation is intended to provide an overview of the geology of the map area. The data do not replace the need for detailed site-specific studies. The information is not appropriate for, and is not to be used as, a geodetic, legal, or engineering base. The information has no legal basis in the definition of boundaries or property lines and is not intended as a substitute for surveyed locations such as can be determined by a registered Public Land Surveyor."

13. Click the Analyze button and review the Errors, Warnings, and Messages. Only Errors absolutely have to be fixed. Warnings and Messages should be reviewed and fixed to improve performance or appearance.

ervice Editor	
Connection: arcgis on barrett_6080 (publisher) Service Name: Surficial_Geology_2) 🛐 Import 🗸 Analyze 🧔 Preview	🚛 Publish 🕑

3 0 E	rrors	🛕 6 Warning	s 🚺 :	8 Messages	Search Analyze Resu	ults			R
	Sever	Status Code	Descr	iption			Name	Туре	Data
Δ	High	Unres 2002	Layer	s symbology is no	t supported (KML)		Geologic	Layer	Surfi
± 🛕	High	Unres 1000	Layer'	s data source has	a different projectio	n than the data fram			
∃(ì)	Low	Unres 30003	Layer	draws at all scale	anges (3 items)				

14. Optionally, click Preview to see what your map will look like on the web.





15. Finally, click **Publish**, and wait while the service is published to the server.



# **Consuming Services Using the ArcGIS.com**

Demonstration by instructor.

# **Consuming Services Using the ArcGIS API for JavaScript**

#### **Explore a Sample**

- Navigate to the ArcGIS API for JavaScript developer site: <u>http://developers.arcgis.com/en/javascript/</u>
- 2. Click on **Samples** in the top navigation bar.
- 3. Expand the **Query Task** group of samples, and click on **Query and immediately open info window**.
- 4. Click on the **View live sample** link just under the sample title.
- 5. By default, users can choose the mouse, keyboard, and sliders for panning and zooming a map, depending on what is enabled in the HTML page. By default, users can do the following:
  - Drag the mouse to pan
  - Mouse Scroll Forward to zoom in
  - Mouse Scroll Backward to zoom out
  - SHIFT + Drag the mouse to zoom in
  - SHIFT + CTRL + Drag the mouse to zoom out
  - SHIFT + Click to recenter
  - Double Click to Center and Zoom in
  - SHIFT + Double Click to Center and Zoom in

- Use arrow keys to pan
- Use + key to zoom in a level
- Use key to zoom out a level
- 6. Click on one of the oil fields and an **Info window** will appear with information about the polygon you clicked.

#### Customize a Sample

- 1. Now let's customize this sample. Close the live sample, and return to the sample launch page.
- Copy all of the code text for the sample to the clipboard and launch the ArcGIS API for JavaScript Sandbox using the following URL:

<u>http://help.arcgis.com/en/webapi/javascript/arcgis/sandbox/sandbox.html?sample=map\_creat</u> <u>e</u>. You can also get to the Sandbox from any location of the JavaScript API site by clicking on **Tutorials > Build your first application**, and then clicking on the blue link in the main page.

ArcGIS API for JavaS	cript eference Forum All Developer Resources
<ul> <li>Hide Table of Contents</li> <li>Build your first application</li> <li>Use an ArcGIS.com webmap</li> <li>Mobile-specific application</li> <li>Geocoder Widget</li> <li>Write a Class</li> <li>Create a Re-usable Widget</li> </ul>	Build your first application         In this tutorial, you will build an application that displays full screen map using a baseman         Play with a live version of this sample in the ArcGIS API for JavaScript Sandbox. The sam modify the sample's source and view the changes live.         1. Reference the ArcGIS API for JavaScript         To begin working with the ArcGIS API for JavaScript, add the following script         HEAD element of your HTML page: <li><li><li><li><li></li> </li>  &lt;</li></li></li>

- 3. Delete all of the code from the left side of the **Sandbox** under **Source:**, and then paste in the sample code.
- 4. Click Run.

5. Now you should have the same Kansas petroleum fields sample running in the sandbox, and it should function just as it did before.



- 6. Now alter the code so that it references a different basemap, our map service, and then edit the lines of code to query our map and show the information from the query in the **Info window**.
  - a. Delete startExtent
    - i. Go to line 23 of the code.
    - ii. Delete the entire line of code that starts with **var startExtent**... This line is not necessary for our purposes, and is for a location in Kansas.
    - iii. Click **Run** again, just to make sure that nothing broke.
  - b. Edit the basemap
    - i. Go to line 24.
    - ii. Change the **satellite** to one of the following: **topo**, **gray**, or **street**.
    - iii. You can click **Run** here again, too, to view the new **basemap**.
  - c. Edit the map **center** 
    - i. Go to line 25.
    - ii. Replace the coordinates with the following [-88.933, 37.732]
    - iii. If you click Run now, the map will be centered on Marion, Illinois.
  - d. Edit the map **zoom** 
    - i. Go to line 26.
    - ii. Change the zoom level from 8 to 13.
    - iii. If you click Run now, the map will be centered on Marion, Illinois.

- e. Edit the ArcGISDynamicServiceLayer
  - i. Go to line 30.
  - ii. Delete the service URL that's inside the quotes and parentheses with the service we created in the last exercise.

http://localhost:6080/arcgis/rest/services/Geology/Surficial\_Geology\_24K/M

### apServer

- iii. Click Run.
- iv. Now, instead of looking at the Petroleum Fields of Kansas, we're looking at the Surficial Geology of Illinois. Also notice that our while our geology service is visible, we can't see through the polygons to the basemap service below.
- f. Edit the map service opacity
  - i. Go back to line 30.
  - ii. Position your cursor after map service URL, just after the end quote, but before the closing parenthesis.
  - iii. Type: , {opacity: "0.75"}
  - iv. Click Run.
- g. Edit the QueryTask URL
  - i. Go to line 40.
  - Replace the QueryTask URL with the Surficial Geology map service, but this time, add the index number of the Geologic Unit Areas layer to the end of the URL. It is this layer that will be queried. (*Hint: Use your REST services directory* to drill down into the layer endpoint.)
  - iii. Click Run. Nothing happens. Why?

### h. Edit the Query outFields

- i. Go to line 49.
- ii. Instead of specifying fields to be returned from the query, get all off the fields by replacing the list of field names with ["\*"].
- iii. Click Run.



- iv. While the geometry of the Geologic Unit Area is being returned when the user clicks on a polygon, we are not getting the attributes.
- i. Edit the infoWindow title and content
  - i. Go to lines 81-85 and completely replace them with the following code:

```
var title = attr.GUName;
var content = "<b>Unit Abbreviation: </b>" + attr.GUAbbrev
```

```
+ "<br /><b>Age: </b>" + attr.GUAge
+ "<br /><b>Material Description: </b>" + attr.GUMatDesc
+ "<br /><b>Interpretation: </b>" + attr.GUInterp;
```

- j. Click Run.
- k. Now when the user clicks on a polygon, they should see a fully populated infoWindow with attribute information from the Geologic Unit Polygons.



# **Securing Services with ArcGIS for Server 10.1**

Exercise objectives

In this exercise, you will:

- Create users.
- Create a role.
- Secure the service, allowing access to a role.
- Access the service from various client applications.

#### **Process Steps**

- Login to ArcGIS Server Manager (<u>http://localhost:6080/arcgis/manager/</u>) using your Primary Site Administrator (PSA) credentials.
- 2. Click Security (on the gray bar), and then Users (on the blue bar).

ArcGIS Serv	er Manager	Services	Site	Security	Logs
Settings Users	Roles				

3. Create users

- a. Click the New User button.
- b. In the **New User** dialog, enter **geouser1** as the Username, and then supply a password.

					Help
Username:	geouser1	Available roles	Dala turan	Member of	
Password:	•••••	kole name:	kole type:		
Repeat Password:	•••••	No i	records to display.		
Email:			٩		
Full name:					
Description:					
				Create	Cancel
				Create	Cancel

- c. Click the **Create** button.
- d. Repeat the steps above to create two more users. Call them geouser2 and basicuser.
- e. When done, the screen should be as pictured below.

ArcGIS Server Manager Services Site Security Logs   Settings Users Roles   Users in the Identity Store   A user is any person or software agent that will access an ArcGIS Server resource. When the built-in store is used to manage users, click the New Jser button to add a user. To locate a specific user, enter the first few letters of the username in the Find User field.   Username Full name: Email:   basicuser / X   geouser1 / X   1 / 1				esri	.com   Resource Cen	<u>ter   Sign Out   Hel</u>	2
Settings     Users     Roles       Users in the Identity     Help       A user is any person or software agent that will access an ArcGIS Server resource. When the built-in store is used to manage users, click the New       Jser button to add a user. To locate a specific user, enter the first few letters of the username in the Find User field.       Find User:     Q       Username     Full name:       Email:       basicuser     / ×       geouser1     / ×       1	ArcGIS Server	Manager	Services	Site	Security	Logs	
Helo Users in the Identity Store A user is any person or software agent that will access an ArGIS Server resource. When the built-in store is used to manage users, click the New User button to add a user. To locate a specific user, enter the first few letters of the username in the Find User field. Username Full name: Email: basicuser	Settings Users	Roles					
A user is any person or software agent that will access an ArGIS Server resource. When the built-in store is used to manage users, dick the New User is used to manage users, dick the New User is used to manage users, dick the New User is used to manage users, dick the New User is used to manage users, dick the New User is used to manage users, dick the New User is used to manage users, dick the New User is used to manage users, dick the New User is used to manage users, dick the New User is used to manage users, dick the New User is used to manage users, dick the New User is used to manage users, dick the New User is used to manage users, dick the New User is used to manage users is user is used to manage users is user is us	Jsers in the Identity Stor	e				Heli	2
Username Full name: Email: basicuser / X geouser1 / X geouser2 / X 1 >	Jser button to add a user. To	b locate a specific user, enter the firs	t few letters of the use	Find User:	er field.	Q Zo New User	
basicuser / × geouser1 / × geouser2 / ×	Username	Full name:		Email:			
geouser1 / × geouser2 / ×	basicuser					/ ×	
geouser2 /× ◀ 1 ►	geouser1					/ ×	
< 1 ►	geouser2					/ ×	
	< 1 ►						

- 4. Create a role
  - a. Click on Roles.
  - b. Click the New Role button.
  - c. In the **New Role** dialog, enter **geouser1** as the Username, In the New Role dialog, give the role a name, description, *l* and add users by clicking on the icon next to their

names.

					<u>Help</u>
Role name:	GeoUsers				
Description:	People I war	t to have access to my	geology ser	vice(s).	
Role type:	⊚User ⊙Pu	blisher 💿 Administrator			
Available users				Role members	
Username	Full name:	Email:			
basicuser			20	geouser1	×
geouser1			20	geouser2	×
geouser2			2.		
	Q				
				Create	Cancel

- d. Click the Create button.
- 5. Secure a service.
  - a. Click on **Services** (on top gray bar), then under **Folders**, click on the **Geology** folder. The Surficial\_Geology\_24K map service is shown in the service gallery.

Manage Services	OGC Services	KML Net	work Links				
olders	💕 Se	rvices				Pu	blish Service
Site (root)  Geology  System Utilities	nî∕×		Surficial Geology 24 This is a compilation of geodatabases of corres Status: St Instances Running: Instances in Use: Maximum Instances:	K (Map Servic surficial geology sponding ISGS g arted 1 0 2	e) maps crea eologic maj	ted from individual Arc ps.	<b>▲ ► ■ ℃ ×</b> GIS
	•	1 🕨					

b. Click on the **f** icon. (All services are by default public.) Click on the **Private, available only to selected users** radio button, and then click the **s** button to add the **GeoUsers** 

role to the list of **Allowed roles**.

dit Pern	nissions				ж
					Help
Sec	urity settings for this resou	rce			
0	Public, available to everyone				
۲	Private, available only to select	ed users			
	Allow access to all users where the second s	ho are log	iged in		
	Available roles		Allowed roles		
	Role name:				
	GeoUsers	25	GeoUsers	×	
	◀ 1 ►				
				Save	Cancel

- c. Click Save.
- d. Note: While **GeoUsers** is the only role that has had permission explicitly given to it, any users in a **Publisher** or **Administrator** role will also be able to access to the service.
- e. Sign out of ArcGIS Server Manager, and close your browser.
- 6. Test User Access Scenarios.
  - a. ArcGIS REST Services Directory
    - Open a browser, and navigate to your service's REST endpoint. <u>http://localhost:6080/arcgis/rest/services/Geology/Surficial\_Geology\_24K/Map\_Server</u>
    - ii. When a user tried to access a secured service using the REST endpoint of the service or one of its layers, the following Login page will appear, prompting them to enter their credentials.

C fi barrett:6080/arcgis/rest/login?redirect=http	*%3A//barrett%3A6080/arcgis/rest/services/Ger 🚼 🔮 🖷 脑 🗮
rcGIS REST Services Directory	<u>Get Token</u>
ome	Help   API Reference
Jser Name:	

#### b. <u>ArcGIS.com</u>

i. When a user adds the service to the map by clicking **Add** > **Add Layer from Web**, they will be prompted to sign in.

Sign in 🛛 💥
Please sign in to access the item on http://barrett:6080 (Geology/Surficial_Geology_2 4K)
User Name:
Password:
OK Cancel

- ii. After successfully signing in, the map should be added to the map.
- c. ArcGIS API for JavaScript Identity Manager widget.
  - i. Return to your JavaScript Sandbox code from the last exercise.
  - ii. Find the list of dojo.require statements, and add the following statement to the code (hint: it'll be somewhere around line 18):

#### dojo.require("esri.IdentityManager");

- iii. Click Run.
- iv. Enter you credentials when the Sign in dialog is shown

Sign in	х
Please sign in to access the iter http://barrett:6080 (Geology/Surficial_Geology_2	m on 14K)
User Name:	
Password:	
	K Cancel
0	K Cancel

- v. Click OK
- vi. Upon successfully signing in, your layer will be added to the map.

### Information

This course material was developed for use by the Esri Development Center at the University of Illinois. Last updated April 2, 2013.

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