## **PUBLISHING A GEODATA SERVICE**

Below are the steps to publish your enterprise geodatabase as a geodata service so counties can begin replicating their Address Point data.

First, we recommend creating a user that will be the data owner of the replicated data. For example, you can create a user called 'COUNTY'.

√ Create Database User	
Input Database Connection	Input Database Ó
Create Operating System Authenticated User (optional)	Specify the connection file to a database or enterprise
COUNTY	geodatabase in Oracle,
Database User Password (optional)	PostgreSQL, or SQL
•••••	Server. Be sure the
Role (optional)	the database as a database administrator user.
Tablespace Name (optional)	
-	-
OK Cancel Environments << Hide Help	Tool Help

Database Connection		×
Database Platform:	SQL Server	
Instance:	skinner-lap	
Authentication Type:	Database authenticatio	n 🔻
	User name:	COUNTY
	Password:	•••••
	Save user name and	password
Database:	STATE	•
About Database Connections		OK Cancel

Next, connect to the geodatabase as this user.

It is also recommend creating a child version. To do this, right-click on the database connection > Administration > Administer Geodatabase. Rigth-click on the DEFAULT version > New Version. In the example below, QA/QC REPLICAS is the child version. Counties will replicate to this version. The State will reconcile/post the changes from QA/QC REPLICAS to DEFAULT.

Q Geodat	abase Adm	ninistratio	n (COUNTY@SKINNER-LAP/STA	ATE)	1	
Versions	Locks					
Filterin	0				Properties -	
New	9		0		Name:	QA/QC REPLICAS
Name			Owner:		Owner:	COUNTY
Name		Owner	Modified		Parent:	sde.DEFAULT
DEFAU		sde	10/14/2013 11:32:45 AM		Description	
	REPLICAS	COUNTY	10/14/2013 11:32:45 AM			
					Access:	Public 🔻
					Created:	11/7/2013 1:30:28 PM
					Modified:	10/14/2013 11:32:45 AM
					Is Blocking:	False
Refresh	2 of 2 Ve	rsions at 3	11/7/2013 1:30:28 PM 📀		Is Replica:	False
Transact	tional Tre	e View	Historical		Is Locked:	False

Since the counties will be replicating to the QA/QC REPLICAS version, you will want the geodatabase to connect to this version. To do so, right-click on the database connection > Geodatabase Connection Properties. Select the version > OK.

Geodatab	ase Connection Properties	
Trans	actional version	
Na	me	Owner
DE	FAULT	sde
QA	/QC REPLICAS	COUNTY
•	m	4
C Histor	ical version	
Instol	connect using a historical marker	
0		¥_
00	onnect using a specific date and time	
	Thursday , November 07, 2013 1:31:41 PM	
		OK Cancel

Next you will want to register the geodatabase as a Data Store for ArcGIS for Server. Right-click on your ArcGIS Server connection > Server Properties > Data Store tab.

ArcGIS Serve	r Properties						×
Directories	Configuration Store	Clusters	Machines	Data Store	Logs	Types	
Registered	Databases						
							+ -
							×
Registered	l Folders						
							+
							×
About req	<u>stering databases an</u>	d folders				Validate	All
				0	К	Cance	el <u>A</u> pply

Click the arrow next to the plus sign on the right of Registered Databases > Register Database.

ArcGIS Server Properties	
Directories Configuration Store Clusters Machines Data Store Logs Types	
Registered Databases	
	Register Database
	Register Database as ArcGIS Server's Managed Database
Registered Folders	
About registering databases and folders Validate All	
OK Cancel	

Specify a name and then click Import. Browse to the SDE connection file and click OK.

Register Database	X
Register Database with the ArcGIS Server	
Name	
STATE	
Publisher database connection	
SERVER=skinner-lap;INSTANCE=sde:sqlserver:skinner-li	Add
	Import
Server database connection	
Same as publisher database connection	
SERVER=skinner-lap;INSTANCE=sde:sqlserver:skinner-li	Add
	Import
About registering your data with ArcGIS Server	
OK	Cancel

After you register the geodatabase as a Data Store, you can publish the geodatabase as a geodata service. Right-click on the geodatabase > Share As Geodata Service.



Select 'Publish a service' > Next.

Share as Service	x
	<ul> <li>Publish a service</li> <li>Save a service definition file</li> <li>Overwrite an existing service</li> </ul>
	About sharing a service
	Next > Cancel

Select your ArcGIS for Server Connection and specify a service name > Next.

Publish a Service			×
Choose a connection			
arcgis on skinner-la	p_6080 (admin)		
Server type:	ArcGIS Server		
Service name			
STATE			
		< <u>B</u> ack Next >	Cancel

Publish to the root folder, existing, or create a new folder > Next.

Publish a Service	×
Publish service to folder <ul> <li>Use existing folder</li> <li>Create new folder</li> </ul>	[root]
	< Back Continue Cancel

Under Capabilities, select Geodata. Make sure 'Replication' is checked. You can optionally uncheck 'Extraction'. Then, click Publish.

Service Editor				x
Connection: arcgis on skinne	r-lap_6080 (admin) Service Name: STATE	🗸 Analyze	🚛 Publish	٢
General Parameters Capabilities Geodata Pooling	Geodata         REST URL:       http://skinner-lap:6080/arcgis/rest/services/STATE/GeoDa         SOAP URL:       http://skinner-lap:6080/arcgis/services/STATE/GeoDataSet         Operations allowed:       Image: Comparison of the service of the s	aServer ver		
Item Description Sharing	Properties			
	<there are="" capability="" for="" no="" properties="" this=""></there>			

After the geodata service is published, you will want to apply security to the service. We recommend creating an ArcGIS Server built-in user for each county and one role that all users will belong to.

Login to ArcGIS Server Manager and click the Security tab.

> 💽 - 🕂	localhost:6080/arcgis/manager/	/security.html				☆ ▼ 🍾 C	
ogle							
IS Server Manager	+						
				esri.com   Resource Ce	nter   <u>Sign Out</u>   <u>Help</u>		
	ArcGIS Server Man	ager Se	ervices Site	Security	Logs		
	Settings Users Roles						
					Help		
	ArcGIS Server Security						
	ArcGIS Server security determines w	who can administer the GIS server, who c	an publish to the GIS ser	ver, and who can use the s	services		
	General ArcGIS Server security setti	ngs are displayed below. To change the	accounts recognized by A	rcGIS Server and set their	permissions, dick the		
	Users and Roles links above. To set	access rules for a service, use the Servic	ces > Manage Services pa	ige.			
				-			
	Configuration Settings	1					
	User Store:	ArcGIS Server Built-in					
	Role Store:	ArcGIS Server Built-in					
	Authentication Tier	GIS Server					
	Authentication Mode:	ArcGIS Tokens					
	Authentication Mode:	ArcGIS Tokens					
	Authentication Mode: Primary Site Administrator Acc	ArcGIS Tokens					
	Authentication Mode: Primary Site Administrator Acc Username:	ArcGIS Tokens					
	Authentication Mode: Primary Site Administrator Acc Username:	ArcGIS Tokens					
	Authentication Mode: Primary Site Administrator Acco Username: Token Settings	ArcGIS Tokens					
	Authentication Mode: Primary Site Administrator Acco Username: Token Settings Lifespan of Short-lived Tokens:	ArcGIS Tokens					
	Authentication Mode: Primary Site Administrator Acco Username: Token Settings Lifespan of Short-lived Tokens: Lifespan of Long-lived Tokens:	ArcGIS Tokens					

Click 'Roles' at the top left > New Role. Specify a Role name, description, and choose 'User' for the role type. Click 'Create'.

New Role				
				Help
Role name:	Counties			
Description:	Each state county.			
Role type:	Ouser OPublisher O	Administrator		
Available users			Role members	
Username Ful	I name:	Email:		
Ν	o records to display.			
	Q			
			Create Can	cel

i,

Click 'Users' at the top left > New User. Specify a username, password, and optionally an email, full name, and description. For example, you may want to name the user after the county. Click the + sign next to the role you previously created to add this user to the role. Click 'Create'. You will want to repeat this step for each county.

New User								х
							Help	
Username:	Sussex	Available roles				Member of		
Password:	•••••	Role name: Counties	User		ð	Counties	×	
Repeat Password:	•••••			Q				
Email:		◀ 1 ►						
Full name:								
Description:	Sussex County, NJ							
						Create	Cancel	

After creating each user, you will want to secure the geodata service. Click on 'Services' and scroll to the geodata service. Click the of icon.

Select 'Private, available only to selected users', click on the + next to the Role, and then click 'Save'.

Edit Permissions			x
			<u>Help</u>
Security settings for this resource			
<ul> <li>Public, available to everyone</li> </ul>			
Private, available only to selected user	s		
Allow access to all users who are l	ogged in		
Available roles	Allowed roles		
Role name:	Counties	×	
Counties 👪	Councies	~	
< 1 ►			
		Save	Cancel

The geodata service is secured. You can now send the county the username/password and the URL to connect to your ArcGIS for Server instance.

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