ArcGIS® for Server: Sharing GIS Content on the Web

Student Edition
Course introduction
Introduction
Course goals
Additional resources

1 What is ArcGIS for Server?
Lesson introduction
Evolution of server-based GIS
Sharing geographic information
Connecting to ArcGIS Server
Author--share--use
Web application development options
Deployment options
Exercise 1: Share a map using ArcGIS Server and ArcGIS.com
   Connect to your on-premises ArcGIS Server deployment
   Author a map
   Share your map as a service
   Create an ArcGIS.com viewer application
Lesson review

2 Understanding GIS services
Lesson introduction
What is a GIS service?
GIS service summary
Data source options for ArcGIS Server
Managing service data: Default
Managing service data: Data Store
Configuring the ArcGIS Server Data Store
Exercise 2: Explore a GIS service
   Configure ArcGIS Server data permissions
   Register your data at the server level
   Author and publish a map service
   Create an application and add layers
   Configure and deploy a web-mapping application
Lesson review

3 Creating effective maps for the web
Lesson introduction
Effective web maps
Map service content
Map service planning
Explore a web-mapping application
Service publishing workflow
Optimize a map service

Exercise 3: Create an effective web-mapping application
   Analyze the original map
   Create a focused, operational layer
   Share your map as a service
   Build a Silverlight web mapping application

Lesson review

4 Map caching for performance and scalability

Lesson introduction
What is caching?
Caching benefits
Should I cache my services?
Caching and web application performance
Caching workflow
Authoring and sharing a cached service
Exercise 4: Author and share a cached map service
   Author the map
   Create a test cache
   Test the cache

Lesson review

5 Sharing imagery

Lesson introduction
Choose an image-sharing strategy
Cached vs. dynamic image services
Choose the appropriate sharing strategy
Authoring image services
Mosaic datasets
Publishing an image service
Exercise 5: Author, share, and use an image service
   Author a mosaic dataset
   Enhance the mosaic
   Publish an image service from a mosaic dataset
   Use ArcMap to test the image service

Lesson review

6 Using geoprocessing services to share workflows

Lesson introduction
What is a geoprocessing service?
Geoprocessing service sample from the ArcGIS Resource Center
Creating a geoprocessing service
Sharing workflows
Exercise 6: Author, share, and use a geoprocessing service
- Review and run a model
- Share model results as a geoprocessing service
- Integrate your task into a web application
- Customize your web application
- Deploy your application
Lesson review

7 Feature services: Sharing editing workflows
Lesson introduction
- What is a feature service?
- What can you do with a feature service?
Creating a feature service
- Author, share, and use a feature service
Exercise 7: Share an editing workflow
- Configure your ArcSDE geodatabase
- Author a map with feature template
- Share a feature service
- Deploy a prebuilt web-editing application
  (Optional) Build a web-editing application
  Test the application
Lesson review

8 Building a web GIS solution
Lesson introduction
Web GIS workflow
Exercise 8: Build a Web GIS solution
- Create your map documents
- Set up your cache scales
- Simplify your smaller scales
- Publish and cache your basemap service
- Author and publish your operational service
- Create an application and add layers
- Configure and deploy your application
Lesson review

Appendixes
Appendix A: Esri data license agreement
Appendix B: Answers to lesson review questions
Lesson 1: What is ArcGIS for Server?
Lesson 2: Understanding GIS services
Lesson 3: Creating effective maps for the web
Lesson 4: Map caching for performance and scalability
Lesson 5: Sharing imagery
Lesson 6: Using geoprocessing services to share workflows
Lesson 7: Feature services: Sharing editing workflows
Lesson 8: Building a web GIS solution