US Government Restricted/Limited Rights

Any software, documentation, and/or data delivered hereunder is subject to the terms of the License Agreement. The commercial license rights in the License Agreement strictly govern Licensee’s use, reproduction, or disclosure of the software, data, and documentation. In no event shall the US Government acquire greater thanRESTRICTED/LIMITED RIGHTS. At a minimum, use, duplication, or disclosure by the US Government is subject to restrictions as set forth in FAR §52.227-14 Alternates I, II, and III (DEC 2007); FAR §52.227-19(b) (DEC 2007) and/or FAR §12.211/12.212 (Commercial Technical Data/Computer Software); and DFARS §252.227-7015 (DEC 2011) (Technical Data - Commercial Items) and/or DFARS §227.7202 (Commercial Computer Software and Commercial Computer Software Documentation), as applicable. Contractor/Manufacturer is Esri, 380 New York Street, Redlands, CA 92373-8100, USA.
Course introduction

Introduction
Course goals
Additional resources
Installing the course data
 Icons used in this workbook
Understanding the ArcGIS Platform

1 Planning an ArcGIS Server site

Lesson introduction
Web GIS
ArcGIS Server and web services
Accessing GIS services
GIS services and apps
Web GIS implementation
On-your-own-infrastructure implementation
Cloud implementation
Hybrid implementation
Choose a platform
ArcGIS Server editions
Lesson review

2 Implementing an ArcGIS Server site

Lesson introduction
Workflow: Administering ArcGIS Server
ArcGIS Server installation
System requirements
Exercise system
Exercise 2A: Install ArcGIS Server
   Start exercise system VMs
   Install ArcGIS Server
   Explore the ArcGIS Server installation
ArcGIS Server site architecture
Administrative tools
Exercise 2B: Create an ArcGIS Server site
   Create the site
   Explore the ArcGIS Server Manager
   Explore the ArcGIS Server Administrator Directory
Lesson review
3 Controlling access to ArcGIS Server

Lesson introduction
ArcGIS Server role types
Granting privileges
Defining roles
Users/roles from ArcGIS Server’s built-in store
Users/roles from an existing enterprise system
Existing user store with built-in role store
Disable primary site administrator account
Exercise 3: Control access to your ArcGIS Server site
  Configure ArcGIS Server’s security store
  Test user credentials
  Disable the primary site administrator account
Lesson review

4 Integrating a web server

Lesson introduction
The ArcGIS Web Adaptor
Configuring the Web Adaptor
Exercise system
Exercise 4: Install and configure the Web Adaptor
  Install the Web Adaptor
  Configure the Web Adaptor
  Test the Web Adaptor
  Install and configure an administrative Web Adaptor
Production system
Lesson review

5 Managing service resources

Lesson introduction
What is a resource?
Copy resources or register them?
Copying resources to the ArcGIS Server site
Copying data to a managed geodatabase
Registering resources with ArcGIS Server
Make resources accessible
Grant the ArcGIS Server account access
Exercise 5A: Managing service resources
  Set up a multiuser geodatabase
  Configure data accessibility
  Configure geodatabase privileges
Register a location in the data store
Step 3: Register a location with a separate server path in the data store
Choose a data registration method
Synchronizing publisher and server data
Updating services
Exercise 5B: Configuring the data store
  Register data stores
  Disable copy to server option
Production system
Lesson review

6 Configuring service capabilities
Lesson introduction
Service capabilities
Choose the appropriate capability
Exercise 6: Configure feature editing
  Plan your service
  Prepare the data
  Publish and configure a service
  Deploy and test a web editing application
Lesson review

7 Tuning services and troubleshooting errors
Lesson introduction
Altering service properties
Tuning services
Viewing ArcGIS Server logs
Exercise 7: Explore ArcGIS Server statistics and logs
  Explore service statistics
  Explore ArcGIS Server logs
Lesson review

8 Creating and updating caches
Lesson introduction
What is a cache?
Building a map cache
Allocating resources to caching
Tools for managing caches
Workflow: Updating caches
Exercise 8: Update a cache
  Tune the CachingTools service
  Publish a basemap service
  Use a script to build a cache
  Schedule cache updates
Lesson review
9  Securing services
Lesson introduction
Authentication and authorization
ArcGIS Server authentication
Tokens
Exercise 9A: Securing services
  Restrict access to a service
  (Optional) Configure private feature access
Web server authentication
Choose an authentication method
Exercise 9B: Configure web-tier authentication
  Configure a site authentication tier
  Configure browser access settings
  Test web-tier authentication
Lesson review

10  Securing the ArcGIS Server site
Lesson introduction
Securing server files
Firewalls
HTTPS communication
How will you secure your site?
Exercise 10: Securing an ArcGIS Server site
  Secure site directories
  Enable HTTPS communication
  Disable HTTP communication
Lesson review

11  Site backup and recovery
Lesson introduction
Backup and recovery
Exercise 11: Exercise
  Prepare a backup location
  Back up the site
  Modify the site
  Restore the site
  Restore site configuration
Lesson review
12 Building multinode sites

Lesson introduction
Scaling ArcGIS Server
High availability
Add a machine to the site
ArcGIS Server licensing
Clusters
Exercise system
Exercise 12: Add a machine to the site
   Start the GIS server
   Prepare the site for a multinode configuration
   Add a GIS server to the site
Production system
Lesson review

13 Implementing ArcGIS Server

Lesson introduction
Workflow: Administering ArcGIS Server
Create a to-do list
Lesson review

Appendixes

Appendix A: Esri data license agreement
Appendix B: Answers to lesson review questions
   Lesson 1: Planning an ArcGIS Server site
   Lesson 2: Implementing an ArcGIS Server site
   Lesson 3: Controlling access to ArcGIS Server
   Lesson 4: Integrating a web server
   Lesson 5: Managing service resources
   Lesson 6: Configuring service capabilities
   Lesson 7: Tuning services and troubleshooting errors
   Lesson 8: Creating and updating caches
   Lesson 9: Securing services
   Lesson 10: Securing the ArcGIS Server site
   Lesson 11: Site backup and recovery
   Lesson 12: Building multinode sites
   Lesson 13: Implementing ArcGIS Server