

# **ArcGIS® for Server: Site Configuration and Administration**

Student Edition

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## 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
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  - 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

- Configure ownership-based access control

- (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
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  - Prepare the site for a multinode configuration
  - Add a GIS server to the site
- Production system
- Lesson review

## 13 Implementing ArcGIS Server

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

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  - Lesson 2: Implementing an ArcGIS Server site
  - Lesson 3: Controlling access to ArcGIS Server
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