Table of Contents

Esri resources for your organization

Course introduction

Course introduction
Course goals
Installing the course data
Icons used in this workbook
Understanding the ArcGIS platform

1 Business needs and ArcGIS Enterprise solutions

Lesson introduction
Mapping needs to a system deployment
Architecting the ArcGIS Platform: Best Practices
Common GIS use patterns
Understanding infrastructure
Expanding capabilities
Using the ArcGIS Enterprise functionality matrix
Business needs and ArcGIS Server licensing roles
Lesson review
Answers to Lesson 1 questions

2 Federation-enabled server role capabilities

Lesson introduction
Base ArcGIS Enterprise deployment
Federating additional server sites
Considerations for federating additional server sites
Exercise environment
Exercise 2: Federate an Image Server site
  Prepare Image Server for federation
  Federate the Image Server site
  Share a mosaic dataset
  Share an elevation dataset
  Use an imagery service
  Explore the raster analysis tools
Lesson review
Answers to Lesson 2 questions

3 Using workload separation

Lesson introduction
Workload separation
Workload separation by server capability
Exercise 3: Implement workload separation
  Prepare a second raster store
  Federate the Image Server site
  Prepare a web map for raster analysis
  Use the raster analysis tools
  Explore hosted imagery
Optimizing your deployment
ArcGIS Monitor
Lesson review
Answers to Lesson 3 questions

4  Web service administrative fundamentals

Lesson introduction
Web service fundamentals
Service types
Exercise 4A: Compare layers and services
  Investigate a hosted feature layer
  Investigate a vector tile layer
  Investigate a map image layer
  Investigate an image service
  Investigate a derived image service
Reviewing ArcGIS Server logs
Life cycle of a service
Troubleshooting common service performance issues
Using caches to optimize performance
Cache considerations
Your cache strategy
Exercise 4B: Automate cache generation
  Change an imagery service to use a cache
  Recreate cache tiles
  Prepare automation
Lesson review
Answers to Lesson 4 questions

5  ArcGIS Enterprise data management

Lesson introduction
ArcGIS-managed and user-managed data
Additional types of ArcGIS-managed and user-managed data
Cloud storage mechanisms
Deletion behavior
6 Administering the ArcGIS Data Store

Lesson introduction
ArcGIS Data Store
Managing ArcGIS Data Store backups
ArcGIS Enterprise high availability
ArcGIS Data Store high availability
Exercise 6: Implement and manage an ArcGIS Data Store
  Configure ArcGIS Data Store logs
  Configure a standby ArcGIS Data Store
  Change ArcGIS Data Store roles
  Use ArcGIS Data Store tools
  Investigate ArcGIS Data Store logs
  Update an ArcGIS Data Store license
Lesson review
Answers to Lesson 6 questions

7 The spatiotemporal big data store

Lesson introduction
Understanding the spatiotemporal BDS
How spatiotemporal BDS components relate to ArcGIS Enterprise
Where spatiotemporal BDS components reside
Exercise environment
Exercise 7A: Use a spatiotemporal BDS with ArcGIS GeoEvent Server
  Investigate the spatiotemporal BDS
  Configure a second spatiotemporal BDS node
  Explore the spatiotemporal BDS in ArcGIS GeoEvent Manager
Use and filter spatiotemporal BDS data
Explore the data source configuration
GeoEvent Server and the spatiotemporal BDS
GeoEvent service paradigm
Exploring the GeoEvent service paradigm
GeoAnalytics Server and the spatiotemporal BDS
Exercise environment
Exercise 7B: Configure and use ArcGIS GeoAnalytics Server
  Configure a GeoAnalytics Server
  Enable GeoAnalytics tools
  Use GeoAnalytics tools
  Manage the new spatiotemporal BDS data source
  Delete data from a spatiotemporal BDS data source
Lesson review
Answers to Lesson 7 questions

8 Distributed collaboration
Lesson introduction
Distributed collaboration
Where collaboration operations are conducted
Exercise 8A: Prepare environments for collaboration
  Manage the VM environments
  Investigate certificates
  Enable sync for a hosted feature layer
Sharing content in a collaboration
Administering a collaboration
Common management tasks for distributed collaboration
Exercise 8B: Configure a distributed collaboration between two Enterprise portals
  Configure collaboration from the EBASE portal
  Configure collaboration from the EBASE2 portal
  Accept the guest portal response
  Share content with the collaboration group
  Finalize the configuration for the EBASE2 guest portal
  Edit the hosted feature layer
Lesson review
Answers to Lesson 8 questions

9 Automation and change management
Lesson introduction
Change management
Environment isolation best practices
Exercise 9: Manage ArcGIS Enterprise with ArcGIS API for Python
  Run Python code samples
  Automation tools
  Automating ArcGIS Enterprise deployments with Chef
  Selecting an automation tool
  Lesson review
  Answers to Lesson 9 questions

Appendices

  Appendix A: Esri data license agreement
  Appendix B: Reference URL list
  Appendix C: Answers to lesson review questions
  Appendix D: Additional resources