

Sharing GIS Content Using ArcGIS®

STUDENT EDITION

Copyright © 2019 Esri
All rights reserved.

Course version 1.2. Version release date January 2019.

Printed in the United States of America.

The information contained in this document is the exclusive property of Esri. This work is protected under United States copyright law and other international copyright treaties and conventions. No part of this work may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying and recording, or by any information storage or retrieval system, except as expressly permitted in writing by Esri. All requests should be sent to Attention: Director, Contracts and Legal, Esri, 380 New York Street, Redlands, CA 92373-8100, USA.

Export Notice: Use of these Materials is subject to U.S. export control laws and regulations including the U.S. Department of Commerce Export Administration Regulations (EAR). Diversion of these Materials contrary to U.S. law is prohibited.

The information contained in this document is subject to change without notice.

Commercial Training Course Agreement Terms: The Training Course and any software, documentation, course materials or data delivered with the Training Course is subject to the terms of the Master Agreement for Products and Services, which is available at <http://www.esri.com/~media/Files/Pdfs/legal/pdfs/ma-full/ma-full.pdf>. The license rights in the Master Agreement strictly govern Licensee's use, reproduction, or disclosure of the software, documentation, course materials and data. Training Course students may use the course materials for their personal use and may not copy or redistribute for any purpose. Contractor/Manufacturer is Esri, 380 New York Street, Redlands, CA 92373-8100, USA.

Esri Trademarks: Esri trademarks and product names mentioned herein are subject to the terms of use found at the following website: <http://www.esri.com/legal/copyright-trademarks.html>.

Other companies and products or services mentioned herein may be trademarks, service marks or registered marks of their respective mark owners.

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 Sharing and Web GIS

- Lesson introduction
- Sharing within your organization
- Portals
- Comparing ArcGIS Enterprise and ArcGIS Online
- Compare the ArcGIS portals
- Content sharing
- Portal members
- Identify portal member roles
- Exercise 1: Share web layers using an ArcGIS Enterprise portal
 - Sign in to your organization's portal
 - Share organizational content
 - Discover additional web layers
- Lesson review
- Answers to Lesson 1 questions

2 Sharing with ArcGIS Pro

- Lesson introduction
- Sharing GIS content
- ArcGIS Pro sharing options
- Content sharing
- Copied and referenced data
- Sharing web layers with ArcGIS Pro
- Exercise 2A: Share a web map
 - Sign in to your portal account
 - Add content to your map
 - Share content to your portal
- Choosing between copied and referenced data
- ArcGIS Enterprise supported layers

Exercise 2B: Explore item details in the Enterprise portal

Validate the web map

Explore item details

Configure the editing settings

Sharing content

Answers to Lesson 2 questions

3 Sharing user-managed content

Lesson introduction

What is user-managed content?

Enabling user-managed content in ArcGIS Enterprise

Checkpoint

Types of layers for user-managed content

Managing feature layers and map image layers

Exercise 3: Share user-managed content

Validate the database registration

Publish a feature layer

Publish a map image layer

Add new layers to a web map

Add new features to a feature layer

Verify edits to source data

Sharing map image layers or feature layers

Lesson review

Answers to Lesson 3 questions

4 Analysis in the ArcGIS Enterprise portal

Lesson introduction

Analysis in the Enterprise portal

Data sources

Choosing feature collection or hosted feature layer

Exercise 4: Conduct analysis in the portal

Add .csv to your web map

Merge the data layers

Use analytical results for additional analysis

Challenge: Perform further portal analysis

Portal analytical functionality

Lesson review

Answers to Lesson 4 questions
Exercise 4 challenge solution

5 Sharing custom analysis

Lesson introduction
Custom web tools and geoprocessing packages
Web tools and geoprocessing packages
Web apps
Exercise 5: Use a custom geoprocessing tool in a configurable web app
 Share a custom geoprocessing tool
 Create a custom web app
 Use the custom web app
Configurable web apps
Lesson review
Answers to Lesson 5 questions

6 Sharing packages

Lesson introduction
What is a project package?
Sharing packages outside an organization
Using project packages
Exercise 6: Create a project package
 Consolidate your project content
 Analyze your project package
 Share your project package
Lesson review
Answers to Lesson 6 questions

7 Sharing imagery

Lesson introduction
Elements of imagery
Raster function templates
Exercise 7A: Share a raster function-enabled imagery layer
 Explore an image layer
 Apply a raster function
 Save a raster function template
 Share a web imagery layer
 View the new web imagery layer in the portal
Applying multiple raster function templates to an image layer
Workflow review

Exercise 7B: Use raster functions in ArcGIS Enterprise

- Examine the web imagery layer

- Update the image display

- Apply a raster function to a web imagery layer

- Save a function result as a new raster layer

Lesson review

Answers to Lesson 7 questions

8 Optimizing map display through caching

Lesson introduction

Tile layers and tile packages

What is the advantage of caching?

Plan and optimize tile layers

Exercise 8: Share a vector tile layer

- Verify map settings before sharing

- Prepare a map to share as a vector tile layer

- Share a vector tile layer

- Examine the vector tile layer in the portal

- Challenge: Publish a tile package as a tile layer

Lesson review

Answers to Lesson 8 questions

Exercise 8 challenge solution

9 Using web apps and presentations

Lesson introduction

Extending your web map

Presentations

Creating presentations

Configurable apps

Choosing configurable app templates

Web AppBuilder for ArcGIS

Exploring the functionality of Web AppBuilder for ArcGIS

Exercise 9: Create a configurable app

- Create web maps

- Create a web app

- Share your web app

Lesson review

Sharing GIS content using ArcGIS portals

Answers to Lesson 9 questions

Appendices

Appendix A: Esri data license agreement

Appendix B: Answers to lesson review questions

Appendix C: Additional resources