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## DATA CREDITS Stan Wickham

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# **Introducing ArcGIS StreetMap Europe**

#### IN THIS CHAPTER

- Creating Pan-European maps
- Creating maps for individual countries
- Finding locations
- Geocoding and mapping
- Tips on learning ArcGIS StreetMap Europe

ESRI® ArcGIS™ StreetMap™ Europe is an extension to ArcView®, ArcEditor™, and ArcInfo™ that adds European street mapping and address geocoding to your geographic information system (GIS). StreetMap Europe includes important transportation data layers, including streets, road networks, administrative boundaries, and key landmarks, in a compressed, high-performance format.

StreetMap Europe enables you to perform a variety of GIS functions, such as interactive street mapping, address location, and geocoding, for one country or all European countries.

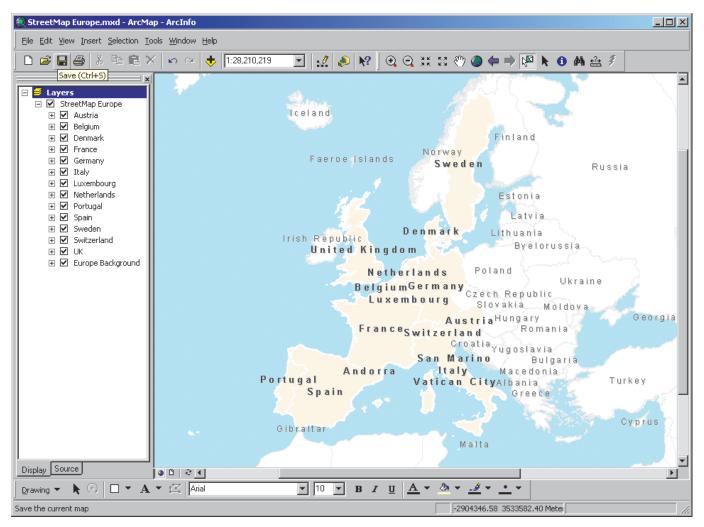
This book is organized so you can easily find instructions on:

- How to enable the extension (Chapter 2)
- How to map street data for all Pan-European countries (Chapter 3)
- How to map street data for an individual Pan-European country (Chapter 4)
- How to map generalized Pan-European data with major roads and postcodes (Chapter 5)

Whether your mapping and geocoding needs cover multiple countries in Europe or focus on a single country, StreetMap Europe will be of great benefit to you in developing your mapping and geocoding applications.

### Creating Pan-European maps

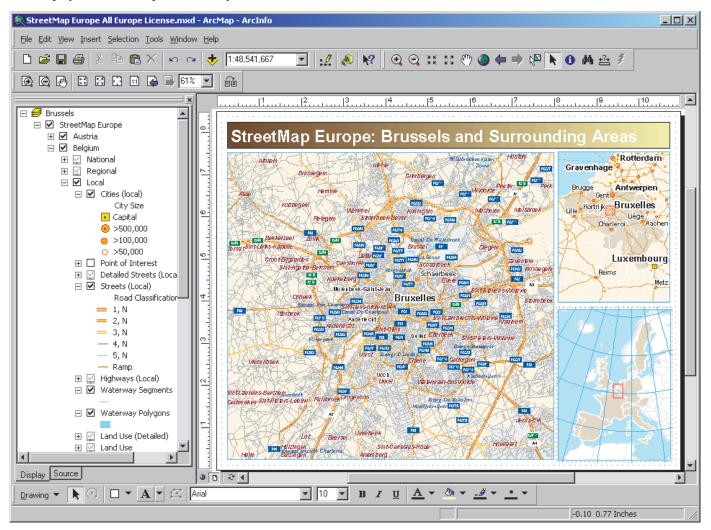
You can display data for multiple or all European countries included in ArcGIS StreetMap Europe.



A generalized map showing ArcGIS StreetMap Europe countries against a European background supplied with StreetMap Europe.

### Creating maps for individual countries

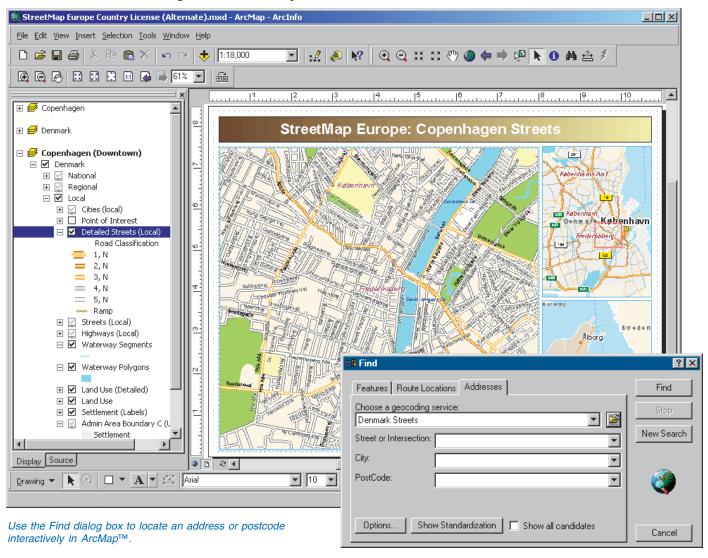
You can display data for one specific country.



Geographic features are defined with default scales. As you zoom in, more features are drawn in greater detail.

### Finding locations

You can find address locations using detailed street and postcode information.



### Geocoding and mapping

#### Geocoding and geocoding services

ArcGIS StreetMap Europe will allow you to geocode single addresses or tables of addresses. Geocoding—also known as address matching—is the process of creating geometric representations—points—for descriptions of locations addresses. In ArcGIS, geocoding is accomplished by creating and using a geocoding service. A geocoding service lets you convert textual descriptions into geographic features. It uses reference data to find locations. In ArcGIS StreetMap Europe, geocoding services use street centerlines with information about the address ranges for each section of the street or postcode points representing the centroids of postcode zones with information about the postcode for each point. Using the geocoding services provided by ArcGIS StreetMap Europe, you can use a table of addresses and/or postcodes to create a point feature class representing the locations of your addresses. You can also use the Find dialog box in ArcMap for geocoding single addresses and postcodes interactively.

For more information on geocoding addresses in a table with ArcGIS StreetMap Europe, see Chapter 3, 'Mapping all countries', and Chapter 4, 'Mapping individual countries'. For more information on geocoding postcode zones in a table, see Chapter 5, 'Mapping major roads and postcodes'.

#### Interactive mapping

ArcGIS StreetMap Europe will allow you to create high-quality maps using the provided map documents, map templates, and group layers. In ArcMap, a map document is essentially a printed map stored on disk. Map documents have a .mxd file extension. You can use custom map templates to create a series of maps with the same layout. A map template is a kind of map document that provides a quick way to create a new map. Templates contain data, a custom interface, and a predefined layout that arranges

map elements on the virtual page. Map templates have a .mxt file extension. A group layer is several layers that appear and act like a single layer in the table of contents in ArcMap. Layers include symbology, display, labeling, query, and relationship information, all of which define how geographic data is drawn on a map. For example, a layer might select specific cities from a shapefile, draw them as blue squares, and label them with text stored in a related table. Layers do not include the data itself; they reference data sources stored elsewhere.

ArcGIS StreetMap Europe provides ready-to-use map documents, map templates, and group layers to help you produce maps quickly and easily. Alternatively, you can start with an empty map document, add individual datasets to your map, and create your own custom map templates and group layers.

For more information on finding an address interactively with ArcGIS StreetMap Europe, see Chapter 3, 'Mapping all countries', and Chapter 4, 'Mapping individual countries'. For more information on finding a postcode zone interactively, see Chapter 5, 'Mapping major roads and postcodes'.

### Tips on learning ArcGIS StreetMap Europe

#### About this book

This book introduces ArcGIS StreetMap Europe and its capabilities. The topics covered assume you are familiar with the fundamentals of GIS. If you're new to GIS or feel you need to refresh your knowledge, please take some time to read *Getting Started with ArcGIS*. You don't need to read it to continue with this book, but you should use it as a reference if you encounter tasks with which you are unfamiliar.

To perform the steps in Chapters 3, 4, and 5, you should already be familiar with using ArcCatalog<sup>™</sup> and ArcMap. You should know how to install the StreetMap Europe extension and licenses, copy data to a new location, and add data to a map. For introductions on working with ArcCatalog and ArcMap, refer to *Using ArcCatalog* and *Using ArcMap*. These books contain tutorials to show you how to make maps and manage GIS data.

#### Finding answers to questions

Like most people, your goal is to complete your task while investing a minimum amount of time and effort in learning how to use the software. You want intuitive, easy-to-use software that gives you immediate results without having to read pages and pages of documentation. However, when you do have a question, you want the answer quickly so that you can complete your task. That's what this book is all about—getting you the answers you need when you need them.

Although you can read this book from start to finish, you'll likely use it more as a reference. When you want to know how to do a particular task, such as geocoding postcodes, just look it up in the table of contents. You'll find a concise, step-by-step description of how to complete the task. Some chapters also

include detailed information that you can read if you want to learn more about the concepts behind the tasks.

#### Getting help on your computer

In addition to this book, use the ArcGIS Desktop Help system to learn how to use StreetMap Europe. To learn how to use Help, see *Using ArcMap*.

#### **Contacting ESRI**

If you need to contact ESRI for technical support, see the product registration and support card you received with ArcGIS StreetMap Europe or refer to 'Contacting Technical Support' in the 'Getting more help' section of the ArcGIS Desktop Help system. You can also visit ESRI on the Web at <code>www.esri.com</code> and <code>arconline.esri.com</code> for more information about ArcGIS StreetMap Europe.

#### **ESRI** education solutions

ESRI provides educational opportunities related to geographic information science, GIS applications, and technology. You can choose among instructor-led courses, Web-based courses, and self-study workbooks to find education solutions that fit your learning style and pocketbook. For more information, go to <a href="https://www.esri.com/education">www.esri.com/education</a>.



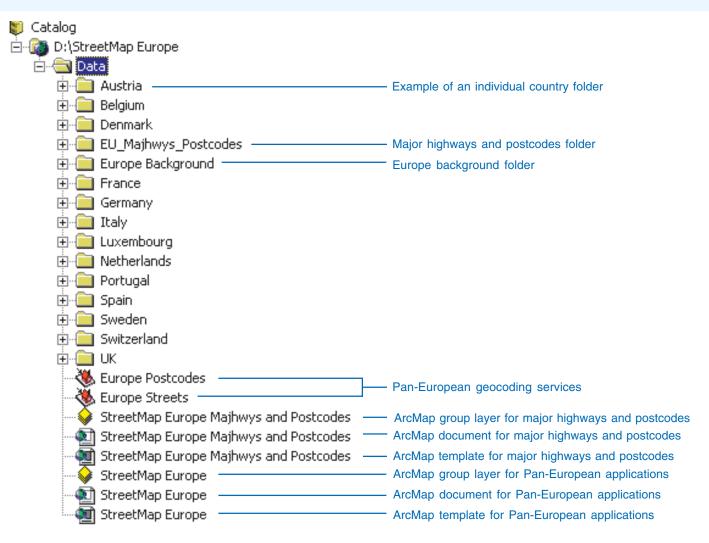
### ArcGIS StreetMap Europe data

ArcGIS StreetMap Europe data CD–ROMs contain data for the following countries:

- Austria
- Belgium
- Denmark
- France (including Andorra and Monaco)
- Germany
- Italy (including San Marino)
- Luxembourg
- · The Netherlands
- · Portugal
- Spain
- Sweden
- Switzerland (including Liechtenstein)
- The United Kingdom

ArcGIS StreetMap Europe is a data product. It is different from other software extensions in that there are licensing options that determine which data you have access to use. Although you can see and copy the contents of the two data CD–ROMs to your server or local hard drive, you will only be able to access and use data for which you have purchased a license or licenses to use.

On the following page, you will see the ArcCatalog representation of StreetMap Europe data.



Contents of the ArcGIS StreetMap Europe data CD-ROMs as viewed in ArcCatalog if copied to disk

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### Using ArcGIS StreetMap Europe

There are two types of extensions: one that requires you to manually enable the extension in the Extensions dialog box in either ArcMap or ArcCatalog before the extension can be used and one that enables itself automatically when you work with maps and data that require the extension. ArcGIS StreetMap Europe is an example of an autoextension; it enables itself when it is needed and disables itself when it is no longer needed.

ArcGIS StreetMap Europe is an optional extension product that is registered or licensed individually. When you install ArcGIS, you can choose to install the ArcGIS StreetMap Europe extension. To unlock it, you need to obtain a license file from ESRI.

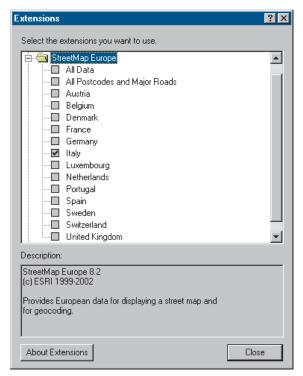
#### Obtaining a license file

A license manager is required to administer the ArcGIS floating installations of ArcInfo Desktop and Workstation, ArcEditor, ArcView, and their extensions. The license manager can run either on a Windows® or UNIX® server regardless of where you install the software.

If you intend to run the license manager on a Windows server, you need a Rainbow Technologies SentinelPro<sup>TM</sup> hardware key on that server. You only need one hardware key per license manager and one license manager per network. You can use your existing hardware key if you have one.

In the United States, request new keycodes on the Internet at www.myesri.com. Outside the United States, contact your local ESRI distributor. For the telephone number of your distributor, visit the ESRI Web site at www.esri.com.

**Note:** The license information file will be sent as an attachment to an e-mail. Save the attachment as a text (.txt) file on your computer without opening it. Opening the attachment with Microsoft® Word may corrupt your license file and adversely affect the license manager installation and operation. Refer to the *License Manager Reference Guide*, located on the CD in the documentation folder, for more information regarding the license manager.



In this example, all countries are licensed, and one of these licenses is currently being used by the application.

#### **Enabling the extension**

You cannot enable or disable the extension by clicking on it. When the extension is currently enabled in your application, its check box will be checked in the Extension Manager.

ArcGIS StreetMap Europe is presented as a folder in the Extensions dialog box because it provides street datasets for various countries, each of which is licensed individually. When you open this folder, you will see a list of the datasets for which you are currently registered or licensed.

To open the Extensions dialog box, choose the Extensions command from the Tools menu in ArcMap or ArcCatalog.

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### ArcGIS StreetMap Europe licensing options

#### Street data for all countries

This option gives you access to all of the ArcGIS StreetMap Europe data contained on both CD–ROMs, including:

 Data for an individual country or multiple countries. Each individual country folder contains a country geocoding service for streets and a country geocoding service for postcodes.

An individual country group layer exists in each individual country folder that stores different geographic features stored in different layers, including administrative boundaries, lakes and rivers, parks, cities, major highways, and detailed streets.

- · Pan-European geocoding services for streets and postcodes.
- Pan-European ArcMap templates, map documents, and group layers.
- Major highway and postcode data.
- European background data containing shapefiles for cities and countries.

If you want to use street data for all countries on only one of the CD–ROMs, you can access and use it from the CD–ROM without copying it to your local drive. However, performance will be much slower. It is best to copy the data to a local disk to make drawing and rendering in ArcMap much faster. If you want to add two datasets to the table of contents in ArcMap, but one is on the first CD–ROM and the second dataset is on the second CD–ROM, then you need to copy at least one of these to your local disk to access both of them at the same time. For this licensing option, create a folder on your local hard disk (e.g., D:\StreetMap Europe) and copy data from each CD–ROM to this directory. The data requires about 1.1 GB of disk space.

Once you have the extension installed and the data licensed and copied, please refer to Chapter 3, 'Mapping all countries', to learn more about using the map documents, templates, group layers, and geocoding services.



ArcCatalog tree view with all ArcGIS StreetMap Europe data loaded from both data CD-ROMs

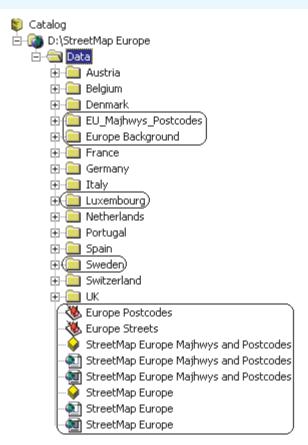
#### Street data for individual countries

This option gives you access to the following:

- Data for an individual country or multiple countries. Each individual country folder contains a country geocoding service for streets and a country geocoding service for postcodes.
  - An individual country group layer exists in each individual country folder that stores different geographic features stored in different layers, including administrative boundaries, lakes and rivers, parks, cities, major highways, and detailed streets.
- Pan-European ArcMap templates, map documents, and group layers.
- Major highway and postcode data.
- European background data containing shapefiles for cities and countries

Although you may access the individual country data from the CD–ROMs, performance will be enhanced if you copy the data from the CD–ROMs to your hard disk. For this licensing option, create a folder on your local hard disk (e.g., D:\StreetMap Europe). You may copy all of the data from both CD–ROMs to this directory and delete the folders that you have not purchased a license to use, or you can copy only the data for which you have purchased a license to use.

Once you have the extension installed and the data licensed and copied, please refer to Chapter 4, 'Mapping individual countries', to learn more about using the map documents, templates, group layers, and geocoding services.



ArcCatalog tree view with all ArcGIS StreetMap Europe data loaded from both data CD–ROMs. In this example, the highlighted data indicates you purchased data for two individual countries and the additional data that is available for use with the individual country licensing option.

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#### Major highways and postcodes

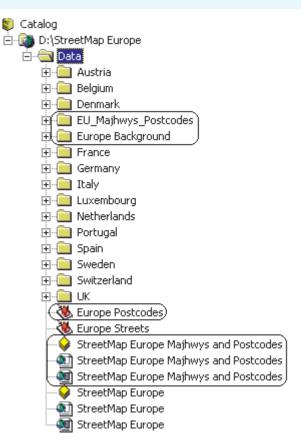
This option gives you access to the following:

- Generalized Pan-European data with major highways and postcodes for all 13 individual countries
- Pan-European geocoding service for postcodes
- Generalized Pan-European map template and map document for major highways and postcodes
- Generalized Pan-European group layer
- European background data containing shapefiles for cities and countries

#### Accessing the data

Although you may access the data from the CD–ROMs, performance will be enhanced if you copy the data from the CD–ROMs to your hard disk. For this licensing option, create a folder on your local hard disk (e.g., D:\StreetMap Europe). You may copy all of the data from both CD–ROMs to this directory and delete the folders that you have not purchased a license to use, or you can copy only the data for which you have purchased a license to use.

Now that you have the extension installed and the data licensed and copied, please refer to Chapter 5, 'Mapping major roads and postcodes', to learn more about using the map documents, templates, group layers, and geocoding services.



ArcCatalog tree view with all ArcGIS StreetMap Europe data loaded from both data CD–ROMs. In this example, the highlighted data indicates you purchased data for major highways and postcodes and the additional data that is available for use with the major highways and postcodes licensing option.

# **Mapping all countries**

# 3

#### IN THIS CHAPTER

- Displaying StreetMap Europe data
- Geocoding addresses with StreetMap Europe

This chapter introduces you to the street data for all countries licensing option for StreetMap Europe. It will introduce you to basic techniques for viewing StreetMap Europe data and using StreetMap Europe geocoding services.

This chapter assumes that you are already familiar with using ArcCatalog and ArcMap. You should know how to install the StreetMap Europe extension and licenses, copy data to a new location, and add data to a map. For introductions to working with ArcCatalog and ArcMap, refer to *Using ArcCatalog* and *Using ArcMap*.

### Displaying StreetMap Europe data

The data folder provides an ArcMap document (StreetMap Europe.mxd) and an ArcMap template (StreetMap Europe.mxt) that contain the group layers for displaying datasets and geocoding services for address matching.

Layers are included for administrative boundaries, key landmarks, and street and road networks.

#### Tip

# Changing the default settings

You can change how the layers display. For information about working with layers in ArcMap, see Using ArcMap.

#### Tip

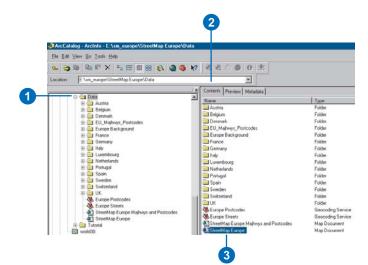
#### Creating your own map

You can create your own map at any time by starting with an empty map document and adding layers as desired. You may also create a new map document using the StreetMap Europe ArcMap document template. For information on creating ArcMap documents, see Using ArcMap.

#### Opening a map

- Click the folder containing the ArcGIS StreetMap Europe data in the ArcCatalog tree.
  - In this example, the data has been copied to the Data folder.
- 2. Click the Contents tab in the ArcCatalog window.
- 3. Double-click the StreetMap Europe map document.

The map opens in ArcMap and contains data for all countries.

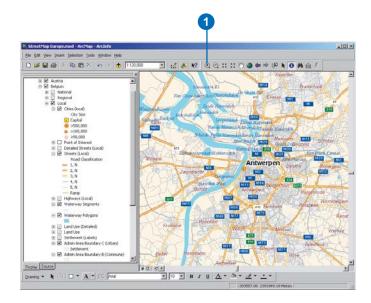


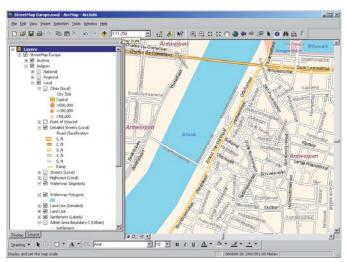
The ArcGIS StreetMap Europe layers provide different levels of detail at different scales. Layers are grouped into three geographic scales: national, regional, and local.

The layers are defined with default scales for displaying the appropriate types of features. The national and regional layers display less detail when you are viewing larger areas, and the local layer displays more detail when you are viewing smaller areas.

# Viewing data in group layers

- 1. Click the Zoom In button on the Tools toolbar in ArcMap.
- Click the plus sign next to one of the countries to expand the group layer for that country.
- Click the plus sign next to a group layer to see the individual layers it contains.
   Layers that have gray check boxes are not drawn.
- Zoom in and out on the map.
   As you zoom in, features are drawn in more detail at the regional and local levels.





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### Geocoding addresses with StreetMap Europe

StreetMap Europe supports Pan-European geocoding for finding a single address interactively or batch matching a table of addresses. Finding locations by postcode points is also supported.

Geocoding services for streets and postcodes for each country are available in each country folder

To geocode addresses, you can use the Europe Streets geocoding service. This geocoding service is a composite geocoding service that uses all of the geocoding services for individual countries

#### Tip

### Choosing a geocoding service

If you want to geocode addresses for an individual country, you can use the country geocoding service that is in the country folder.

If you want to geocode addresses for multiple countries, you can use the Europe Streets geocoding service, which contains all of the geocoding services for individual countries.

# Finding an address interactively

- Click the Find button on the Tools toolbar in ArcMap.
- 2. Click the Addresses tab in the Find dialog box.

The Europe Streets geocoding service has already been added to the map document.

- Type an address containing the street, city, postcode, and country.
- 4. Click Find.

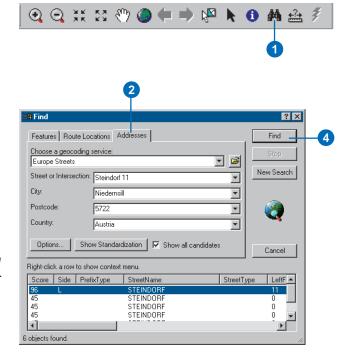
The candidates appear at the bottom of the Find dialog box.

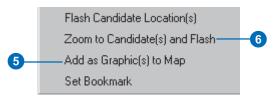
 Right-click the first candidate in the list and click Add as Graphic(s) to Map.

A graphic point representing the address location appears on the map.

Right-click the first candidate again and click Zoom to Candidate(s) and Flash.

The map will zoom to the candidate's location, and the location of the candidate will be flashed on the map.





#### Tip

# Finding a single address and geocoding a table of addresses

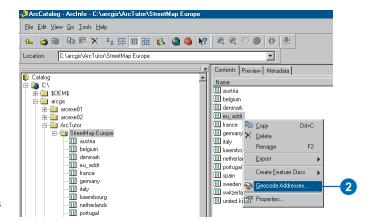
In the StreetMap Europe tutorial folder, there are 13 dBASE® tables that contain addresses and postcodes, one table for each country. There is also a dBASE table containing addresses and postcodes for all countries. You can use addresses and postcodes from these tables to find a single address using the Find dialog box or for geocoding a table of addresses for individual or multiple countries (Pan-European applications).

# Geocoding addresses in a table

- Navigate to the StreetMap Europe tutorial folder in ArcCatalog and click the Contents tab.
- Right-click the eu\_addr dBASE table and click Geocode Addresses.

The Select Geocoding Service dialog box appears. It lists the geocoding services that are available in your local Geocoding Services folder.

3. Click Browse for service. ▶





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#### Tip

#### Rematching addresses

You can rematch resulting features later if you wish. For information on rematching addresses in a table, see Using ArcMap.

 Navigate to the StreetMap Europe data folder in the Choose a geocoding service dialog box, click the Europe Streets geocoding service, then click Choose.

A new shapefile named Geocoding\_Result.shp will be created in the tutorial folder. This shapefile will contain point features representing the location of the addresses in the table.

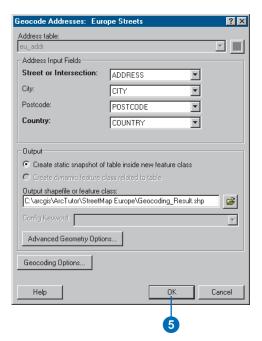
 Click OK to geocode the table of addresses in the Geocode Addresses: Europe Streets dialog box.

When the table finishes geocoding, the Review/ Rematch Addresses dialog box will appear.

6. Click Done.

The new Geocoding\_Result.shp shapefile appears in the StreetMap Europe tutorial folder.





# Mapping individual countries

4

#### IN THIS CHAPTER

- Displaying StreetMap Europe data
- Geocoding addresses with StreetMap Europe

This chapter introduces you to the street data for individual countries licensing option for ArcGIS StreetMap Europe. It will introduce you to basic techniques for viewing ArcGIS StreetMap Europe data and using ArcGIS StreetMap Europe geocoding services.

This chapter assumes that you are already familiar with using ArcCatalog and ArcMap. You should know how to install the StreetMap Europe extension and licenses, copy data to a new location, and add data to a map. For introductions to working with ArcCatalog and ArcMap, refer to *Using ArcCatalog* and *Using ArcMap*.

### Displaying StreetMap Europe data

A map layer file is available for each country. You can add it to a new map document. The layer file contains group layers with different levels of detail. For working with group layers, see *Using ArcMap*.

Layers are included for administrative boundaries, key landmarks, and street and road networks ▶

#### Tip

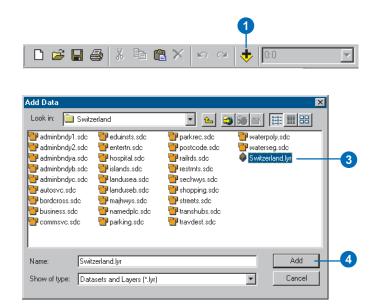
# Adding additional layers and data to the map

If you have purchased licenses for multiple countries, you can add the layer files for each country to the map document. You can also add other background layers in shapefile format from the Europe Background folder. Data in this folder does not require a license.

#### Creating a map

- Click the Add Data button on the Tools toolbar in ArcMap.
- 2. Navigate to one of the country folders for which you have purchased a license.
- 3. Click the layer file.
- 4. Click Add.

The layer is added to the map document.



The ArcGIS StreetMap Europe layers provide different levels of detail at different scales. Layers are grouped into three geographic scales: national, regional, and local.

The layers are defined with default scales for displaying the appropriate types of features. The national and regional layers display less detail when you view larger areas, and the local layer displays more detail when you view smaller areas.

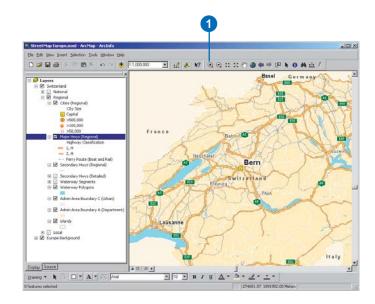
#### Tip

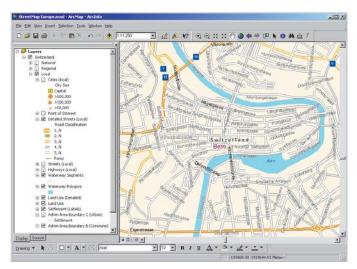
# Changing the default settings

You can change how the layers display. For information about working with layers in ArcMap, see Using ArcMap.

# Viewing data in group layers

- 1. Click the Zoom In button on the Tools toolbar in ArcMap.
- 2. Click the plus sign next to one of the countries.
- Click the plus sign next to a group layer to see the individual layers it contains.
  - Layers that have gray check boxes are not drawn.
- Zoom in and out on the map.
   As you zoom in, features are drawn in more detail at the regional and local level.





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### Geocoding addresses with StreetMap Europe

StreetMap Europe supports Pan-European geocoding for finding a single address interactively or batch matching a table of addresses. Finding locations by postcode points is also supported.

Geocoding services for streets and postcodes for each country are available in each country folder.

To geocode addresses, you can use the Europe Streets geocoding service. This geocoding service is a composite geocoding service that uses all of the geocoding services for individual countries

#### Tip

## Choosing a geocoding service

If you want to geocode addresses for an individual country, you can use the country geocoding service that is in the country folder.

If you want to geocode addresses for multiple countries, you can use the Europe Streets geocoding service, which contains all of the geocoding services for individual countries.

# Finding an address interactively

- Click the Find button on the Tools toolbar in ArcMap.
- 2. Click the Addresses tab in the Find dialog box.
- 3. Click the Browse button.
- 4. Select the Europe Streets geocoding service.
- 5. Click Add.
- 6. Type an address containing the street, city, and postcode.
- 7. Click Find.

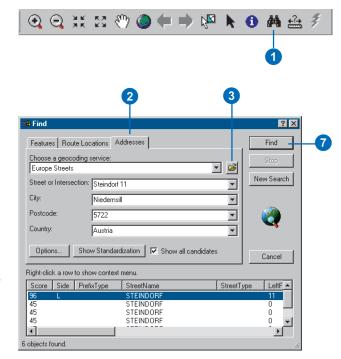
The candidates appear at the bottom of the Find dialog box.

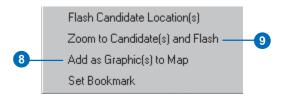
 Right-click the first candidate in the list and click Add as Graphic(s) to Map.

A graphic point representing the address location appears on the map.

 Right-click the first candidate again and click Zoom to Candidate(s) and Flash.

The map will zoom to the local layer, and the location of the candidate will be flashed on the map.





#### Tip

# Finding a single address and geocoding a table of addresses

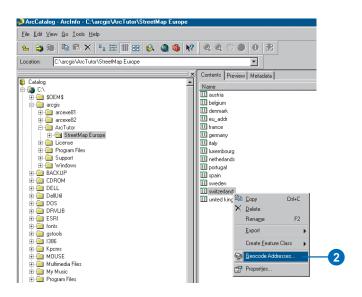
In the StreetMap Europe tutorial folder, there are 13 dBASE tables that contain addresses and postcodes, one table for each country. There is also a dBASE table containing addresses and postcodes for all countries. You can use addresses and postcodes from these tables to find a single address using the Find dialog box or for geocoding a table of addresses for individual or multiple countries (Pan-European applications).

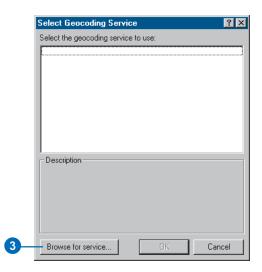
# Geocoding addresses in a table

- Navigate to the StreetMap Europe tutorial folder in ArcCatalog and click the Contents tab.
- Right-click the country dBASE table for a country for which you have purchased a license to use and click Geocode Addresses.

The Select Geocoding Service dialog box appears. It lists the geocoding services that are available in your local Geocoding Services folder.

3. Click Browse for service. ▶





Mapping individual countries 25

#### Tip

#### Rematching addresses

You can rematch resulting features later if you wish. For information on rematching addresses in a table, see Using ArcCatalog.

 Navigate to the country folder in the Choose a geocoding service dialog box, click that country's Streets geocoding service, then click Choose.

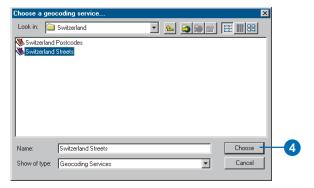
A Geocoding\_Result.shp shapefile will be created in the tutorial folder. This shapefile will contain point features representing the location of the addresses in the table.

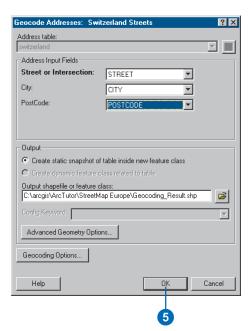
5. Click OK to geocode the table of addresses.

When the table finishes geocoding, the Review/ Rematch Addresses dialog box appears.

6. Click Done.

The new Geocoding\_Result.shp shapefile appears in the StreetMap Europe tutorial folder.





# **Mapping major roads and postcodes**

#### IN THIS CHAPTER

- Displaying major highways and postcodes with StreetMap Europe
- Geocoding postcodes with StreetMap Europe

This chapter introduces you to the street data for major roads and postcodes licensing option for StreetMap Europe. It will introduce you to basic techniques for viewing StreetMap Europe data and using StreetMap Europe geocoding services.

This chapter assumes that you are already familiar with using ArcCatalog and ArcMap. You should know how to install the StreetMap Europe extension and licenses, copy data to a new location, and add data to a map. For introductions to working with ArcCatalog and ArcMap, refer to *Using ArcCatalog* and *Using ArcMap*.

### Displaying major highways and postcodes with StreetMap Europe

The data folder provides an ArcMap document—StreetMap Europe Majhwys and Postcodes.mxd—and an ArcMap template—StreetMap Europe Majhwys and Postcodes.mxt—that contains the StreetMap Europe Majhwys and Postcodes group layers and geocoding service.

Layers are included for administrative boundaries, cities, and major highways.

#### Tip

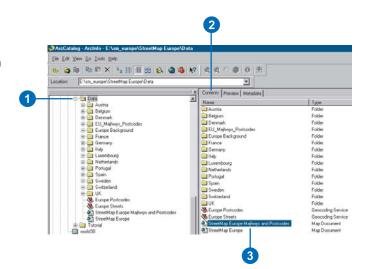
#### Creating your own map

You can create your own map at any time by starting with an empty map document and adding layers as desired. You may also create a new map document using the StreetMap Europe ArcMap document template. For information on creating ArcMap documents, see Using ArcMap.

#### Opening a map

- Click the folder containing the StreetMap Europe data in the Catalog tree.
  - In this example, the data has been copied to a folder named Data.
- 2. Click the Contents tab in the ArcCatalog window.
- Double-click the StreetMap Europe Majhwys and Postcodes map document.

The map opens in ArcMap and contains major highways and European background layers.



# Geocoding postcodes with StreetMap Europe

StreetMap Europe supports Pan-European geocoding. You can use the Europe Postcode with Country geocoding service for matching postcodes.

# Finding a postcode interactively

1. Click the Find button on the Tools toolbar in ArcMap.

The Europe Postcodes geocoding service has already been added to the map document.

- 2. Click the Addresses tab in the Find dialog box.
- 3. Type a postcode and country.
- 4. Click Find.

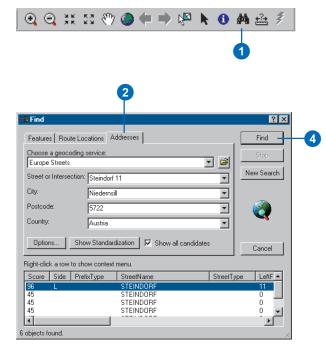
The candidates appear at the bottom of the Find dialog box.

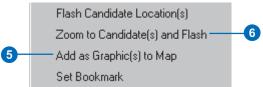
 Right-click the first candidate in the list and click Add as Graphic(s) to Map.

A graphic point representing the address location appears on the map.

 Right-click the first candidate again and click Zoom to Candidate(s) and Flash.

The map will zoom to the candidate's location, and the location of the candidate will be flashed on the map.



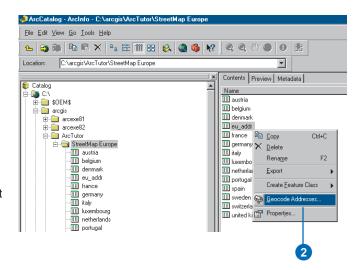


# Geocoding postcodes in a table

- Navigate to the StreetMap Europe tutorial folder in ArcCatalog and click the Contents tab.
- Right-click the eu\_addr dBASE table and click Geocode Addresses.

The Select Geocoding Service dialog box appears. It lists the geocoding services that are available in your local Geocoding Services folder.

3. Click Browse for service. ▶





#### Tip

#### Rematching addresses

You can rematch resulting features later if you wish. For information on rematching addresses in a table, see Using ArcCatalog.

 Navigate to the StreetMap Europe data folder in the Choose a geocoding service dialog box, click the Europe Postcode with Country geocoding service, then click Choose.

A Geocoding\_Result.shp shapefile will be created in the tutorial folder. This shapefile will contain point features representing the locations of the postcodes in the table.

 Click OK to geocode the table of addresses in the Geocode Addresses: Europe Postcode with Country dialog box.

When the table finishes geocoding, the Review/Rematch Addresses dialog box will appear.

6. Click Done.

The new Geocoding\_Result.shp shapefile appears in the StreetMap Europe tutorial folder.

