Introduction

1

ESRI StreetMap™ Europe is an ArcGIS extension 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 your country or across Europe.
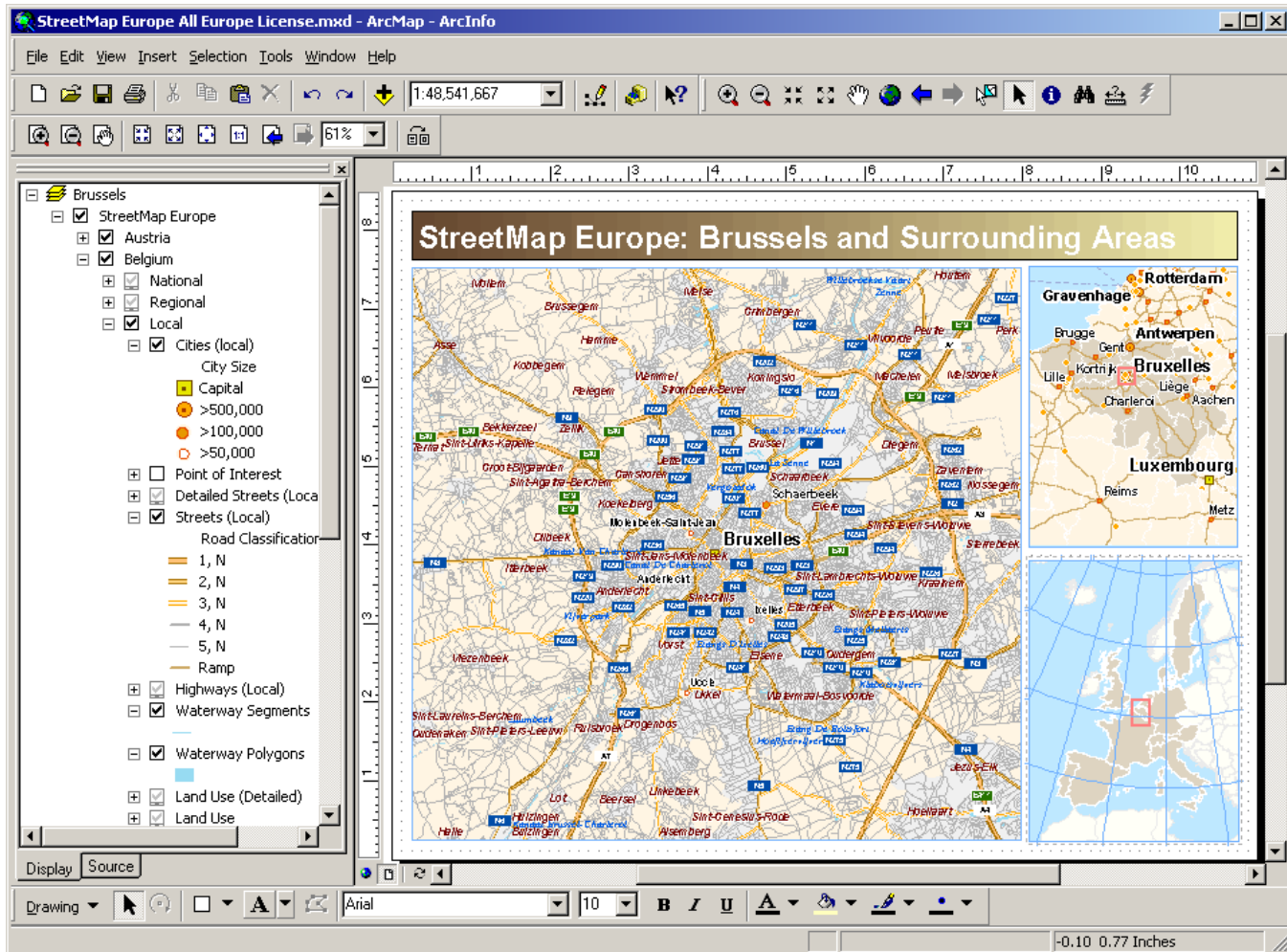
Streetmap Europe is available in three options:

- Street Data for all countries (Pan-Europe applications)

- Street Data for an individual country

- Generalized Pan-Europe data with major roads and postcodes

All data options are included in this package.

Whether your mapping and geocoding problems cover multiple countries in Europe or focus on a single country, StreetMap Europe will be of great benenfit to you in developing your mapping and geocoding applications.
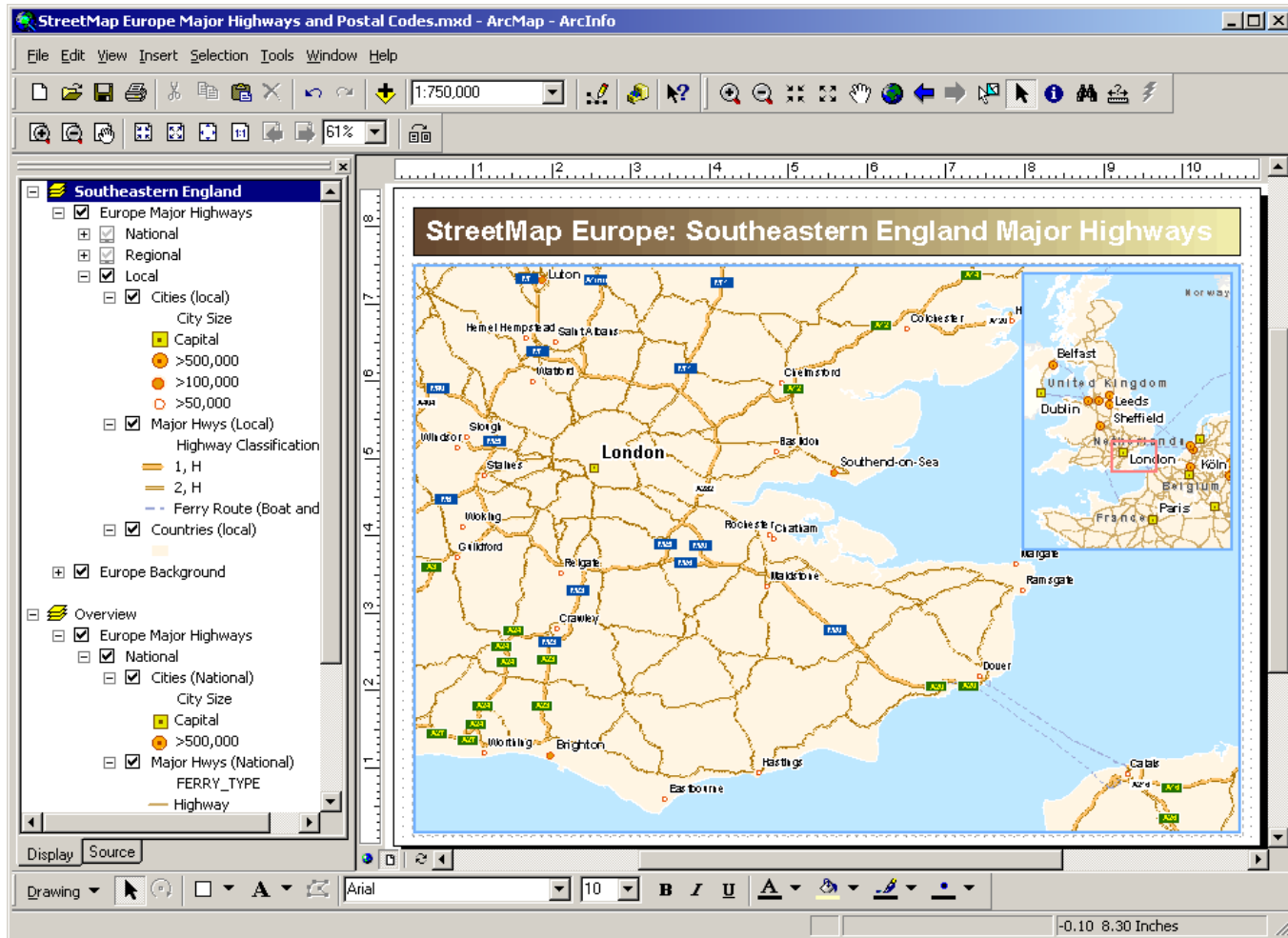
Street data for all countries

Street data for an individual country
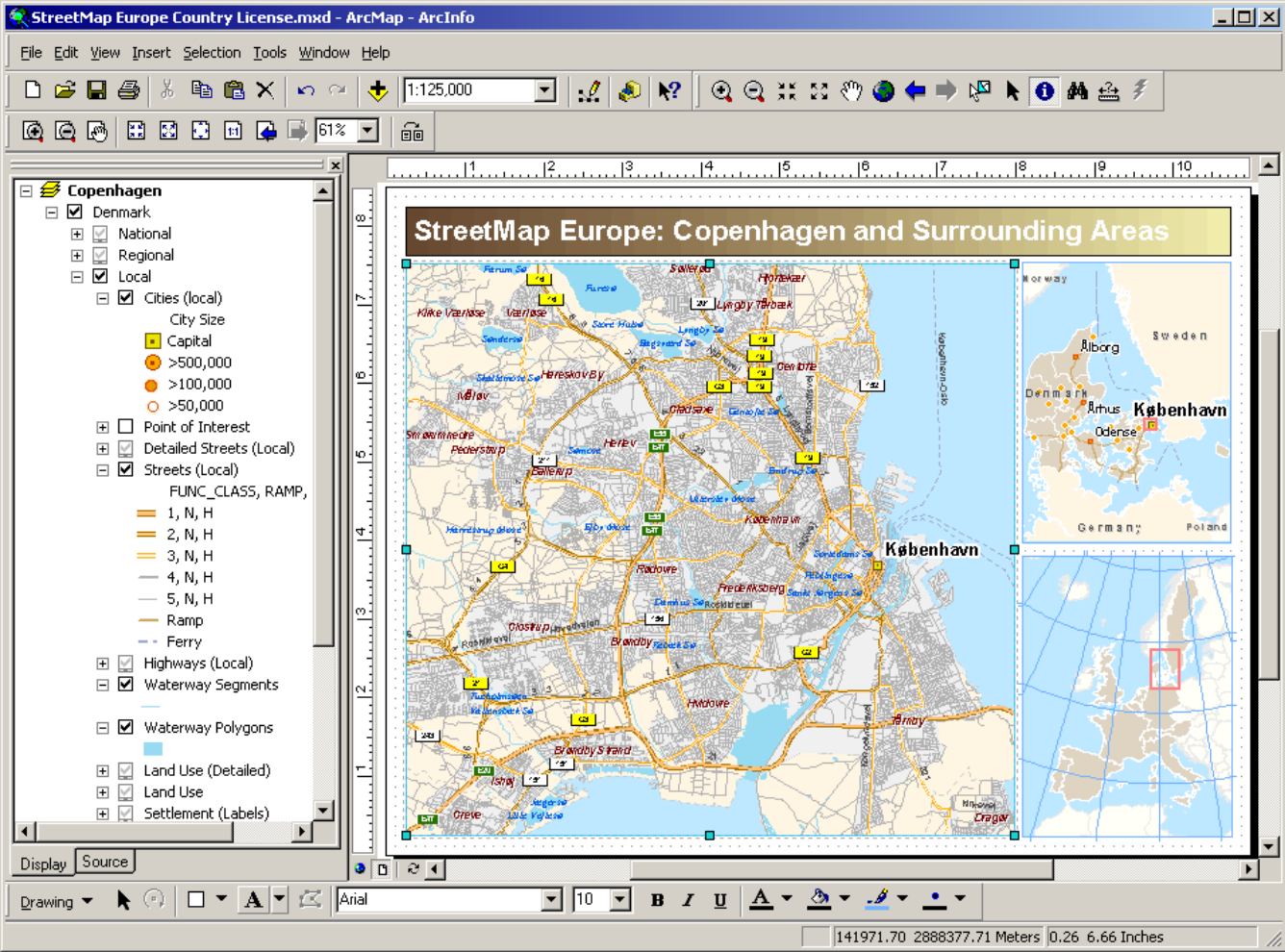
Generalized data with major highways and postcodes

Data and maps for StreetMap Europe

The Data and Maps for StreetMap Europe CD-ROMs have data for the following thirteen countries:

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

Although you can see the contents of the StreetMap Europe CD-ROMs in the ArcCatalog tree, you will only be able to access the data for which you have purchased a license or licenses to use.

Street data for all countries (pan-European)

If you have purchased this license option, you have access to all of the StreetMap Europe data contained on both CD-ROMs, including:

- Data for all thirteen individual countries, including country geocoding services for streets and postcodes and an ArcMap group layer

- Pan-European geocoding services for streets and postcodes
- Pan-European ArcMap templates and map documents
- Pan-European ArcMap group layers
- Major highway and postcode data

Street data for individual countries

If you purchased this license option, you have access to the following data:

- Data for an individual country or multiple countries, including country geocoding services for streets and postcodes and an ArcMap group layer for each individual country

- Pan-European geocoding service, map documents, and group layers. However, they only work with the data you have purchased.

- Major highway and postcode data

Major highways and postcodes

If you purchsed this license option, you have access to the following data:

- Generalized pan-European data with major highways and postcodes for all thirteen individual countries

- Pan-European geocoding services for postcodes

- Generalized pan-European ArcMap template and document for major highways and postcodes

- Generalized pan-European ArcMap group layer

All three licensing options have access to the European background data containing shapefiles for cities and countries.

Catalog
└─ D:\StreetMap Europe
   └─ Data
      ├─ Austria ——————————————————— Individual country folder
      ├─ Belgium
      ├─ Denmark
      ├─ EU_Majhwys_Postcodes ——————— Major Highways and Postcodes folder
      ├─ Europe Background ——————————— Europe background folder
      ├─ France
      ├─ Germany
      ├─ Italy
      ├─ Luxembourg
      ├─ Netherlands
      ├─ Portugal
      ├─ Spain
      ├─ Sweden
      ├─ Switzerland
      ├─ UK
      ├─ Europe Postcodes ——————————— Pan-European geocoding services
      ├─ Europe Streets
      ├─ StreetMap Europe Majhwys and Postcodes —— ArcMap group layer for major highways and postcodes
      ├─ StreetMap Europe Majhwys and Postcodes —— ArcMap document for major highways and postcodes
      ├─ StreetMap Europe Majhwys and Postcodes —— ArcMap template for major highways and postcodes
      ├─ StreetMap Europe ——————————— ArcMap group layer for Pan-European applications
      ├─ StreetMap Europe ——————————— ArcMap document for Pan-European applications
      └─ StreetMap Europe ——————————— ArcMap template for Pan-European applications

All countries

2

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

This tutorial assumes that you are already familiar with using ArcCatalog and ArcMap. You should know how to install the StreetMap Europe extension and license(s), copy data to a new location, and add data to a map. If you are new to geocoding, first complete the Geocoding tutorial. For introductions to working with ArcCatalog and ArcMap, refer to *Using ArcCatalog* and *Using ArcMap*.

Exploring StreetMap Europe data

Before you begin, make sure you have obtained and installed a license or licenses to use the StreetMap Europe data. The StreetMap Europe extension requires one or more licenses to access the data. Once you have the license(s) installed, they will be automatically checked out when you access the data in ArcMap and ArcCatalog. You do not need to manually check the box next to the extension in the Extension dialog box to enable the extension. ▶

Tip

Copying the data to disk
Create a folder on your local hard disk (for example., D:\Streetmap Europe), and copy all data from each CD-ROM to this directory. The data requires about 1.1 GB of disk space.

Tip

Checking in a license
When you access and preview data in ArcCatalog or add the data to a map document in ArcMap, a license for that data is checked out. The license will remain checked out until you close ArcCatalog or ArcMap.

Accessing the data in ArcCatalog

1. Copy the StreetMap Europe data to your hard disk.

2. In ArcCatalog, navigate to the folder containing the StreetMap Europe data.

3. Double-click one of the country folders to expand the folder.

4. Double-click one of the StreetMap Europe feature datasets.

5. Click a feature class.

6. Click the Preview tab.

7. Click the Tools menu and click Extensions.

8. Double-click the StreetMap Europe folder in the Extensions dialog box to expand the folder.

   A check mark will appear in the box next to the license corresponding to the data you previewed.

9. Click Close.

The Data and Maps for StreetMap Europe folder provides an ArcMap document (StreetMap Europe.mxd) and an ArcMap template (StreetMap Europe.mxt) that contains the StreetMap Europe group layers and geocoding service.

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

Accessing the data in ArcMap

1. In the Catalog tree, click the folder containing the StreetMap Europe data.

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.

4. Click the Tools menu and click Extensions.

5. Double-click the StreetMap Europe folder in the Extensions dialog box to expand the folder.

   A check mark will appear in the box next to the license corresponding to the data you previewed.

6. Click Close.
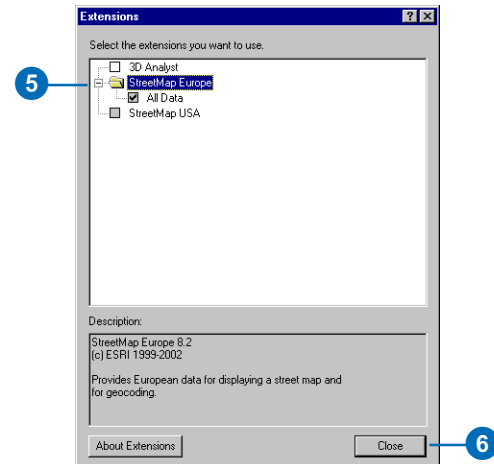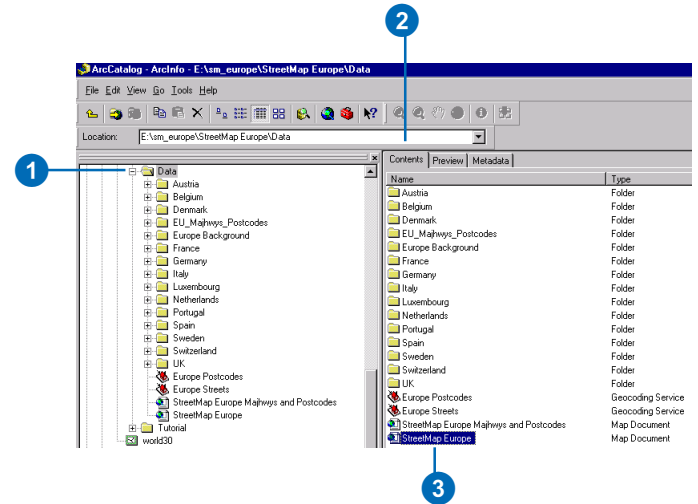
Displaying StreetMap Europe data

The 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 plus sign next to one of the countries to expand the group layer for that country.

2. Click the plus sign next to a group layer to see the individual layers it contains.

   Layers that aren't currently drawn on the map have gray check boxes.

3. Zoom in and out on the map.

   As you zoom in, features are drawn in more detail at the regional and local levels.

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.

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

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

2. In the Find dialog box, click the Addresses tab.

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

3. Type a valid address containing the street, city, postcode, and country. A country name is required.

4. Click Find.

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

5. 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.

6. 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 addresses in a table

1. In ArcCatalog, navigate to the StreetMap Europe tutorial folder and click the Contents tab.

2. 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.
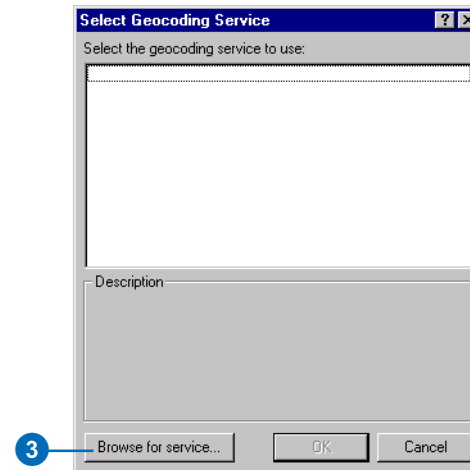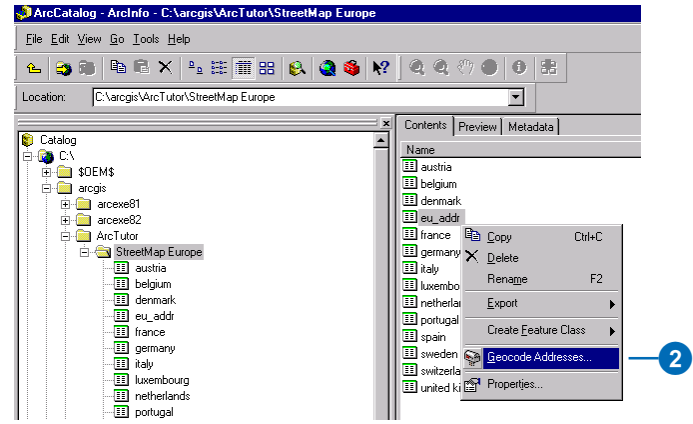
3. Click Browse for service.

4. In the Choose a Geocoding service dialog box, navigate to the StreetMap Europe data folder, 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.

5. In the Geocoding Addresses: Europe Streets dialog box, click OK to geocode the table of addresses.

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

6. Click Done.

   The new Geocoding_Result shapefile appears in the StreetMap Europe tutorial folder.

Individual countries

3
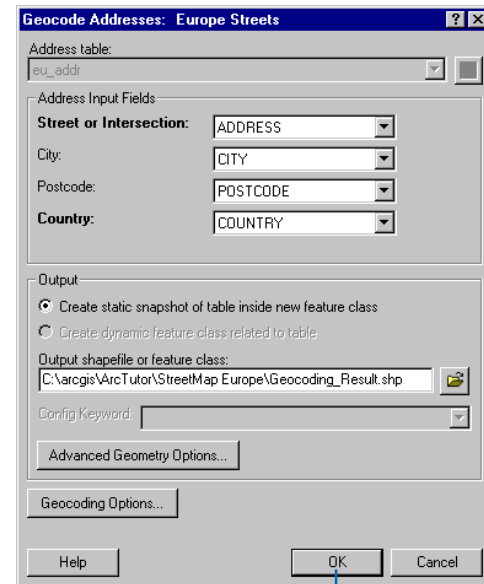
This chapter introduces you to the Street Data for all Countries licensing option for the StreetMap Europe extension for ArcGIS. It will introduce you to basic techniques for viewing StreetMap Europe data and using StreetMap Europe geocoding services.

This tutorial assumes that you are already familiar with using ArcCatalog and ArcMap. You should know how to install the StreetMap Europe extension and license(s), copy data to a new location, and add data to a map. If you are new to geocoding, first complete the Geocoding tutorial. For introductions to working with ArcCatalog and ArcMap, refer to *Using ArcCatalog* and *Using ArcMap*.

Exploring StreetMap Europe data

Before you begin, make sure you have obtained and installed a license or licenses to use the StreetMap Europe data. The StreetMap Europe extension requires one or more licenses to access the data. Once you have the license(s) installed, they will be automatically checked out when you access the data in ArcMap and ArcCatalog. You do not need to manually check the box next to the extension in the Extension dialog box to enable the extension. ▶

Accessing the data in ArcCatalog

1. Copy the StreetMap Europe data to your hard disk.

2. In ArcCatalog, navigate to the folder containing the StreetMap Europe data.

3. Double-click one of the country folders to expand the folder.

4. Double-click one of the StreetMap Europe feature datasets.

5. Click a feature class.

6. Click the Preview tab.

7. Click the Tools menu and click Extensions.

8. Double-click the StreetMap Europe folder in the Extensions dialog box to expand the folder.

   A check mark will appear in the box next to the license corresponding to the data you previewed.

9. Click Close.

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

Layers are included for adminis-trative boundaries, key land-marks, and street and road networks.

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.

Accessing the data in ArcMap

1. Start ArcMap.

2. Click the Add data button.

3. Navigate to one of the country folders for which you have purchased a license.

4. Click the layer file.

5. Click the Add button.

6. In ArcMap, click the Tools menu and click extensions.

7. Double-click the StreetMap Europe folder in the Exten-sions dialog box to expand the folder.

   A check mark will appear in the box for the data that you have added to the map document and are licensed to use.

8. Click Close.
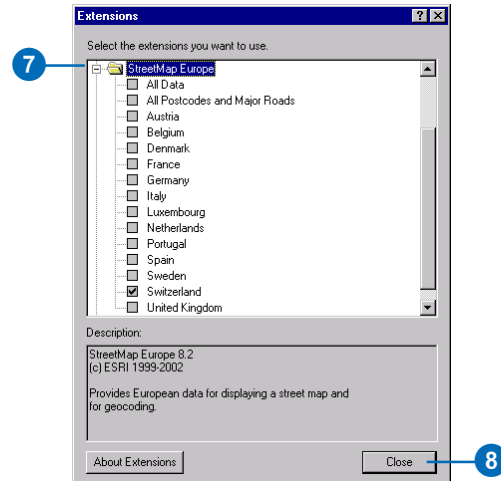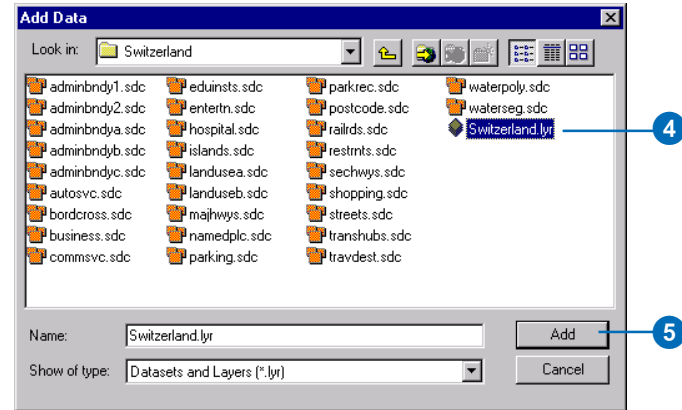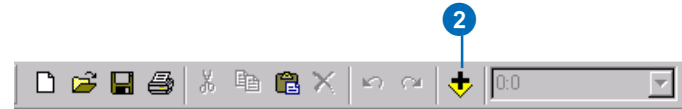
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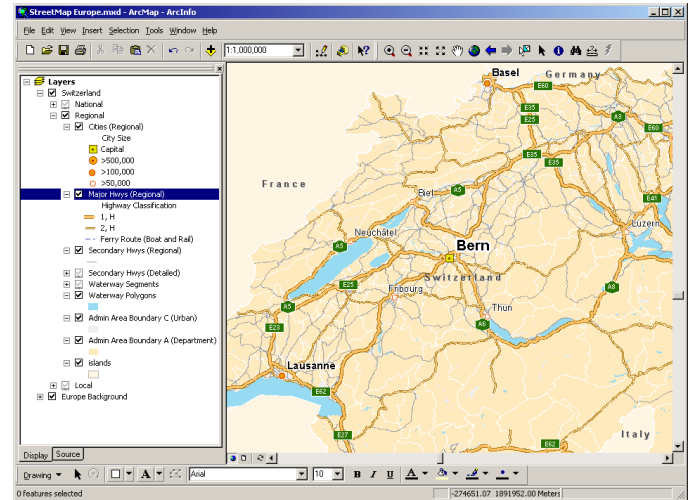
Viewing data in group layers

1. Click the plus sign next to one of the countries.

2. Click the plus sign next to a group layer to see the individual layers it contains.

   Layers that aren't currently drawn on the map have gray check boxes.

3. Zoom in and out on the map.

   As you zoom in, features are drawn in more detail at the regional and local level.

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

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

2. In the Find Dialog, click the Addresses tab.

3. Click the Browse button.

4. Select the Streets geocoding service.

5. Click the Add button.

6. Type a valid address containing the street, city, and postcode.

7. Click Find.

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

8. 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.

9. 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.
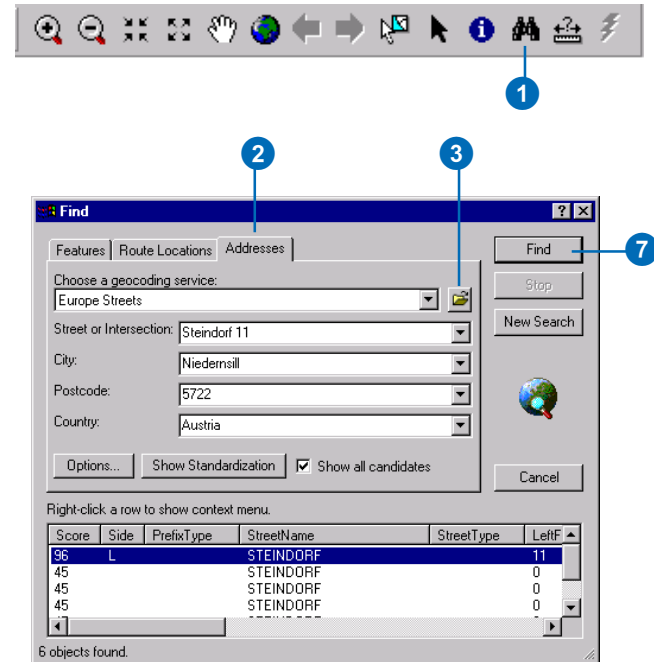
Geocoding addresses in a table

1. In ArcCatalog, navigate to the StreetMap Europe tutorial folder and click the Contents tab.

2. 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 which are available in your local Geocoding Services folder.

3. Click Browse for service. ▶
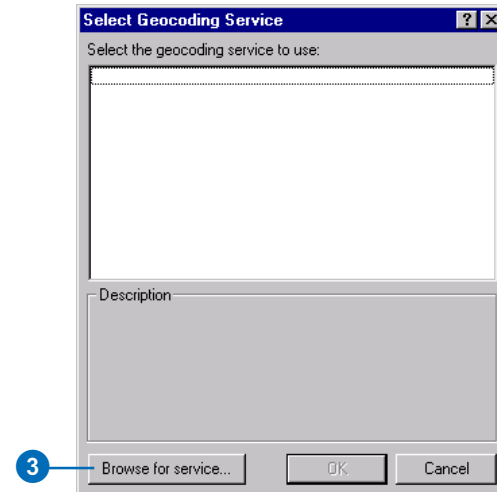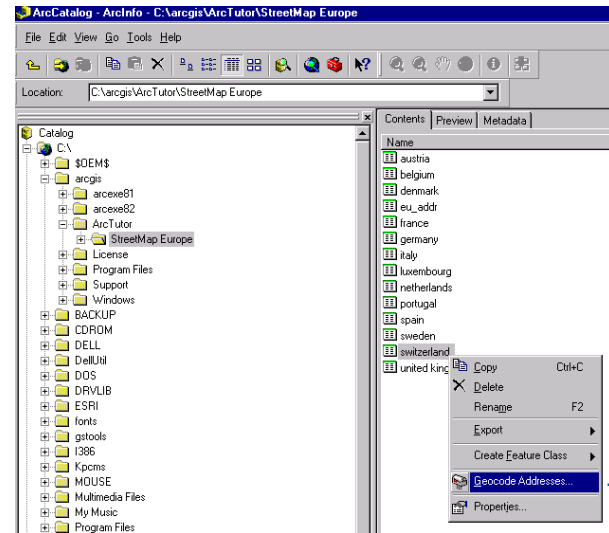
4. In the Choose a Geocoding service dialog box, navigate to the country folder, click that country's Streets geocoding service, then click Choose.
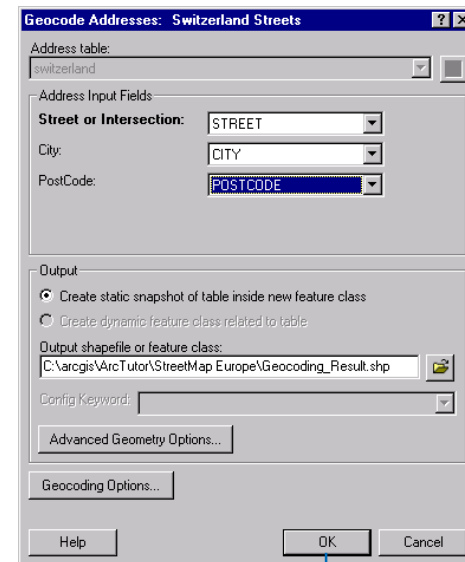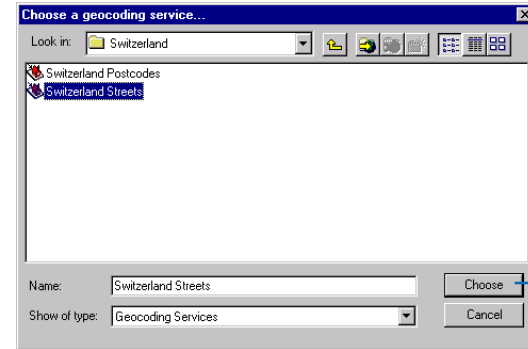
   A new shapefile named Geocoding_Result.shp will be created in the tutorial folder. This shapefile will contain point features representing the location of the addresses in the table.

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 shapefile appears in the StreetMap Europe tutorial folder.

Major roads and postcodes

4

This tutorial introduces you to the Street Data for all Countries licensing option for the StreetMap Europe extension. It will introduce you to basic techniques for viewing StreetMap Europe data and using StreetMap Europe geocoding services.

This tutorial assumes that you are already familiar with using ArcCatalog and ArcMap. You should know how to install the StreetMap Europe extension and license(s), copy data to a new location, and add data to a map. If you are new to geocoding, first complete the Geocoding tutorial. For introductions to working with ArcCatalog and ArcMap, refer to *Using ArcCatalog* and *Using ArcMap*.

Exploring StreetMap Europe data

Before you begin, make sure you have obtained and installed a license or licenses to use the StreetMap Europe data. The StreetMap Europe extension requires one or more licenses to access the data. Once you have the license(s) installed, they will be automatically checked out when the data is accessed by ArcMap and ArcCatalog. You do not need to manually check the box next to the extension in the Extension dialog box for enabling the extension. ▶

Tip

Copying the data to disk
Create a folder on your local hard disk (e.g., D:\Streetmap Europe), and copy all data from each CD-ROM to this directory. The data requires about 1.1 GB of disk space.


Tip

Checking in a license
When you access and preview data in ArcCatalog, or add the data to a map document in ArcMap, a license for that data is checked out. The license will remain checked out until you close ArcCatalog or ArcMap.

Accessing the data in ArcCatalog

1. Copy the StreetMap Europe data to your hard disk.

2. In ArcCatalog, navigate to the folder containing the StreetMap Europe data.

3. Double-click the EU_Majhwys_Postcodes folder to expand the folder.

4. Double-click one of the StreetMap Europe feature datasets.

5. Click a feature class.

6. Click the Preview tab.

7. Click the Tools menu and click Extensions.

8. Double-click the StreetMap Europe folder in the Extensions dialog box to expand the folder.

   A check mark will appear in the box next to the license corresponding to the data you previewed.

9. Click Close.
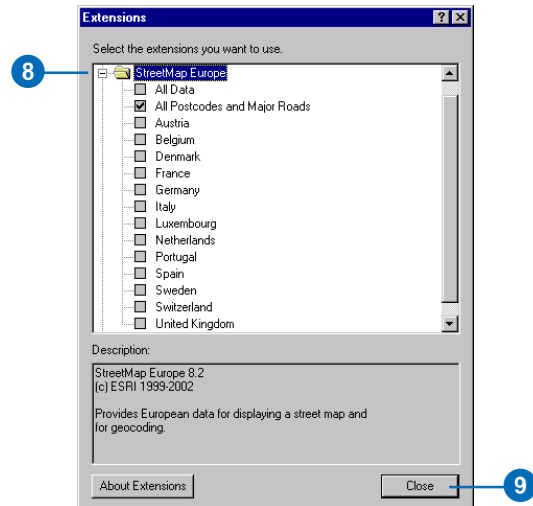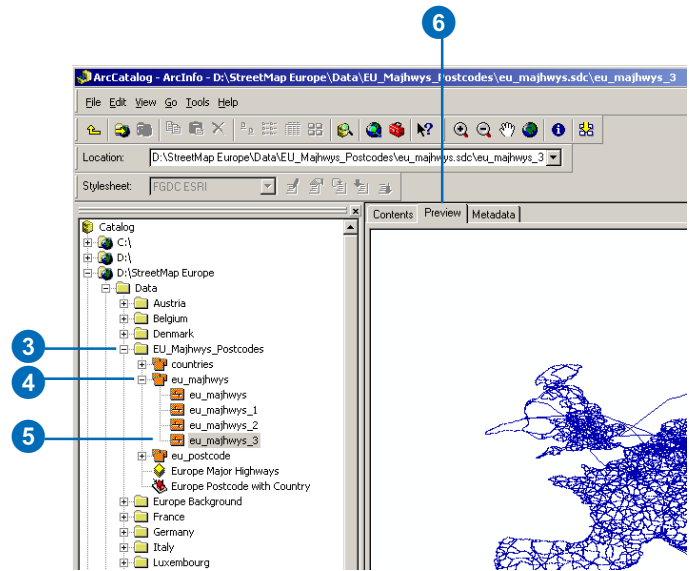
The Data and Maps for StreetMap Europe folder provides an ArcMap document (StreetMap Europe Majhwys and Postcodes.mxd) and an ArcMap template (StreetMap Europe Majhwys and Postcodes.mxt) that contains the StreetMap Europe Majhwys and Postcodes group layers and geocoding service.

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

Accessing the data in ArcMap

1. In the Catalog tree, click the folder containing the StreetMap Europe data.

2. Click the Contents tab in the ArcCatalog window.

3. Double-click the StreetMap Europe Majhwys and Postcodes map document.

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

4. Click the Tools menu and click Extensions.

5. Double-click the StreetMap Europe folder in the Extensions dialog box to expand the folder.

   A check mark will appear in the box for the data that you have added to the map document and are licensed to use.

6. Click Close.
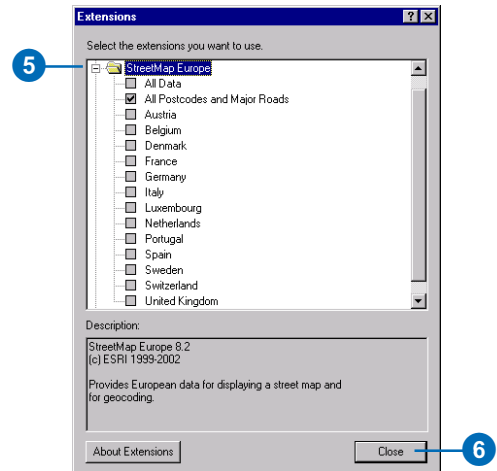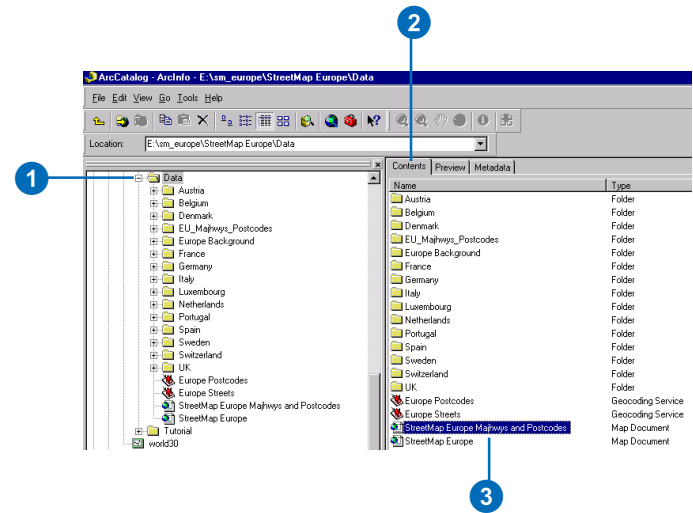
Geocoding postcodes with StreetMap Europe

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. In the Find dialog box, click the Addresses tab.

3. Type a valid postcode and country. A country name is required.

4. Click Find.

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

5. 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.

6. 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.
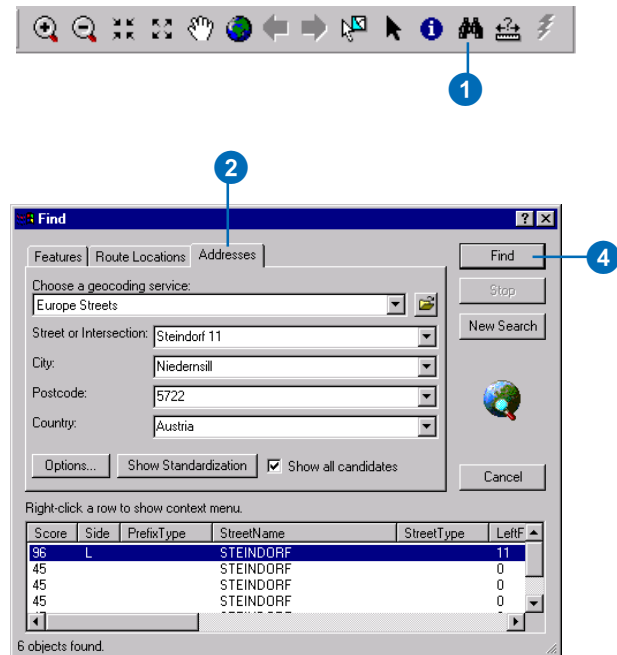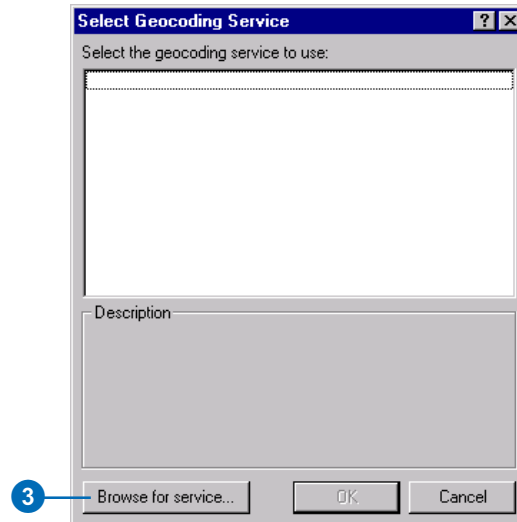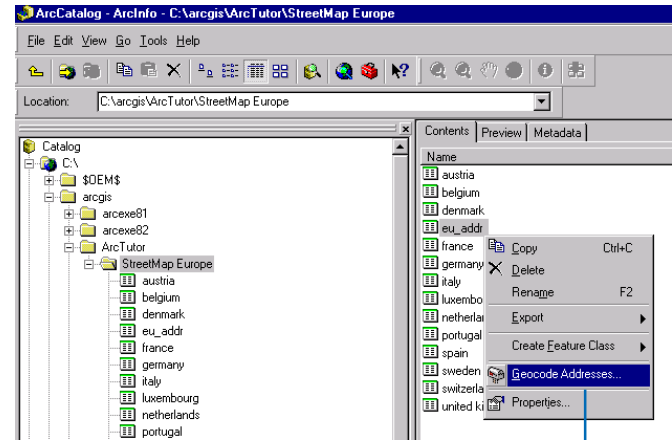
Geocoding postcodes in a table

1. In ArcCatalog, navigate to the StreetMap Europe tutorial folder and click the Contents tab.

2. Right-click the eu_addr dBASE table and click Geocode Addresses.

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

3. Click Browse for service.

4. In the Choose a geocoding service dialog box, navigate to the StreetMap Europe data folder, click the Europe Postcodes geocoding service, then click Choose.

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

5. In the Geocoding Addresses: Europe Postcodes dialog box, click OK to geocode the table of addresses.

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

6. Click Done.

   The new Geocoding_Result shapefile appears in the StreetMap Europe tutorial folder.