

Data Appliance 6.0 for ArcGIS World Places Locator Help



Table of Contents

Welcome to Data Appliance 6.0 for ArcGIS World Places Locator	3
World Places Locator	4
Deployment	
Deploying on ArcGIS 10.1 or 10.2 for Server	
Deploying World Places Locator on ArcGIS 10.1 or 10.2 for Server	6
Prerequisites for ArcGIS 10.1 or 10.2 for Server	7
Requirements	8
Deleting a geocode service on ArcGIS 10.1 or 10.2 for Server	9
Adding World Places Locator on ArcGIS 10.1 or 10.2 for Server	10
Deploying on ArcGIS Server 10	
Deploying World Places Locator on ArcGIS Server 10	12
Prerequisites for ArcGIS Server 10	13
Requirements	8
Deleting a geocode service on ArcGIS Server 10	15
Adding World Places Locator on ArcGIS Server 10	16
Using a geocode service in ArcGIS	18
Support	20
Copyright information	21

Welcome to Data Appliance 6.0 for ArcGIS World Places Locator

Welcome to the Help system for Data Appliance for ArcGIS World Places Locator.

World Places Locator is shipped with Data Appliance 6.0 for ArcGIS on a separate DVD containing data, service documents, and help for publishing the locator. If you published World Places Locator with a previous release, you need to update your environment to use the DVD version prior to your Data Appliance collection upgrade.

World Places Locator Help includes the following topics:

- [World Places Locator](#) service description
- Deployment instructions for [ArcGIS 10.1 or 10.2 for Server](#) and [ArcGIS Server 10](#)
- Instructions for using a geocode service with [ArcGIS](#)

Other resources

See Data Appliance for ArcGIS at the [ArcGIS Resources](#) website for additional information (hardware user guides, system references, and quick-start guides).

World Places Locator



Service Name: ESRI_Places_World

This locator enables you to geocode various types of places around the world. It references a geodatabase of more than 14 million places around the world that includes countries, states and provinces, administrative areas (for example, counties), cities, landmarks, water bodies, and more.

The geodatabase is built primarily using the GeoNames Data which is accessible via Creative Commons Attribution 3.0 License through www.geonames.org. Esri has assembled selected records from the May 2011 GeoNames Data and appended additional attributes (for example, description, rank, bounding coordinates, and so on) for use in this locator.

You may contribute to the future content of this locator by submitting or editing place-names through GeoNames.

The locator accepts a single-line place-name input (for example, Paris, or Paris, France, or Washington, DC) and returns candidates sorted by match score and rank. This locator can be used to geocode single places.

The data used in the service is in Geographic Coordinate System (GCS) WGS84.

Attribution: Source: Esri, GeoNames

Directory Size: 2.42 GB

Technical Notes:


- **Candidate sorting:** Candidate results are sorted using multiple fields in the following sequence:
 - Match Score (Score): Beginning with a full match of 100 and proceeding down to the minimum match score
 - Rank (Rank): Beginning with a rank of 1 for most prominent places and proceeding up to 99 for less prominent places
- **Shape:** Geometry of the output.
- **Score:** A value assigned to all potential candidates of an address match. The match score is based on how well the location found in the reference data matches with the address being searched.
- **Name:** Name of the place.
- **Type:** Type of place (for example, Populated Place, Hill, Farm, Administrative Division, Amusement Park, and so on). There are several hundred unique types in the database. The type field can be used to filter out some candidates you don't want to present to a user.
- **Rank:** Indicates the relative prominence of the place and can be used for sorting. The rank field is based on the place type and, in some cases, its population. The values range from 1 for the most prominent places (for example, countries) up to 100 for less prominent places (for example, points of interest). Candidates returned from the service are not always sorted by rank, so you can re-sort candidates by rank if you prefer.
- **Match_addr:** The corresponding address in the reference data for the candidate point.
- **Descr:** Includes a full description of the place that typically includes its name, type, and the administrative area in which it is located. This is typically the field you would want to display to users for candidates. ArcGIS Locator currently returns the values in all capitals, so you may want to convert the text to title casing (capitalize first letter only) before presenting in a list. The locator separately returns several fields used in building the description (for example, Name, Type, City, State, Country), so you can assemble your own custom description if you prefer.
- **City:** Name of the candidate city.
- **County:** Name of the candidate county or administrative unit.
- **State:** Name of the candidate state or administrative unit.
- **State_Abbbr:** Abbreviation for the candidate state or administrative unit.
- **Country:** Name of the candidate country.
- **Cntry_Abbbr:** Abbreviation for the candidate country.

- **Latitude:** Latitude of candidate point.
- **Longitude:** Longitude of candidate point.
- **Bounding Coordinates:** The four bounding coordinates for a place (that is, North_Lat, South_Lat, West_Lon, East_Lon) are returned for candidates. These can be used to browse the map to an area surrounding the place (for example, map extent of California rather than centroid point). For some features (for example, administrative divisions, countries, states, counties, and ZIP Codes), these extents were derived from polygon features. In other cases (for example, points of interest), these extents were approximated by buffering the point location by an average extent.

Deploying World Places Locator on ArcGIS 10.1 or 10.2 for Server

Data resources required for deploying World Places Locator are found on the DVD containing the World Places Locator dataset:

- The Locators folder contains four files:
 - ESRI_Places_World.sd
 - worldplaces.loc
 - worldplaces.loc.xml
 - worldplaces.lox
- The help PDF file has information for deploying World Places Locator on ArcGIS 10.1 or 10.2 for Server.

 **Note:** If you are still using ArcGIS Server 10, refer to the instructions for [Deploying World Places Locator on ArcGIS Server 10](#).

The following instructions are available to assist you in deploying World Places Locator on your system:

- For details on prerequisites for using the data collections, see [Prerequisites](#).
- For information on supported environments, see [Requirements](#).
- If you previously used World Places Locator (ESRI_Places World) from Data Appliance World Collection 5.0 or an earlier version and you received a data collection upgrade for Data Appliance 6.0 for ArcGIS, you will need to [delete this service from ArcGIS 10.1 or 10.2 for Server](#).
- For deployment instructions, see [Adding World Places Locator on ArcGIS 10.1 or 10.2 for Server](#).

Prerequisites for ArcGIS 10.1 or 10.2 for Server

The following prerequisites must be met before you deploy Data Appliance 6.0 for ArcGIS World Places Locator to your GIS server:

- You must have ArcGIS 10.1 or 10.2 for Server or later installed, configured, and running with the latest service packs installed. If ArcGIS 10.1 or 10.2 for Server or later is not running or if you have problems with the installation, for ArcGIS 10.1 for Server, see [Installing ArcGIS 10.1 for Server for Windows](#) or [Installing ArcGIS 10.1 for Server for Linux](#). For ArcGIS 10.2 for Server, see [Installing ArcGIS 10.2 for Server for Windows](#) or [Installing ArcGIS 10.2 for Server for Linux](#).

 **Note:** If you are not planning to upgrade to ArcGIS 10.1 or 10.2 for Server and are using 10.0, refer to the instructions for [Deploying World Places Locator on ArcGIS Server 10](#).

Requirements

Data Appliance 6.0 for ArcGIS World Places Locator is [tested and certified](#) to work in a number of environments. For information on supported environments, see [System requirements](#) for Data Appliance for ArcGIS on the ArcGIS Resources website.

Data Appliance for ArcGIS World Places Locator may work in other environments supported by ArcGIS Server, but Data Appliance for ArcGIS has not been tested and certified on those environments.

Deleting a geocode service on ArcGIS 10.1 or 10.2 for Server

The instructions below describe how to delete this geocode service from ArcGIS 10.1 or 10.2 for Server.

Steps:

1. Log in to ArcGIS for Server using the Data Appliance for ArcGIS data account with administrative privileges.
2. Start ArcGIS Server Manager and log in using your ArcGIS Server account.
3. Click **Services > Manage Services**.
4. Locate the ESRI_Places_World service in the Services module and click **Delete**.

The service is deleted from your server.

Adding World Places Locator on ArcGIS 10.1 or 10.2 for Server

[World Places Locator \(ESRI_Places World\)](#) enables you to find world places.

 **Note:** See [Requirements](#) for information on supported environments.


To use a locator, you need to deploy it using ArcGIS Server Manager. The following steps walk you through the deployment process for ArcGIS 10.1 and 10.2 for Server.

Copy the worldplaces folder to the GIS server

Copy the worldplaces folder from the locators folder on the DVD to your GIS server, for example, C:\locators\worldplaces. You can use Windows copy and paste tools or another copy utility.

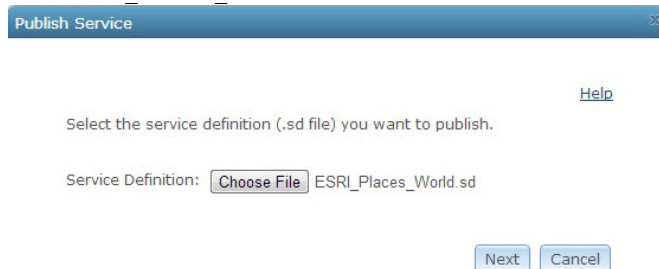
Publishing World Places Locator on ArcGIS 10.1 or 10.2

Using **ArcGIS Server Manager**, you can publish the World Places Locator service definition file (.sd) as a service.

 **Note:** The service definition file ESRI_Places_World.sd is created with the data path C:\locators\worldplaces. If the data is copied to a different path, the service will be published but not started. Use the REST admin tool to correct the path and start the service.

Steps:

1. Open ArcGIS Server Manager and log in.
2. Click **Services > Manage Services > Publish Service**.
3. Click **Choose File** or **Browse** to browse to the locators > worldplaces folder on your GIS server, for example, C:\locators\worldplaces.
4. Select ESRI_Places_World.sd and click **Next**.



5. On the specify properties dialog box, make sure the **Name** is ESRI_Places_World and the **Type** is Geocode Service; choose any **Folder**. Click **Next**.

[Help](#)

Specify properties for your new service and click Next.

Name:

Type:

Folder: Existing
 New

Cluster:

Start service immediately

Share service on my portal
(Requires being signed in under Services > Sharing)

6. Click **Publish** to publish the service definition as a service.
 The published service screen appears for ESRI_Places_World geocode service indicating **Status: Started**. The new geocode service will appear in the list of available services.


For more information for ArcGIS 10.1 for Server, see [Publishing a service definition to the server in Manager](#) for Windows in ArcGIS 10.1 for Server Help under **Services > ArcGIS for Server (Windows) > Publishing services > How to publish services** or [Publishing a service definition to the server in Manager](#) for Linux in ArcGIS 10.1 for Server Help under **Services > ArcGIS for Server (Linux) > Publishing services > How to publish services**.

For more information for ArcGIS 10.2 for Server, see [Publishing a service definition to the server in Manager](#) for Windows in ArcGIS 10.2 for Server Help under **Services > ArcGIS for Server (Windows) > Publishing services > How to publish services** or [Publishing a service definition to the server in Manager](#) for Linux in ArcGIS 10.2 for Server Help under **Services > ArcGIS for Server (Linux) > Publishing services > How to publish services**.

Deploying World Places Locator on ArcGIS Server 10

Data resources required for deploying World Places Locator are found on the DVD containing the World Places Locator dataset:

- The Locators folder contains three files:
 - worldplaces.loc
 - worldplaces.loc.xml
 - worldplaces.loc
- The help PDF file has information for deploying World Places Locator on ArcGIS Server.

 **Note:** If you are planning to upgrade to ArcGIS 10.1 or 10.2 for Server, or if you are already using 10.1 or 10.2, refer to the instructions for [Deploying World Places Locator on ArcGIS 10.1 or 10.2 for Server](#).


The following instructions are available to assist you in deploying World Places Locator on your system:

- For details on prerequisites for using the data collections, see [Prerequisites](#).
- For information on supported environments, see [Requirements](#).
- If you previously used World Places Locator (ESRI_Places World) from Data Appliance World Collection 5.0 or an earlier version and you received a data collection upgrade for Data Appliance 5.1 for ArcGIS, you will need to [delete this service from ArcGIS Server 10](#).
- For deployment instructions, see [Adding World Places Locator on ArcGIS Server 10](#).

Prerequisites for ArcGIS Server 10

The following prerequisites must be met before you deploy Data Appliance 6.0 for ArcGIS World Places Locator to your GIS server:

- You must have ArcGIS Server 10 SP5 or later installed, configured, and running with the latest service packs installed. If ArcGIS Server 10 SP5 or later is not running or if you have problems with the installation, see ArcGIS Server 10 [.NET](#) or [Java](#) Help.

 **Note:** If you are planning to upgrade to ArcGIS 10.1 or 10.2 for Server, or if you are already using it, refer to the instructions for [Deploying World Places Locator on ArcGIS 10.1 or 10.2 for Server](#).

Requirements

Data Appliance 6.0 for ArcGIS World Places Locator is [tested and certified](#) to work in a number of environments. For information on supported environments, see [System requirements](#) for Data Appliance for ArcGIS on the ArcGIS Resources website.

Data Appliance for ArcGIS World Places Locator may work in other environments supported by ArcGIS Server, but Data Appliance for ArcGIS has not been tested and certified on those environments.

Deleting a geocode service on ArcGIS Server 10

If you previously used World Places Locator (ESRI_Places World) from Data Appliance World Collection 5.0 or an earlier version and you received a data collection upgrade for Data Appliance 6.0 for ArcGIS, you will need to delete this service from ArcGIS Server and [add it from the DVD](#) included with Data Appliance 6.0 for ArcGIS. This is necessary because the World Places Locator is no longer included on the data collection of drives; it is now shipped on a separate DVD included with Data Appliance.

The instructions below describe how to remove this geocode service from ArcGIS Server 10.

Steps:

1. Log in to ArcGIS Server using an account with administrative privileges.
2. Start ArcGIS Server Manager and log in using your ArcGIS for Server account.
3. In ArcGIS Server Manager, click the **Services** tab.
4. Check the check box next to the geocode service you want to remove, for example, `ESRI_Places_World`.
5. Optionally, pause the service by clicking **Pause** and check the check box again.
6. Click **Delete**.

Adding World Places Locator on ArcGIS Server 10

[World Places Locator \(ESRI_Places World\)](#) enables you to find world places.

Note: For information on supported environments, see [Requirements](#).

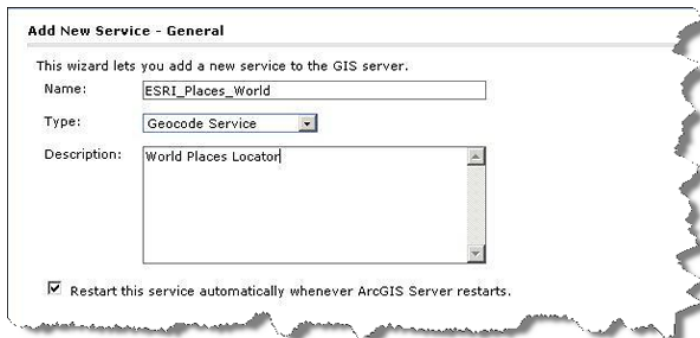
To use a locator, you need to deploy it using ArcGIS Server Manager. The following steps walk you through the deployment process for ArcGIS Server 10.

Steps:

1. Copy the worldplaces folder from the locators folder on the DVD to your GIS server, for example, to \\MyServer\locators\worldplaces. You can use Windows Copy and Paste tools or another copy utility.
2. Log in to ArcGIS Server using an account with administrative privileges.
3. Start ArcGIS Server Manager and log in using your ArcGIS Server account.
4. In ArcGIS Server Manager, click the **Services** tab.
5. Click **Add New Service**. You can create a service in the root folder or use the **Manage Folders** drop-down arrow to select another location for the new service.



6. On the **Add New Service** dialog box
 - a. In the **Name** field, enter the name of the geocode service, for example, `ESRI_Places_World`.
 - b. For **Type**, select **Geocode Service**. A Description can also be provided, if desired.
 - c. Make sure **Restart this service automatically** is checked and click **Next**.



7. On the **Parameters** dialog box
 - a. For the **Locator Name**, enter the name of the file with the .loc extension from the worldplaces folder copied to your GIS server in step 1, for example, `worldplaces.loc` or `worldplaces`.
 - b. For the **Location**, enter the path to the worldplaces folder copied to your GIS server in step 1, for example, `C:\arcgisserver\locators\worldplaces`.
 - c. Change **Batch Size** to 0 since it is not meant for batch geocoding and click **Next**.
8. On the **Capabilities** dialog box
 - a. Make sure **Geocoding (always enabled)** is checked.

- b. Check **Enable Web Access**.
 - c. Under **Operations Allowed**, check **Geocode**. Make sure **ReverseGeocode** is not checked and click **Next**.
 9. On the **Pooling** dialog box, set the time-out and pooling options and click **Next**.
 10. On the **Processes** dialog box, set the process isolation and recycle time and click **Next**.
 11. On the **Summary** dialog box, review the information for the service you created and click **Finish** to create the service and start using it.

Using a geocode service in ArcGIS

After you have added the World Places Locator service to your ArcGIS Server, you are ready to use it.

If you're using ArcGIS 10.2, see [Geocode services](#) in ArcGIS 10.2 for Server (Windows) Help under **Services > ArcGIS for Server (Windows) > Publishing services > Types of services** or [Geocode services](#) in ArcGIS 10.2 for Server (Linux) Help under **Services > ArcGIS for Server (Linux) > Publishing services > Types of services** for more information.

If you're using ArcGIS 10.1, see [Geocode services](#) in ArcGIS 10.1 for Server (Windows) Help under **Services > ArcGIS for Server (Windows) > Publishing services > Types of services** or [Geocode services](#) in ArcGIS 10.1 for Server (Linux) Help under **Services > ArcGIS for Server (Linux) > Publishing services > Types of services** for more information.

If you're using ArcGIS 10, see [Geocode services](#) in Desktop 10 Help under **Professional Library > ArcGIS Server > Publishing services > Types of services** for more information.

ArcGIS for Desktop

ArcGIS 10.2 for Desktop

You can load a locator into ArcMap and use it to find places.

For information on managing geocode services in ArcMap, see [About managing address locators](#) in ArcGIS Help 10.2 under **Guide books > Geocoding > Building an address locator**.

For information on using geocode services in ArcMap 10.2, see [About finding an address](#) in ArcGIS Help 10.2 under **Guide books > Geocoding > Locating addresses**.

ArcGIS 10.1 for Desktop

You can load a locator into ArcMap and use it to find places.

For information on managing geocode services in ArcMap, see [About managing address locators](#) in ArcGIS Help 10.1 under **Guide books > Geocoding > Building an address locator**.

For information on using geocode services in ArcMap 10.1, see [About finding an address](#) in ArcGIS Help 10.1 under **Guide books > Geocoding > Locating addresses**.

ArcGIS Desktop 10

You can load a locator into ArcMap and use it to find places.

For information on managing geocode services in ArcMap, see [About managing address locators](#) in Desktop 10 Help under **Professional Library > Guide books > Geocoding > Building an address locator**.

For information on using geocode services in ArcMap, see [About finding an address](#) in Desktop 10 Help under **Professional Library > Guide books > Geocoding > Locating addresses**.

ArcGIS Explorer

You can change the find places functionality of ArcGIS Explorer to use World Places Locator.

For information on how to select custom resources, see [Custom resources](#) in ArcGIS Explorer Help under **Application configurations: Customizing and deploying Explorer > Setting your configuration's properties**.

For information on how to use geocode services in ArcGIS Explorer, see [Find Places, Addresses, or Locations](#) in ArcGIS Explorer Help under **Finding > Places, addresses, or locations**.

ArcGIS for Server

ArcGIS 10.2 for Server

For information on using the locator with ArcGIS for Server, see [Geocode services](#) in ArcGIS 10.2 for Server (Windows) Help under **Services > ArcGIS for Server (Windows) > Publishing services > Types of services** or [Geocode services](#) in ArcGIS 10.2 for Server (Linux) Help under **Services > ArcGIS for Server (Linux) > Publishing services > Types of services**.

ArcGIS 10.1 for Server

For information on using the locator with ArcGIS for Server, see [Geocode services](#) in ArcGIS 10.1 for Server (Windows) Help under **Services > ArcGIS for Server (Windows) > Publishing services > Types of services** or [Geocode services](#) in ArcGIS 10.1 for Server (Linux) Help under **Services > ArcGIS for Server (Linux) > Publishing services > Types of services**.

ArcGIS Server 10

For information on using the locator with ArcGIS Server Manager, see [About the Find Address task](#) in ArcGIS Server 10 .NET Help under **Creating web applications > ArcGIS Server Manager > Configuring tasks > Find Address task** or [Find Address task](#) in ArcGIS Server 10 Java Help under **Creating web applications > ArcGIS Server Manager > Configuring tasks**.

For information on using geocode services with ArcGIS Server Manager, see **Developing with ArcGIS Server: An overview in ArcGIS Server 10 .NET** or [Java](#) Help.

ArcGIS APIs and SDKs

ArcGIS API for Flex, JavaScript, or Silverlight, REST API, and ArcGIS Mobile SDK users can take advantage of World Places Locator in applications. Details for implementing a geocoding service are available in the [ArcGIS for Developers](#) documentation.

Support

For the latest information on Data Appliance for ArcGIS, see the [ArcGIS Content Resource Center](#).

Esri support

For questions regarding the configuration and setup of ArcGIS services and usage, contact the following:

United States users—Support will be provided by [Esri Technical Support](#). Use the following contact options:

- **Phone:** 1-888-377-4575
- **Email:** support@esri.com
- **Hours:** Monday through Friday, 5:00 a.m. to 5:00 p.m. Pacific time (excluding Esri holidays)

International users—Support will be provided by your [local Esri distributor](#).

Cutting Edge Networked Storage support

For questions and support regarding Data Appliance for ArcGIS hardware, contact Cutting Edge Networked Storage using the following options:

- **Phone:** 1-800-257-1666
- **Email:** support@cuttedge.com
- **Web page:** http://www.cuttedge.com/contact/technical_support.html
- **Hours:** Monday through Friday, 8:00 a.m. to 5:00 p.m. (Pacific time)

Copyright information

Copyright(C) 1995-2013 Esri

All rights reserved

Visit Esri's [Copyright and Trademarks Web site](#)

The information contained in this document is the exclusive property of Esri and its licensor(s). 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: Contracts and Legal Services Manager, Esri, 380 New York Street, Redlands, CA 92373-8100, USA

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

U.S. Government Restricted/Limited Rights

Any software, documentation, and/or data delivered hereunder is subject to the terms of the License Agreement. The commercial license rights in the License Agreement strictly govern Licensee's use, reproduction, or disclosure of the software, data, and documentation. In no event shall the U.S. Government acquire greater than RESTRICTED/LIMITED RIGHTS. At a minimum, use, duplication, or disclosure by the U.S. Government is subject to restrictions as set forth in FAR §52.227-14 Alternates I, II, and III (DEC 2007); FAR §52.227-19(b) (DEC 2007) and/or FAR §12.211/12.212 (Commercial Technical Data/Computer Software); and DFARS §252.227-7015 (NOV 1995) (Technical Data) and/or DFARS §227.7202 (Computer Software), as applicable. Contractor/Manufacturer is Esri, 380 New York Street, Redlands, CA 92373-8100 USA.

Esri Trademarks

@esri.com, 3D Analyst, ACORN, Address Coder, ADF, AML, ArcAtlas, ArcCAD, ArcCatalog, ArcCOGO, ArcData, ArcDoc, ArcEdit, ArcEditor, ArcEurope, ArcExplorer, ArcExpress, ArcGIS, ArcGlobe, ArcGrid, ArcIMS, ARC/INFO, ArcInfo, ArcInfo Librarian, ArcInfo—Professional GIS, ArcInfo—The World's GIS, ArcLessons, ArcLocation, ArcLogistics, ArcMap, ArcNetwork, ArcNews, ArcObjects, ArcOpen, ArcPad, ArcPlot, ArcPress, ArcQuest, ArcReader, ArcScan, ArcScene, ArcSchool, ArcScripts, ArcSDE, ArcSdl, ArcSketch, ArcStorm, ArcSurvey, ArcTIN, ArcToolbox, ArcTools, ArcUSA, ArcUser, ArcView, ArcVoyager, ArcWatch, ArcWeb, ArcWorld, ArcXML, Atlas GIS, AtlasWare, Avenue, BAO, Business Analyst, Business Analyst Online, BusinessMAP, CommunityInfo, Data Automation Kit, Database Integrator, DBI Kit, EDN, Esri, Esri—Team GIS, Esri—The GIS Company, Esri—The GIS People, Esri—The GIS Software Leader, FormEdit, GeoCollector, Geographic Design System, Geography Matters, Geography Network, GIS by Esri, GIS Day, GIS for Everyone, GISData Server, JTX, MapBeans, MapCafé, MapData, MapIt, Maplex, MapObjects, ModelBuilder, MOLE, MPS—Atlas, NetEngine, PC ARC/INFO, PC ARCPLOT, PC ARCSHELL, PC DATA CONVERSION, PC STARTER KIT, PC TABLES, PC ARCEDIT, PC NETWORK, PC OVERLAY, PLTS, Rent-a-Tech, RouteMAP, SDE, Site•Reporter, SML, Sourcebook•America, Spatial Database Engine, StreetEditor, StreetMap, Tapestry, the ARC/INFO logo, the ArcAtlas logo, the ArcCAD logo, the ArcCAD WorkBench logo, the ArcCOGO logo, the ArcData logo, the ArcData Online logo, the ArcEdit logo, the ArcEurope logo, the ArcExplorer logo, the ArcExpress logo, the ArcGIS logo, the ArcGIS Explorer logo, the ArcGrid logo, the ArcIMS logo, the ArcInfo logo, the ArcLogistics Route logo, the ArcNetwork logo, the ArcPad logo, the ArcPlot logo, the ArcPress for ArcView logo, the ArcPress logo, the ArcScan logo, the ArcScene logo, the ArcSDE CAD Client logo, the ArcSDE logo, the ArcStorm logo, the ArcTIN logo, the ArcTools logo, the ArcUSA logo, the ArcView 3D Analyst logo, the ArcView Data Publisher logo, the ArcView GIS logo, the ArcView Image Analysis logo, the ArcView Internet Map Server logo, the ArcView logo, the ArcView Network Analyst logo, the ArcView Spatial Analyst logo, the ArcView StreetMap 2000 logo, the ArcView StreetMap logo, the ArcView Tracking Analyst logo, the ArcWorld logo, the Atlas GIS logo, the Avenue logo, the BusinessMAP logo, the Data Automation Kit logo, the Digital Chart of the World logo, the Esri Data logo, the Esri globe logo, the Esri Press logo, the Geography Network logo, the GIS Day logo, the MapCafé logo, the MapObjects Internet Map Server logo, the MapObjects logo, the MOLE logo, the NetEngine logo, the PC ARC/INFO logo, the Production Line Tool Set logo, the RouteMAP IMS logo, the RouteMAP logo, the SDE logo, The Geographic Advantage, The Geographic Approach, The World's Leading Desktop GIS, Water Writes, www.esri.com, www.geographynetwork.com, www.gis.com, www.gisday.com, and Your Personal Geographic Information System are trademarks, registered trademarks, or service marks of Esri in the United States, the European Community, or certain other jurisdictions.

Other companies and products mentioned herein may be trademarks or registered trademarks of their respective trademark owners.