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## Welcome to ArcReader and ArcGIS Publisher



#### IN THIS CHAPTER

- Sharing information
- Viewing maps
- Exploring data
- Printing maps
- Publishing maps with ArcGIS Publisher
- Tips on learning ArcReader and ArcGIS Publisher

Welcome to ArcReader<sup>TM</sup> and the ArcGIS<sup>TM</sup> ArcMap<sup>TM</sup> Publisher extension—tools for sharing maps designed in ArcMap. Have you ever wanted to share an ArcMap map document with others, only to find out that those you want to share the map with do not have ArcMap?

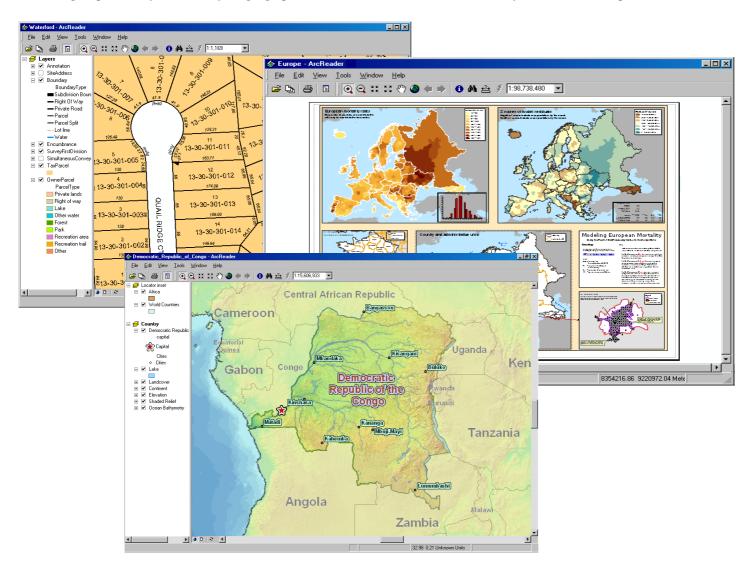
ArcReader and the ArcGIS ArcMap Publisher extension provide an environment for sharing and distributing maps. Publisher converts ArcMap map documents into the published map file format (.pmf). These published maps can then be shared with ArcReader users. With ArcReader you can:

- View published maps.
- · Explore data.
- Experience dynamic mapping.
- · Print maps.

This books shows you how to use ArcReader and Publisher so you can effectively use published maps or share your maps.

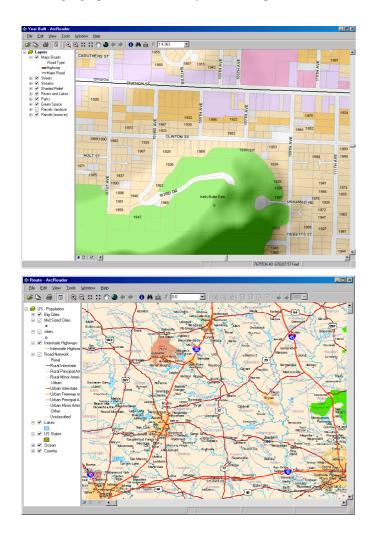
#### Sharing information

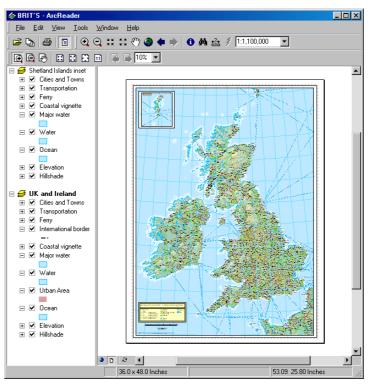
Publishing maps allows you to share your geographic information with ArcReader users, as you see it in ArcMap.



#### Viewing maps

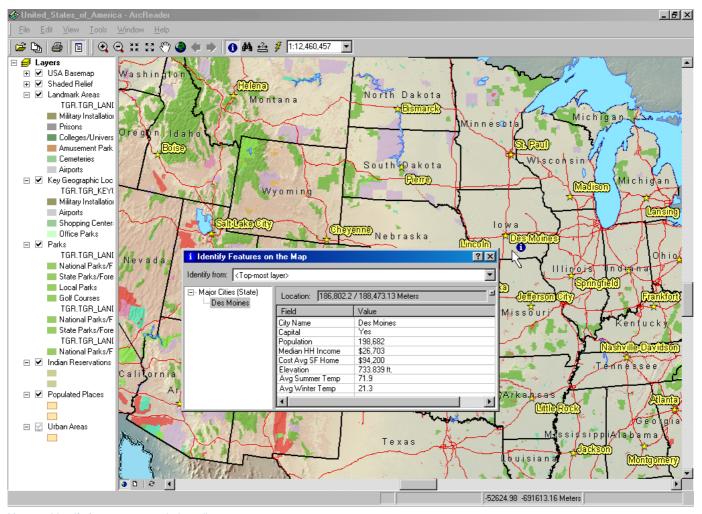
Sometimes just looking at a map will tell you what you want to know. Well-designed maps not only tell you where things are but also what's special about them. ArcReader displays maps as they appear in ArcMap, with the same high-end cartographic symbols and map elements geographic information system (GIS) professionals are accustomed to.





#### Exploring data

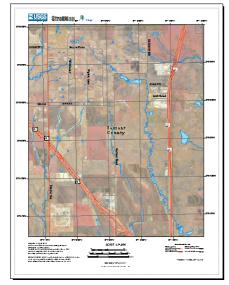
Maps are not static displays; they're interactive. You can browse a map—taking a closer look at a particular area—and point at features to find out more about them.



You can identify features to see their attributes.

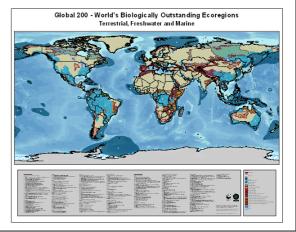
### Printing maps

Use ArcReader to display published maps and print the maps as you see them. You can choose to print the full layout, as it was published, or zoom to a location and just print that portion of the map.





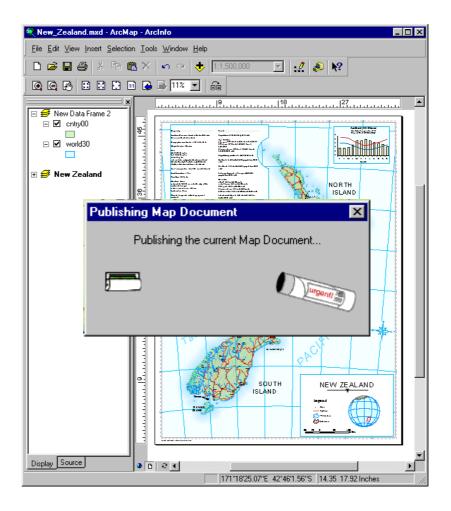




#### Publishing maps with ArcGIS Publisher

You can publish any ArcMap map document. All of the map elements and symbology are published along with references to the data. Maps based on file, server, and Internet data can all be published. You can even deliver the data with the published map.





#### Tips on learning ArcReader and ArcGIS Publisher

If you're new to GIS and maps, remember that you don't have to learn everything about ArcReader to get immediate results. Begin learning ArcReader by reading Chapter 2, 'Quick-start tutorial'. This chapter shows you how quickly and easily you can explore a map and gain valuable information. ArcReader comes with the map used in the tutorial, so you can follow along step by step at your computer. You can also read the tutorial without using your computer.

#### Finding answers to questions

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

#### Getting help on your computer

In addition to this book, the ArcMap and ArcReader online Help systems are a valuable resource for learning how to use the software. To learn how to use Help, see Chapter 3, 'ArcReader basics'

#### **Contacting ESRI**

You can also visit ESRI on the Web at www.esri.com for more information on ArcReader, Publisher, and ArcGIS.

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# Quick-start tutorial

2

#### IN THIS CHAPTER

• Exercise 1: Viewing a map

• Exercise 2: Querying a map

• Exercise 3: Printing a map

The best way to learn ArcReader is to try it yourself. This tutorial guides you through some basic ArcReader skills as you explore a map.

Before you begin, install the ArcReader Tutorial data. To install it, run the Tutorial setup during the ArcReader installation or independently. For more information on how to install tutorial data, see the install guide.

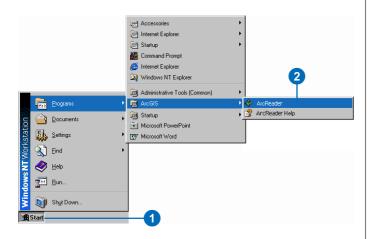
In this tutorial you will learn to use ArcReader tools for viewing, querying, and printing a published map.

#### Exercise 1: Viewing a map

In this exercise, you will open and explore a published map with ArcReader. You will also use ArcReader to find out information about the data on the map.

#### **Starting ArcReader**

- 1. Click Start on the Windows taskbar.
- Click Programs, point to ArcGIS, and click ArcReader. ArcReader opens.



#### Opening an existing published map

1. Click File and click Open.

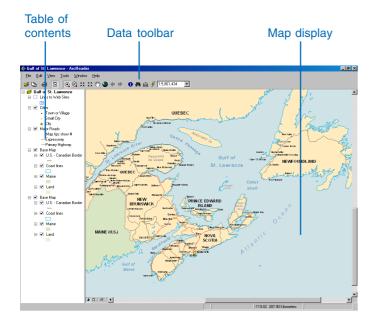


2. Click the Look in dropdown arrow, and navigate to the Map folder on the local drive where you installed the tutorial.



3. Double-click Gulf of St. Lawrence.pmf. ArcReader opens the map.

ArcReader can open published map files (.pmf), which have been created in ArcMap using the ArcGIS Publisher extension. These published maps do not actually store the data shown on the map, but rather reference the data, which may be stored on a local disk, on another computer, or on the Internet. The map document stores map elements such as titles, scale bars, and North arrows.



This particular map contains the following layers in a data frame named Gulf of St. Lawrence:

#### Layers

Links to Web Sites 
Internet addresses

Cities Locations of population centers

Major Roads Locations of expressways and

primary highways

Base Map Contains land and coastline line

layers

A *data frame* is a frame on the map that displays all layers within a geographic extent.

The map portrays the Gulf of St. Lawrence and the surrounding region. Notice that there are check boxes next to each layer name in the table of contents. All layers with a check are drawn in the map display area.

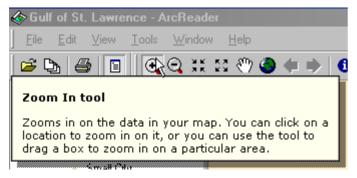
#### **Moving Around a map**

The Data toolbar has tools to move around the map and query the features on the map. Move your cursor over each icon (without clicking) to see the name of each tool. The name is displayed in a tool tip. This tutorial will use these names to refer to specific buttons and tools. When you interact with the map, one of these tools will be active, and the pointer will change to that tool when moved over the map.



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If you need more information about how a tool or command works, press Shift+F1 on your keyboard while hovering over the tool with the mouse.



Context-sensitive help for the Zoom In tool is shown above.

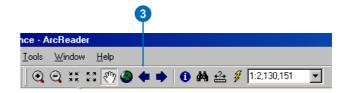
 Click the Zoom In tool, then click and drag a box around Anticosti Island and a portion of the St. Lawrence River. This will make it easier to read the labels and see where the cities and roads are located.



Using the Pan tool you can interactively recenter the map. Click the Pan tool, then click on the map and hold down the left mouse button to drag the display in any direction.



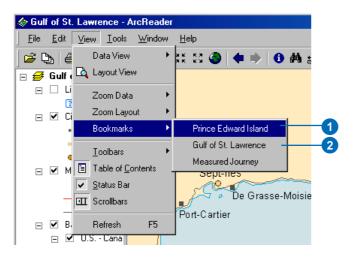
3. The Go Back and Go Next buttons can be used to revisit any of the places you have zoomed or panned to. Click the Go Back button now to view the previous map extent.



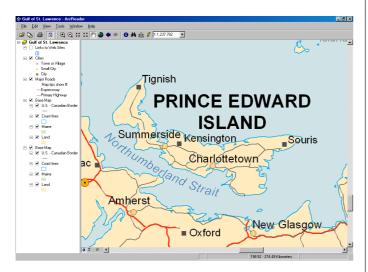
#### **Using bookmarks**

Bookmarks are named map extents created by the publisher of the map. The publisher zooms to a specific view of the map and saves it for future use. You can access the publisher's saved extents by selecting Bookmarks.

1. Click the View tab, point to Bookmarks, and click Prince Edward Island.



The map now shows Prince Edward Island.



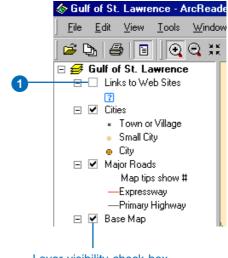
2. Click the View tab, point to Bookmarks, and click Gulf of St. Lawrence to reset the map to its original display.

#### Turning layers on and off

The table of contents is where you turn layers on and off on the map. To display a layer, check the box next to its name. To turn it off, uncheck it.

- 1. Check Links to Web Sites. Notice the blue question mark symbols now draw on the map.
- 2. Uncheck the Links to Web Sites.

Notice that the layer is turned off and no longer displays on the map.



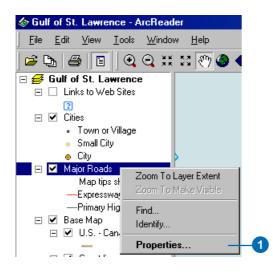
Layer visibility check box

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#### **Getting information about layers**

Each of the layers in a map has a set of properties that can be viewed, allowing you to learn what features are available for that layer.

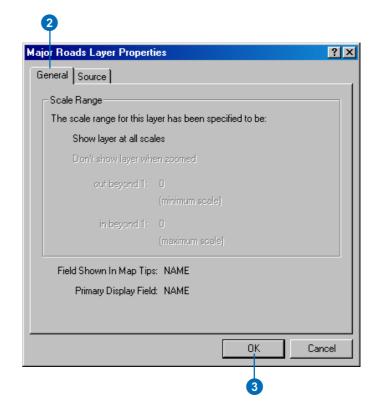
1. In the table of contents, right-click Major Roads and click Properties.



2. Click the General tab.

You can see whether the layer is displayed at all scales or only within a specific range of scales and whether Map Tips have been enabled for the layer. Map Tips are onscreen descriptions of map features that appear when you pause the mouse pointer over a feature. Later in this tutorial you will use Map Tips from this layer.

3. Click OK and close the Layer Properties window.



#### **Using the Magnifier Window**

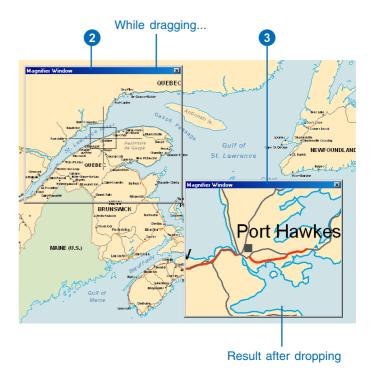
There are times when you may not want to change the location displayed on the map, but still need to see more detail. The ArcReader Magnifier Window allows you to do this.

Click Window and click Magnifier.
 The Magnifier Window opens.



2. Click on the title bar of the Magnifier Window and drag it over the map. When you are dragging it, the Magnifier Window will show a crosshair to indicate the part of the display that will be magnified.

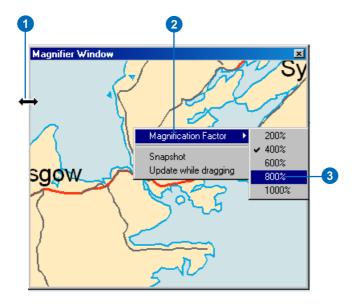
3. When the crosshair is over the portion of the map you would like to magnify, release the mouse button. You will see a magnified view of the location under the magnifier.



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You can change several of the Magnifier Window properties.

- 1. Move your cursor near the edge of the Magnifier Window, then click and drag the cursor in the direction you want to resize the window (make it a little larger).
- 2. Place your cursor in the middle of the Magnifier Window and right-click.
- 3. Point to Magnification Factor and click 800% (or another factor). This will scale the data displayed in the Magnifier Window by the percentage chosen.



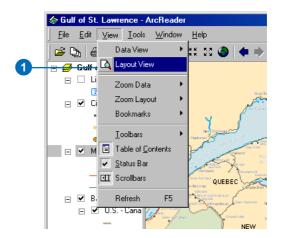
4. Right-click in the Magnifier Window and click Snapshot. Move the Magnifier Window somewhere else; notice that the picture doesn't change, keeping your snapshot.

When you have finished experimenting with the magnifier, close it.

#### **Data view and Layout view**

ArcReader is capable of displaying a map in either Data view or Layout view. Up to this point this tutorial has been using Data view. Data view shows the contents of a data frame. Layout view shows the map as it would appear on a printed page. Layout view also shows map elements that are not contained within the data frame, such as the map title, legend, scale bar, and North arrow.

1. Click the View tab and click Layout View.



Now the page for this map is displayed. Notice the page includes a title, legend, scale bars, and some supporting text. Also displayed is the Layout toolbar, which contains tools for navigating the Layout view. Move your cursor over each icon (without clicking) to see the name of each tool. These tools are used like the tools in the Data toolbar. They allow you to change the way the page is displayed. Notice that the data tools are still accessible for changing the view of the data within the data frame.

Page for map

Layout toolbar

Fig. 50 of 31 Lewrence Archaeler

Fig. 51 Sept. 10 of 31 Lewrence

Gulf of St. Lewrence

Late Web Sept.

Fig. 60 of 43 Lewrence

Fig. 60 of 51 L

There is a shortcut in ArcReader for switching between Data and Layout view. In the scrollbar near the bottom of the map, there are three small buttons. Clicking the globe switches to Data view, clicking the page switches to page view, and clicking the arrows redraws the map.

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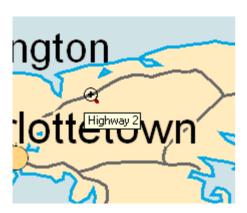
#### Exercise 2: Querying a map

A map viewed with ArcReader typically contains more information than what you initially see. For example, a feature may hold attribute information that is not labeled or displayed on the map. With ArcReader you can query that information or use the information to find a feature on the map.

#### **Using map tips**

The most readily accessible kind of information comes in the form of map tips. A map tip is an attribute chosen by the map publisher that is displayed when a tool is placed over a feature on the map. Map tips are only visible while in Data view.

- 1. Click the Data view button.
- 2. Click a data tool and hover over a road to see its name.



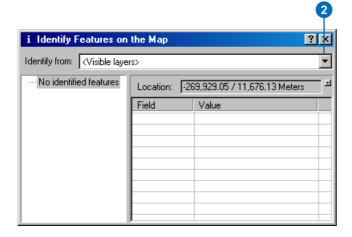
The Major Roads layers is the only layer in this map that has map tips enabled. You can tell if a layer has map tips by right-clicking the layer name in the table of contents and looking at the General tab on the properties dialog box.

#### Identifying a location

You can use the Identify tool to get two kinds of information—you can see what features are at a specific location and also investigate the attributes of each feature.

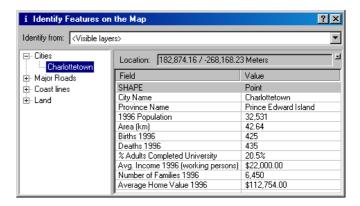
- Click the Identify tool.
   The Identify window opens.
- 2. Click the Identify from dropdown list and click <Visible layers>.





- 3. From the View menu click Bookmarks and click Prince Edward Island.
- 4. Click on the dot that represents the city of Charlottetown.



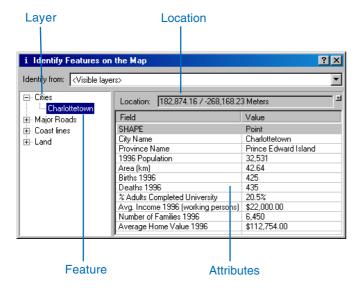


Notice that the Identify tool located information about Charlottetown but also information about the Major Roads, Coast lines, and Land. The identify results include all visible layers.

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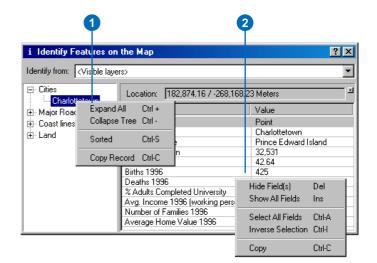
#### Identifying window commands

You can right-click on features, layer names, or their information to get options for working with that information.

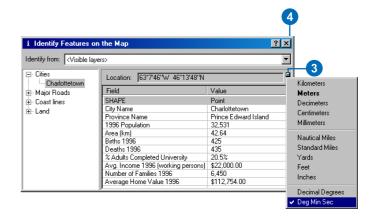


- 1. Right-click on a layer or feature to organize the Identify tree or copy a record.
- 2. Right-click on the field values to hide, select, or copy the feature attributes.

If you click Copy, you can then paste the information into another application such as a text editor or spreadsheet.



- 3. Click the mini button to access a menu that will allow you to display the location of the city in the units of your choice.
- 4. Close the Identify window.



#### Finding a location

In ArcReader it is easy to find a feature based on a name or value.

1. Click the Find tool.

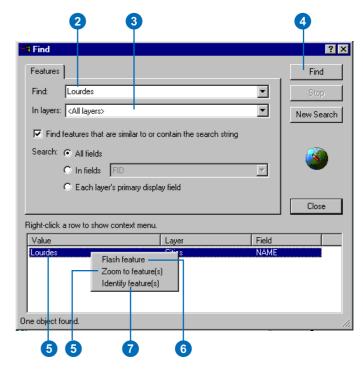
The Find window will appear.



- 2. In the Find text box, type "Lourdes".
- 3. Make sure the In layers dropdown box shows <All layers>.
- 4. Click the Find button. (ArcReader will locate the city called Lourdes and show it as a row in the results section of the window.)

Once you've found a place, you can use the Find dialog results to navigate to or learn about the feature.

- 5. In the Find dialog results, right-click on Lourdes and click Zoom to feature(s). ArcReader displays the city of Lourdes.
- 6. In the Find dialog results, right-click on Lourdes and choose Flash feature. It will flash



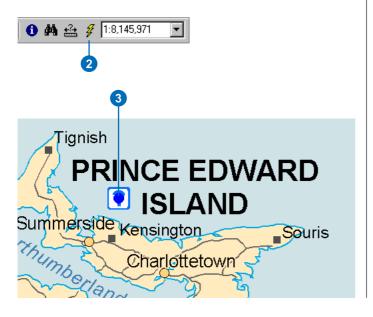
- 7. Right-click on Lourdes and choose Identify feature(s) to see all of the attribute information for the city of Lourdes.
- 8. When you are ready to continue, close the Identify tool and the Find window.

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#### Using hyperlinks

Maps viewed with ArcReader may have hyperlinks to provide additional information about certain features. The Gulf of St. Lawrence map contains hyperlinks in the Links to Web Sites layer. Hyperlinks are only available in Data view, and you will need an Internet connection to use this tool. Select the Prince Edward Island bookmark and continue with the exercise.

- 1. Turn the Links to Web Sites layer on by checking it in the table of contents. You should see a blue question mark appear on the screen.
- 2. On the Data toolbar click the Hyperlink tool to activate it. Notice that a blue dot appears on the question mark. This blue color is used to indicate hyperlinked features. The Links to Web Sites layer is the only layer with hyperlinks in this map.



3. Click on the center of the blue dot hyperlink to the left of the Prince Edward Island label. This opens up your default Internet browser and displays the official Web site of the Government of Prince Edward Island, Canada, where you can learn more about Prince Edward Island.

#### **Measuring distance**

You can easily measure distances in ArcReader. The ArcReader Measure tool allows you to see how far apart two places are or even plot a route and check its distance.

- 1. From the View menu click Bookmarks and click Measured Journey.
- 2. In the Data toolbar click the Measure tool.
- Starting at Port-Cartier (in the upper center of the map)
  plot a course through the Gaspé Passage and on to Cape
  St. George by clicking each time you want to change
  directions.

There are a couple things to notice as you do this. First, on the ArcReader status bar in the lower left, you will see the current segment's length. Second, you will see the total distance you have measured.

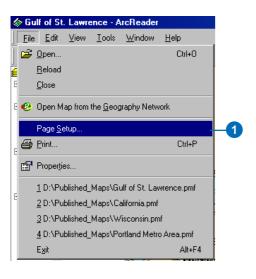


4. Double-click on Cape St. George to finish measuring.

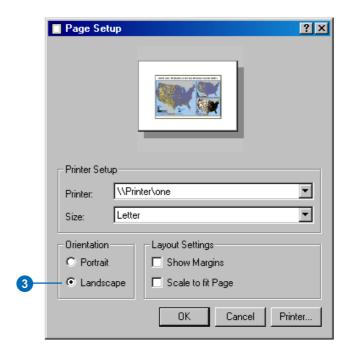
#### Exercise 3: Printing a map

To perform the following steps, you will need to have a printer available. The printer should be able to print a letter size (or A4) sheet of paper and can be either a black and white or color printer.

1. From the ArcReader File menu choose Page Setup. (The Page Setup window should open; this is where you can change which printer you are using or change the most common settings for that printer.)



- 2. If you have a desired printer as your default printer, skip to Step 3. Otherwise, click Printer in the Page Setup dialog box and choose an appropriate printer.
- 3. Under Orientation, click Landscape.
- 4. Under Printer Setup, make sure the Size is set to Letter (or A4).
- 5. Click OK.



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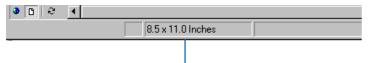
#### Printing a map

1. Switch to Layout view.

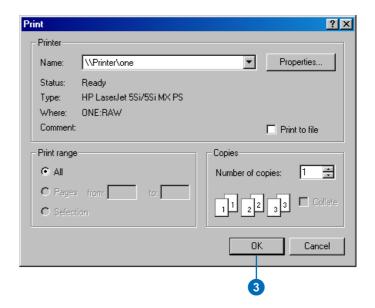
It is important to switch to Layout view because printing is a bit different depending on the view. Printing in Data view will print the currently displayed data frame at the current extent to the selected paper size. The printed data will be scaled to fit the page size selected in Page Setup. When printing from Layout view the entire published page is printed.

- 2. From the File menu choose Print.
- 3. Click OK to print the map.

The Gulf of St. Lawrence map was published with a landscape page size of 8.5 x 11 inches. It is possible to print this map to a larger or smaller paper size by checking the Fit to page check box in the Page Setup dialog box. The map will scale up or down to fit the page.



In Layout view the original page size is displayed on the status bar.



In this chapter you have been introduced to viewing, querying, and printing published maps with ArcReader. The next chapter provides more detail on these tasks and introduces information about published maps and their use in ArcReader.

## **ArcReader basics**

#### IN THIS CHAPTER

- Starting ArcReader
- Opening a map
- The ArcReader window
- The table of contents, data frames, and layers
- Looking at a map in Data view and Layout view
- Moving around on the map
- Using bookmarks
- Using the magnifier
- Exploring data on a map
- Using bookmarks
- Printing
- Getting help

In ArcReader you work with published maps. Maps help you visualize geographic data by showing you where things are, telling you what they are, and helping you understand why they are that way.

Published maps serve a variety of purposes. Some maps are interactive and meant to be browsed, others are formatted for printing, and some are created for both purposes. Every map can have a unique look—including both its graphic layout and interface—tailored to those who will ultimately use the map.

#### Starting ArcReader

Starting ArcReader is the first step to exploring a published map.

Before you can start, ArcReader must be installed on your computer.

Once the software is installed, you can access ArcReader from the Start button on the Windows taskbar. Each ArcReader session can display one map at a time. You can work with several maps by starting additional ArcReader sessions.

#### Tip

# Starting ArcReader by opening an existing published map

Double-clicking a map in Windows Explorer will launch ArcReader and display the map.

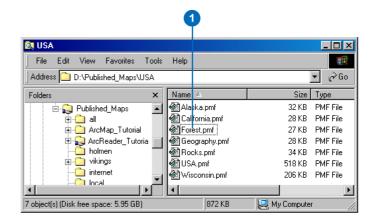
## Starting ArcReader from the Start menu

 Click Start on the Windows taskbar, click Programs, point to ArcGIS, and click ArcReader.



# Starting ArcReader from the Windows Explorer browser

1. Double-click the published map.



#### Opening a map

To work with a map, open it in ArcReader. If you know its location on disk, you can navigate to it and double-click the map. If you already have ArcReader running, you can open it directly within that session using the file browser.

A map doesn't store the spatial data displayed on it. Instead, it stores references to the location of these data sources—for example, geodatabases, coverages, shapefiles, and rasters—on disk or on the Internet. When you open a map, ArcReader checks the links to the data. If it can't find some data—for instance, if the source data for a layer has been deleted or renamed, a network drive is not accessible. or a Web server is down-ArcReader displays a red exclamation point next to the layer name. The layer will still be part of the map and listed in the table of contents, but it won't be displayed.

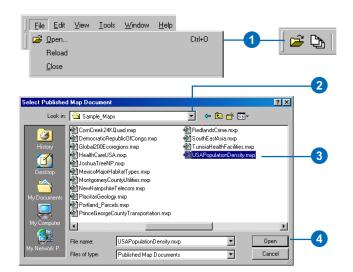
#### Tip

## Setting the number of files in the recent file list

You can control the number of files displayed in the recent file list in the Options dialog box. Open the Options dialog box on the Tools menu.

## Opening a map from ArcReader

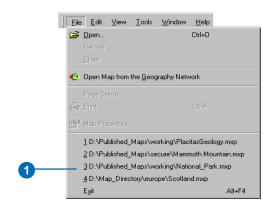
- Click the Open button on the Standard toolbar or click File and click Open.
- Click the Look in dropdown arrow and navigate to the folder that contains the map.
- 3. Click the map you want to open.
- 4. Click Open.



## Opening a recently opened map

 Click File and click a map from the list of recently opened maps.

You can also use the Recent Files button on the File toolbar.



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#### Tip

## Turn off ArcReader Messages

There is a check box on each message that can be used to turn off the messages. It is possible to turn the messaging back on in the Options dialog box located on the Tools menu.

#### Tip

# Why does the interface change when I open a map?

Every map can have its own interface. The map publisher decides how the map will display and what ArcReader functionality will be available for use with the map. Use the Map Properties dialog box to find out if the author published the map with special settings.

#### Tip

## Working with one map at a time

You can only work with one map at a time in an ArcReader session. ArcReader will close any open map before opening another one.

#### Tip

# What does an asterisk mean next to the map name on the title bar?

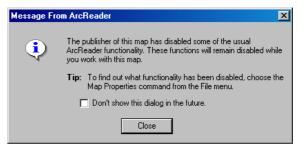
An asterisk signals that the map has been republished. Reload the map from the File menu to see the latest revision of the map.

# Interpreting the ArcReader information warning messages

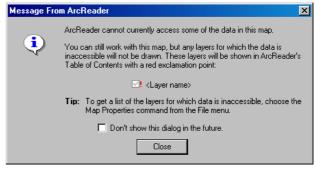
1. Open a map.

Sometimes when you open a map, you get a Message From ArcReader. The message alerts you to ArcReader functionality that has been disabled by the map author or inaccessible data.

Both messages refer you to the Map Properties dialog box located on the File menu for more information.



When you see this message some functionality is not available in the map.



When you see this message the data is unavailable for display.

# Opening the General tab on the Map Properties dialog box

1. Click File and click Map Properties.

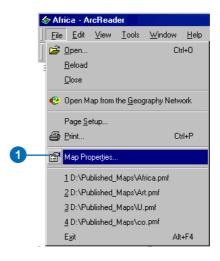
The Map Properties dialog box opens.

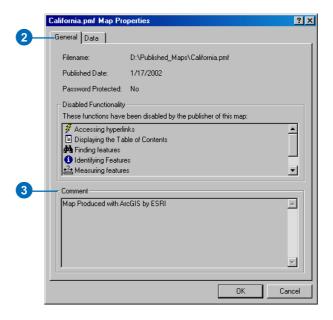
2. Click the General tab.

The General tab shows a list of disabled tools and commands set by the map author.

Disabled functionality is listed on the General tab. The listed tools and commands will not be enabled for use with the map.

 The Comment section on the General tab is a place where the publisher may include information about the map.





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#### Tip

#### Broken data links

If you see a red exclamation point next to the layer name in the table of contents, the link to the layer's data source is broken. The map is unable to connect to the data.

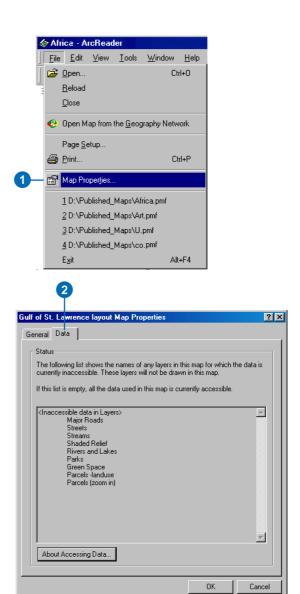
## Finding the status of the data for layers in the map

1. Click File and click Map Properties.

The Map Properties dialog box opens.

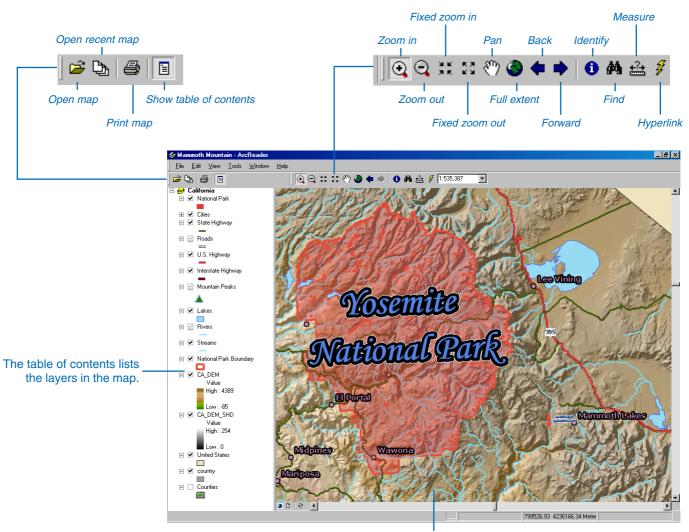
2. Click the Data tab.

The Data tab lists layers that are inaccessible. Check here to see the names of the broken layers. Since a broken layer cannot be published in a map, something has happened to the data, or ArcReader is unable to connect to the data.



Click About Accessing Data to learn more about broken layers and data access.

#### The ArcReader window



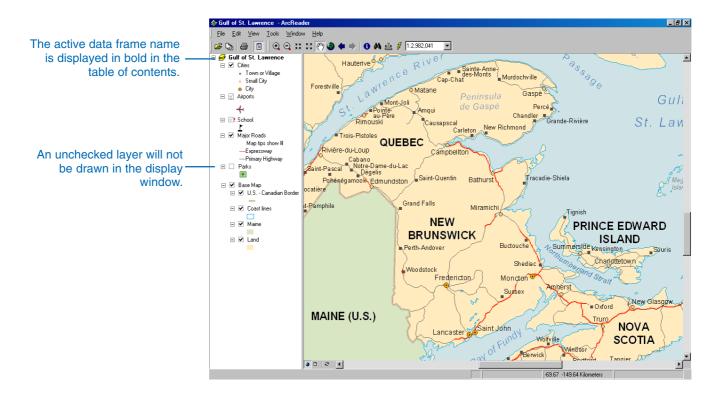
The layers are drawn on the map display.

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#### The table of contents, data frames, and layers

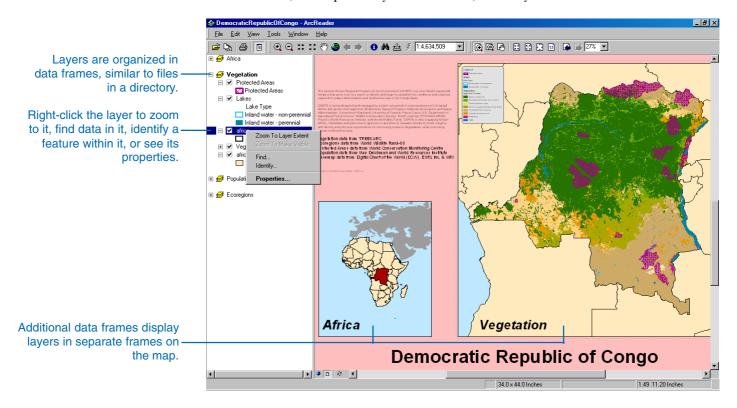
A published map is a graphical representation of geographic data. Geographic information on a map is displayed as *layers*, where each layer represents a particular type of *feature*, such as streams, lakes, highways, political boundaries, or wildlife habitats. A layer doesn't store the actual geographic data; instead, it references data stored on a computer. Referencing data in this way allows the layers on a map to automatically reflect the most up-to-date information in a GIS database.

The *table of contents* lists all the layers on the map and shows what the features in each layer represent. The check box next to each layer indicates whether it is currently turned on or off (that is, whether it is currently drawn on the map or not). The order of layers within the table of contents is also important; the layers at the top draw on top of those below them.



Layers in the table of contents can be further organized into *data frames*. A data frame simply groups, in a separate frame, the layers that are displayed together.

When a map has more than one data frame, one of them is the *active data frame*. The active data frame is the one you're currently working with. You can always tell which data frame is active because it's highlighted on the map with a hatched frame, and its name is shown in bold text in the table of contents. Of course, if a map has only one data frame, it's always the active one.



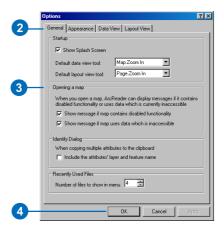
# Controlling the look and feel of ArcReader using the Options dialog box

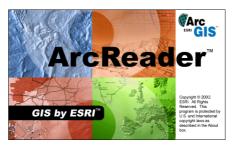
The General tab on the Options dialog box lets you control how ArcReader initially opens.

- 1. Click the Tools menu and click Options.
- 2. Click the General tab.
- Set behavior, such as displaying information messages, showing the splash screen, and setting default tools.
- 4. Click OK.

The changes will be in effect for current and future ArcReader sessions.







The appearance of the ArcReader splash screen and other settings can be controlled in the Options dialog box.

# Using the table of contents

Every map has a table of contents. The table of contents shows you what layers the map contains and also how the map symbolizes the geographic features in those layers.

Some maps display all the layers in one data frame. Others, such as those with insets and overviews, will have more than one data frame. The table of contents shows how the layers are organized into data frames.

When viewing a map, you'll use the table of contents primarily to turn layers on and off.

#### aiT

#### No table of contents?

The map author may have published the map with the table of contents turned off. To find out what other functionality may have been disabled by the map's author, look at Map Properties on the File menu.

#### Tip

## Click to interrupt the drawing of the layer

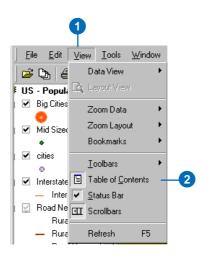
Click anywhere on ArcReader to stop the drawing process.

## Showing the table of contents

- 1. Click the View menu.
- 2. Click Table of Contents.

This command is used to toggle the table of contents on and off.

If the table of contents was disabled by the map's author, it cannot be turned back on.

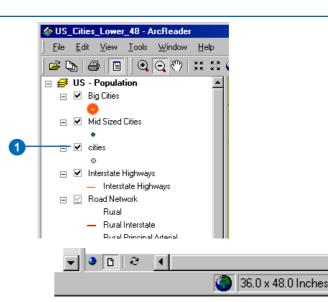


#### Turning a layer on or off

 In the table of contents, check the box next to the layer's name.

The layer should appear on your map. If you can't see the layer, it may be hidden by another layer or display only at a particular scale.

The spinning globe on the ArcReader status bar indicates the map is drawing.



The spinning globe on the ArcReader status bar indicates the map is drawing.

#### The data frame

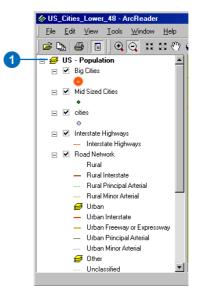
A data frame is a frame on the map that displays layers in the same geographic area. A map may have one or many data frames. For instance, one data frame might highlight a detailed road network, while another might provide an overview of where the detailed road network is within a larger geographic area

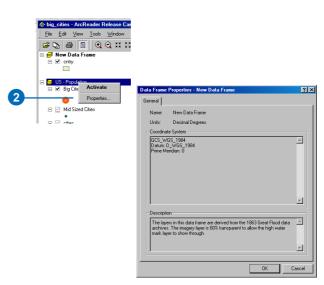
Data frames and layers are listed in the table of contents. The layers listed under a data frame in the table of contents are contained within the data frame on the map. Only one data frame can be viewed at a time in Data view. The data frame name appears in bold text in the table of contents when the data frame is active. All data frames in a map are visible in Layout view. Layout view shows all of the data frames as they appear on a page. The active data frame is highlighted with a hatched border.

# Showing the contents of a data frame in the table of contents

The active data frame is shown in bold.

- Click the plus or minus sign to the left of the data frame in the table of contents to show or hide the list of layers it contains.
- Right-click the data frame name and click Properties. The data frame dialog box shows information about the coordinate system and notes from the map author.





#### Why isn't my layer drawing?

The layer may have a visible scale range set. If you see a gray scalebar underneath the layer's check box in the table of contents. it's not drawing because it's outside of a visible scale range. You'll need to zoom in or out to see it

If you see a red exclamation point, the link to the layer's data source is broken. The map is unable to connect to the data.

#### Tip

#### Layer Properties provides helpful information

Right-click a layer and click Properties. The Properties dialog box is useful for determining why a layer will not draw.

Is a Scale Range Set? If so, what is it set to?

Can your computer connect to the source data?

#### Seeing a layer's properties

1. Right-click the layer name and click Properties.

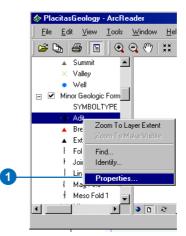
> The Layer Properties dialog box opens.

2. Click the General tab.

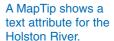
The General tab contains information about scale dependency. Scale dependency is used to draw features at various scales. Some data is too dense to show at small scales. When zooming to a larger scale, the data will draw.

3 Click the Source tab.

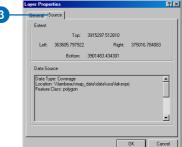
The Source tab displays information about the type, name, location, and coordinate system of the data source referenced by this layer. If the layer has a red exclamation point next to it in the table of contents. ArcReader is unable to connect to the source data.











The Source tab shows the data type and location.

# Looking at a map in Data view and Layout view

ArcReader provides two different ways to view a map: Data view and Layout view. Each view lets you look at and interact with the map in a specific way.

When you want to browse geographic data on your map, choose Data view. *Data view* displays the contents of a data frame. A data frame can be thought of as a container that holds a map's data. A map can have one or many data frames. Data view only shows one data frame at a time. The displayed data frame is referred to as the active data frame. This view also hides all the map elements on the layout—such as titles, North arrows, and scale bars.

When you want to see the entire map page, use Layout view. In *Layout view*, you'll see a virtual page showing all the map elements and data frames.

#### Tip

## Not all maps have Data view and Layout view

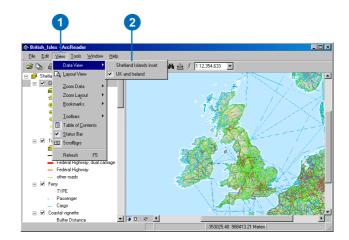
The map author may create the map with only one view. To see if both views are available, use the Map Properties dialog box.

#### Switching to Data view

 Click View and point to Data View.

The checked data frame is the active data frame.

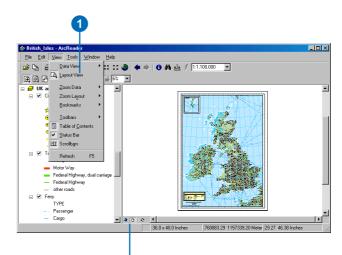
Click a data frame. The selected data frame will become the active view.



#### **Switching to Layout view**

 Click View and click Layout View.

ArcReader shows the entire layout.



You can also use these buttons to quickly switch between the Data and Layout view.

# Moving around on the map

As you work with a map, you can easily change how you view the data it contains. When browsing a map, you might want to pan and zoom around the data to investigate different areas and features.

There are two sets of tools for navigating the map: those on the Data toolbar and those on the Layout toolbar. Data tools are used for navigating the active data frame, and layout tools are used to navigate the page.

#### Tip

## Toolbars for browsing the map in Layout view

There are two toolbars available for browsing the map in Layout view. One set of commands is for browsing the data within the data frame, and the other set is for browsing the data frames and graphics on the layout page.

#### Tip

#### Reloading the map

The Reload command on the file menu redisplays the map as it was originally published.

## Tools for navigating ArcReader

Use the data tools to interact with the data displayed in the active data frame.

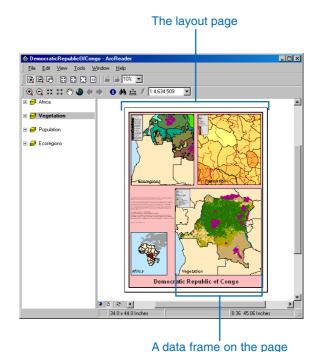
Use the layout tools to interact with the data frame and map elements on the page.

These tools are also available by clicking on the View and Tools menus.

#### The Layout toolbar



The Data toolbar



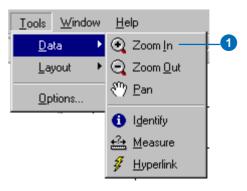
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# Using Pan and Zoom in the data frame

- 1. Click Tools, point to Data, and click Zoom In.
- In the data frame, drag a box over the area to which you want to zoom.

The area will be centered in the screen and enlarged.

You may also click a location to Zoom In. Use Zoom Out to see more of the data in a data frame, or use Pan to readjust the view of the data.



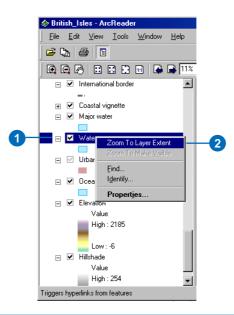


# Why doesn't a layer draw when I move around the data frame?

The layer probably has a Scale Range set that prevents the layer from displaying on the map at certain scales. Right-click the layer and click Properties or Zoom To Make Visible to determine what the scale range is set to.

# Zooming to the extent of a layer

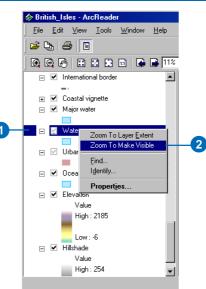
- 1. Right-click the layer to which you want to zoom.
- Click Zoom To Layer Extent.ArcReader redraws to show the entire layer.



# Zooming to make a scale-dependent layer visible

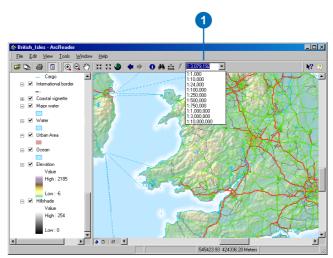
- Right-click the scale-dependent layer to which you want to zoom.
  - Scale-dependent layers only draw at specific map scales.
- Click Zoom To Make Visible.ArcReader zooms to a scale

that will make the layer draw.



# Zooming to a specific scale in the data frame

 Type the desired scale on the Standard toolbar or choose one from the dropdown list.

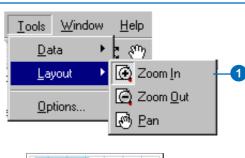


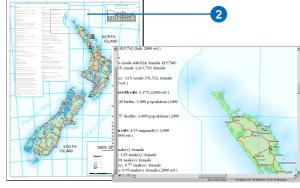
#### **Zooming the layout**

- Click Tools, point to Layout, and click Zoom In. This allows you to zoom in on the map page.
- 2. Using the Zoom In tool, drag a box around the area of interest. The area will be centered and enlarged in the display window.

The extent of the data frame remains unchanged, and map elements appear larger.

Layout tools are only available while in Layout view. To see more of the page, use Zoom Out.





## Using bookmarks

A spatial bookmark identifies a predefined geographic location. Clicking a bookmark zooms to that location. Bookmarks allow you to easily navigate to areas of interest defined by the map's author.

All bookmarks for the map will be displayed in the bookmark list. If there are multiple data frames on the map, they will also be listed.

#### Tip

#### Reloading the map

Use Reload from the File menu to see the map as it was originally published.

#### Using a spatial bookmark

 Click the View menu, point to Bookmarks, and click the name of the bookmark you want to use.

The predefined area displays.



## Opening the Magnifier Window

When you don't want to adjust your map display but you want to see things with more detail, open the Magnifier Window.

The Magnifier Window works like a magnifying glass: as you pass the window over the data, you see a magnified view of the location under the window. Moving the window around does not affect the current map display.

Right-click the Magnifier Window to adjust the magnification.

#### Tip

# Magnifier updates when switching between Data and Layout view

The Magnifier Window is available in both Data and Layout views. When you switch views while the Magnifier Window is open, it will redraw to show the current view. The redraw will occur even when the magnifier is set to Snapshot mode.

# Opening the Magnifier Window and setting the view

Click the Window menu and click Magnifier.

The Magnifier Window appears.

- Drag the Magnifier Window over the data to see a magnified view.
- 3. Right-click the Magnifier Window to access options.



# Exploring data on a map

Sometimes just looking at a map isn't enough. You need to query the data to solve problems. ArcReader lets you explore the data on the map and get the information you need.

You can find features that have a particular characteristic or attribute, examine all the attributes of a particular layer, measure distances on the map, point to features to find out what they are, or follow a hyperlink to more information.

#### Tip

## Find features faster by narrowing the search

Use the Find tool (which has a search field) if you know exactly what you are looking for. The fewer fields to search, the quicker the results.

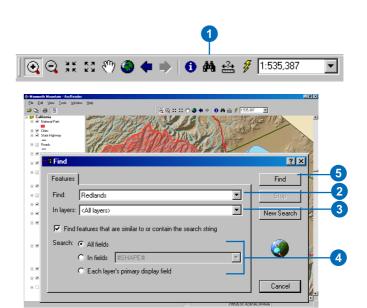
#### Tip

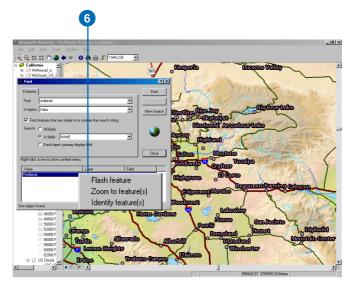
#### Accessing the Find tool

You can access the Find tool by right-clicking a layer in the table of contents or by clicking the Edit menu.

## Finding features with attribute values

- 1. Click the Find button.
- 2. Type the attribute value of interest in the Find text box.
- Click the In layers dropdown arrow and click the layer you want to search.
- Search for the attribute in all fields, in a specific field, or in the primary display field.
- 5. Click Find.
- Right-click the found feature listed in the results window to Flash, Zoom to, or Identify the feature.





#### Accessing the Identify tool

The Identify tool can be accessed by right-clicking a layer in the table of contents, by clicking on the Tools menu, or by rightclicking Results on the Find tool.

#### Tip

#### Identifying a location

Identify shows the location of the mouse click. The Location box shows the feature location if you click a feature in the Identify tree. The x,y location is the inside centroid for polygons, midpoint for lines, and actual location for points.

#### Tip

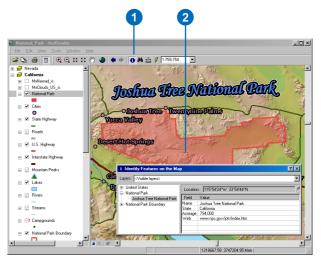
## Identifying multiple features at once

Click and drag a box around the features you want to identify.

# Identifying features by pointing at them

- Click the Identify button.
   An empty Identify window appears.
- Click the map feature you want to identify or drag a box around multiple features.
  - By default, information about the topmost layer will be shown in the Identify window.
- Use the Identity from dropdown arrow to identify a feature in a specific layer.

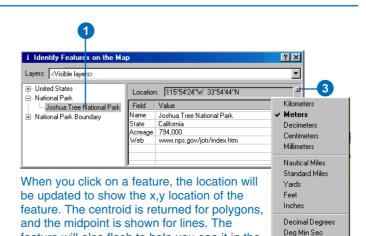
Only features in that layer will show up in the identify results window.





## Getting the location of the identified feature

- Click a feature in the Identify tree.
- Click the mini button next to the location text to choose the location units of your choice.



feature will also flash to help you see it in the

display.

#### Copy the field values

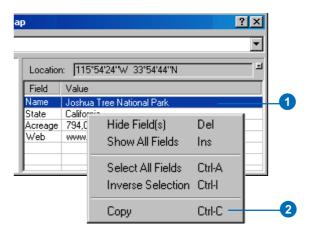
Right-click the feature in the Identify tree to copy the record. The layer name and its attributes will be copied.

Use the Options dialog box to control whether the layer name is included in the Copy command. The copied records can then be pasted into another application.

# Copying attributes from the Identify window

- 1. Click an attribute in the Identify window.
- 2. Right-click on the fields and click Copy.

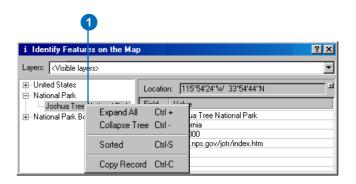
You can now paste the attribute into another software application.



#### Copying the entire record

 Right-click on the feature in the Identify tree and click Copy Record to copy the entire record.

The feature's record can now be pasted into another application.

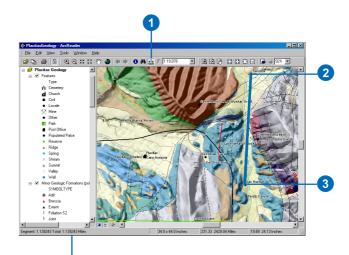


#### The Measure tool

The Measure tool displays distance in the units of the data frame.
These units are set by the map publisher and cannot be changed in ArcReader.

#### **Measuring distance**

- 1. Click the Measure button on the Tools toolbar.
- 2. Click on the map at the location where you want to start measuring.
- Move the pointer to the point you want to measure to. If you would like to measure along the curve of a line, click along the line to add vertices.
- 4. Double-click to end the line.



The measurement displays here on the status bar.

#### Tip

#### The HyperLink tool

This tool will be inactive if no hyperlinks have been defined by the map publisher.

There are three types of hyperlinks:

**Document:** When you click a feature with the Hyperlink tool, a document or file will be launched using the application with which that file type is currently associated.

URL: When you click a feature with the Hyperlink tool, a Web page will be launched in the default browser.

Macro: When you click a feature with the Hyperlink tool, a value will be sent to a custom macro. The publisher will need to provide the macro with the map.

# Accessing hyperlinked features

- Click the Hyperlink button on the Tools toolbar.
- Click a hyperlinked feature.
   Hyperlinked features are outlined in blue when using the Hyperlink tool. When you hover over the feature, the icon will change to a hand, and you will see a popup tip with the name of the target.
- The hyperlink will open. In this case, the hyperlink is an Internet Web page.



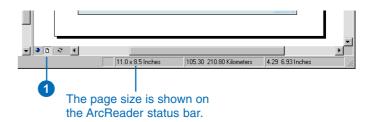
### **Printing**

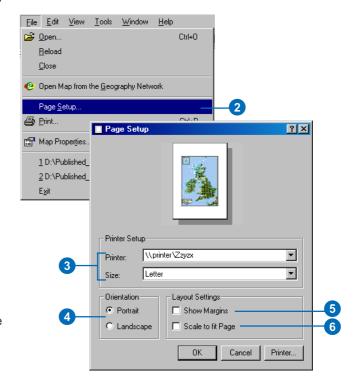
There are a few things to consider when printing from ArcReader. When printing from Layout view the entire page layout will be printed. If you are printng from Data view, the data will be printed just as it appears in the ArcReader display. The data will be scaled to fit the specified printer page.

#### **Showing margins**

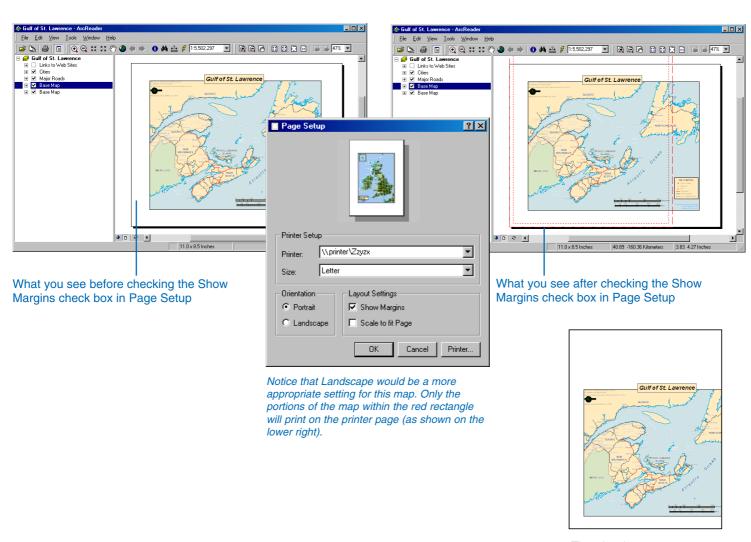
Before printing, it is important to know the published page size of the map you are working with.

- 1. Click the Layout button.
  - Once you know the page size, open the Page Setup dialog box and choose the appropriate printer setup, orientation, and layout settings. These settings will allow the printed map to fit on the desired page.
- 2. Click the File menu and click Page Setup.
- 3. Choose your printer and the paper size.
- Choose the desired orientation (Portrait or Landscape) for your map.
- If you are unsure about the chosen paper size and orientation settings, check the Show Margins check box to see the printer margin in Layout view.
- If the map you are working with has a page size that is too large for your printer, you can still print the map to the paper size of your choice by checking the Scale to fit Page check box.





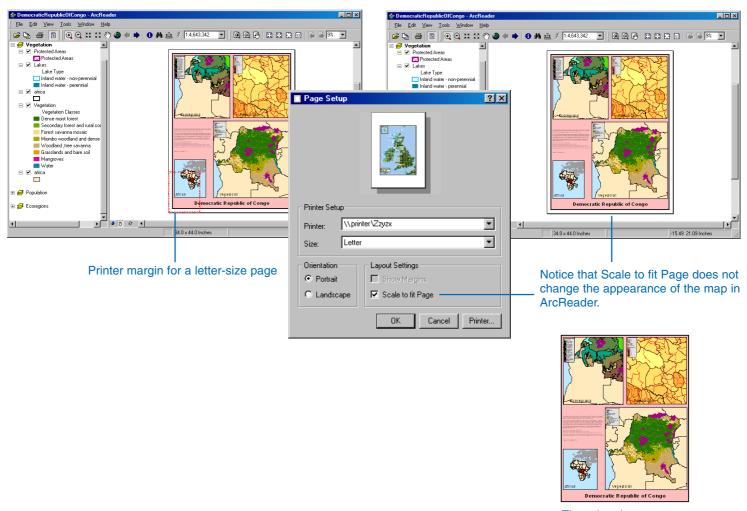
### Using Page Setup to determine the appropriate paper size



The printed page

### Printing a large map on a small page

Check Scale to fit Page on the Page Setup dialog box when the published map size is too large to fit on the available printer.

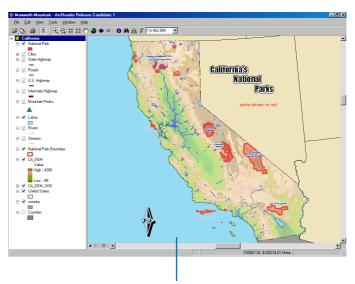


The printed page

#### **Printing from Data view**

The portion of the map in the display area will be scaled to fit the selected printer page.

Printing from Data view always scales the map to fit the page.



The map displayed in Data view



Printing from Data view scales the data in the ArcReader display window to fit the printer page.

#### Getting help

You can quickly learn what ArcReader can do by getting help about the buttons and menu commands you see on the interface. Hover over a command or button with the mouse pointer and press Shift+F1 on your keyboard.

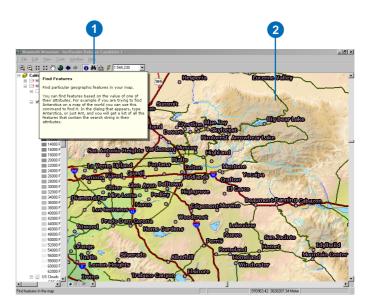
You can also get help in some dialog boxes. When you click the What's This? button in the upperright corner and click an item in the dialog box, a description of the item pops up.

Much of the information in this book is available in the online Help system. The Help topics are organized around the main tasks you want to complete as well as the concepts behind the tasks.

You can look up general Help topics in the online Help system using the Contents tab. You can search the index for specific tasks and issues. You can also use the Find tab to look up Help topics that have specific words or phrases.

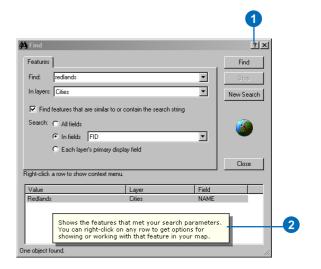
## Getting help in the ArcReader window

- Move the pointer over a button or command and press Shift+F1 on your keyboard.
   Help text appears.
- Click anywhere on the screen to close the Help description box.



# Getting help in a dialog box

- 1. Click the What's This? button.
- 2. With the Help pointer, click the item in the dialog box about which you want more information.
- Click anywhere on the screen to close the Help description box.



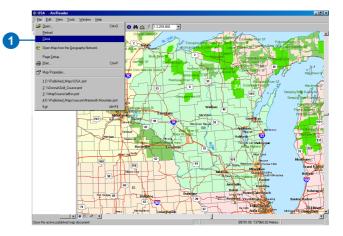
# Closing and exiting

On the ArcReader File menu there are Close and Exit commands. Close removes the currently loaded map from ArcReader. Exit closes ArcReader.

#### Closing an opened map

1. Click the File menu and click Close.

Opening a new map also closes the current map.



#### **Closing ArcReader**

1. Click the File menu and click Exit.

The ArcReader session will be ended.



## **Publisher**

# 4

#### IN THIS CHAPTER

- Preparing maps for publishing in ArcMap
- Creating a map to share on a computer network
- Creating a map to distribute with data
- Creating a map with Internet data
- Starting ArcGIS Publisher
- Using Publisher Settings
- Map Contents Summary
- Sharing your maps

The ArcGIS ArcMap Publisher is an optional extension you can install on ArcGIS Desktop. Publisher allows you to save maps for distribution and sharing with others. Publisher converts ArcMap map documents (.mxd) into the published map format (.pmf) used with ArcReader. This chapter will describe how to share maps using Publisher.

Keep in mind that interactive map creation has unique design requirements. The online Help system for ArcMap contains guidance for interactive map publishing. See the Creating Interactive Maps topic in the Help system.

#### Preparing maps for publishing in ArcMap

When publishing a map it is important to consider the purpose of the map and how the map will be used in ArcReader. It is also important to recognize what is in the map and how ArcMap settings, as well as Publisher settings, will affect the output.

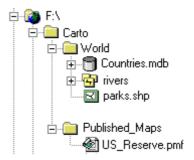
#### **Accessing data**

ArcReader references data sources in the same manner as ArcMap does. The data source information in the map document is also stored in the published map. Since ArcReader will be using the same method of connecting to the data, it is important to ensure that the ArcReader user will have access to the data.

In ArcMap use the Map Properties dialog box and the Source tab on the Layer Properties dialog box to set data sources. You can also click the Source tab on the table of contents to get a quick look at the current data source connections for a map.

Choosing the right data source connection method for a published map depends on how the map is going to be used. For a map that is going to be distributed on a computer network, you will want to create the map with universal naming convention (UNC) data paths or network server-based data. If you plan on delivering the data with the published map (perhaps putting everything on digital media, such as a CD), you will want to use relative paths to connect to the data. You may also want to consider using Internet-served data, in which case, anyone with a Geography Network<sup>SM</sup> connection will be able to use the map in ArcReader.

#### Delivering data with the map



The graphic above shows a directory structure. The US\_Reserve.pmf file references F:\Carto\World\parks.shp data. If you were to distribute data with the published map, you would create the map using relative paths. In this case the path would be ..\World\parks.shp for the data in the map. ArcMap will not show the path in this manner, but if you choose Store relative path names, this is the path that would be stored in the map. As long as the published map stays relative to the data, the map layers will be accessible in ArcReader. If you were to put the map and data on a CD, you would place the Data directory and everything in it on disk.

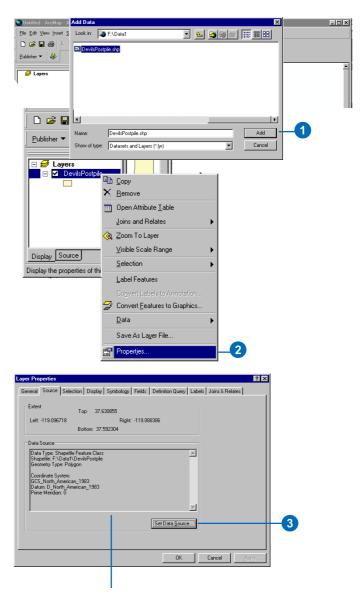
The following tasks will demonstrate how to store data source information in a map for sharing on a network.

# Creating a map to share on a computer network

If you are using ArcSDE<sup>TM</sup> or Internet-served data, the published map will work for all ArcReader users that have access to the servers. For file-based data you will need to create maps that store the location of the data on the network. If you click on a drive letter when you add data from your computer, a local path to the data is stored in the map. To make the map usable on another computer, you will want to store the UNC pathname in the map.

# Converting local drive paths to UNC paths

- 1. Open ArcMap and Add Data from a local drive.
- Right-click on the layer in the table of contents and click Properties.
- In the Layer Properties dialog box, click the Source tab and click Set Data Source. ►

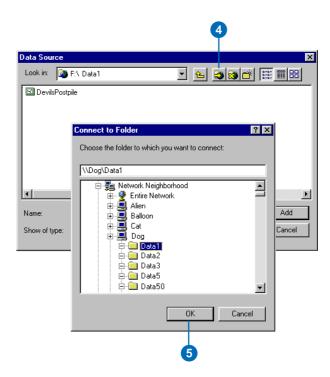


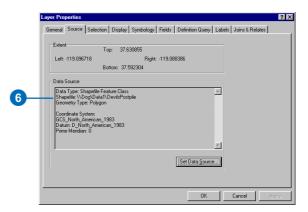
Notice the current data source is local.

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- 4. Click the Connect To Folder button.
- Double-click Network
   Neighborhood on the
   Connect to Folder dialog box
   and browse to the directory
   on the computer that contains the data, then click OK.
- In the layer's properties you will now see that the UNC pathname is stored in the map.

The UNC pathname will be published in the map, and all computers on the network with access to the directory will be able to use the map in ArcReader.



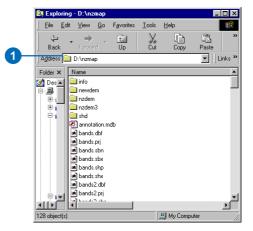


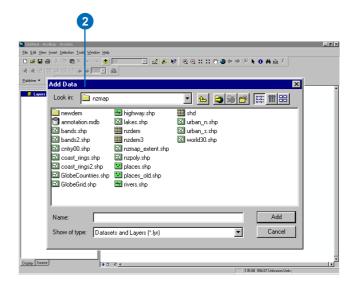
# Creating a map to distribute with data

If you plan on distributing data with the map, you will need to use relative paths when you create the map. When using relative paths the map will be able to access the data as long as it stays in the same location relative to the data.

# Creating a map with relative path data

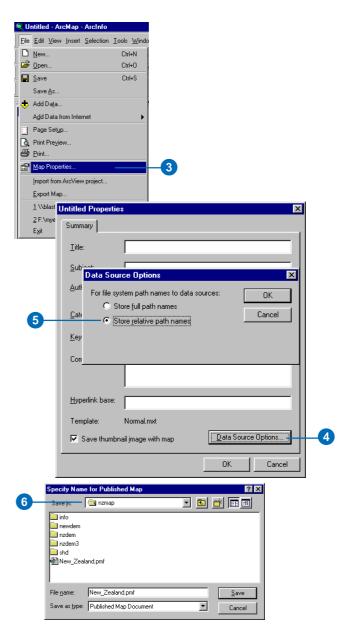
- Put all of the data that will be used to create the map into a directory on a single drive.
- 2. Add your data to the map. ▶





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- 3. Click the File menu and click Map Properties.
- Click Data Source Options on the Map Properties dialog box.
- Click Store relative path names on the Data Source Options window. Click OK to apply the setting.
- 6. Publish or save the map in a directory that has the same parent directory as the data in the map. The data in the map will be referenced correctly as long as the map and data stay in the same relative location to one another. Send the whole directory to anyone that will be using the map.



# Creating a map with Internet data

There is nothing complex about publishing Internet data. On the publishing side you only need to add data from the Internet. The user of the published map will need an Internet connection to see the data in the map.

#### aiT

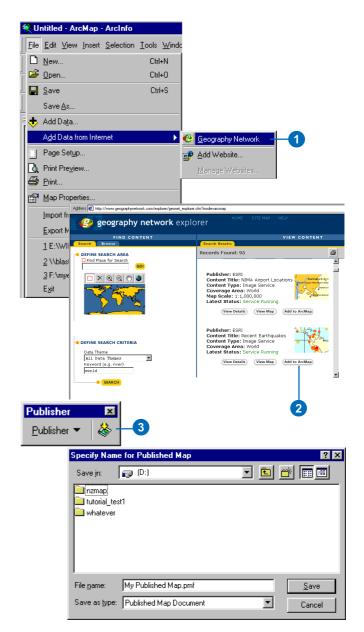
#### ArcReader can open maps from the Geography Network

Published maps can be placed on the Geography Network and opened by any ArcReader user. See www.geographynetwork.com for more information on sharing maps on the Internet.

#### Creating a map with Internet data

- Click the File menu, point to Add Data from Internet, and click Geography Network.
- Search for Geography Network data and add it to ArcMap.
- Click the Publisher button on the Publisher menu bar and enter the output location.

The published map can be sent to and used by anyone that has ArcReader and a connection to the Geography Network.



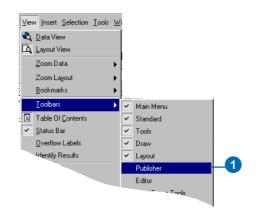
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# Starting ArcGIS Publisher

Any ArcMap document (.mxd) can be converted to a published map file using Publisher, which is available through an ArcMap toolbar.

## Adding the Publisher toolbar

- 1. Click the View menu, point to Toolbars, and click Publisher.
- 2. The Publisher toolbar will be added to ArcMap.



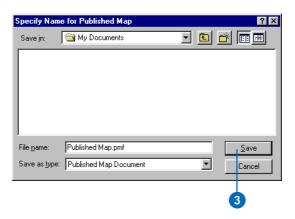


# Publishing a map with default settings

- 1. Open a Map Document.
- 2. Click the Publisher button.
- Choose the output location for your published map and click Save.

A published map will be created that will look in ArcReader, just as it does in ArcMap.





#### Tip

## Why is the Publisher toolbar unavailable?

The Publisher toolbar must be turned on in the extension manager. You also need a Publisher license.

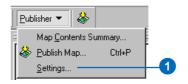
# Using Publisher Settings

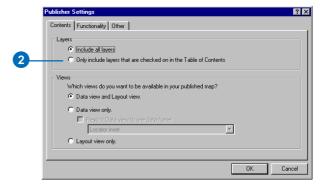
Publishing a map allows it to be used in ArcReader. By default, what you see in ArcMap is what you will see in ArcReader. However, there are some options available that allow you to control how the map is viewed and used in ArcReader. Using Publisher you can restrict the view to a specific data frame, limit the use of some commands, or even password protect the map. The settings are designed to give the map author control over how the map is viewed and how the data is explored.

# Including just the visible layers

- Click Publisher and click Settings.
- Click Only include layers that are checked on in the Table of Contents.

This setting allows you to choose specific layers for publishing in a map without removing the layers from the map.



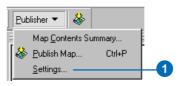


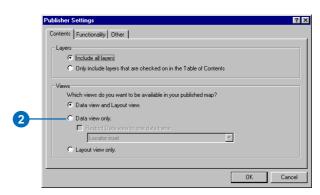
# Publishing just the Data view

- Click Publisher and click Settings.
- In the Publisher Settings dialog box, click the Contents tab and click Data view only.

In ArcReader only the data frames will be viewable. The map's page layout elements are not included in the published map, and Layout view will be disabled in ArcReader.

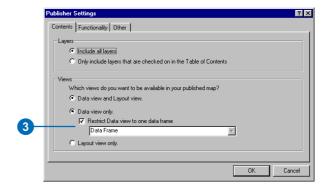
You can choose the data frame that will be visible in ArcReader. ▶





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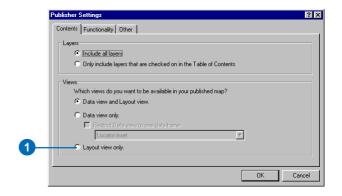
 Click Restrict Data view to one data frame and choose a data frame from the dropdown list to publish one specific data frame.
 ArcReader will not be able to view the data frame in Layout view.



#### Publishing just the Layout view

 In the Publisher Settings dialog box, click Layout view only.

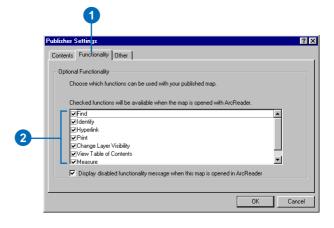
Only the Layout view will be available in ArcReader. It will not be possible to view the map in Data view.



# Disabling ArcReader commands and tools

- Click the Functionality tab in the Publisher Settings dialog box.
- Uncheck the commands and tools in the list that will be disabled in ArcReader.

When the map is opened a message will pop up telling the ArcReader user that some functionality has been disabled. To supress this message uncheck the Display disabled functionality message when this map is opened in ArcReader check box.

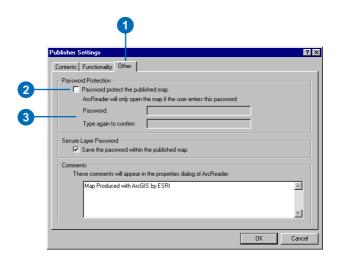


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# Protecting published maps with a password

- Click the Other tab on the Publisher Settings dialog box.
- Check the Password protect the published map check box.
- 3. Type in a password and confirm the password.

ArcReader will require the password to open the map.



#### Tip

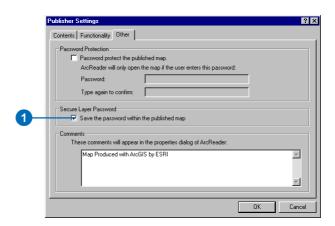
# You can open published maps that contain secure layers with or without a password

By default, maps containing secure layers will prompt the ArcReader user for the password. Optionally, you can turn off password protection by including the password with the layer when the map is published.

# Including Secure Layer passwords

1. Check Save the password within the published map.

Secure data requires a password to be entered when it is added to ArcMap. Use this setting to store secure layer passwords in the published map if you want the ArcReader user to see the secure layers without entering a password.



# Adding comments to publish with the map

1. Type comments into the Comments text box.

ArcReader users will be able to see the comments in the ArcReader Map Properties dialog box.



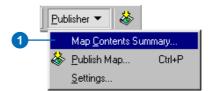
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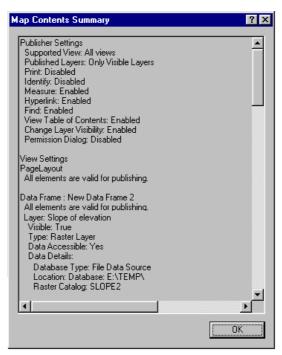
## Map Contents Summary

Map Contents Summary presents publisher settings, map properties, and layer properties in one location. Use this information to determine if the map will be published as desired. For example, if you have decided to only include checked on layers in publisher settings, only the checked on layers will be listed in the Map Contents Summary information. You can also check the data source information that will be put into the published map.

# Listing a summary of the map contents and settings

 Click Map Contents Summary on the Publisher menu.





The Map Contents Summary shows you the parameters controlling how the map will be published.

# Sharing your maps

Once you have created your published map, you can share it with ArcReader users and serve it using ArcIMS<sup>®</sup>.

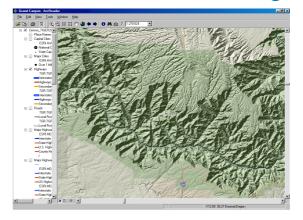
Keep in mind that you must ensure access to the data sources when you share your map. For file-based data sources, be sure your users can access the data for each layer. For multiuser database management system data, ensure your users have database access. For ArcIMS layers, ensure the server is available to your users.

# Opening maps shared on the Geography Network with ArcReader

- Click the File menu and click Open Map from the Geography Network.
- 2. Search for a map and add it to ArcReader.







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## **Publisher tutorial**

#### IN THIS CHAPTER

- Exercise 1: Publishing a map
- Exercise 2: Specifying how a map is published
- Exercise 3: Using Publisher security settings

The best way to learn Publisher is to try it yourself. This tutorial guides you through the process of publishing a map.

Before you begin, install Publisher and the ArcReader tutorial data. To install the data, run the Tutorial setup during the ArcGIS Desktop installation or independently. For more information on how to install tutorial data, look at the ArcGIS Desktop installation guide for your platform.

In this tutorial you will learn how to use Publisher to convert your ArcMap map document into a published map to be used in ArcReader.

### Exercise 1: Publishing a map

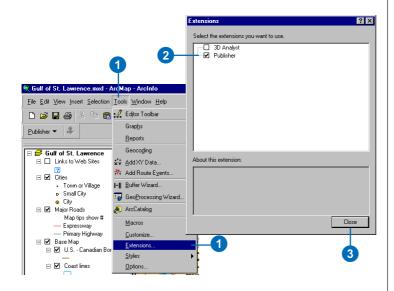
#### Choosing a map to publish

This exercise uses the Gulf of St. Lawrence.mxd file located in the ArcReader tutorial data. It is possible to do this exercise with any map document.

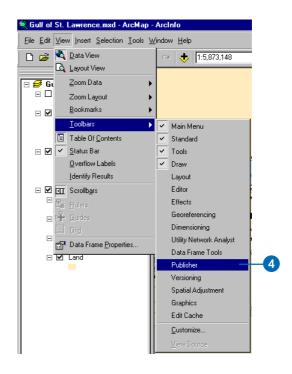
1. Open the Gulf of St. Lawrence.mxd file.

#### **Enabling the Publisher toolbar**

- 1. Click the Tools menu and click Extensions.
- 2. Check Publisher in the Extensions dialog box.
- 3. Click Close.



4. Click View, point to Toolbars, and click Publisher.



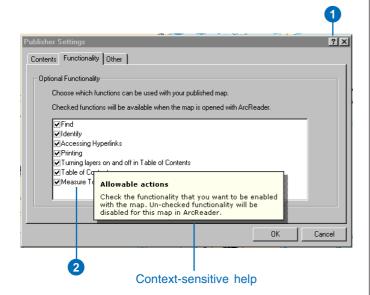


The Publisher toolbar appears.

### Using context-sensitive help to get more information about Publisher

Context-sensitive help provides information about parts of the application interface. Use the Help button or click Shift+F1 while holding the pointer over the command you would like more information about.

- 1. Click the Help button.
- 2. Click on the option you want more information about.

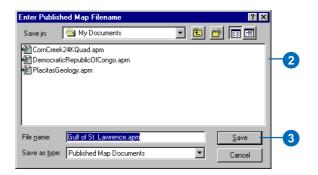


#### Publishing a map using the default settings

1. Click Publisher and click Publish Map.



2. Use the file browser to name and select the output location for the published map. Initially, Publisher defaults to the My Documents folder.



Click Save.

You have just published a map.

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#### Viewing the map in ArcReader

An important part of the publishing process is to open the published map in ArcReader to ensure that the map is published as expected. To learn how to use ArcReader, refer to Chapter 2, 'Quick-start tutorial', and Chapter 3, 'ArcReader basics'.

### Exercise 2: Specifying how a map is published

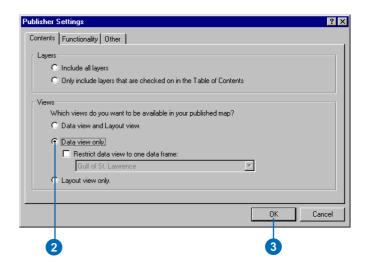
The Publisher settings serve a variety of purposes, from simplifying the way ArcReader users will interact with a complex map to protecting sensitive data. You will find that selecting the proper settings can help make the map more useful for its intended audience.

#### Publishing a map to be viewed in Data view only

1. Click Publisher and click Settings.



2. Click the Data view only button.



- 3 Click OK
- 4. Click Publisher and click Publish Map.



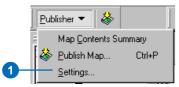
5. Choose an output location for the map and click Save.

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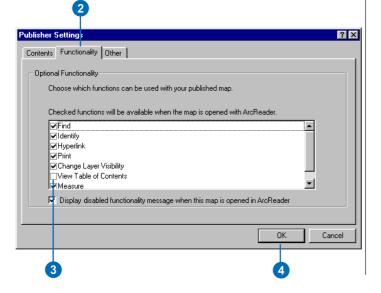
#### Publishing a map without a table of contents

Sometimes you may need to publish simplified maps to meet the requirements of your audience or to protect data. Publisher allows you to provide maps with reduced functionality, allowing you to tailor the ArcReader experience for a particular purpose.

1. Click Publisher and click Settings.

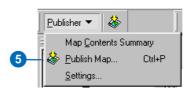


- 2. Click the Functionality tab.
- 3. Uncheck View Table of Contents.
- 4. Click OK.

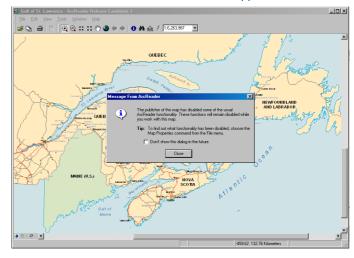


5. Click Publisher, click Publish Map, and save the map to an output location.

If you use the same name, you will be asked if you want to overwrite the map.

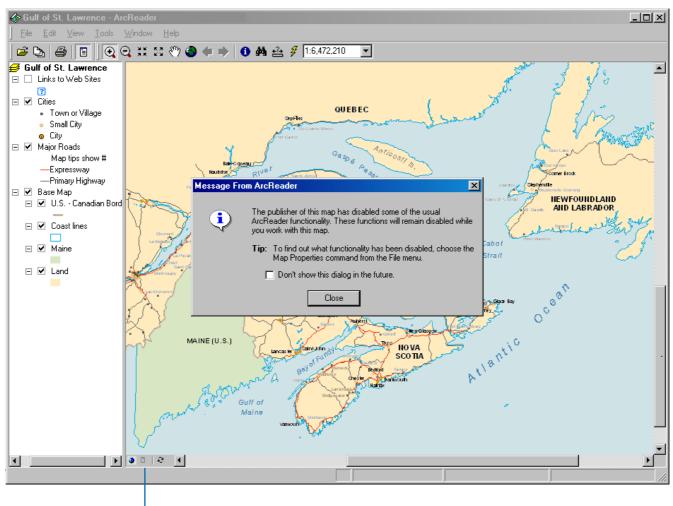


The table of contents does not appear.



The message notifies the user that some commands or tools have been disabled.

#### When the map is opened in ArcReader, a message is displayed that alerts the map user to disabled functionality.



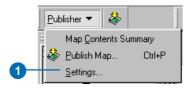
The Layout view button is disabled.

### Exercise 3: Using Publisher security settings

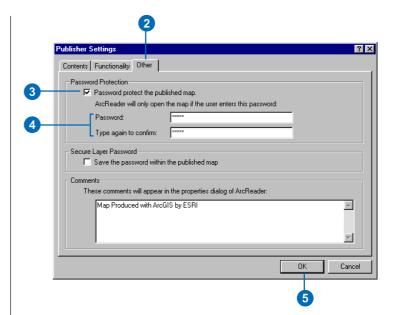
A published map is a read-only document, but sometimes it is important to limit access to a map or data in the map. Publisher honors data source passwords and allows you to add another layer of security by password protecting a published map.

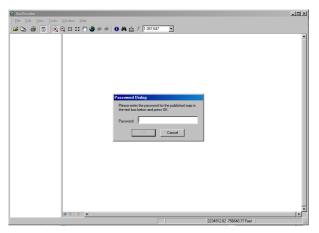
#### Publishing a map that is password protected

1. Click Publisher and click Settings.



- 2. Click the Other tab.
- 3. Check the Password protect the published map check box.
- 4. Enter a password and confirm the password.
- 5. Click OK.
- 6. Click Publish Map, and save the map to an output location.





ArcReader prompts for a password when the map is opened.

## Glossary

#### active data frame

The data frame you're currently working with, for example, adding layers to. The active data frame is shown in bold text in the table of contents.

#### attribute

A characteristic of a map feature. Attributes of a river might include its name, length, average depth, and so on.

#### attribute table

Information about features on a map, stored in rows and columns. Each row relates to a single feature; each column contains the values for a single characteristic.

#### data frame

A frame on the map that displays layers occupying the same geographic area. You may have one or more data frames on your map depending on how you want to organize your data. For instance, one data frame might highlight a study area, and another might provide an overview of where the study area is.

#### data source

Any geographic data, such as a coverage, shapefile, raster, or geodatabase.

#### data view

An all-purpose view for exploring, displaying, and querying geographic data. This view hides all map elements, such as titles, North arrows, and scale bars. See also layout view.

#### display units

The units—for example, feet, miles, meters, or kilometers—ArcReader uses to report measurements, dimensions of shapes, and distance tolerances and offsets.

#### feature

A representation of a real-world object in a layer on a map.

#### feature class

- 1. A classification describing the format of geographic features and supporting data in a coverage. Coverage feature classes for representing geographic features include point, arc, node, route-system, route, section, polygon, and region. One or more coverage features are used to model geographic features; for example, arcs and nodes can be used to model linear features, such as street centerlines. The tic, annotation, link, and boundary feature classes provide supporting data for coverage data management and viewing.
- 2. The conceptual representation of a geographic feature. When referring to geographic features, feature classes include point, line, area, and surface. In a geodatabase, an object class that stores features and has a field of type geometry in a geodatabase.

#### field

A column in a table. Each field contains the values for a single attribute.

#### geodatabase

A geographic database that provides services for managing geographic data. A geodatabase is hosted inside a relational database management system. A geodatabase contains feature datasets.

#### graticule

A graphic representation on a map of the network of parallels and meridians (latitude and longitude) that subdivide the earth's surface.

#### grid

A geographic representation of the world as an array of equally sized square cells arranged in rows and columns. Each grid cell is referenced by its geographic x,y location. See raster.

#### group layer

Several layers that appear and act like an individual layer in the table of contents in ArcReader.

#### image

Represents geographic features by dividing the world into discrete squares called cells. Examples include satellite and aerial photographs, scanned documents, and building photographs. See also raster.

#### layer

A collection of similar geographic features—such as rivers, lakes, counties, or cities—of a particular area or place for display on a map. A layer references geographic data stored in a data source, such as a coverage, and defines how to display it. You can create and manage layers as you would any other type of data in your database.

#### layout

The design or arrangement of elements—such as geographic data, North arrows, and scale bars—in a digital map display or printed map.

#### layout view

The view for laying out your map. Layout view shows the virtual page upon which you place and arrange geographic data and map elements—such as titles, legends, and scale bars—for printing. See also data view

#### legend

A list of symbols appearing on the map; includes a sample of each symbol and text describing what feature each symbol represents.

#### map

A graphical presentation of geographic information. It contains geographic data and other elements such as a title, North arrow, legend, and scale bar. You can interactively display and query the geographic data on the map and also prepare a printable map by arranging the map elements around the data in a visually pleasing manner.

#### map display

A graphic representation of the map on the computer screen.

#### map document

The disk-based representation of a map. Map documents can be printed or embedded into other documents. Map documents have an .mxd file extension.

#### map element

A graphic component, such as a scale bar, North arrow, and title, that helps describe the geographic data on the map.

#### map tips

Displays onscreen descriptions of map features when you pause the mouse pointer over the feature.

#### map units

The units—for example, feet, miles, meters, or kilometers—in which the coordinates of spatial data are stored.

#### neatline

A border commonly drawn around geographic features, often to separate them from other map elements.

#### North arrow

A map element that shows how the map is oriented.

#### projection

A mathematical formula that transforms feature locations from the earth's curved surface to a map's flat surface. A projected coordinate system employs a projection to transform locations expressed as latitude and longitude values to x,y coordinates. Projections cause distortions in one or more of these spatial properties: distance, area, shape, and direction.

#### raster

Represents any data source that uses a grid structure to store geographic information. See grid and image.

#### scale

The relationship between the dimensions of features on a map and the geographic objects they represent on the earth, commonly expressed as a fraction or a ratio. A map scale of 1/100,000 or 1:100,000 means that one unit of measure on the map equals 100,000 of the same unit on the earth.

#### scale bar

A map element that graphically shows a map's scale.

#### shapefile

A vector data storage format for storing the location, shape, and attributes of geographic features. A shapefile is stored in a folder and contains one feature class

#### symbol

A graphic representation of an individual feature or class of features that helps identify it and distinguish it from other features.

#### symbology

The criteria used to determine symbols for the features in a layer. A characteristic of a feature may influence the size, color, and shape of the symbol used.

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Lists all the layers on the map and shows what the features in each layer represent.

#### TIN

Triangulated irregular network. A data structure that represents a continuous surface through a series of irregularly spaced points with values that describe the surface at that point (for example, an elevation). From these points, a network of linked triangles forms the surface.

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