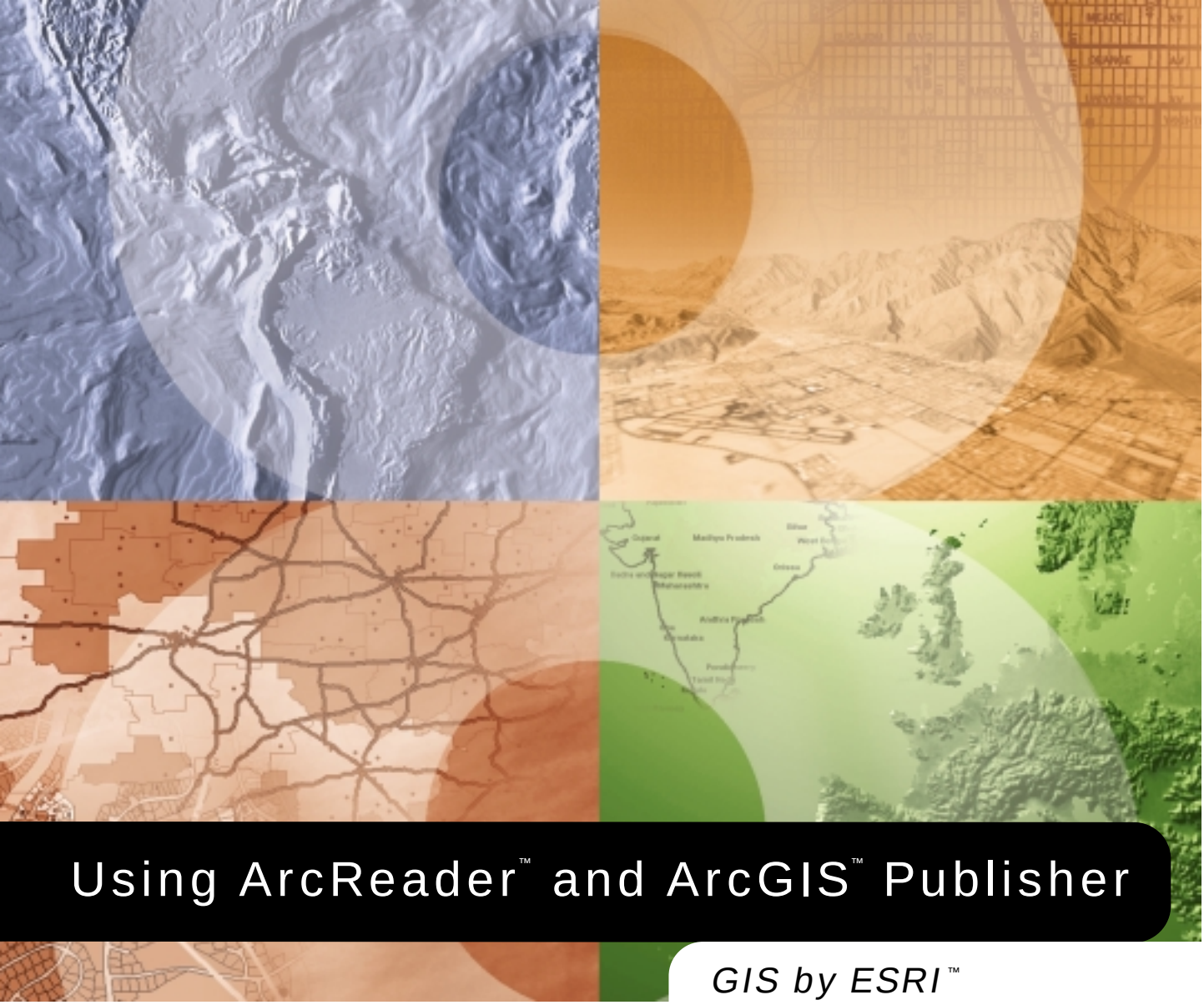

Using ArcReader™ and ArcGIS™ Publisher

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ArcGIS™
ESRI

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ArcReader 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 of Canada.

Exercise 1 introduces various ways that you can view a map in ArcReader.

Exercise 2 shows you how to query a map in ArcReader to get the most information possible from it.

Exercise 3 walks you through printing a map from ArcReader.

Each exercise in this tutorial takes between 15 and 20 minutes to complete. You can either work through the entire tutorial at once or complete each exercise one at a time.

Before you begin the exercises in this tutorial, install the ArcReader tutorial data. To install the data, run the Tutorial setup during the ArcReader installation. You also have the option of running the Tutorial setup independently of the ArcReader installation.

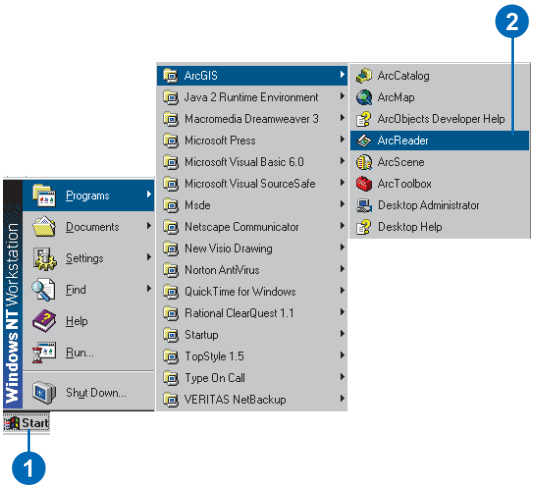
Exercise 1: Viewing a map

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

Starting ArcReader

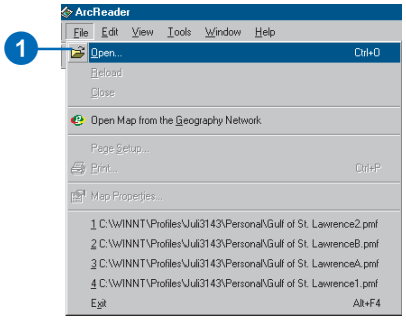
1. Click Start on the Windows taskbar.
2. Click Programs, point to ArcGIS, and click ArcReader.

   ArcReader opens.

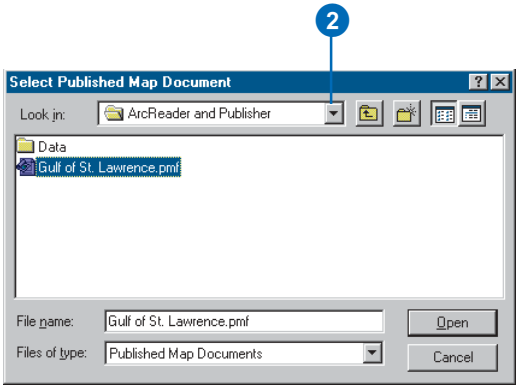


Opening an existing published map

1. Click File and click Open.



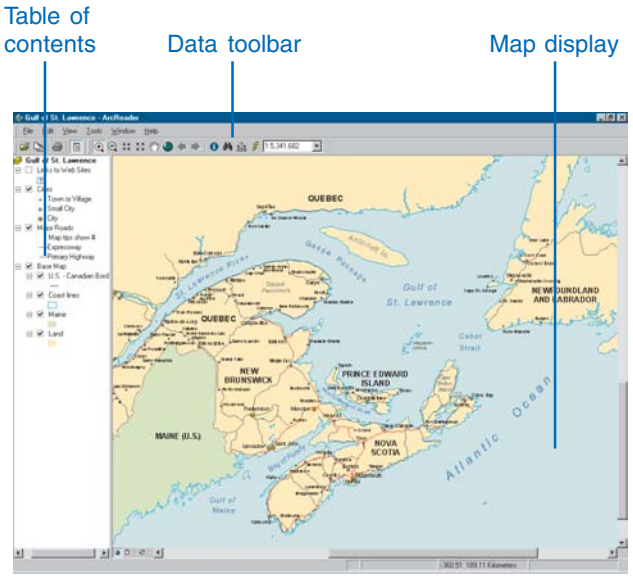
2. Click the Look in dropdown arrow and navigate to the Map folder on the local drive where you installed the tutorial. (C:\arcgis\arcexe82\ArcTutor is the default location.)



3. Double-click Gulf of St. Lawrence.pmf.

   ArcReader opens the map.

ArcReader can open published map files (.pmf) that have been created in ArcMap using Publisher. 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, scalebars, and North arrows.



This is an example of a .pmf—the Gulf of St. Lawrence.pmf.

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

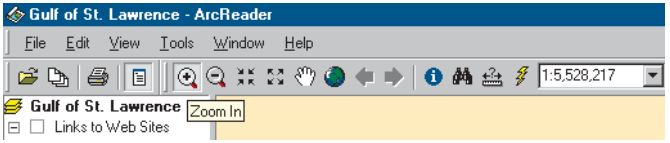
Layers	What layers contain
Links to Web Sites	Internet addresses
Cities	Locations of population centers
Major Roads	Locations of expressways and primary highways
Base Map	Contains land and coastline layers

A *data frame* is a frame on the map that displays layers in the same geographic area.

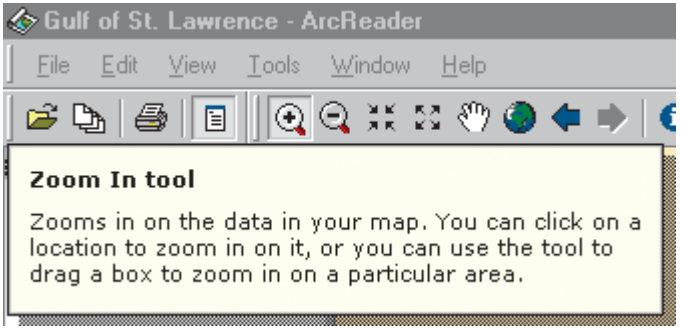
The map portrays the Gulf of St. Lawrence and the surrounding region. Notice that there are check boxes next to each layer name in the table of contents. All layers that are checked are drawn in the map display area.

Moving around a map

The Data toolbar has tools to move around the map and query features on the map. Hover your cursor over each icon (without clicking) to see the name of each tool. The name is displayed in a ToolTip. 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 the active tool when moved over the map.

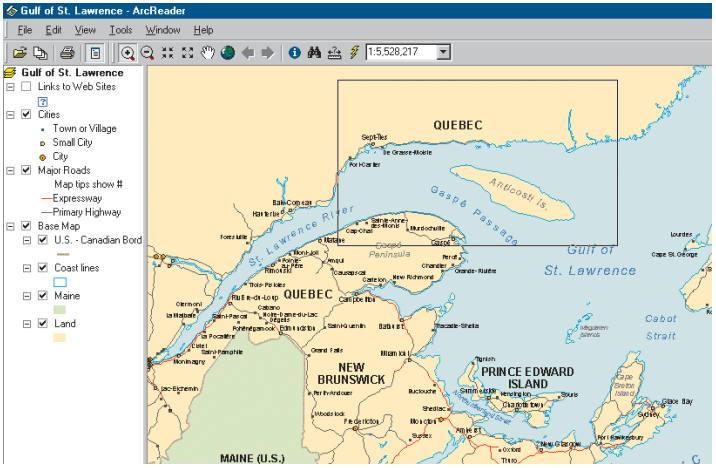


If you need more information about how a tool or command works, you can quickly access the context-sensitive help that is available for most tools. Press Shift+F1 on your keyboard while hovering over the tool with the mouse.

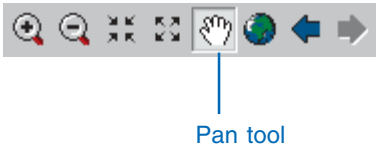


Context-sensitive help for the Zoom In tool is shown above.

1. 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.



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

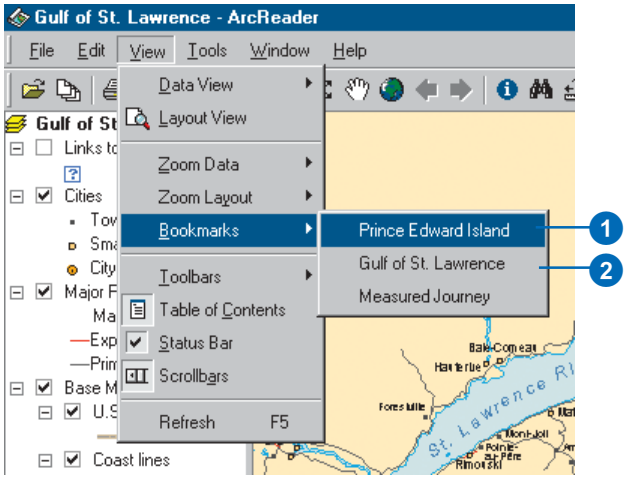


3. The Go Back and Go Next buttons can be used to revisit any of the places to which you have previously zoomed or panned. Click the Go Back button now to view the previous map extent.

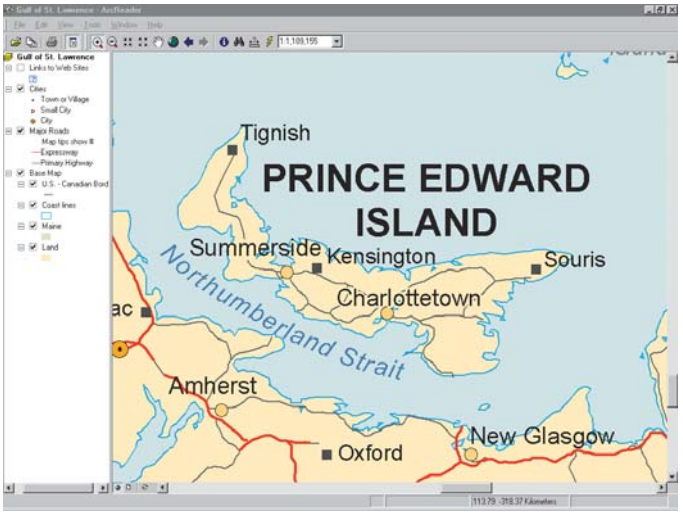
Using bookmarks

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 menu, point to Bookmarks, then click Prince Edward Island.



The map now shows Prince Edward Island.



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

To learn how to set bookmarks, see *Using ArcMap*.

Turning layers on and off

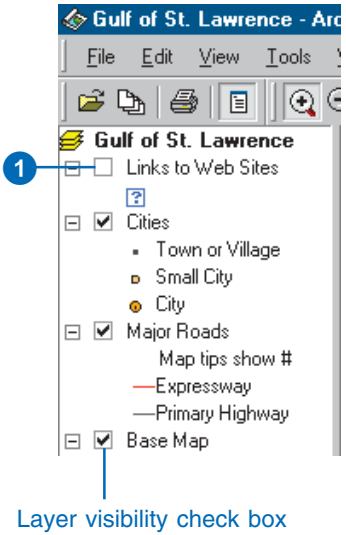
The table of contents is where you turn map layers on and off. To display a layer, check the Layer visibility check box next to its name. To turn the layer off, uncheck the box.

1. Check Links to Web Sites.

   Notice the blue question mark symbols now draw on the map.

2. Uncheck the Links to Web Sites.

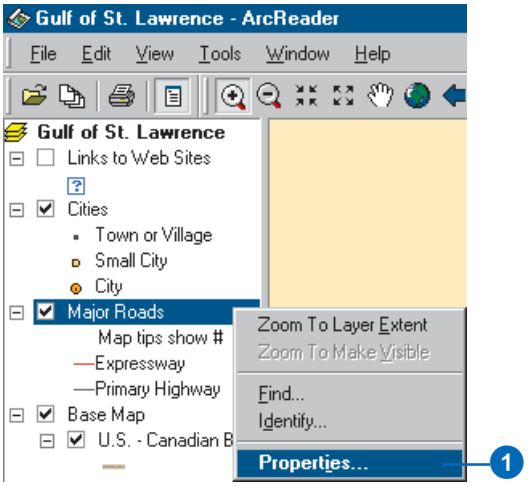
   Notice that the layer is turned off and no longer displays on the map.



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.

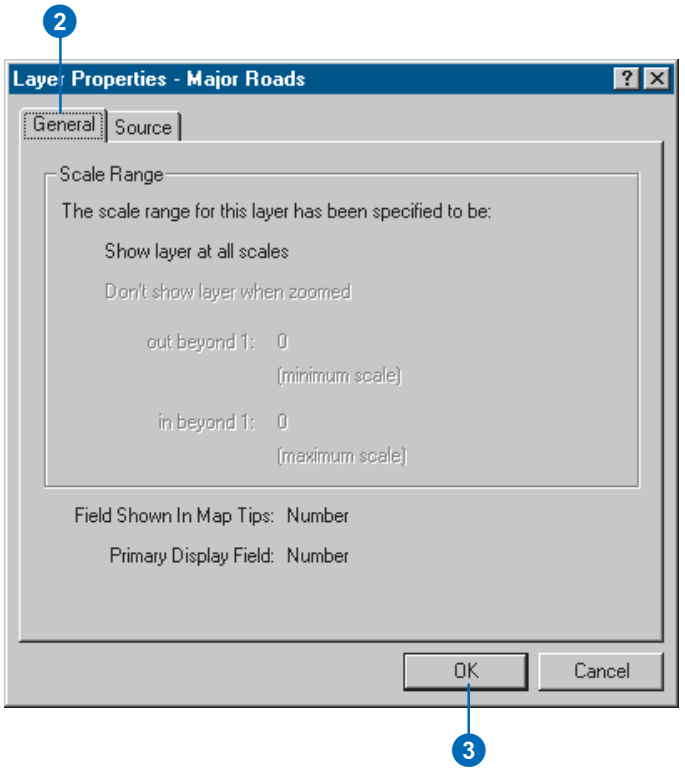
1. In the table of contents, right-click Major Roads and click Properties.



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 hover the mouse pointer over a feature. Later in this tutorial you will use Map Tips from this layer.

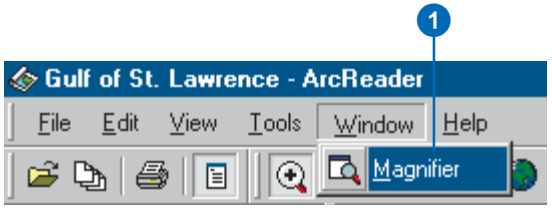
3. Click OK to close the Layer Properties dialog box.



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.

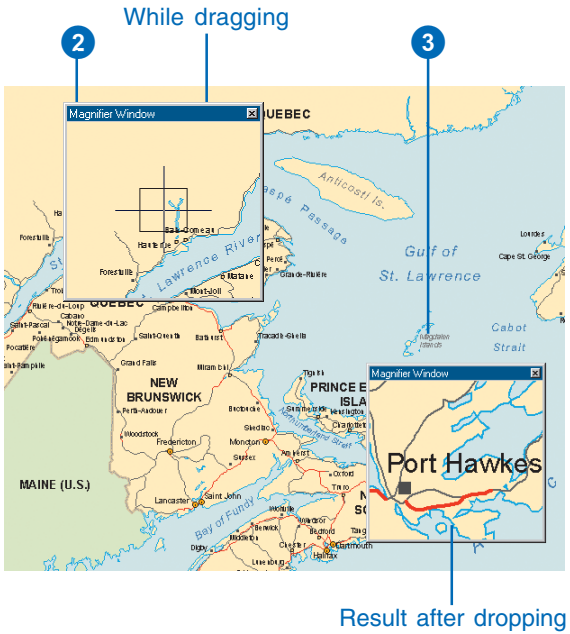
1. Click Window and click Magnifier.



   The magnifier window opens.

2. Click the title bar of the magnifier window and drag it over the map. While you are dragging it, the magnifier window will show a crosshair to indicate what part of the display will be magnified.

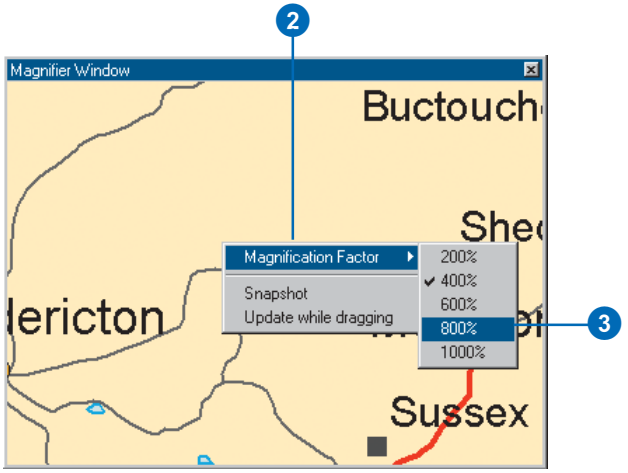
3. When the crosshair is over the portion of the map you would like to magnify, release the mouse button. You will see a magnified view of the location under the magnifier.



Changing the magnifier window properties

You can change several of the magnifier window properties, such as the magnification factor and what the magnifier window displays.

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%. This will scale the data displayed in the magnifier window by the percentage chosen.

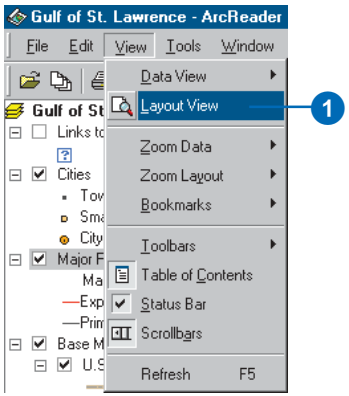


4. Right-click the magnifier window and click Snapshot. Move the magnifier window somewhere else; notice that the picture doesn't change, but instead keeps your snapshot.
5. To reenable the magnifier, right-click the magnifier window and click Snapshot again. The window redraws to magnify the section of the map it is over. When you have finished experimenting with the magnifier window, click the Close button to 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 aren't contained within the data frame, such as the map title, legend, scalebar, and North arrow.

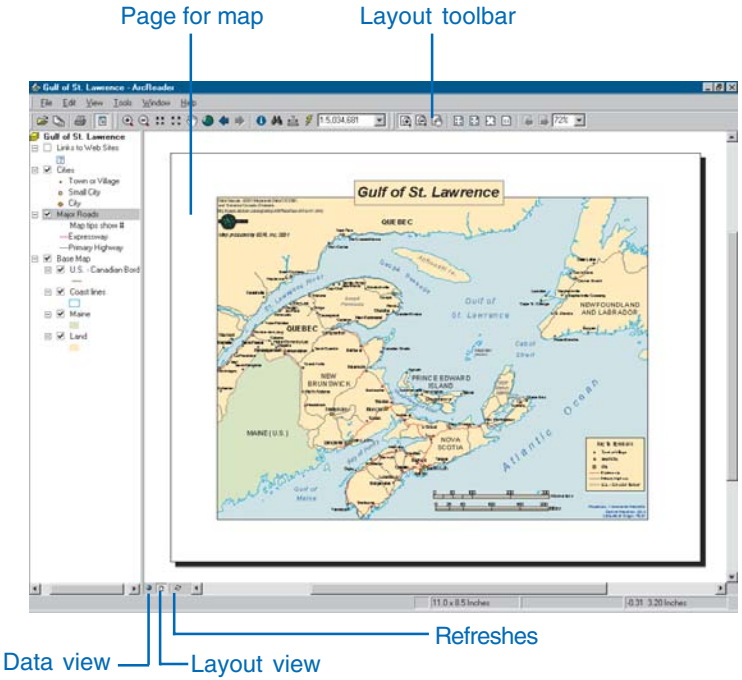
1. Click the View tab and click Layout View.



The map displays in Layout view. Notice the page includes a title, legend, scalebars, and some supporting text. Also displayed is the Layout toolbar, which contains tools for navigating in Layout view. Hover your cursor over each icon, without clicking, to see the name of each tool.

The Layout tools in the Layout toolbar 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.

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



In this exercise, you learned various ways to view a published map in ArcReader. In the next exercise, you will learn how to query a map in ArcReader.

Exercise 2: Querying a map

A map in ArcReader typically contains more information than 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 Map Tips to find a feature on the map.

Using Map Tips

The most readily accessible kind of map attribute information comes in the form of Map Tips. A Map Tip is an attribute chosen by the map author that displays whenever you hover any data tool over a feature on the map. Map Tips are only visible while in Data view.

1. Click the Data view button, located at the bottom-left part of the map.
2. Click any 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 Map Tips are enabled for a layer by right-clicking the layer name in the table of contents and clicking the General tab on the Properties dialog box.

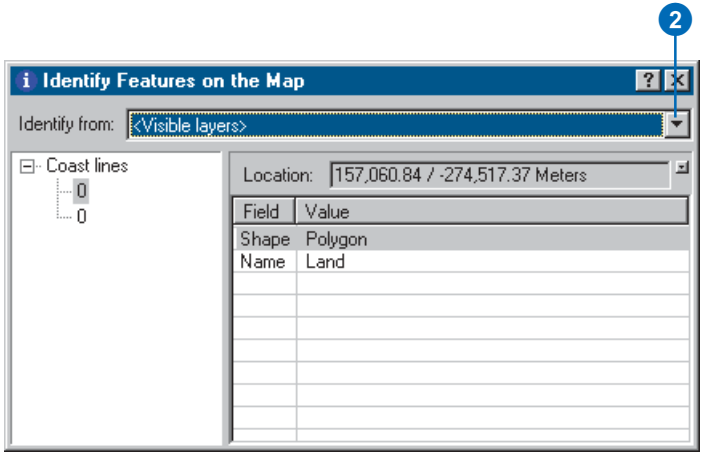
Identifying a location

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.

1. Click the Identify tool.

   The Identify window opens.

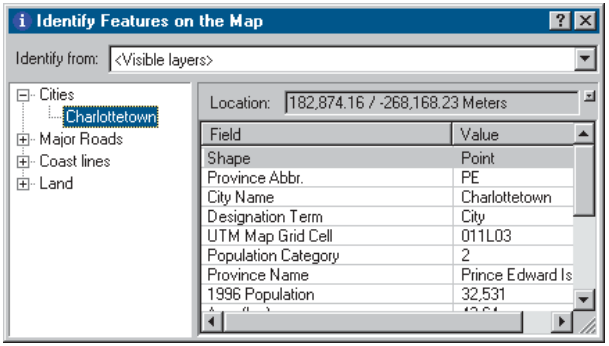
2. Click the Identify from dropdown list and click <Visible layers>.



3. Click the View menu, click Bookmarks, then click Prince Edward Island.

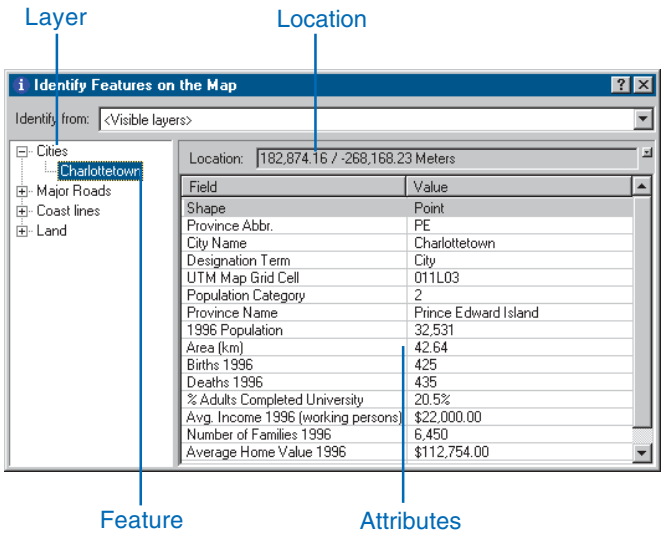
4. Click the dot that represents the city of Charlottetown.

Notice that the Identify tool located not only information about Charlottetown but also information about the Major Roads, Coast lines, and Land. The identify results include all visible layers.

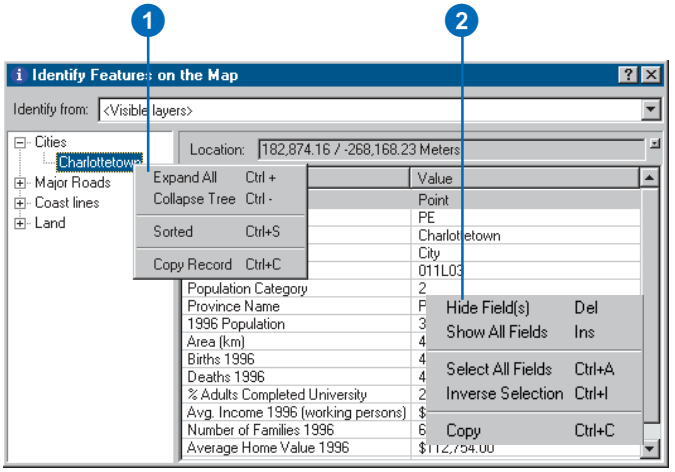


Identify window commands

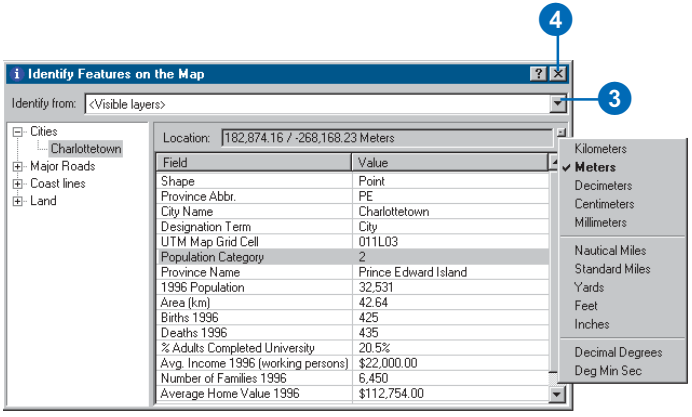
Right-clicking features, layers, or their attributes in the Identify window opens a context menu with options for working with the fields for that feature or layer.



1. Right-click a layer or feature. The options in the context menu allow you to expand all the fields, collapse the Identify tree, sort the fields, or copy a record.
2. Right-click an item in the Value column. The options in the context menu allow you to organize the Field values. You can hide or show all the fields, select all the fields, change the order of the fields (inverse selection), or copy all the fields. If you click Copy, you can then paste the information into another application, such as a text editor or a spreadsheet.



3. Click the small dropdown button to the right of the Location text box to open a menu that will allow you to display the location of the city in the units of your choice. Click Meters.



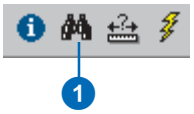
4. Close the Identify window.

Finding a location

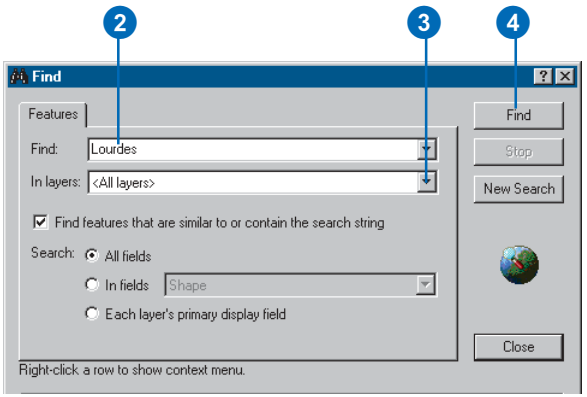
In ArcReader it is easy to find a feature based on a name or value using the Find tool.

1. Click the Find tool.

   The Find dialog box appears.

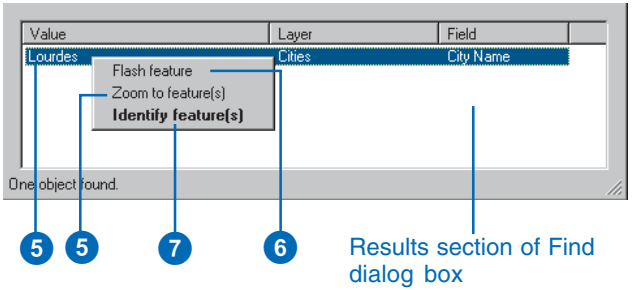


2. In the Find text box, type “Lourdes”.
3. Click the In layers dropdown arrow and click <All layers>.
4. Click Find. ArcReader locates the city called Lourdes and shows it as a row in the Results section of the window.



Once you’ve found a place, you can use the Find dialog box to navigate to or learn more about the feature.

5. In the Find dialog box, right-click Lourdes and click Zoom to feature(s). ArcReader zooms to the city of Lourdes.
6. Make sure the Find dialog box does not cover the city of Lourdes. In the Find dialog box, right-click Lourdes and choose Flash feature. Lourdes will flash.
7. Right-click Lourdes and click Identify feature(s). The Identify Features on the Map dialog box, which contains all the attribute information for the city of Lourdes, appears.

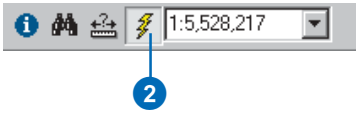


8. Close the Identify Features on the Map dialog box and the Find dialog box.

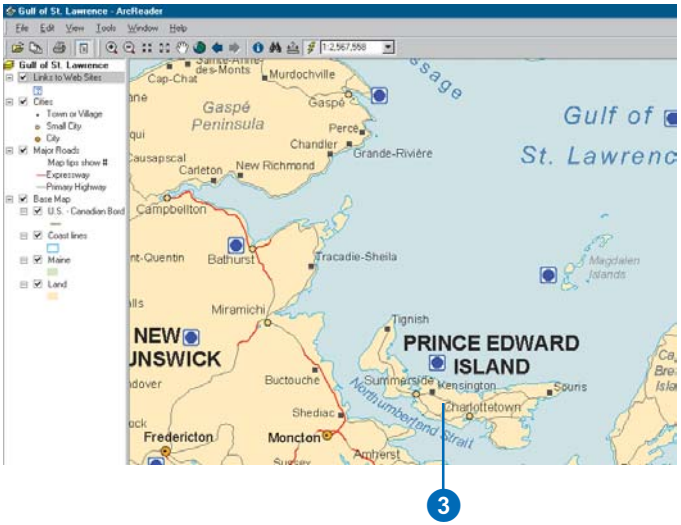
Using hyperlinks

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. Click the View menu, point to Bookmarks, click Prince Edward Island, then continue with the exercise.

1. Check the Links to Web Sites layer in the table of contents. You should see a blue question mark appear on the screen. If the question mark does not appear, zoom out until it becomes visible.
2. On the Data toolbar click the Hyperlink tool to activate it. Notice that a blue dot appears over the question mark. This blue dot indicates hyperlinked features. The Links to Web Sites layer is the only layer with hyperlinks in this map.



3. Hover the Hyperlink tool over the center of the blue dot hyperlink. The cursor changes to a pointing hand. Click to open your default Internet browser. The official Web site of the Government of Prince Edward Island, Canada, where you can learn more about Prince Edward Island, displays.



Measuring distance

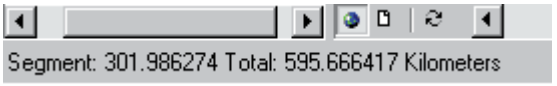
You can measure distances in ArcReader. The ArcReader Measure tool allows you to see how far apart two places are or even plot a route and check its distance.

1. Click the View menu, point to Bookmarks, then click Measured Journey.
2. Click the Measure tool on the Data toolbar.

3. Click Port-Cartier, then plot a course through the Gaspé Passage and on to Cape St. George by clicking each time you want to change directions.
4. Double-click on Cape St. George to finish measuring.

   The line you drew disappears.

There are a few 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.



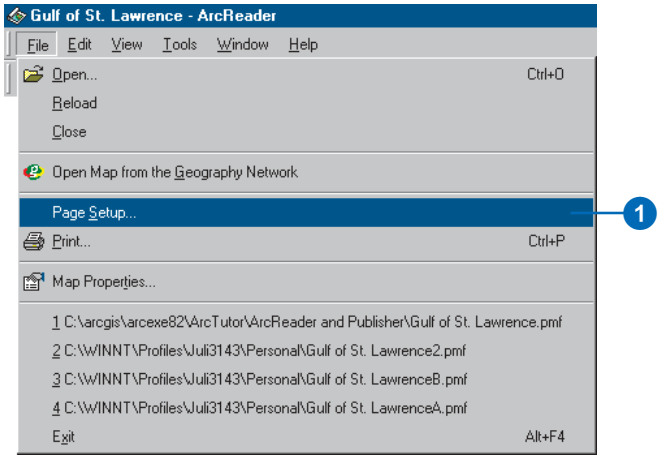
In this exercise, you learned various ways to query a published map to get more information from it. You learned about Map Tips and the various tools that let you investigate more closely the information a map contains. In the next exercise, you will learn how to print a map in ArcReader.

Exercise 3: Printing a map

To perform the following exercise, 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. Click the ArcReader File menu and click Page Setup.

   The Page Setup dialog box opens. This dialog box contains options that let you change which printer you are using or change the settings for that printer.



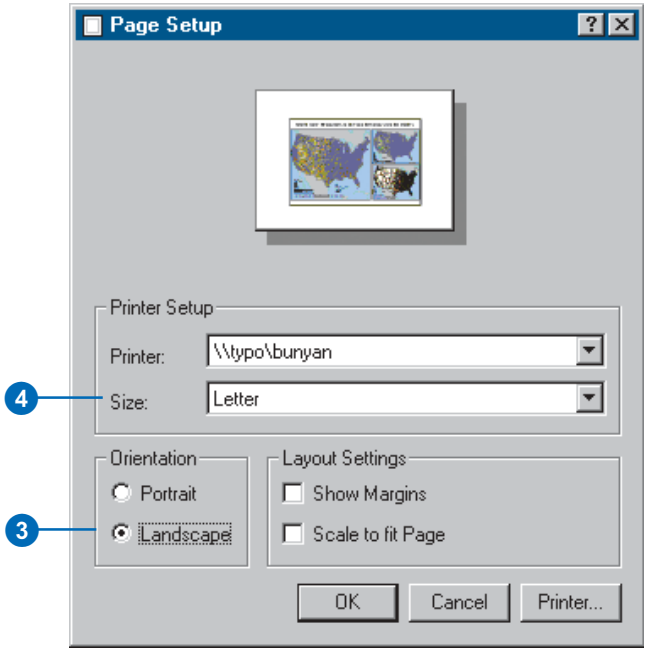
2. If the printer you want to print from is set as your default printer, skip to Step 3. Otherwise, click Printer in the Page Setup dialog box and choose the printer to which you want to print your map.

3. Click Landscape.

4. In the Printer Setup box, click the Size dropdown arrow and click Letter (or A4).

Note that it is possible to print this map to a larger or smaller paper size by checking the Scale to fit Page check box in the Page Setup dialog box. The map will scale up or down to fit the page.

5. Click OK.

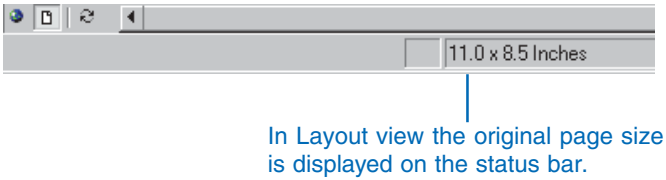


Printing a map

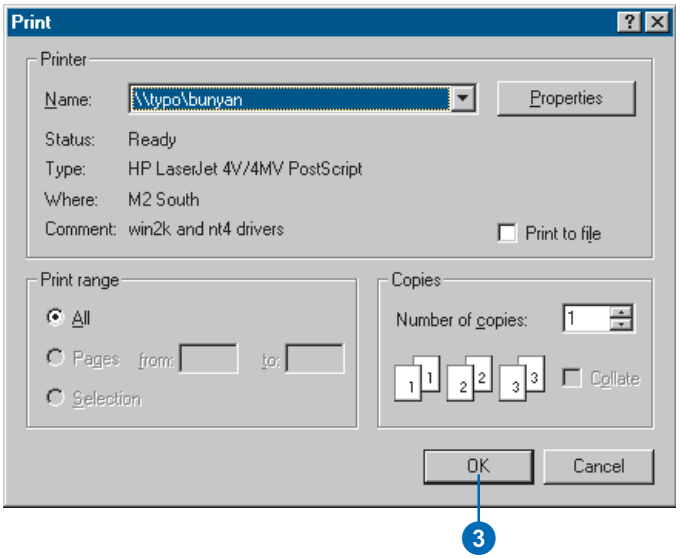
1. Click the Layout view button.

It's important to switch to Layout view because your printing results can vary depending on what view you are in. 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. Click the File menu and click Print.



3. Click OK.



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