Setting Up the Tutorials

The three tutorials accompany "Extending ArcIMS MapServices using ArcXML," by Mark Ho, an instructor for ESRI Education Services. This article appears in the January–March 2002 issue of *ArcUser* magazine and describes how to enhance the appearance and functionality of MapServices in an ArcIMS Viewer by editing the map configuration file. This document provides instructions for setting up the data and applications needed for working the tutorials. The original article and tutorials assume that the reader is familiar with creating a simple ArcIMS Web.
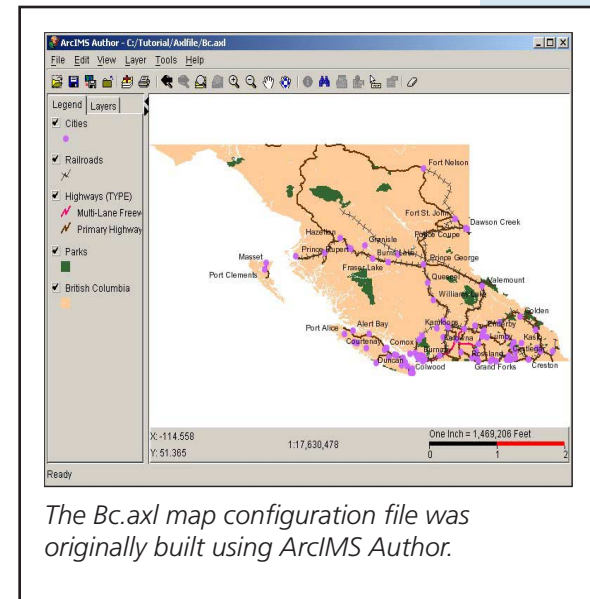
What You Will Need

➲ ArcIMS 3.1 properly installed and operational including the ArcIMS 3.1 Administrator application

➲ A Web browser (Microsoft Internet Explorer or Netscape Navigator)

➲ Tutorial sample data downloaded from the *ArcUser Online* Web site **(www.esri.com/arcuser)**

➲ The *ArcXML Programmer's Reference Guide*

The *ArcXML Programmer's Reference Guide* can be installed locally during the regular ArcIMS installation. It is also available from the ArcOnline Web site **(arconline.esri.com)** in a WebHelp or PDF versions and can be accessed directly online. You can edit the map configuration file using a simple text editor such as Microsoft WordPad or Notepad or you may use an XML editor such as XMLSpy from Altova, Inc., or Xeena from IBM alphaWorks.

Step One: General Setup

These tutorials were created and tested on ArcIMS 3.1 in a Windows environment using the default ArcIMS working directory of C:\ArcIMS. *[Note: If ArcIMS is installed a drive other than C, replace references to the C drive with that drive letter.]* This directory contains two subfolders—the Website folder for storing Web pages and the Output folder for storing ArcIMS output. If these folders are not located in the default ArcIMS working directory, two virtual directories must also be mapped on the Web server to point to the subfolders' paths.

These tutorials use a map configuration file, Bc.axl, that was built and saved using ArcIMS Author. It is stored in the Axlfiles folder for the sample dataset. An existing HTML Viewer, Bcsite, was created using ArcIMS Designer and will be used in these tutorials. Two alternations were made to Bcsite—the background color of the map was changed to light blue and the overview map was removed. There is no need to recreate the HTML Viewer in ArcIMS Designer.

The Bc.axl map configuration file was originally built using ArcIMS Author.

Step Two: Copy Data Files

The data is stored in the default folder used during the dataset's installation, C:\Tutorial\Data. If the data will be installed in another folder, or if you are a UNIX user, the Bc.axl file must be edited using a text or XML editor. Edit the default folder to point to the new data location. Find the SHAPEWORKSPACE element and replace the directory attribute value with the new data path. There is no need view or resave the map configuration file in ArcIMS Author. You will need to copy the Bcsite Web site files and several image files from the sample data to the appropriate locations.

1. After downloading the archived sample dataset from the *ArcUser Online* Web site, double-click on the executable file to extract the data. When prompted, install the data in C:\Tutorial, the default folder.

2. Using Windows Explorer, copy the Bcsite folder from the C:\Tutorial folder to the ArcIMS Web site folder, C:\ArcIMS\Website. You must **copy**, not move, the folder to the Web site directory.

3. Using Windows Explorer, copy the two gif images from the C:\Tutorial\Images folder to the ArcIMS Output folder, C:\ArcIMS\Output.
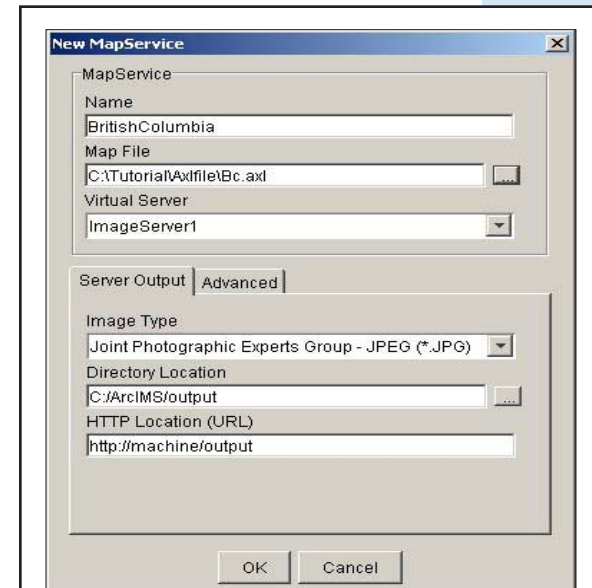
Step Three: Create a New MapService

Before data can be viewed on the Bcsite Web, a new Image MapService must be created. The Administrator Message Console, used throughout these tutorials, will identify any errors made while editing the map configuration file.

1. Open the ArcIMS Administrator application.

2. Create an Image MapService named BritishColumbia (case sensitive), pointing to the tutorial's map configuration file (C:\Tutorial\Axlfiles\Bc.axl). Accept the default Server Output settings. Ensure the BritishColumbia MapService has been successfully created and started.

3. In the ArcIMS Administrator menu, choose Help > Administrator Message Console.

4. With the Adminstrator Message Console open, choose View > Message Level > All from the menu. From the View menu, choose Clear Console.

5. Minimize ArcIMS Administrator and the Administrator Message Console. These applications will be used in each tutorial.

Step Four: Test the HTML Viewer

The data available from the MapService data will be viewed using the HTML Viewer supplied with the dataset.

1. Open the Web browser and enter the URL for the Bcsite web site
    http://your_machine_name/website/bcsite
    where your_machine_name is the name of your computer.

Use these settings when creating the BritishColumbia Image MapService in ArcIMS Administrator.

The Bcsite Web site, with 5 layers, should be displayed in the browser window.

2. Zoom and pan around the site to get familiar with the data set, the layer renderings, and the scale-dependent labeling.

3. Minimize the Web browser. It will also be used in each tutorial.

Troubleshooting the Bcsite Web Site

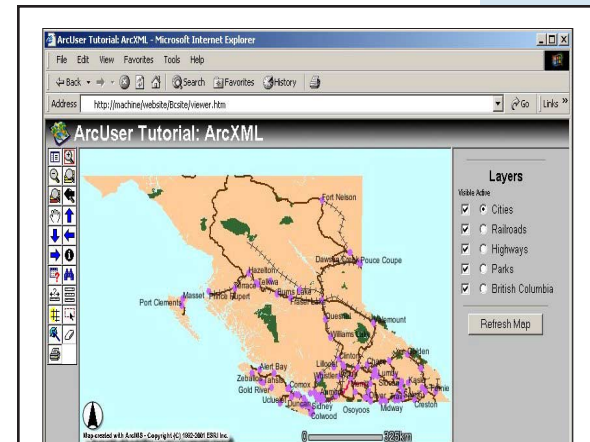If the Bcsite Web site does not appear in the browser, check for these common errors.

➲ *Has the MapService been created and started?*
Check ArcIMS Administrator to verify the BritishColumbia MapService is running.

➲ *Has the BritishColumbia MapService been properly named?*
MapService names are case sensitive, so ensure the MapService is precisely named BritishColumbia in ArcIMS Administrator.

➲ *Have you properly copied the Bcsite folder to the C:\ArcIMS\Website folder?*
Use Windows Explorer to ensure the location of the Bcsite folder is correct, and that you have **copied (not moved)** the folder.

➲ *Is the tutorial data located in C:\Tutorial\Data?*
If you did not install the tutorial data in the default folder, you must open the Bc.axl file with a text editor and change the directory path inside the SHAPE-WORKSPACE folder, then refresh the BritishColumbia MapService in ArcIMS Designer.

➲ *Is ArcIMS running properly?*
Check to see if ArcIMS has been successfully installed and is communicating properly. Use the ArcIMS Diagnostics tool to ensure all tests are successful.

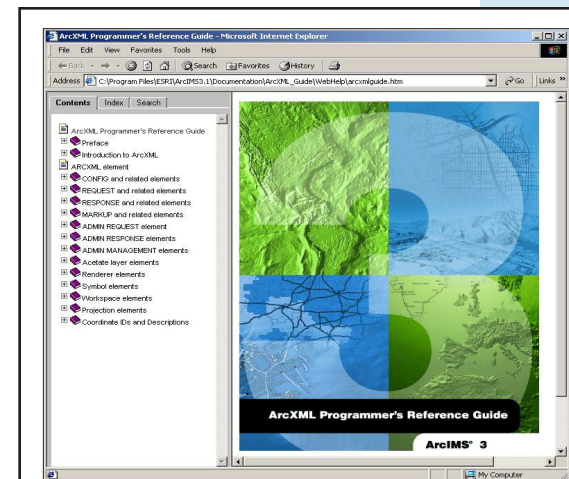### Step Five: Get Ready to Edit the Map Configuration file

1. Open the text editor (Microsoft WordPad or Notepad) or XML editor (XMLSpy or Xeena) you will use to edit the ArcXML elements and attributes in the map configuration file.

2. Open the map configuration file, Bc.axl located in C:\Tutorial\Axlfiles\.

3. Open the *ArcXML Programmer's Reference Guide*, which will be used to learn more about specific ArcXML elements and attributes, by choosing Start > Programs > Esri > ArcIMS 3.1 > Documentation > ArcXML Guide, or by logging onto the ArcOnline Web site (**arconline.esri.com**).

4. Minimize both the text editor and the guide.

Summary

With the sample data set up, the MapService started, and the required applications open, you can work on any the three ArcXML tutorials.

The Bcsite web site using the HTML Viewer template should load and display the Canadian province of British Columbia as originally specified in ArcIMS Author.

The ArcXML Programmer's Reference Guide *provides invaluable information about all ArcXML elements, attributes and the relationships between them.*