Speed Metadata Creation with Templates

Metadata is essential for using geospatial data intelligently. Metadata—data about data—consists of properties and documentation. The default settings in ArcCatalog cause it to automatically generate a basic metadata file in XML format that contains a file's properties such as the extent of a shapefile's features. This XML file is generated when the file is selected in the ArcCatalog tree and the Metadata tab is clicked. However, documentation—the part of metadata that contains information that is often needed to determine if a dataset is suitable for a particular use such as an abstract describing the data, restrictions on data use, contact numbers, and other information—must be entered.

One way to quickly create metadata documentation is to use a metadata template. A metadata template contains information common to multiple datasets. For example, a template can quickly add documentation that applies to all GIS resources for a specific project.

If metadata containing most of the documentation needed for the template already exists for one data file, the metadata can be exported using the Export Metadata button on the Metadata toolbar in ArcCatalog. The content of the file then can be edited in Windows Notepad (or another program for editing XML) to generalize it for the project.

Creating an Empty XML File Manually

If no suitable metadata exists, a metadata template can be created using an empty XML file. XML files can be created either manually or programmatically. The manual method will be described here. The process described works for ArcGIS with ArcInfo, ArcEditor, or ArcView licenses in releases 8.1 through 8.3 and 9.0. Information on programmatically generating an empty XML file can be found at the ESRI Support site.

```
<?xml version= "1.0"?>
<metadata>
</metadata>
```

Listing 1

The following steps will create an empty XML file.
1. Open a text editor such as Windows Notepad.
2. Copy the lines shown in Listing 1 and paste them into the text editor.
3. In Notepad, save this text as an XML file by choosing File > Save As, selecting All Types from the Save as Type drop-down list, and giving the file a name ending with the .xml extension (e.g., simplecounty.xml). *Note: Do not name this file*

metadata.xml because ArcCatalog will assume that the file contains metadata describing the folder in which it was saved. Also, do not use more than one file extension (e.g., myMetadata.txt.xml) because this will cause the file not to appear in ArcCatalog.

Creating the Template
1. In ArcCatalog, right-click the folder containing the new XML template and click Refresh. Open the folder, select the template, and click the Metadata tab.
2. Click the Edit Metadata button on the Metadata toolbar.
3. Enter the *documentation* (not properties) for the template that will be common to all data with which the template will be used. This could include items such as contact information, legal restrictions, and date published. Do *not* include properties such as the spatial reference or extent—information that ArcCatalog will automatically add. Entering this information will cause ArcCatalog to cease updating these values in the future.
4. Save the template.

Using the Template
Use the template before adding documentation specific to a dataset because when metadata is imported, it overwrites any existing metadata elements.
1. In the ArcCatalog tree, click the item to which the template will be applied and click the Metadata tab.
2. Click the Import Metadata button on the Metadata toolbar.
3. In the Import Metadata dialog box, click the Format drop-down arrow and choose the format of the metadata that will be imported.
4. Click the Browse button and navigate to the location of the template and click on it. Click Open, then click OK. The imported metadata appears in the Metadata tab.

To Learn More about Metadata
For more information on defining metadata, see Chapter 9 in *Using ArcCatalog,* one of the manuals that comes with ArcGIS Desktop. For more information on creating and managing metadata, see the free training seminar, *Metadata: Tips and Tricks,* and the course, *Protecting Your Investment in Data with Metadata,* both offered by the ESRI Virtual Campus. Information on specific metadata topics is available from the ESRI Knowledge Base at the ESRI Support site (www.esri.com/support).