

Using the Import Wizard

This is second of two companion tutorials for “Migrating Coverages to Geodatabases,” an article that appeared in the July–September 2001 issue of ArcUser magazine. This tutorial describes how to use the Import Wizard in ArcCatalog to import an existing coverage containing arcs, nodes and a route into it geodatabase. This tutorial uses MyGDB, the personal geodatabase created in the first tutorial.

Wizards guide you through the steps needed to accomplish a task. They are especially useful for new users because Wizard prompts, explain, and use smart defaults to complete tasks. In this tutorial we will customize the procedure by specifying the feature class name and the items to be imported.

Selecting a Coverage and Featuredataset

1. Start ArcCatalog if it not already running and make sure you are connected to the MyWorkSpace folder containing MyGDB.
2. Right-click on MyGDB and choose Import > Coverage to Geodatabase Wizard from the context menu.
3. In the Coverage to Geodatabase Wizard, click on the Browse button and path to the location of MyGDB and select the arccov coverage.
4. A list of available feature classes appears in the text box below “Select the feature classes you want to convert.” Check the boxes next to the route.bursts, arc, and node feature classes. The arccov coverage has a number of feature classes that are topologically integrated. The route.bursts feature class is dependant on the arc feature class which has attributes associated with the node feature class. Click Next.
5. Create a new Feature dataset for these feature classes by clicking on the radio button next to “Create a new output feature set” and typing MyArcFeaturedataset as the name of the new Feature dataset. Click Next

Specifying Parameters

We will alter some of the parameters for these new features classes. In addition to checking the spatial reference for the feature classes and spatial index grid, we will change the names of the feature classes, change options for the features classes, and modify the field mappings for items.

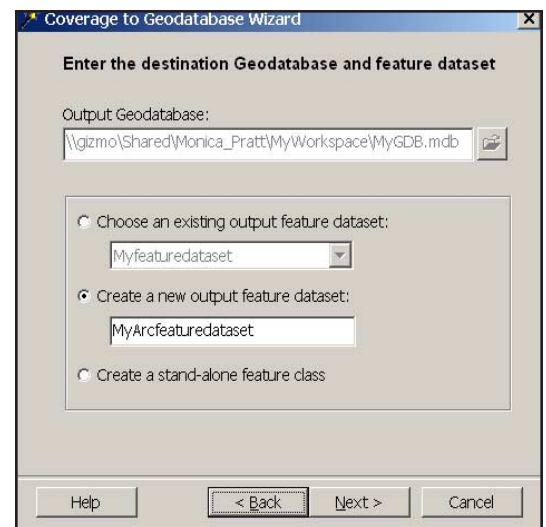
1. In the next panel, click on the radio button next to “Specify remaining parameters” and click Next.
2. The next panel shows the current spatial reference. If the input coverage has a defined coordinate system contained in a PRJ file, ArcGIS reads this information and adds it to the geodatabase feature class properties. This is not the same as projecting the data; all you are doing is defining the projection of the feature class. If the input coverage has no spatial reference information, ArcGIS will set the projection to UNKNOWN (the default value) or let you specify the appropriate coordinate system. Don’t change the spatial reference for the new feature dataset. Choose Next.
3. The next panel shows the new feature class names and additional options. Change the Output feature classes as indicated in Figure 1. Set the value for the third column “Set Option?” to Yes for all feature classes. This will allow us to exclude some attribute fields in the final GDB feature classes. Click Next

Spatial Index Grid

The data importing tools in ArcGIS suggest a grid size based on the spatial reference, average feature size, and number of features in the input coverage. This suggested grid size is only an approximation. You can determine the

What You Will Need

To successfully complete this tutorial you will need ArcGIS 8.1 (ArcInfo, ArcEditor, or ArcView), the sample data for this tutorial downloaded from the ArcUser Online Web site (www.esri.com/arcuser), and the personal geodatabase created in the first tutorial.



Create a new Feature dataset for these feature classes by clicking on the radio button next to “Create a new output feature set” and typing MyArcFeaturedataset as the name of the new Feature dataset. Click Next

Original Name	New Name
Route.bursts	Pipebursts
Arc	Waterpipes
Node	Valves

Figure 1: Output Feature Settings

optimum grid size for any feature class by examining the data and the needs of the application that will query this data.

The spatial index grid is a two-dimensional grid system that spans a layer and is similar conceptually to a locator grid on a road map. ArcGIS uses this grid to quickly locate features in a dataset that might match the criteria of a spatial search. Care in creating the spatial index will increase the efficiency of spatial searches. If you are unfamiliar with creating spatial index grids, use the default value provided. Creating a poorly defined grid will actually increase the time needed to complete a spatial search. In this exercise, accept the default option for the Spatial Index parameters for Pipebursts and click Next.

Field Mapping Options

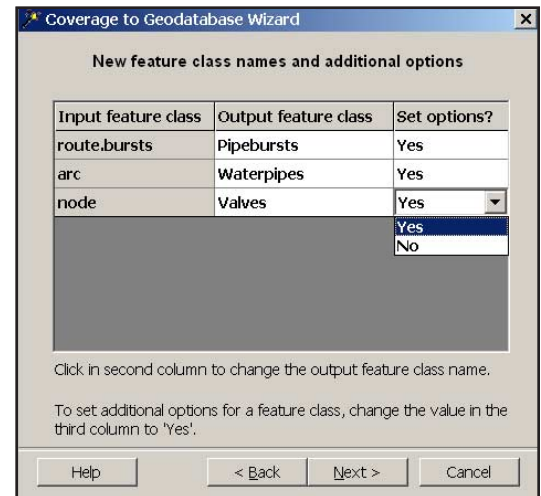
The next panel shows the field mappings for the feature datasets. During the conversion field mapping process, the wizard checks item names in the input table for any characters or words that are illegal in the output table and automatically changes them. It displays these findings in the panels for each feature class.

The Original Fields field shows the item names from the coverage feature attribute table as well as required fields for the output, FID and Shape. The Original Error shows what problems occurred during the conversion. The Corrected Fields field shows the item names that will be used in the output geodatabase table. Entries in Corrected Fields can be edited. The Delete Field? field always defaults to No. Delete a field from the feature class by changing the setting to Yes. Because the original coverage was derived from an ArcStorm Database a number of fields will need to be deleted.

1. In the next panel for Pipebursts, change the Delete Field? setting to Yes for the following fields: LOCK__ID, PHASE__ID, OBJECT__ID and CREATE__ID. Click Next
2. In the panel for Waterpipes, accept the grid level, click on Next, and change the Delete Field? settings for ARCCOV# and ARCCOV-ID to Yes.
3. In the panel for the Valves feature class, accept the grid level, and change the Delete Fields? settings for LOCK__ID, PHASE__ID, CREATE__ID, NAME__LAYER fields to Yes. Click Next
4. A summary Panel displays the Input and Output options. Click Finish.

Summary

The wizard now processes the input coverage and creates the new feature dataset and feature classes. Once the conversion process is complete, refresh ArcCatalog and explore the new MyArcfeaturedataset using ArcCatalog. For more information on adding existing data to a geodatabase see Building a Geodatabase, part of the documentation that comes with ArcGIS.



The next panel shows the new feature class names and additional options. Change the Output feature classes as indicated in Figure 1. Set the value for the third column "Set Option?" to Yes for all feature classes. This will allow us to exclude some attribute fields in the final GDB feature classes. Click Next



Delete a field from the feature class by changing the setting to Yes. Because the original coverage was derived from an ArcStorm Database a number of fields will need to be deleted.