

## How to import schema into the Geodatabase

This document describes how to add new schema and load data to a geodatabase after it has been created from a data model template.

**Note:** *You need to set the Spatial Reference while running the Schema Wizard or when creating the geodatabase.* You will need to specify a spatial reference so that the feature classes created can be used with your data. There is a separate document that describes how to specify the spatial reference while running the Schema Wizard. This process is important because the spatial reference cannot be changed after the schema is created. This document assumes that you have a database created that will fit your data.

## Converting Data to a Different Format

Converting data from one format to another is a common task, usually done at the beginning of a project. There are many ways to convert data to the geodata workspace. It may start as a coverage or shapefile and your goal is to load this into a geodatabase, or you may want to import the data from one geodatabase to another using the import/export xml workspace document tools.

ArcCatalog makes it easy to change a data source's format. Right-click the data source whose format you want to change and point to Export. A list of the data converters that are appropriate for the selected data source will appear.

## Importing a geodatabase feature class

You can use the Feature class to Geodatabase tool in ArcCatalog and ArcToolbox to import feature classes from one geodatabase to another or to import features from one feature class into a new feature class in the same geodatabase. This tool creates simple feature classes only and does not preserve object identity.

When you use this tool to import a custom or network feature class, a new simple feature class is created and the geometry and attributes of each feature are imported. If the input feature class has any subtypes, default values, relationships, and so on, they are not imported along with the features.

## Copying and moving geodatabase data (limited in ArcView)

In addition to the Feature class to Geodatabase tool, ArcCatalog contains tools to directly move and copy data between geodatabases while preserving object identity, subtypes, relationships, network connectivity, and so on. With this method of copying data, you can copy entire feature datasets or individual feature classes between geodatabases.

When the data is copied, the copy has all the behavior of the original data; any attribute domains referenced in the original geodatabase are copied along with the feature class or table. If the feature class or table participates in a relationship class, then that relationship class, along with the feature class or table it is related to through that relationship class, is also copied. For example, if you copy a feature class with feature-linked annotation, the

feature-linked annotation is automatically copied with the feature class.

If you are copying a feature class into an existing feature dataset either in the same geodatabase or in another geodatabase, then the spatial reference of the feature class and the feature dataset must match. If the spatial references do not match, you will not be able to copy the data.

You can move feature classes and relationship classes in and out of, or between, feature datasets in the same geodatabase by dragging and dropping them in ArcCatalog. When moving a feature class into a feature dataset, the feature class and the feature dataset must have the same spatial reference.

If you copy or move a network feature class, all the feature classes that participate in the network, and the geometric network itself, are also copied or moved with the feature class.

## How to import shapefiles

Importing shapefiles using default values.

In the ArcCatalog tree, right click the shapefile you want to import into your geodatabase.

Click Export.

Click To Geodatabase (Single).

The wizard appears with the input shapefile field already populated with the shapefile you selected in ArcCatalog.

Navigate the Output Location to the database or database connection into which you want to import the shapefile, or type its path.

Type a name for the new Output Feature Class.

Expression (optional) can be used to query a subset of data by clicking the SQL query builder button. The query builder includes fields and unique values that can be selected by double clicking.

The field info (optional) shows the contents of the shapefile.

M and Z values can remain the Same As Template to convert schema directly without changes.

Leave other options default.

When satisfied with your options, click OK to import the shapefile into the database.

## Tips

Using the Import menu.

Using the Multiple feature class import/export tool.

To select multiple shapefiles from the contents view of ArcCatalog, click Feature Class (multiple) in the Import menu. By clicking the browse button, multiple feature classes can be added to Input Features.

Use the browse button to navigate to the output Geodatabase

Click OK to import the shapefiles into the geodatabase.

## Add new schema using ArcToolbox

To import shapefiles to the geodatabases you can also use ArcToolbox.

Open ArcToolbox in ArcCatalog by clicking the Window menu and ArcToolbox. ArcToolbox window will appear next to ArcCatalog tree.

In ArcCatalog tree, right click on the geodatabase and point to New.

Click Toolbox.

A new Toolbox is created in the ArcCatalog tree.

Right click on Toolbox and point to New.

Click Model.

Add shapefile(s) by dragging them directly from ArcCatalog tree into model builder window.

Or, by clicking the Add button in the model builder window to browse the shapefile(s) and add.

The tool(s) for importing shapefile(s) into geodatabase are found in ArcToolbox inside the Data Management Tools.

Under the ArcToolbox tree, expand Data Management Tools.

Expand Features under Data Management Tools

Drag and drop the copy Features into the model builder window.

Connect the shapefile to the Copy Features tool by draw a line using the 'add connection' tool to draw a line to string together processes in the geoprocessing model builder environment.

The copy features tool will be colored after a successful connection.

Click the run button

The shapefile schema and attribute table information are used to create a new feature class in the geodatabase.

Tip:

You can also use the database management tools to create a new Database, Domains, Subtypes, Relationship classes, new raster layers, and more geodata types.

