Import Linking to Personal Geodatabases

You can use the Import process in the TNT products to import geospatial layers from a Personal Geodatabase created by ArcGIS or set up links to use the layers in their native form. A Personal Geodatabase stores one or more geospatial layers (feature classes in ESRI terminology) in a Microsoft Access file. Each geospatial layer in the Personal Geodatabase is stored in its own table in the Access file. A single spatial table contains only one type of spatial element (polygon, line, or point). A Personal Geodatabase with geologic map data, for example, might have separate spatial tables for rock units (polygons), rock contacts (lines), faults (lines), and outcrop structural measurements (points). Each spatial table has one table row for each component element. A shape column in the table stores the spatial information for each element in binary form, and other columns contain the attributes for these elements.

You can select any or all of the spatial tables in a Geodatabase for import or linking. If you choose to link to the Geodatabase spatial tables, a linked shape object is created in your selected TNT Project File for each selected table. Georeference information is automatically detected and stored with each shape object. When displayed or processed, each shape



Each shape layer in this view is linked to a separate table in a single Personal Geodatabase file, the digital version of the *Surficial Geology of the Eagles Mere 7.5-minute Quadrangle, Pennsylvania*, published by the Pennsylvania Department of Conservation and Natural Resources. (The topographic map base is a separate linked GeoTIFF file.) Each shape layer contains a single spatial element type (polygon, line, or point) and all types are included in this view. Styles for the shape layers were set up in the TNTmips Display process using the attribute values provided in each map layer's table in the Geodatabase file.



Each shape object in this view is linked to a separate Personal Geodatabase file with map data for a county in Utah, USA. Styles for the shape layers were set up in the TNTmips Display process using the attribute values provided in each layer's table in the Geodatabase file. The shape layers are displayed over a relief-shading raster computed from a digital elevation model in the TNTmips Terrain Properties process.

object reads the spatial information for its elements directly from the spatial table in the Geodatabase file. Each linked shape object is represented in the TNT interface with one or more linked attribute tables for the type of spatial element it contains. Attribute values in these tables are also read directly from the Access file when needed. You can use these linked attributes as the basis for setting up display styling (as illustrated by the examples on this page), for DataTips, and for selection queries and other forms of script.

If you elect to import rather than link, you have the option to import the layers as standalone shape, vector, or CAD objects.