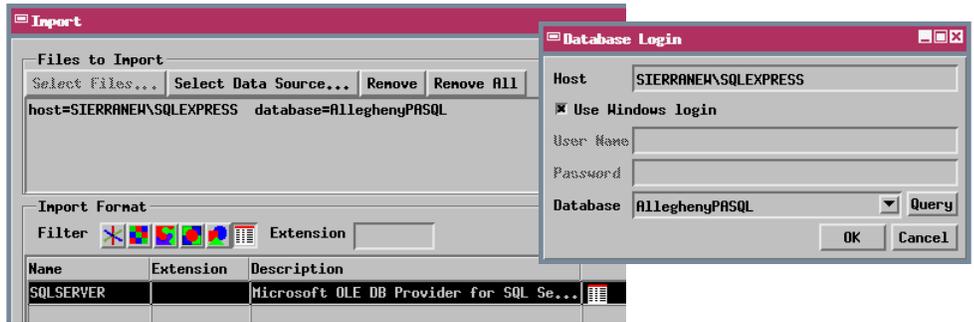


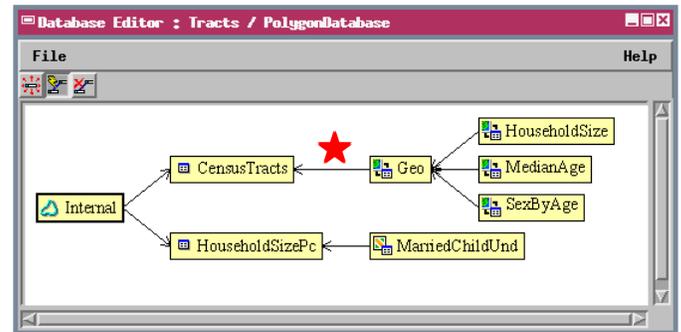
Import

Linking to SQL Server Databases

Your TNT geospatial objects can read, query, and base element styling on attribute information stored in a Microsoft SQL Server database. Simply use the Import process in the TNT products to link the SQL Server database to the TNT database of the desired geospatial object. After linking, you can use common fields in a TNT table and a linked SQL Server table to relate the SQL Server database to the elements in your TNT geospatial object.

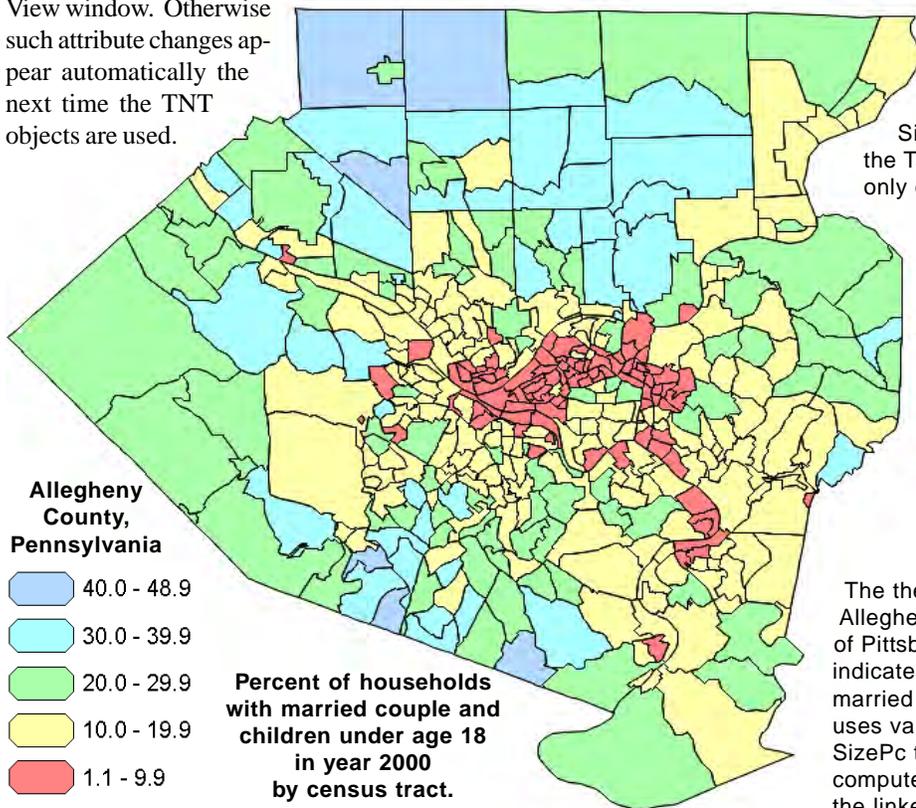


The linking procedure for SQL Server uses a specially tailored OLE DB connection that allows you to log in to the SQL Server host, query the host for the available databases, and select the desired database. You can then choose to link to (or fully import) any or all of the tables in the SQL Server database. All pre-existing keyfield designations and relationships between SQL Server tables are maintained automatically by the OLE DB connection. This procedure works with all current versions of SQL Server, including the FREE SQL Server 2005 Express Edition, which is limited to computers with a single CPU but supports databases up to 4GB in size.



TNT tabular views of linked SQLserver tables can be set to automatically refresh at a selected time interval to show any changes made in the attribute values by the SQLserver database administrator while the tabular view was open. For geometric objects with styling based on attributes in the linked tables, attributes changed while the spatial object is displayed require a redraw of the layer to update the styles in the View window. Otherwise such attribute changes appear automatically the next time the TNT objects are used.

The Database Editor view above shows the polygon database for a vector object with census tract polygons for Allegheny County, Pennsylvania. The Geo, HouseholdSize, MedianAge, and SexByAge tables exist in an SQL Server Express database, which was linked into the TNT polygon database using OLE DB. The structure of the SQL Server database (relations between tables) is automatically maintained by the OLE DB connection. After linking, the SQL Server Geo table was manually related to the TNT Census tract table (arrow marked by red star), effectively relating all of the SQL Server tables to the vector polygons. The HouseholdSizePc table in the TNT vector database (shown in the Tabular view below) is a new TNT table containing only computed and string expression fields that reference fields in the HouseholdSize table in the external SQL Server Express database.



GEO_ID2	PCT009002_Pct	PCT009003_Pct	PCT009004_Pct
4200352140	29.1	13.2	16.0
4200351800	25.3	8.9	16.4
4200341330	19.1	7.5	11.6
4200346600	16.9	7.3	9.6
4200327150	31.8	15.4	16.3

419 of 419 records shown

The theme map to the left shows census tracts for Allegheny County, Pennsylvania, which includes the city of Pittsburgh in the center. The polygon fill colors indicate ranges in the percentage of households with a married couple and children under age 18. This theme uses values in a computed field in the TNT HouseholdSizePc table in which the percentage for each record is computed using two fields in the HouseholdSize table in the linked SQL Server Express database.