# Oracle® Spatial Layer vs TNT Vector Object

TNTmips® and Oracle Spatial each have their own vocabulary. In TNTmips, elements in vector objects have associated attributes that are stored in an element specific database. In Oracle Spatial, layers with their associated geometries and attributes are all stored as tables with additional tables that contain the relationship between these tables, georeference information, and so on. TNTmips has elements and objects while Oracle Spatial has elements, geometries, and layers. An Oracle Spatial geometry is made of one or more elements and is equivalent to an element in TNTmips. An Oracle Spatial layer is equivalent to a vector object in TNTmips.

Oracle Spatial layers have an associated spatial index that limits, and thus speeds up, searches based on spatial criteria, such as intersection and containment. These indices are similar to the search trees built by vector validation in TNTmips. The topology required for accurate GIS work is not stored with the Oracle Spatial layers. The spatial layer is spaghetti, or a collection of geometries with spatial locations but no relationship to each other. This lack of topology poses no problems for use with TNTmips. The required topology is built when the spatial table is imported from Oracle Spatial. Topology is maintained continuously for any TNTmips use of a vector object.
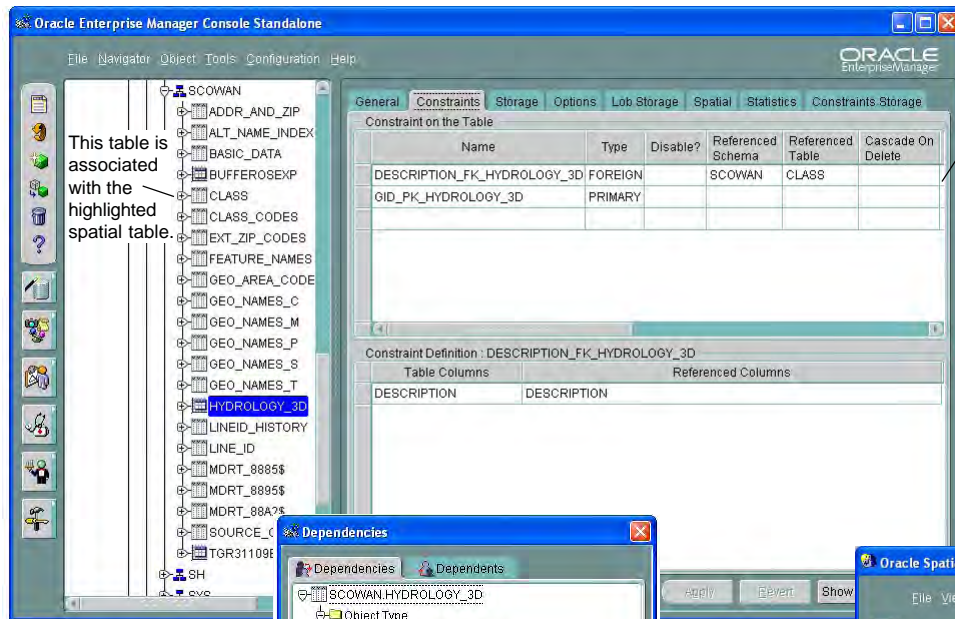
Relationships between tables are shown graphically in TNTmips' Database Editor window (below) and in tabular form in this Oracle Spatial tabbed panel (left).

This table is associated with the highlighted spatial table.
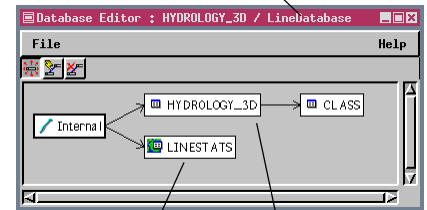
This table was added by the import process.

This table contains the same information as the tabular form of the spatial table shown in Oracle Spatial's Table Editor window (below, center). You can open the table by double-clicking on it in the Database Editor.

Oracle Spatial also provides a graphic depiction of all components that would be affected by changes in or deletion of the spatial table (or any other table). Two of these components are related to the log-in identity and storage location, but the others would be saved as part of the vector object in TNTmips.
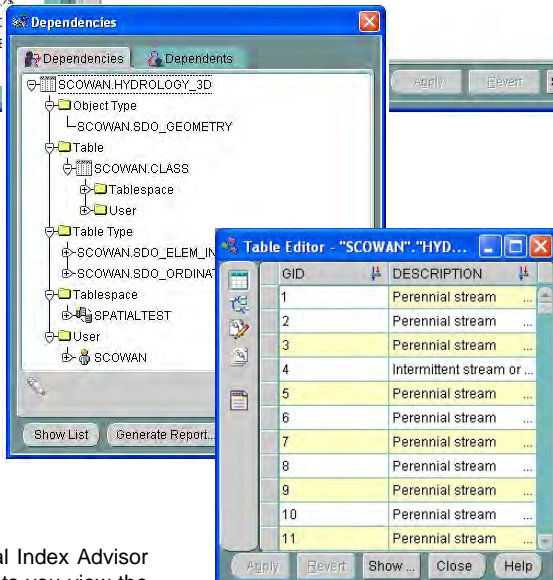
The Oracle Spatial Index Advisor (shown at right) lets you view the geometries in your spatial tables. The attributes assigned in spatial tables can be viewed in tabular form (immediately above) in the Table Editor, which is opened from the Oracle Enterprise Manager Console (also above). There is a record (row) that corresponds to each of the geometries in the layer.