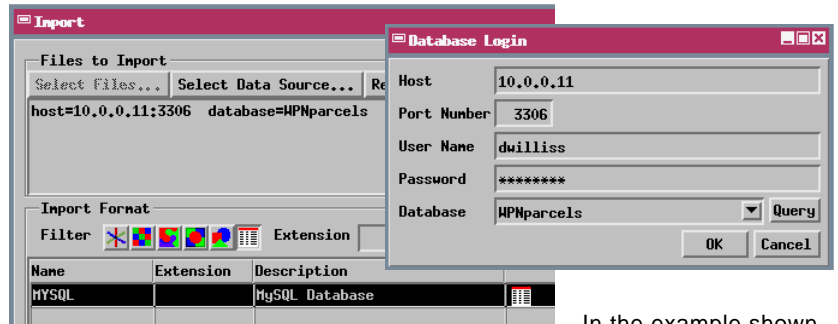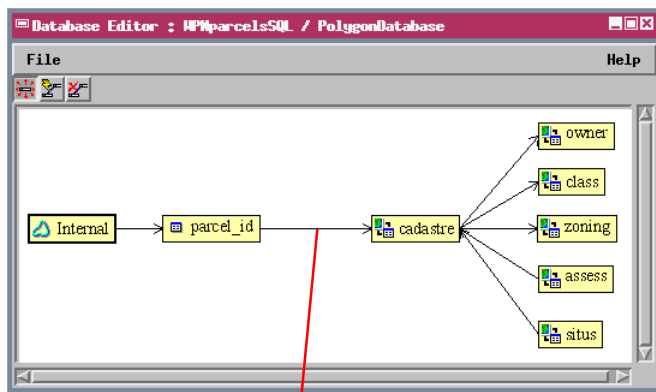# Linking to MySQL Databases

MySQL is a powerful relational database system that, like the TNT products, can run on all major operating systems, including Windows, Linux, and Mac OS X. Your TNT geospatial objects can directly use attribute information stored in a MySQL database on any of these platforms. Simply use the Import process in the TNT products to link tables in the MySQL database to your TNT object. The import/linking procedure for MySQL prompts you to log in to the MySQL server host and specify the desired MySQL database. You can then choose to link to (or fully import) any or all of the tables in the selected MySQL database. All pre-existing keyfield designations and relationships

In the example shown here, TNT spatial data on a PC running Windows XP is linked to a database in a MySQL database server residing on a PC running LINUX.

between the selected MySQL tables are maintained automatically by the link connection or when imported. Pairing MySQL with the TNT products provides flexible cross-platform capability for handling both geospatial and attribute data. In addition, the TNT products can link to geospatial data stored using the spatial extension to MySQL (see the color plate entitled *Import: Linking to MySQL Geodatabase Layers*).

Linked MySQL tables that contain spatial coordinate information can be pinmapped directly. But if the attributes in MySQL tables pertain to the spatial elements in a TNT geometric object, you will need to make at least one keyfield relationship between a linked table in the MySQL database and a TNT table with records directly or indirectly related to the geometric elements (using the Database Editor or the table's Properties window). Once this relationship has been made, the MySQL attributes can be used as the basis for DataTips, selection queries or other scripts, or geometric element styling, as in the example shown here. TNT tabular views of the linked tables can be set to automatically refresh at a selected time interval to show any changes made in the attribute values by the MySQL database administrator while the tabular view is 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.

Tables to the right of this arrow reside in a MySQL database. The relationship between these two tables was set up manually in the TNT Database Editor. It effectively relates all of the interrelated MySQL tables to the polygon elements in this vector object.

Real estate parcel polygons styled using a property class attribute residing in a linked table in the MySQL database.

| | |
|---|---|
| Residential | Condominium |
| Duplex | Commercial |
| Conversion | Industrial |
| Multi-family | Exempt |

Tabular view of one of the linked tables in the MySQL database. The highlighted record is related to the selected vector polygon via keyfield relationships among the MySQL tables and one between a MySQL table and a table in the vector object's polygon database.