

Database

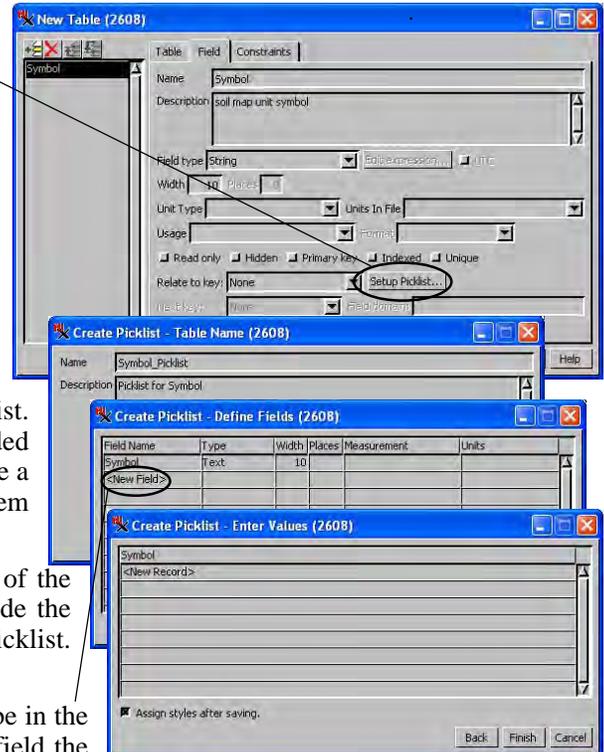
Wizard to Create a New Picklist

A TNT attribute picklist is a specialized list derived from a database table that contains the allowable attributes for elements in a geometric object.

A picklist lets you quickly assign attribute values from a list you set up. The TNT products provide a wizard to create a new picklist for use with a new or existing database table. The picklist wizard sets this table up with the correct database relationships when you are creating or editing a table that has a field you want to populate with values from the picklist you create. The necessary database relationships are described in the Technical Guide entitled *Database: Picklist Relational Structure*. The wizard also lets you assign styles to appear in the picklist and be used for drawing elements in the geometric object with attribute values assigned from the picklist.

Create a Picklist from New or Existing Table

To create a picklist using the picklist wizard, click on the Setup Picklist button in the table properties window for a new or existing table with records directly attached to the elements in the geometric object. This opens the wizard to create a new table that will provide the picklist for the field highlighted in the New Table or Table Properties window. The Setup Picklist button is not active if the highlighted field is not a string field, which includes string and Unicode string field types, or is a primary key (shown at left). The field that will be populated by the picklist cannot be a primary key because it needs to be related to the primary key in the picklist table. The values for other field types, such as computed fields and memo fields, do not make sense to pick from a list. Numeric fields, such as integer and floating point fields, are also excluded because it is likely quicker and easier to just enter the number. If you have a small number of allowable numeric values, you can make a picklist for them by including them in a text field.



Name the Picklist Table. You name the picklist table on the first panel of the picklist wizard. A default name and description are provided that include the name of the field the picklist is associated with and its identity as a picklist. Simply click Next to accept the default.

Define Picklist Fields. The next panel lets you define the fields that will be in the picklist table. By default, a field in this list with the same name as the field the picklist is being created for is shown. You can again click Next if this field is the only field you want in your picklist table. Additional fields may be added to the table if desired by clicking on the New Field entry and typing in the field name. When a new field is added, it will have the same properties as the preceding field, all of which may be changed. The field type is changed from this default by left-clicking on the type column and selecting the desired type from the menu. The available field types are shown on the menu at the left. The measurement category and units are also designated by left-clicking in the column and selecting from a menu. The width and places values are changed by typing into the fields. You can also right-click to change the order of fields or delete them. Only the first field is shown in the picklist, but the others can be viewed when the picklist table is opened. Computed fields are not a choice on this menu but can be added to the picklist table through the normal table editing procedures.



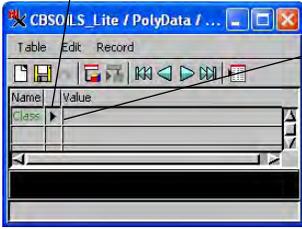
Define Picklist Choices. Picklist choices are specified in the third picklist wizard panel. If the field you are creating the picklist for already has values, this panel will be pre-populated with those values. You can add to this list of values or start a list for a new table by clicking on the <New Record> entry and typing into the field or fields. Creating a picklist with values that match the values in an already existing, directly attached table is useful if you will be adding more elements to the object and/or if you want to create a template for use when you create new objects. None of the records in a directly attached table are saved with a template, but all of the records in a related-only table (such as the picklist table) are maintained in the template.

Note that there is an *Assign styles after saving* toggle on this panel. If this toggle is off, clicking on the Finish button in the wizard adds the picklist table to the database and returns you to the Table Properties window for the table that will use the picklist. You will note that the *Relate to key* box has been filled in with the picklist table and field names.

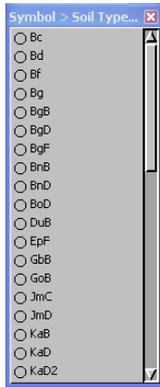


(over)

This button appears in single record view only. Clicking on it, opens the picklist.



single record view of table with field that can be populated from its picklist



picklist without styles assigned

OR



picklist with styles assigned



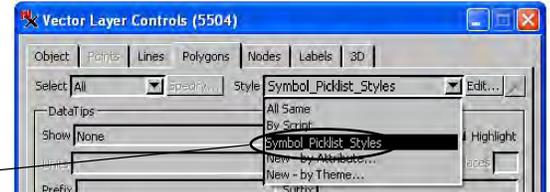
picklist table in tabular view

Use this icon to switch to Single Record View.

Note that the second field shown in the tabular view of the picklist table illustrated does not appear in the picklist this table provides.

Define Styles as Part of Picklist Setup

If the *Assign styles after saving* toggle is on, clicking on the Finish button opens the Assign Styles by Attribute window. The attribute you created the picklist for is automatically selected and its values listed for style assignment. Style assignment for the picklist table from the picklist wizard operates the same as when assigning styles to any geometric object from the Layer Controls window. However, when you click on OK after assigning drawing styles, you return to the Table Properties window for the table you were creating/editing when you clicked on the Setup Picklist button. When the *Assign styles after saving* toggle is on, you go directly to the Assign Styles by Attribute window when you click on the Finish button. The styles you set up, will automatically show in the picklist. To use the styles set for the picklist as the drawing styles for the elements after their attribute value is selected from the picklist, you need to choose the style assignment table you set up for the picklist in the Layer Controls window. The name of the style table is the same as the name of the picklist appended with *_Styles*.



Additional Picklist Considerations

This picklist table setup can be changed at any time by clicking on the Setup Picklist button again when the appropriate field is highlighted in the Table Properties window or through the regular database editing operations accessed from the Display or Layer Manager window. If you skip entering field values and/or assigning styles while using the wizard, both can be done later.

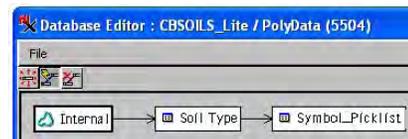
Remember that picklists can only be accessed from a single record view of the table that has the field the picklist is intended to populate (see illustration at top of page). Picklists are automatically available without using the wizard procedure for any table with a foreign key reference to a string field in a related-only table. If you want to use the values in an existing table for your picklist without using the wizard, you should refer to the discussion on the TechGuide entitled *Database: Creating Picklists Manually for New Objects*.

Remember that the contents of the picklists created using the picklist wizard or created manually can be reused if you save the object as a template and use the template as the starting point for the next object you want to create (see the TechGuide entitled *Spatial Editor: Creating and Using Geodata Templates* for more information on this topic). You can also simply add the picklist table generated by the wizard to a new or existing object and set up the necessary relationships manually (see the TechGuides entitled *Database: Creating Picklists Manually for New Objects* and *Database: Picklist Relational Structure*.)

Choose Edit Relations from the right mouse button menu at the database (not table) level in the Display Manager to see how the tables are related to each other and to perform various manipulations.

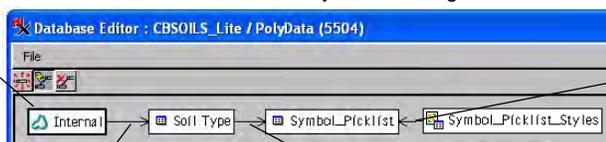


Representation of object with single table before picklist table is added...



...after picklist added but before styles are assigned...

...after styles are assigned.



The leftmost box in the Edit Relations window represents the elements.

This arrow indicates that the elements are related to the records in the SOIL TYPE table.

This arrow indicates that the records in the SOIL TYPE table are related to the records in the SYMBOL_PICKLIST table.

This arrow indicates that the records in the SYMBOL_PICKLIST_STYLES table are also related to the records in the SYMBOL_PICKLIST table.