Database

Single Record View

TNTmips provides two different methods of viewing database tables: single record view and tabular view. Tabular view is intended for working with mutliple records and/or geometric elements. Tabular view provides
- the ability to mark elements related to selected records;
- the ability to view only the records attached to the active element, the records attached to all marked elements, or all records;
- right mouse button menus with contents that depend on your click location (Select Record checkbox, column heading, or individual cell) and whether elements are selected; and
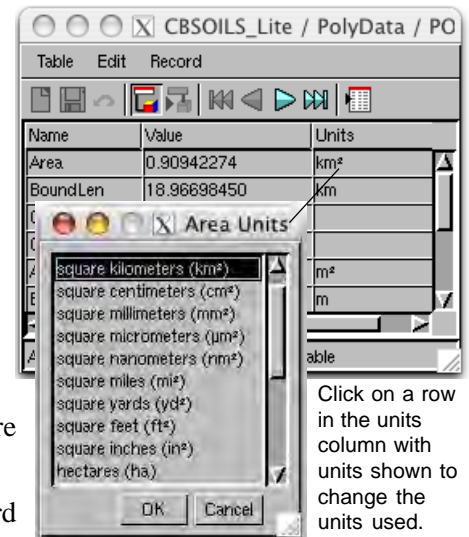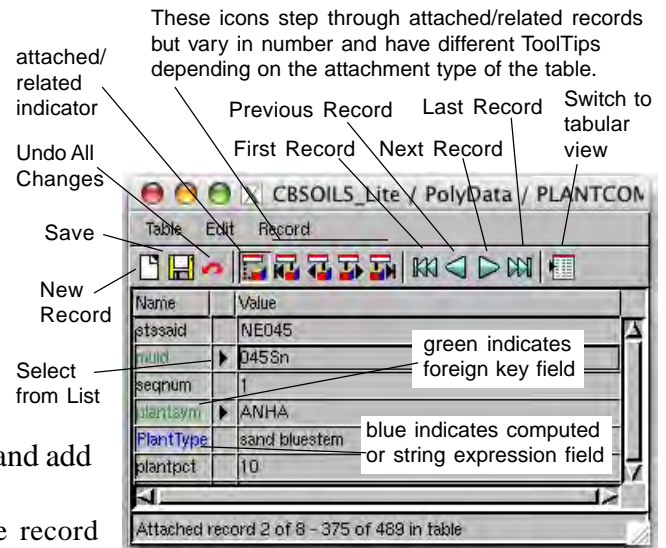- the ability to sort on one or more fields, change field order, and add statistics and substatistics.

These features of tabular view that are not available in single record view are reviewed in tutorial booklets and other Technical Guides.

These icons step through attached/related records but vary in number and have different ToolTips depending on the attachment type of the table.

attached/ related indicator

Undo All Changes

Save

New Record

Select from List

Previous Record   Last Record   Switch to tabular view

First Record   Next Record

green indicates foreign key field

blue indicates computed or string expression field

Single record view is designed for working with single selected geometric elements and provides access to pick lists (see the TechGuide entitled *System: Choose Attributes Using a Pick List*). If a single geometric element has multiple records attached, you can step through each record using the icons in single record view or use the icons to view any record in the table. Single record view also directly shows field units if they are assigned and provides a means to change the units on a field-by-field basis for viewing purposes. The appropriate unit type menu opens when you click on a field with units shown (for example, area, length, angular velocity). The numeric value in the associated field will change to reflect the new units (for example, 18966.98450450 m becomes 18.96698450 km). The DataTip over the unit column spells out the units shown in abbreviated form (for example, the DataTip for km^2 is square kilometers).

Click on a row in the units column with units shown to change the units used.

New Record. When you click on the *New Record* icon, a new empty record that is attached to the active geometric element is added to the end of the table. If you do not want it attached to the active element, click on the *Attached to active element* toggle button to turn it off or have no elements selected when you add a new record.

Save. There is an *Ask Before Saving* toggle on the Table menu that determines whether saving is automatic or you are prompted as to whether you want to save your changes when you switch to another record or close the table. The only time it is necessary to use the Save button is if you want to update changes to the current record without moving to another record so you can see how your changes affect the values in or attachments for another table. Saving will also update the information shown at the bottom of the table view (# attached, record #, and # in table).

Undo Record Changes. This button is only active if you have made changes to the record you are currently viewing. Clicking on this button undoes all the changes you have made to that record.

(over)

 Tables with implied one-to-one, one-to-one, and one record per element attachment types have only two icons in the toolbar section immediately to the left of the First Record icon.

 The *Attached to active element* icon is a toggle button that indicates whether the record being viewed is attached to the active element (toggled on) or not attached (toggled off). When a geometric element is initially selected, this button will be toggled on because the default behavior of single record view is to show the first record attached to the active element. If the element has no records attached, this button will be off as illustrated at the start of this paragraph (does not have a pushed-in appearance as shown in the second and third following paragraph illustrations). It will also be off for the attachment types listed above if you have used one of the blue buttons (for example, Next Record and Previous Record) that moves you between records. When the Attached to active element icon is off while viewing tables with *one to one* or *one record per element* attachment types, you can click on this icon to attach the record being currently viewed to the active element. In the case of these two attachment types, that means that any currently attached record must first be unattached. Because this may not be your intention, you are given a warning message (shown at the right) to alert you to the consequences if you proceed. When the icon is toggled on, you can click on it to unattach the current record from the active element for these two attachment types. You cannot use this icon to attach a different record to or unattach a record from an element for tables with an *implied one-to-one* attachment type. You can change the attribute values in such a record but not attach or unattach it.
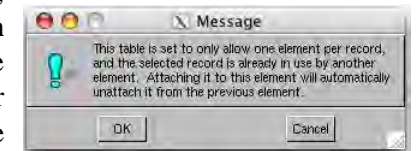
 The *Go to Attached* icon will return you to the one record attached to the active element in tables with the listed attachment types. When the *Attached to active element* icon is toggled on, the *Go to Attached* icon is dimmed because you are already viewing the attached record.

 You get five icons to the left of the blue record navigation icons on the single record view toolbar when the table attachment type is *One element per record*, *No restriction*, or *Related only*.

 The functions of the *Attached to active element* icon are described above. The icon appears with a dotted line as illustrated here for related only tables. The word Attached is replaced with Related in the ToolTips if the table's attachment type is related only. If the active element is related to only one record, the other four icons in this group will be dimmed. When a record from a table with a no-restriction attachment type is shown in single record view, you can use the *Attached to active element* icon to attach and unattach records regardless of whether that record is attached to other elements or other records are attached to the active element. When a record from a table with a One-element-per-record attachment type is shown as attached to an element, it can be unattached using this icon. However, if you try to attach a record already attached to another element to the active element, you will get the warning message shown at the right that indicates the record will have to be unattached from the other element before it can be attached to the active element. Records in related only tables cannot be attached or unattached because their associations are established by the primary key/foreign key relationship. Changing key field values will change which records are associated with an element.

 The *First Attached* icon takes you to the first attached/related record for the active geometric element if you have navigated away from it.

 The *Previous Attached* icon helps you cycle through the records attached to the active element. This icon will be dimmed if you have not moved from the first related/attached record.

 The *Next Attached* icon takes you to the next attached/related record if there are multiple related records.

 The *Last Attached* icon takes you to the last record in the set attached/related to the current active element.

 This set of icons takes you to the first, previous, next, or last record in the table you are viewing rather than stepping through only the related or attached records. If you want to go to a specific record number, choose Go to Record from the Record menu in single record view.