

# Database Editing Contracts

*Many of these contracts are used by the Data Form Wizard and should not be modified*

These contracts allow you to insert, update, and delete records from a recordset. In addition, there are contracts that allow insertion of values from selection form elements such as radio buttons, checkboxes, and list elements. The contracts can be divided into three categories: Direct Recordset Editing, and Insertion of Selection Data.

The use of these contracts ultimately changes the recordset's underlying database, so it is important to be aware of constraints and characteristics in the underlying database that may cause errors or unwanted changes. It is also advisable to use a backup copy of your database when designing and testing pages that use these contracts.

For more detailed information on individual contracts, see the individual contract descriptions, which are found on the 'Description' tab of the Contract Properties Dialog. The Contract Properties dialog can be accessed from the Drumbeat Tools menu.

## **Using Image Buttons with Server-Side Contracts**

The contracts used by the DFW are entirely server-side and inherently designed for submit buttons. This would otherwise limit the use of more aesthetically appealing navigation buttons that use images, for instance. Fear not, for all is not lost! You can still use clickable images with these contracts, but you must additionally apply the **“Submit form when clicked”** contract from the **Forms submit** category.

There are several subtle requirements for this to work. The METHOD of the Form object has to be POST and there has to be a form on the page. If all the buttons on a page are replaced with images, there may be no form at all. In such cases you will have to put a hidden form element on the page just so there is a form. To be safe, it is a good idea to apply the “Submit when clicked” contract last. Note also that the use of image buttons in this manner requires a JavaScript enabled browser and undermines the generic browser support of the server-side contracts used by the DFW.

## **Direct Recordset Editing**

The Update, Insert and Delete contracts directly modify the recordset participating in the contract. All of these contracts involve a recordset and a submit button. Excluding the “Delete...with confirmation” contract, all of these are server-side contracts available in generic browsers. They are also used by the DFW. The “Delete...with confirmation” contract requires a browser enabled with client-side JavaScript and is available in Navigator 3 and up.

For the Insert and Update contracts, all form elements on the page bound to the recordset will be inserted or updated. Also, any selection form elements that aren't explicitly bound to the recordset but are interacting with the submit button and recordset through contracts will be inserted/updated (See below).

For the Delete contracts, the active record displayed on the page is deleted. Note that the entire record will be deleted, even if only a few fields of the record are actually displayed. Also note that the Data Form Wizard uses the non-confirmation contract. If you want to provide an extra safeguard on deleting records, consider using the “Delete...with confirmation” contract, but recall that it is a client-side contract that works only in JavaScript enabled browsers.

Keep in mind that constraints in the recordset’s underlying database can cause problems for database editing, particularly data-type, field-level or referential integrity constraints. Form validation contracts are useful in dealing with field-level constraints. Dealing with referential integrity constraints can vary depending on the database system and is beyond the scope of this discussion.

### **Insertion of Selection Data**

The four “Use <form element> data to update/insert...” contracts allow you to use information in edit boxes, list elements, radio buttons and checkboxes to edit a recordset. As the names suggest, the contracts can be applied to both update and insert actions. They all involve interactions among three participants: a recordset, submit button and the specified form element. The usefulness of these contracts lies in the ability to submit values that are not bound to the destination recordset. You can configure a group of radio buttons or a list box to contain a predetermined set of values that the user must select for inserting or updating a record. A common example would be an address form that contains a drop-down list of states.

There are two key points to remember when using these contracts. First, these contracts do not work by themselves. They only work when the appropriate Insert or Update contract is independently applied to the submit button and recordset. Second, you must clearly understand how to configure the form element’s content, selection, and/or value attributes to get the proper results. For information on attribute definitions and proper configuration of these form elements, consult the User’s Manual. Also see the Quick Start tutorial, which demonstrates several common and useful ways of using these elements in a database page (including a nice example of using a list element whose content comes from one recordset but submits to another).