Usability Enhancements in RiverWare

Oct. 2006 to Oct. 2007 -- RiverWare 4.8, 4.9 and 5.0 (development).

Listed below are some of the general usability enhancements made to RiverWare over the last fiscal year (06-07).

1.0 Gus Selector enhancements:

- Slots:
 - New Filter: Slot Timestep Size filter
- Slot Columns:
 - New Filter: Slot Column Label
 - Ability exclude non-Columns from the selection.
- Accounts:
 - Account selection panel now optionally shows sortable columns for Account Type, Account Owner and Account Priority Date.
 - New Filter: Account Senior to Date/Time (Priority Date)
 - New Filter: Account Junior to Date/Time (Priority Date)

2.0 Slots, Open Slot dialog and Account series display dialog enhancements:

- Series Slot Text Annotations. [See other documentation].
- Series Display Compression. [See other documentation].
- Date/Time Series Values. [See other documentation].
- Integer Indexed Slots.
- Slot value edit operation: "Adjust Values" -- See below.
- Optional Column Sum row on Table Slots.
- Various Statistical Slot enhancements.
- Series timestep Rule Priority Number of the selected cell is displayed in the Selection Status panel.
- TableSlots can now have a Numeric Column Map (as had been possible for Periodic Slots). The first use of this is the "Alternate Routing Coefficients" Table Slot.
- New features to add Open Slot's series data in either a New SCT or the single open SCT. An SCT divider is first appended to the SCT Slot List so as to add an entry to the SCT's "Go To" menu.

3.0 SCT enhancements:

The SCT is no longer limited to displaying series data having exactly the timestep size of the model. SCTs
can be created which show series data having a different timestep size, though any one SCT can show only
series data with one timestep size.

4.0 Workspace GUI enhancements:

Ability to load recently accessed RiverWare Models and RplSets through a cascaded submenu.

5.0 Qt Ported Dialog enhancements

- **Run Analysis Dialogs:** Date/Time Spinner, Context Menus, Presimulation Values, Navigation Features (time, open object, etc.).
- Exchange Balance Dialog: All editing and display features common to the Open SeriesSlot dialog and related Account series dialogs; and inclusion of Payback Supplies.
- Snapshot Manager: Various Slot Sorting and Selection Features; Snapshot list includes Number of Slots and a Snapshot Creation Timestamp (with persistence of the timestamp in model files); Real working camera icon flash.

6.0 Other general enhancements

- Context ("right-click popup") menus implemented in more dialogs.
- Enhanced navigation controls, i.e to easily show related information.

Description: "Adjust Values" Slot edit operation

Most dialogs which allow the selection of multiple slot values now support the adjustment of selected slot values via the <u>Edit->Adjust Values...</u> item in the main menu bar. When the user selects this item RiverWare presents a modal Adjust Slot Values dialog which allows for the specification of an amount by which the selected slot values should be adjusted. Values may be adjusted by a percentage, or if all of the values have the same units, by a fixed increment in user units. After entering the adjustment value the user then applies that value to the selected values by selecting the "Ok" button or cancels the operation by selecting the "Cancel" button.

For example if the values 10.0 and 100.0 acre-ft/month are selected and the user enters 10 acre-ft/month into the Adjust Slot Values Dialog and selects "Ok", then the values will be changed to 20.0 and 110.0. If the user enters 10%, the values will be changed to 11.0 and 110.0.

Featured usability features:

- Global Time Scroll: It is possible to scroll all open time-series displays (e.g. Open Series Slot dialogs, Edit
 Account Dialog, Plot dialog) to a particular timestep through context (right-click popup) menus and a shiftclick on the "Scroll" button.
- Timestep Bookmarks: Series Slot Text Annotations ("Notes") can be used as "Bookmarks" for Local and Global Time Scroll operations. When one or more Note Items are defined on any series shown in a major series data display, an option menu with those items appears in the dialog box. Selecting an item causes a Local Time Scroll -- or a Global Time Scroll if the Shift Key is held down. Also, Global Time Scroll can be operated by double-clicking on any Annotation Item defined in the model within the Note Group Editor.