

# RiverWare Series Display Compression

Abstract / October 2007

A new "Series Display Compression" feature was developed for RiverWare 5.0. Repeated series values, or trivial values (matching NaN, 0, or a user specified value) can optionally be hidden. This feature is available in the following RiverWare series data displays:

1. Open Slot Dialog for Series Slots (and subclasses) and Table Series Slots
2. Edit Account Dialog
3. Object Account Summary Dialog
4. Exchange Balance Dialog

Particular series timestep rows can be hidden based on one of several display compression criteria:

1. Repeated Values (from the prior shown timestep row).
2. All NaNs
3. All 0s (or other user-supplied numeric value)
4. All NaNs or 0s (or other user-supplied numeric value).

Value comparison can be based on either:

1. Display precision (Default)
2. Slot Convergence
3. Exact internal numeric equality

The number of timestep rows hidden due to Series Display Compression is optionally shown. Cells above the hidden rows are ornamented as a visual clue of hidden data -- with two distinct types of ornamentation for (a) hidden repeated values, and (b) values hidden due to matching NaN and/or 0 (or other user-supplied numeric value). The user can temporarily disable display compression, with the current cell selection and visible time range preserved.

In Repeated Values Compression mode, a "count" column is shown indicating the number of times the data in each visible timestep row is repeated. In this mode, edits to any cell are applied to all of the repeated values represented by that cell (but only when display compression is enabled).

In the Open Slot dialog (for which a narrow window is often preferred), the series display compression controls are shown in three rows. The latter two rows are hidden by default, and can be shown or hidden using a "treeview arrow" toggle button. For the Open Slot dialog (only) the Slot's Series Display Compression controls are persistent (saved in the RiverWare model file).

