II. RiverWare Software Maintenance

**Releases, Patches and Snapshots**

RiverWare 7.0.2 Release

RiverWare Patch 7.0.2 was released on January 25, 2017. Release notes are as follows:

**Reduced File Size of Generated Images**

A significant reduction of the size of generated image files was applied to:   
• Image files generated for model reports.   
• Image files created as part of the chart animation video generation.  
In some cases, the file sizes were reduced by a factor of 30 without any impact on file quality.  
  
**Batch Mode RCL Command**

The batch mode command InvokeDssDMI was generalized to set the DSS File path or F Part information outside of a CWMS run. The syntax is as follows:

InvokeDssDMI <DMI name> !DssFile <DSS file> !DssFPart <DSS F part>

• <DMI name> is the name of the DSS DMI to invoke. If the name contains embedded white space, it must be enclosed in braces.  
• <DSS file> is the name of the DSS file. If the file name contains embedded white space, it must be enclosed in braces.  
• <DSS F part> is the DSS F part. If the F part contains embedded white space, it must be enclosed in braces.

**Bugs**

The following issues were addressed:

* 5856: On the Table Slot dialog, column deletion created a blank column.
* 867: An automatically generated post-optimization ruleset was invalid.
* 5871: In the SCT, the pre-run divider was incorrect after a run abort.
* 5877: In the SCT, removing a slot led to blank columns or rows.
* 5880: In the SCT, printing could include hidden rows/columns.
* 5884: The Object Account Summary was not showing columns correctly when accounts were removed from the list.
* 5885: The Muskingum Cunge, Muskingum Cunge Improved, and MacCormack reach routing methods were not initialized correctly.
* 5886: A crash could occur saving a model after deleting an object.
* 5890: A crash could occur when right-clicking in an empty Model Report layout.
* 5891: Deleting a column on a custom table slot on a simulation object deleted custom column labels.

RiverWare 7.0.3 Release

RiverWare Patch 7.0.3 was released on January 31, 2017. Release notes are as follows:

**New Muskingum with Segments Reach Routing Method**

A new routing method was added to the Reach object. The "Muskingum with Segments" method allows you to route using the standard Muskingum equation, Outflow = C0 Inflow (t) + C1 Inflow (t-1) + C2 Outflow (t-1), but further discretize the reach into sub-segments. Each segment uses the same routing parameters as specified in the Routing Parameters category. In addition, this method has fewer requirements for initial data than the original Muskingum method; if the initial Outflow is not known, it is set to the Inflow. Please contact us if you have questions on this method or would like the documentation.

**Bugs**

The following issues were addressed:

* 5876: A crash could occur when loading a model with a DMI dialog open.
* 5899: A crash could occur within RPL editing when using the undo feature for certain expressions.
* 5900: Within Plotting, editing Marker settings incorrectly set the date of the Marker back one day.
* 5902: Plot Pages created from the Output Manager were not always saved to the model file.
* 5903: Within Scripts, the Set Table Slot Value Script Action was not correctly setting values with the DateTime unit type.

**Software Updates, Bug fixes (not associated with new development)**

Bug Fixes:

Bug 5885: Muskingum Cunge routing did not correctly compute parameters.

**Regression Tests**

The regression tests continue to be maintained on a daily basis. This involves updating the regression tests to exercise new developments in the code. Also, as new code is added to the development area, the model comparisons performed in the nightly regression tests usually show differences (for example, because a new method category may have been added). When this occurs, the regression tests need to be updated to reflect the current state of the development area so model comparisons do not fail. In addition, every week, the daily history of each regression test is analyzed to determine if the run time or model size has significantly changed because of new development. In January, the 32bit builds on and regression tests stopped working because of configuration conflicts. These were fixed.