



How to	Run the RTC-Tools models
Description	Step by step description of how to perform a specific task in ROWS.
Comments	The <i>italic</i> phrases correspond to the red markings in the screenshots. Please be aware that the screenshots may deviate slightly from the application
version	2018-02

Note: A short background on the model can be found in a separate HowTo.

The release and inflow time series and the optimization goals can be set as a Modifier. By default, the model takes the URBS Upper Murray Forecast unless an inflow forecast modifier is active.

Both the simulation and optimization model of RTC-Tools, have been organized in three runs:

- Run Hume Dam ...: a local run to experiment with the release and other settings
- Save Hume Dam ...: to save the run persistently on the server for sharing with others
- Run Ensemble Hume Dam ...: to run the models with the URBS ensemble forecast.

The screenshot shows the MDRA-ROWS-flood application interface. Key components and annotations include:

- 1a:** Points to the 'Run Hume Dam Sim' option in the Workflows tree on the left.
- 1b:** Points to the 'Modifiers' tab at the bottom of the application.
- 2a:** Points to the 'Hume Release Forecast' button in the Modifier Properties section.
- 2b:** Points to the 'Time series' section where the 'Q_release' series is selected.
- 2c, 3b:** Points to the 'Apply' button in the Modifier Properties section.
- 3a:** Points to the 'RTCTools Goals parameter' button in the Modifier Properties section.
- 4a:** Points to the 'Re-run' button in the top right corner.
- 4b:** Points to the 'Run' button in the Workflows tree.
- 5a:** Points to the 'Plots' tab at the bottom of the application.
- 6:** Points to the 'Act' button in the top right corner.

Follow the steps below to conduct a run and inspect the results.

1. Select the node to run in the Workflows tree (1a) and select the Modifiers tab (1b)
2. Click the Hume Release Forecast, the Hume Inflow Forecast or the Kiewa Forecast (2a), specify the timeseries (2b), update the name if needed and click Apply (2c)
3. For the optimization model, click the RTC-Tools Goals parameter button (3a) and select which goals to include and with what priority (highest priority is most important). Update the modifier name if needed and Click Apply to save your settings (3b).
4. Run the model, either via the rerun button on the form (4a) or by the play-button in the workflow-tree (4b)
5. Inspect the results by selecting the Plots tab at the bottom of the application (5a)

Be aware: if you have specified a manual inflow forecast as modifier, then the URBS inflow forecast is overruled, also for the ensemble. You can deactivate the modifier via the checkboxes in the overview table (6)