

What's New in Results



RESULTS

Post-Processor: Visualization & Analysis

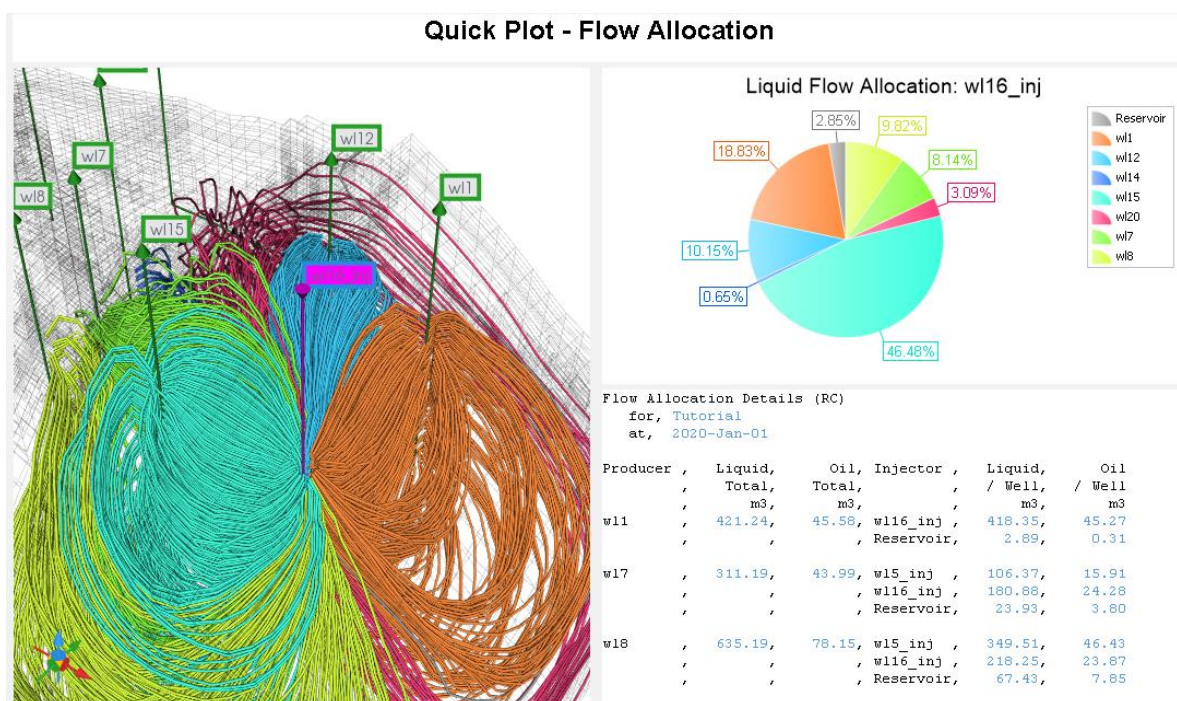
Version 2021.10

Major Enhancements

CMG is introducing the following features in Results 2021.10:

Flow Allocation Dashboard

Beginning in the 2021.10 version of Results, a flow allocation dashboard has been added as a “quick plot” option. This dashboard, shown below, allows an interactive exploration of flow allocation factors and produced/injected volumes for the selected well and time step. The flow allocation dashboard will be created through the context menu of a well in the 3D viewer (“Quick Plot Well” | “Flow Allocation”).



Support for ECL Data

Results now supports reading time series data from Eclipse output specification. This make a comparison between simulators possible. Load ECL data by selecting the SMSPEC file in the “Add Files” dialog or by dropping a SMSPEC file onto Results. The data will then be automatically available in the curve selector.

The ability to load Eclipse output has also been added to Results Report.

Export to RESQML Improvements

Users can now specify which grid as well as which properties/time steps are exported to RESQML from the specification dialog similar to RESCUE export options.

Changing Display Precision of Color Scale

A new option in the color scale editor is the ability to change the display precision of the tick marks. The “auto” setting will allow Results to determine the number of digits based on the range between min and max and the number of tick marks. A numerical value will set the number of digits from 0 to 9.

The screenshot shows the 'Color Scale Editor' interface. It is divided into two main sections: 'Ranges' and 'Intervals'.

Ranges Section:

- 'Set Min/Max From:' has three radio button options: 'All Timesteps' (selected), 'Current Local Timestep', and 'Accumulated Timesteps'.
- 'Min:' is set to 282 and 'Max:' is set to 1013.
- 'Show Min/Max Labels' is a toggle switch that is turned on.
- 'Label Precision:' is a dropdown menu currently showing '0 (1)'. The dropdown is open, showing the following options: 'Auto', '0 (1)', '1 (0.1)', '2 (0.01)', '3 (0.001)', '4 (0.0001)', and '5 (0.00001)'.

Intervals Section:

- 'Logarithmic' is a toggle switch that is turned off.
- 'Dynamic' is a radio button option that is selected.
- 'No. of Intervals' is a slider set to 10, with a dropdown arrow next to the number.
- 'Increment Value:' is set to 100.00.

Formulas

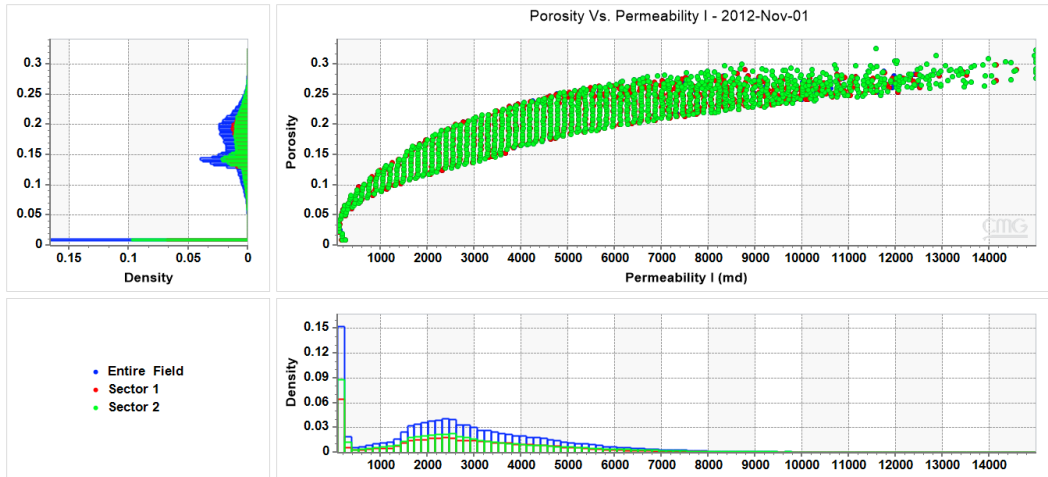
Formulas now support Tracer properties.

Export Grid and Properties

Users can now export their Grid in node-based format to a text file through Results. Additionally, we have also added the capability to export properties in SIF or GSLIB formats.

Cross Plots

Results now has the capability to create fully customizable Cross Plots through the Cross Plot node in the tree view.



DFN Display

Users can display models with DFN's along with several DFN Display properties to make analysis easier. The values of DFN cells can be probed alongside their matrix and fracture properties. Display of DFN outlines in Aerial, IK-2D and JK-2D views is also supported.

Data Sources

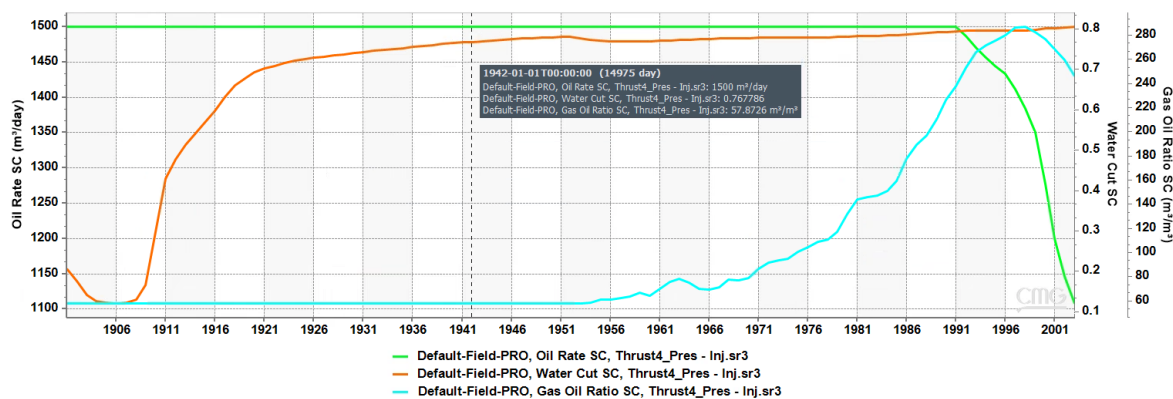
Details view has been extended and made the default for adding/removing data sources from the Data Sources node. Users can also directly open folders containing the selected data source from the page.

Quick Layout Setting for Dashboards

Results has added a layout option to allow users to quickly create simple layouts for their dashboards, without having to customize each visualization individually.

Multiprobe Curves

Users can now enable the multiprobe option to simultaneously probe multiple curves on a plot.



Other Enhancements

2D Views respond to Layer List Selections in Dashboards

Selecting a Perforation UBA in a Layer list will now cause all Aerial, IK-2D and JK-2D to change to the necessary layer in order to display the relevant UBA.

Curve Overrides

Users can now modify curve properties project wide using the Curve Override interface. The interface has been designed to optimize workflows for clients who have multiple different files loaded that require direct comparison on several plots.

Additionally, users can now specify custom default colors to be used for oil, gas and water related curves.

General Preferences

General preferences have been incorporated into each panel available on plots and reservoir views. These panels include options to set all panel options as a preference for use throughout any Results instance.

Plot Properties and Curve Properties in a Panel

Users can now format plots with custom settings for Legend, plot axis, and generic plot properties through a panel. Panel settings also have an “Apply to All” setting to allow users to apply a customization to all plots.

Curve Properties which used to be a Tree Node item are now available through an intuitive panel. This allows the user to see the effects of changing panel settings, directly on the plot being viewed.

Stability/Performance

Several stability and performance enhancements have been added to improve overall user experience.