S3control 2020.9 Release Notes

S3control

September 2020

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1. Introduction

S3control 2020.9 is the latest version of the Reservoir Engineering Pre-Processing software from Sciencesoft Ltd. S3control provides an advanced text editor for input decks. It includes powerful keyword recognition, validation and syntax highlighting. The built-in workflows and concept views enable engineers to perform common tasks quickly and easily. Engineers can also create their own workflow templates and share these with colleagues. Real time keyword and model validation functions are built in as standard.

The new features to be found in the latest version of S3control are outlined as follows:

S3optima Support

S3control has a next generation history matching tool added for 2020.

New Run-time Monitoring Control

The run-time monitoring feature has been updated to support running multiple simulators in a single session.

Inserting Variables into Concept Views

Concept views will now accept variables as well as constant values.

Reversible Colour Schemes

Colour schemes in 3D grid views can now be reversed on a view by view basis.

Full MetEOR support

S3control supports Sciencesoft's new chemical enhanced oil recovery (CEOR) simulator MetEOR. To find out more please contact your account manager or email sales@sciencesoft.com

Polymer Concept View

For chemical simulators there is a new polymer concept view to edit and view the polymer properties.

Surfactant Concept View

For chemical simulators there is a new surfactant concept view to edit and view the surfactant properties.

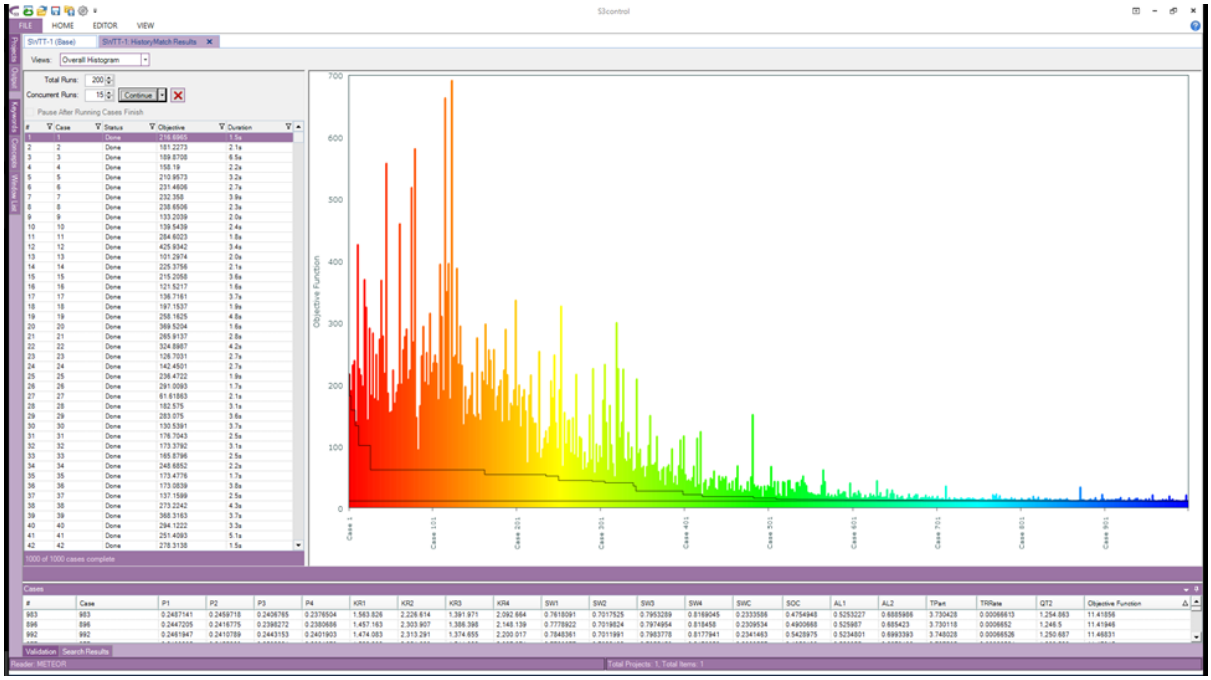
Find and Replace over all files

Find and replace has been a standard feature within S3control since the first version. For 2020 this has been extended to search over all files in a study from a single click.

2. S3optima

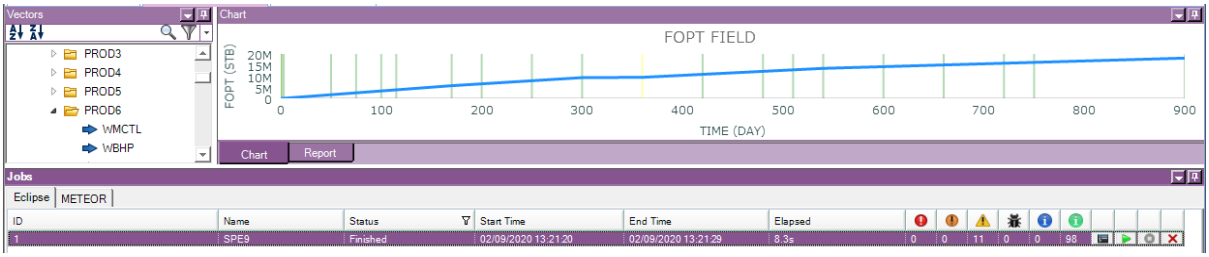
The next generation History Match tool in S3control has been launched in 2020. This module replaces S3match from 2019.

An additional document is enclosed with your installation of S3control for this module.



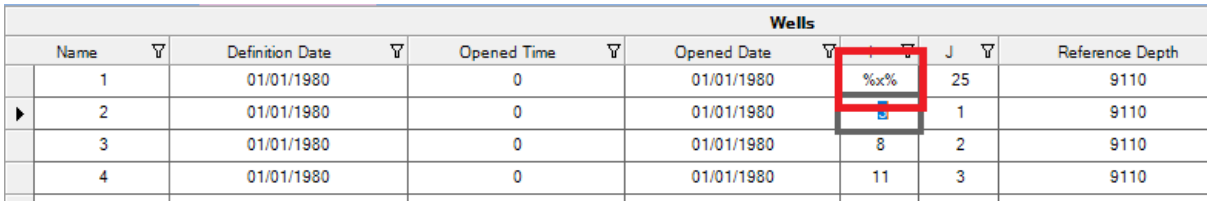
3. New Run-time Monitoring Control

The 2020 Run-time monitoring control now supports running multiple studies from different simulators at the same time. Additionally, the simulator report is available to be viewed directly from the run-time control and will update as the simulation runs through.



4. Inserting Variables directly into Concept Views

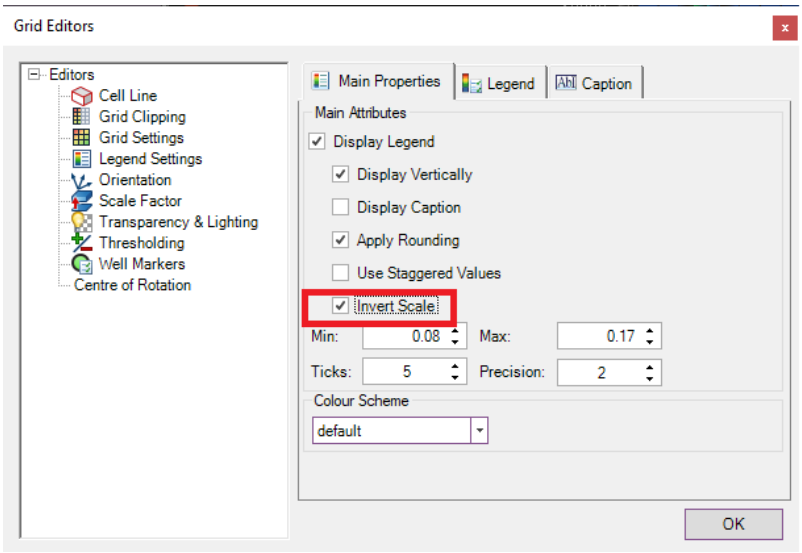
For the first time variables are able to be used as an input parameter into concept views. This means variables can be defined and viewed from not just the text editor control but any of the concept views which S3control currently supports.



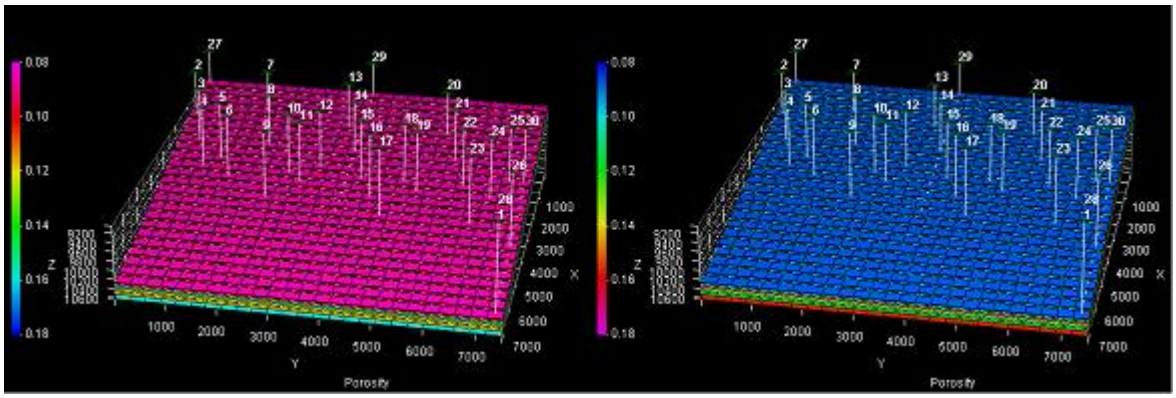
Wells

	Name	Definition Date	Opened Time	Opened Date	I	J	Reference Depth
	1	01/01/1980	0	01/01/1980	%x%	25	9110
▶	2	01/01/1980	0	01/01/1980		1	9110
	3	01/01/1980	0	01/01/1980	8	2	9110
	4	01/01/1980	0	01/01/1980	11	3	9110

5. Reversible Colour Schemes



The colour schemes for the legend on grid properties can now be reversed. From the Legend grid settings dialog and using the “Invert Scale” checkbox. This will swap what the highest value colour is with that of the lowest as shown below.



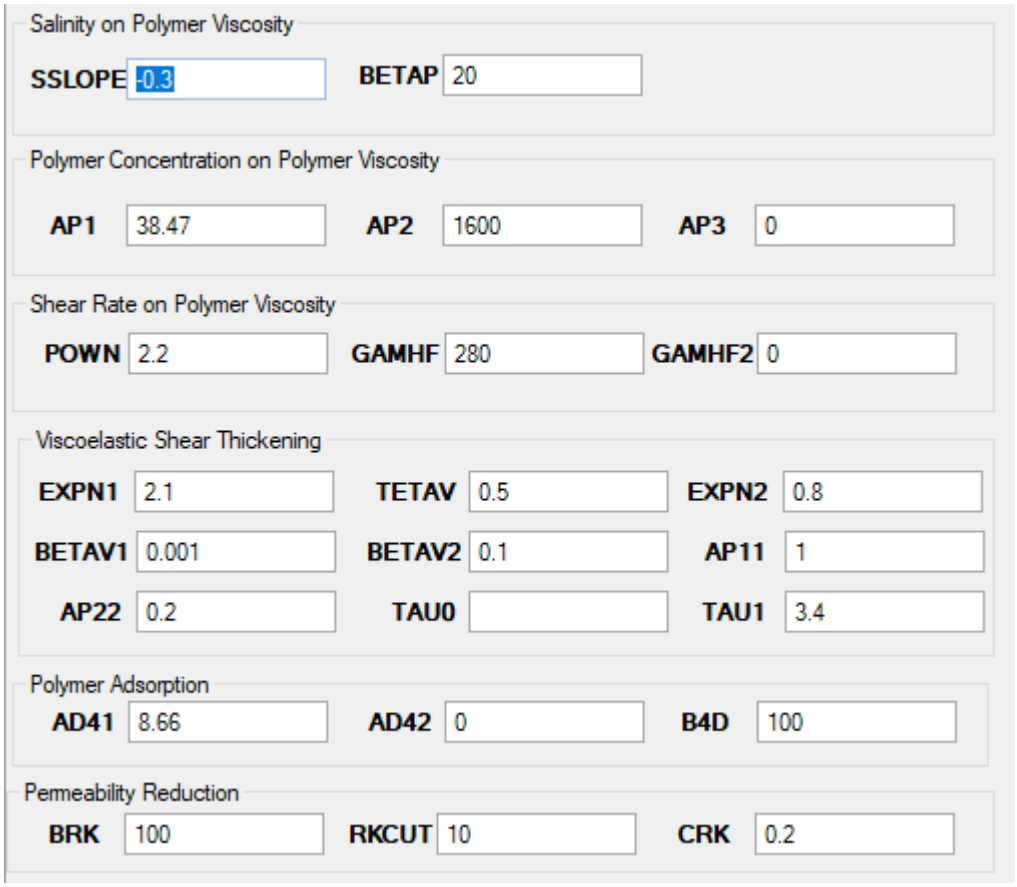
6. Full MetEOR Support

MetEOR is the Sciencesoft solution for chemical simulation. This product is also now supported in S3control allowing engineers to do sensitivity studies and QC work directly inside S3control along with all the other features of the tool.

Users who would like more information or a demo of this new simulator can contact sales@sciencesoft.com for more information.

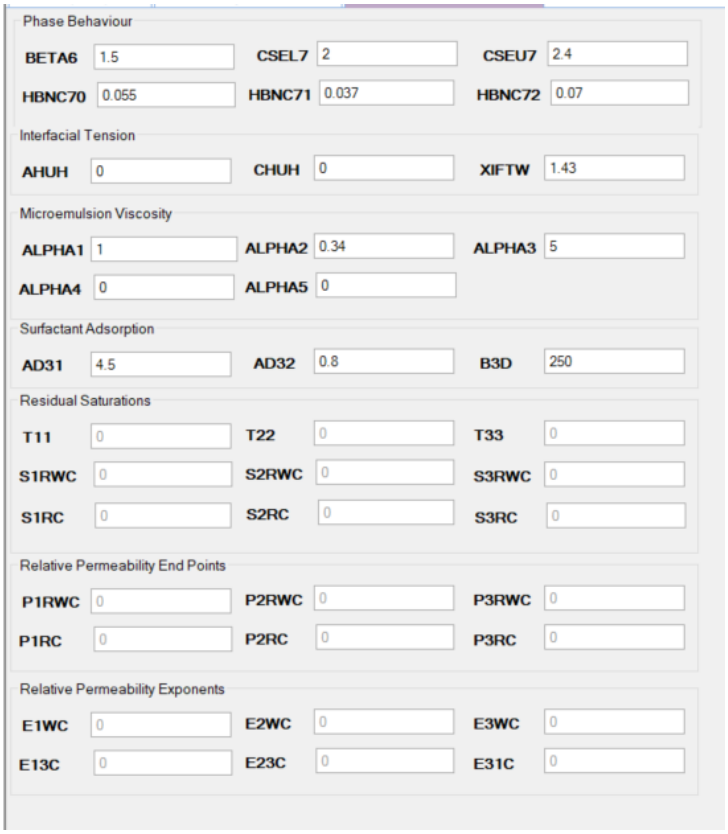
7. Polymer Concept View

The Polymer concept view holds information relating to the physical and chemical properties of the polymer data loaded with the input deck. As well as viewing the data, it is also possible to edit values



8. Surfactant Concept View

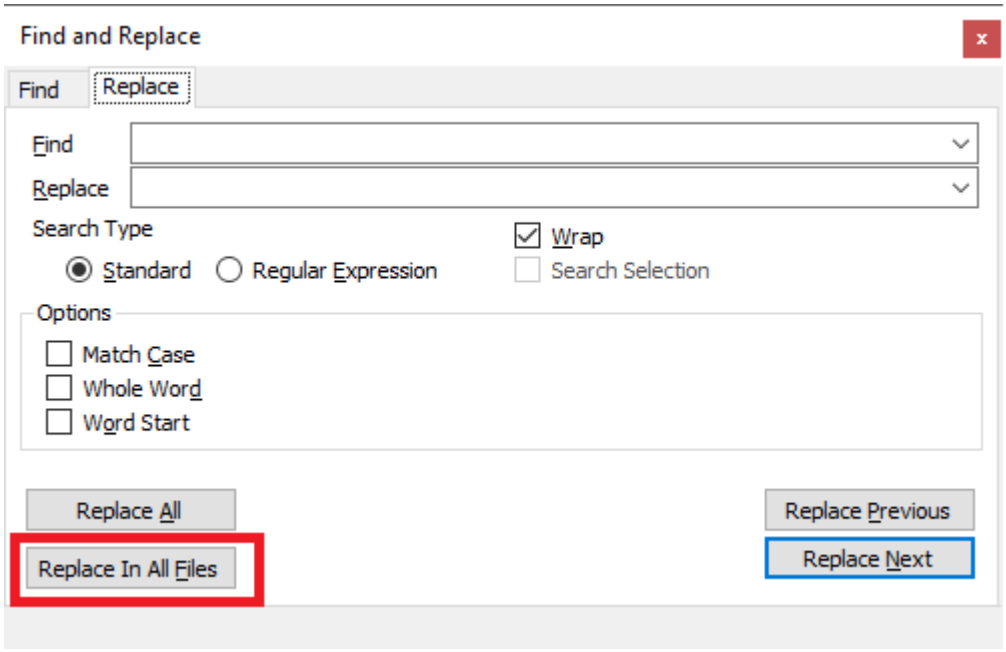
The Surfactant concept view holds information relating to the physical and chemical properties of the surfactant data loaded with the input deck. As well as viewing the data, it is also possible to edit values.



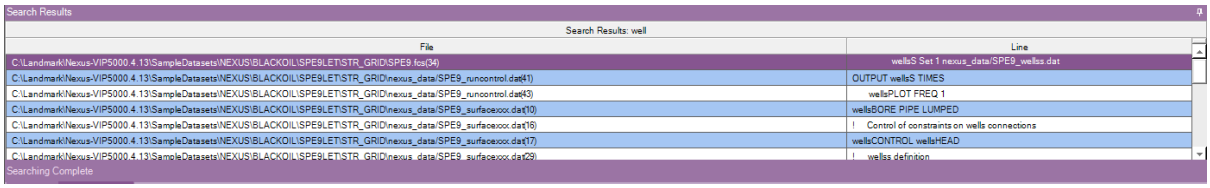
9. Find and Replace over all Files

The Find functionality and the Search Replace functionality within the S3control text editor has been extended to run over all files and not just the file which is currently open. The results from this search are available from the Search Results panel at the bottom of the application.

The functionality is available from the search dialog on any text editor view. The dialog and new button are shown below:



The results from this operation will appear in a panel at the bottom of the application. An example of this is also shown below:



10. Miscellaneous Enhancements

- The create restart workflow now supports the Nexus simulator
- RPTSOL and RPTSCHED keywords are processed in calculating restart timesteps.
- The run-time monitoring for Nexus now uses the VDB files rather than the small sum files which only include field vectors.
- High DPI monitors support has been added to the graphical user interface for Windows 7 machines.
- Multiple nested includes files are supported in TNavigator models.
- The CORNERS keyword in TNavigator models is supported in displaying the 3D grid.
- Simulation report files for TNavigator is now supported.
- A licence checker for TNavigator has been added.
- MetEOR and UTCHEM wells now have the skin factor as a concept value to use in workflows.
- Array validation has been added for the Nexus simulator.
- Support for files with Chinese characters has been added
- Integration settings to link multiple versions of S3GRAF or S3quickbuild to S3control.