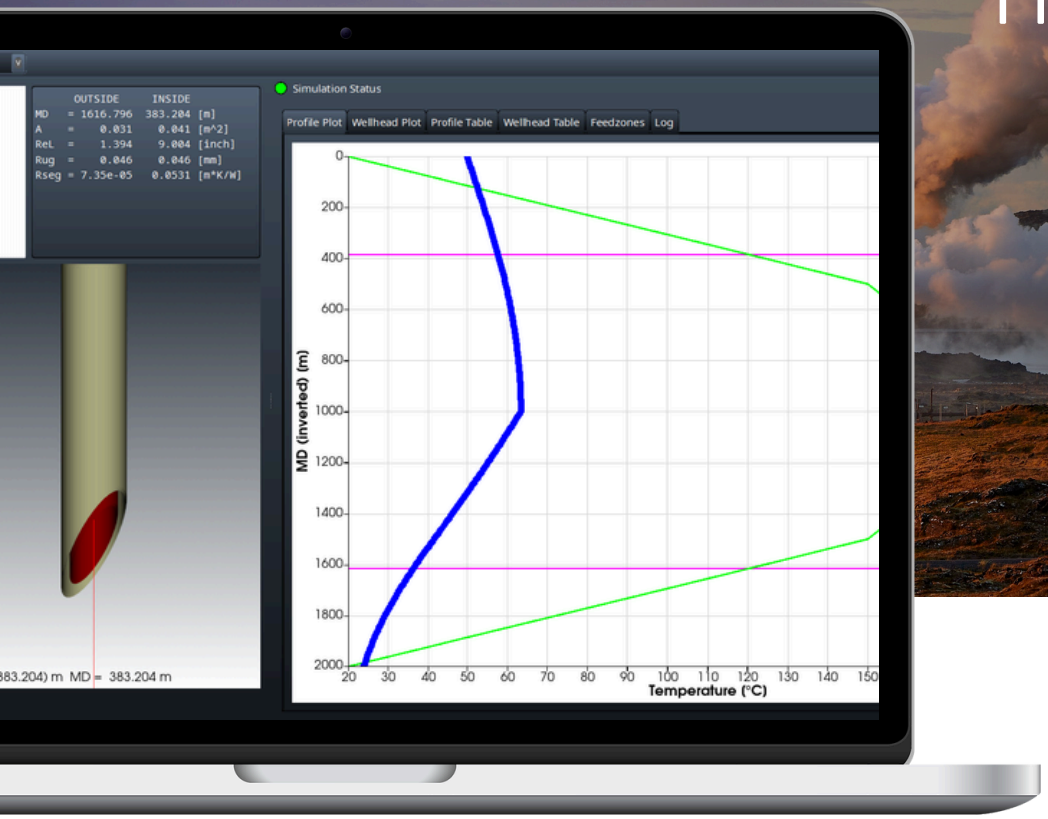
SEEQUENT | UNDERSTAND THE UNDERGROUND

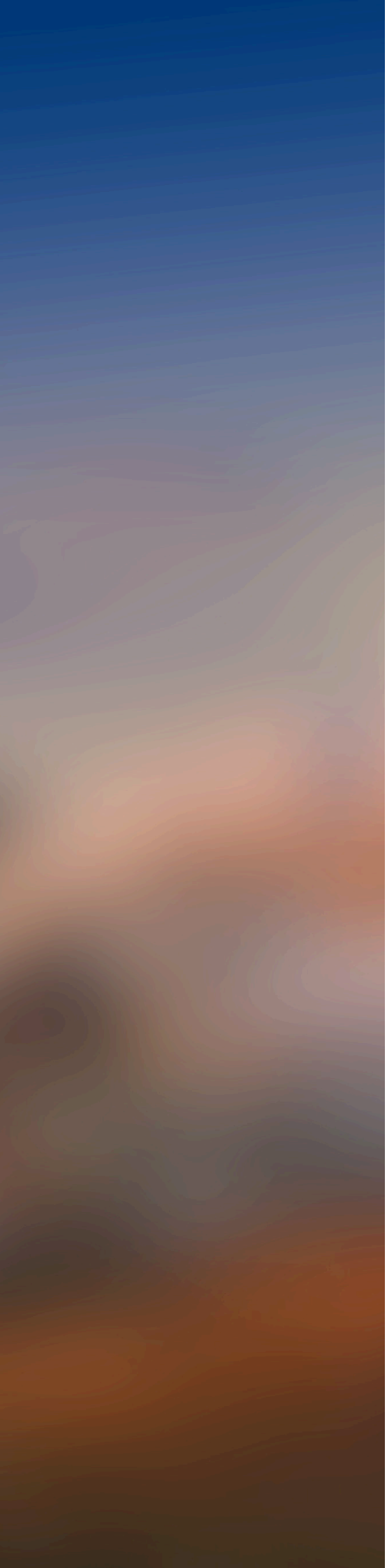
Volsung 2026.1

new release



Volsung 2026.1

Volsung 2026.1 adds support for modelling coaxial geothermal wells. It also updates how 3D visualisation controls are accessed and how simulation outputs are configured. This release includes a licensing change and now requires Bentley account authentication.



Contents

Volsung 2026.1 Release notes

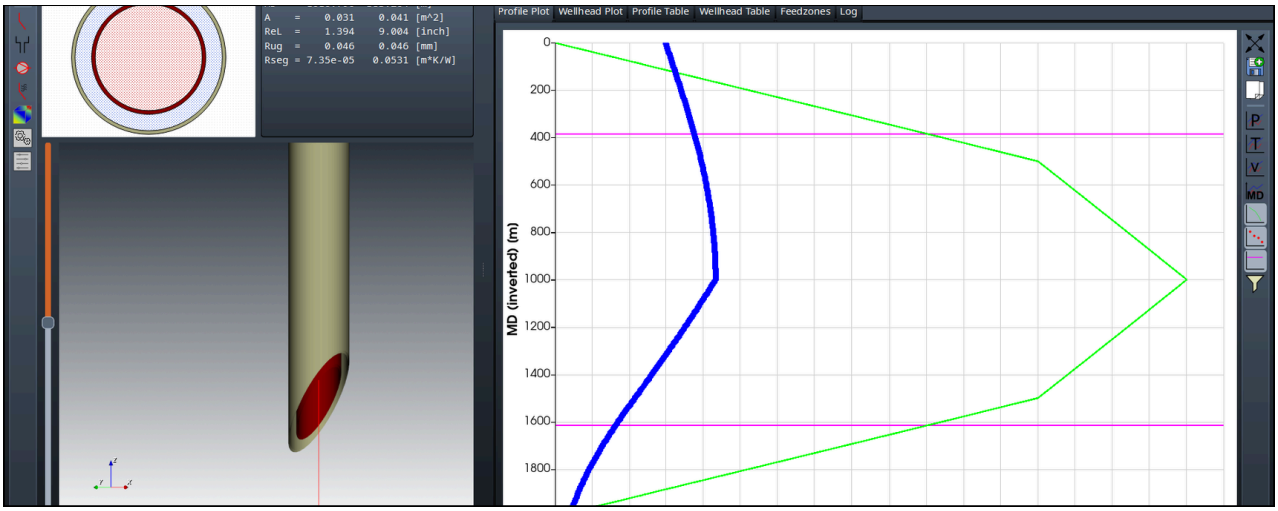
Model coaxial geothermal wells

Volsung 2026.1 adds support for modelling coaxial geothermal wells. Flow is treated as travelling down the outer annulus and back up the inner pipe within the same well. The measured depth (MD) axis corresponds to the total distance along this combined path.

The well cross section layout has been updated for coaxial configurations. Mouse indicator lines are shown for both the annulus and the inner pipe, reflecting their positions along the flow path.

The formation properties for conductive heat transfer can be set in the heat transfer dialog or, if they change along the length of well, they can be set in the reservoir properties dialog. Thermal conductivity of the casing and well materials can vary along the wellbore and are now specified in the Flow Path dialog. The wellbore profile output table includes additional columns for casing resistance, formation resistance, and external heat transfer. This data is used for detailed analysis of heat transfer.

Coaxial well support is intended for use in Advanced Geothermal System (AGS) modelling approaches.



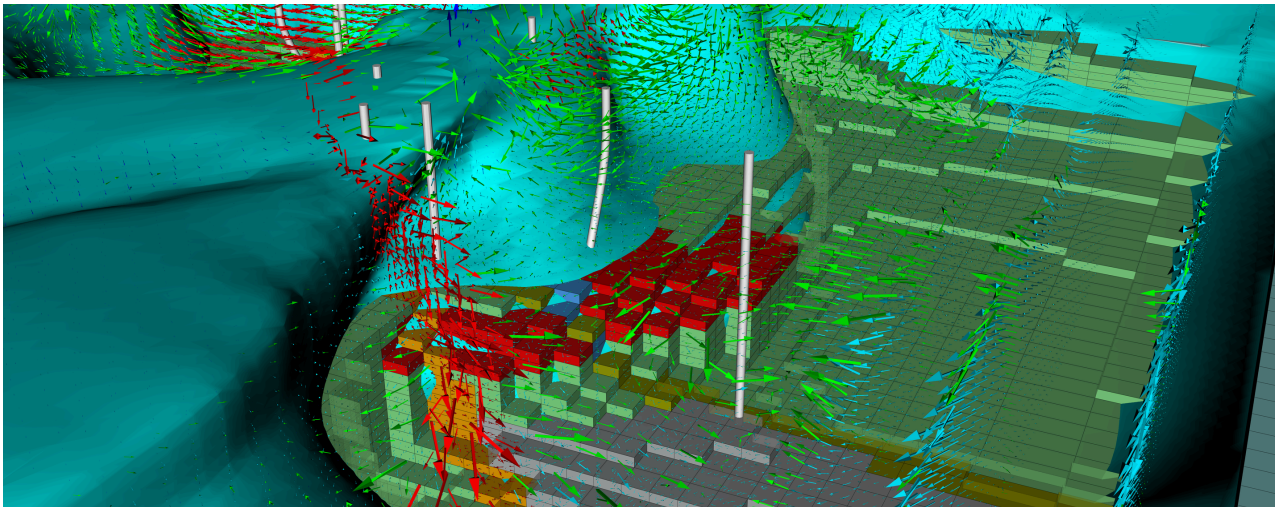
Improved 3D data visualisation control

Visualisation controls have been reorganised. Contouring, thresholding, and vector display controls are accessed through the Viewer Settings panel.

Visualisation controls are now located below the project tree rather than inside it. This change affects where visualisation settings are adjusted, not the underlying simulation results.

Value contour handling has been extended. Contour sets can be saved and recalled. Additional options are available when specifying contour values.

The projection widget has been updated for permeability orientation. Axis-aligned indicators are used for orientation display. A blue disk shows the dipping plane, and a black line shows the permeability direction. Orientation can be edited either in the scene or through the toolbar.



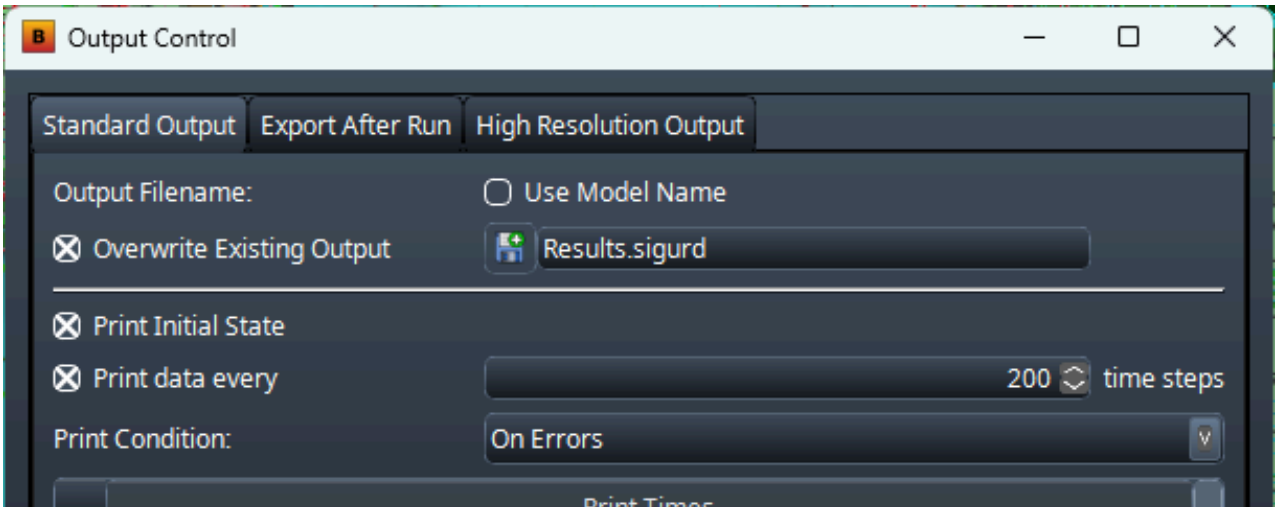
Greater control and flexibility over output data

Simulation output configuration has been consolidated. Output options that were previously set in multiple locations are now gathered in a single Output Controls dialog accessed from the navigator tree. The Output Control object includes a Use Model Name option.

High-resolution simulation output is optional and can be enabled for selected variables only.

Reservoir property export functionality is separate from simulation output configuration. Two export modes are available:

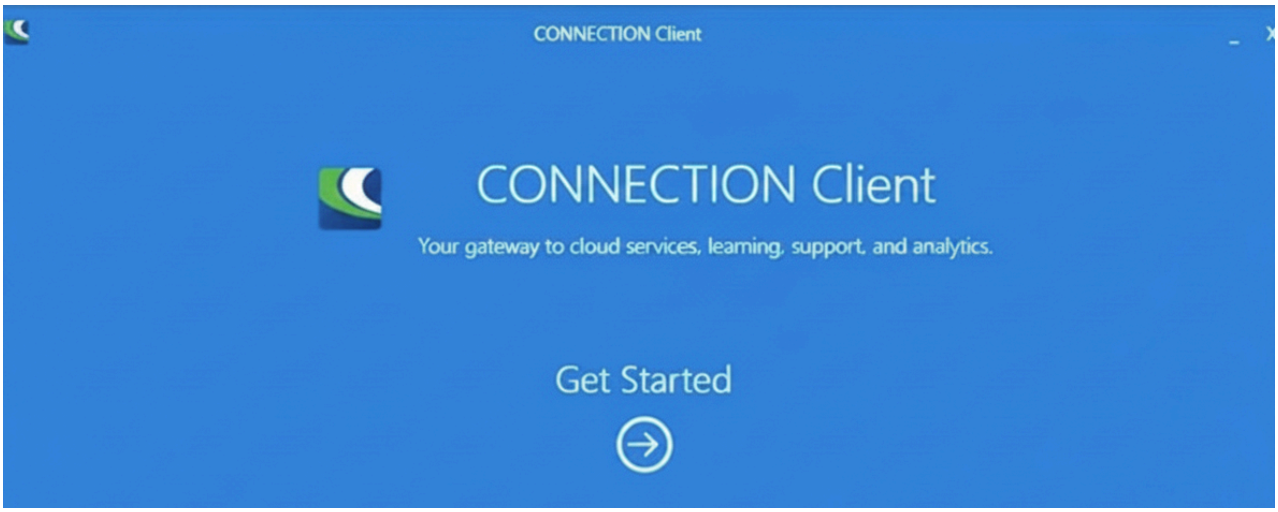
- Bulk reservoir property export, which writes selected properties for all cells to an HDF5 file.
- Single reservoir property export, which writes one selected property at specified locations to a CSV file.



Align licensing with Seequent products

Volsung and Gudrun now use Bentley licensing. Access to Volsung 2026.1 requires a Bentley account and the Connection Client.

Existing users can update the maintenance tool in the application. New users can follow the Getting Started guide.



Additional modelling and visualisation updates

Several additional modelling and visualisation features are included in this release including:

- Temperature-dependent permeability can be defined in the reservoir model.
- Permeability modification functions support Smoothstep polynomials.
- Three CESNEF pressure drop correlations have been added in the wellbore model.
- A new spider web grid option has been added.
- The water table can be displayed as a 3D draped surface.

See the Changelog, in the installation doc folder, for details of changes to input and output formats.