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MOVE 2026, IPM 14 - Overview

- **MOVE 2026** is a part of the **IPM 14** release:
  - Single installer for **IPM** suite of tools: **MOVE, GAP**, **GAP TRANSIENT**, **PROSPER**, **MBAL**, **PVTP**, **REVEAL** and **RESOLVE.**
  - Option to install **MOVE** together with all other **IPM** programs, or separately.
  - **API** for enabling automation and connectivity (with the full **IPM** installation).
  - **MOVE** integration with **RESOLVE** workflows (with the full **IPM** installation).

- Continuous development of the **MOVE** API for both **RESOLVE** and **OpenServer.**

- New AI-powered chat bot application, ***askPE***:
  - Exploring interactively all **MOVE** Knowledge Base and **PE** documentation.

- Constrained model building and data analysis in **MOVE 2026**:
  - New Property Modelling tool.
  - Query tool improvements.
  - Improvements in the Attribute Analysis Calculator.
  - New options in the Quick Editor for well log visualization in 3D View.

- Kinematic Modelling in **MOVE 2026**:
  - New 2D Strain Capture functionality in 2D Move-on-Fault.

- Stress Analysis in **MOVE 2026:**
  - Auto-update pressure/stress profiles from well logs.
  - **MOVE** now provides suggested default pressure profiles based on slip scenarios for normal, reverse, and strike-slip settings.

- MOVE links for Petrel and GST:
  - New ability to transfer Petrel interpretation windows to **MOVE** sections.
  - **MOVE** sections can now be stored and retrieved from GST as Profiles Features.

- Import and Export format improvements:
  - Data Ranges can now be defined in the SEG-Y import. Now it is possible to pre-visualize the seismic image before importing it.
  - Added Open Mining Format (OMF) import and export.
  - Export to KML with elevation.
  - Export lines and points as OBJ.

3000 Cathedral Square, Guildford, GU2 7YB, England, UK

Tel: +44 131 474 7030 **Fax:** +44 131 474 7031 **Email:** edinburgh@petex.com **Website:** www.petex.com

Registered Office: Petex House, 10 Logie Mill, Edinburgh, Scotland, EH7 4HG, UK *Registered in Scotland number 126553*

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What's new in MOVE 2026, IPM 14

We are happy to announce that **MOVE *2026*** is now released as part of the new ***Integrated Production Modelling (IPM) 14*** suite, including **MOVE**, **RESOLVE**, **REVEAL**, **GAP**, **PROSPER**, **MBAL**, **PVTP** and **OpenServer**. As in previous versions, this new release features a single installer for all **IPM 14** products. There is also an option to install the IPM suite without **MOVE**, or alternatively, **MOVE** without the rest of the **IPM** suite.

This new **MOVE 2026** major release introduces new features, improvements and performance upgrades to expand the existing capabilities of the previous version **MOVE 2024 (IPM 13.5)** for geological structural modelling and analysis. The section below outlines modifications provided in this release of the software, made across the **MOVE** core application, **MOVE** modules, **MOVE Knowledge Base**, as well as the **MOVE** Application Programming Interface (API).

Additionally, a comprehensive list of updates and improvements can be found at the end of this document.

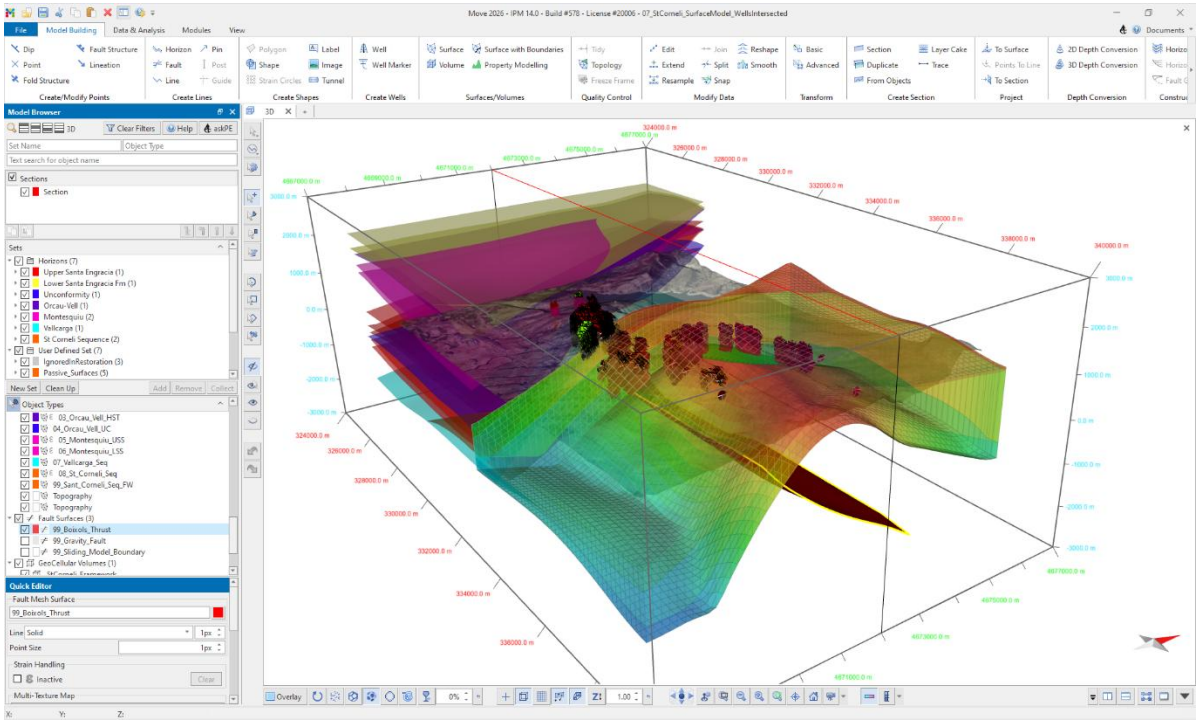

Figure 1. MOVE 2026 Interface showing a geological model in 3D View.

3000 Cathedral Square, Guildford, GU2 7YB, England, UK

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askPE GenAI

Make the most of **MOVE 2026** by engaging in interactive learning and exploring the **MOVE** Knowledge Base through our powerful AI-driven chat assistant, ***ask*PE**.

***ask*PE** is deployed through a web application that enables interactively consulting all **PE** documentation, including **MOVE** tutorials, help pages and articles. Our generative AI will also cite the specific location in the Knowledge Base and the documentation database facilitating user navigation to that section. Absorbing all the information contained in **MOVE** has never been easier.

The application can be accessed by clicking on the dedicated button next to the Help button in the Model Browser and at the left-hand side of the Main Window.

Integrated modelling through API and RESOLVE

Integrated modelling is the practice of using technology to remove artificially imposed boundaries, using automated and efficient communication between modelling software tools.

Models can be compared against other models from multiple domains and disciplines, ensuring assumptions are consistent in all components. Dynamic feedback can be established by propagating changes across connected models. Data and constraints from forecasts can be fed in the geological model, which allows to challenge our assumptions, test and validate alternative hypothesis and refine interpretations.

Dynamic communication between models across different disciplines for integrated geological modelling can be achieved using **RESOLVE** or our ever-expanding **MOVE** Application Programming Interface (API).

With **RESOLVE-MOVE** integration, modelling workflows can be expanded with multiple additional calculations, analyses and connections which are not natively implemented in **MOVE**. Automatic integrated workflows add significant value:

- Greatly increase efficiency.
- Ensure replicability and remove subjectivity.
- Workflows can be documented and repeated.

Workflow automation and integration using **MOVE**'s API connection provide the flexibility to create workflows tailored to the needs of the user.

MOVE 2026 facilitates the connection of an even larger array of **MOVE** tools and operations through the API than in previous versions. The Split and Join tools can now be accessed via the **MOVE** API.

Many context menu options have also been exposed in this release through the use of specific commands (**OpenServer**) and operations (**RESOLVE**), such as Delete or Rename Sections, Create Boundary as Line, Separate Mesh, Create Points at Face Centres or Corners from **RESOLVE** and **OpenServer**.

The export to ASCII Data can now be automated through the **MOVE** API in **MOVE 2026**. This adds a wide range of new possible workflows where newly acquired data can be incorporated efficiently into models, exported, and the model updated or flagged for update as necessary.

Additionally, a new tutorial has been designed and added to **MOVE 2026** Knowledge Base which provides a step-by-step guide to automate a full practical case: fault seal analysis and spill point identification to calculate the fluid column height and reservoir volume.

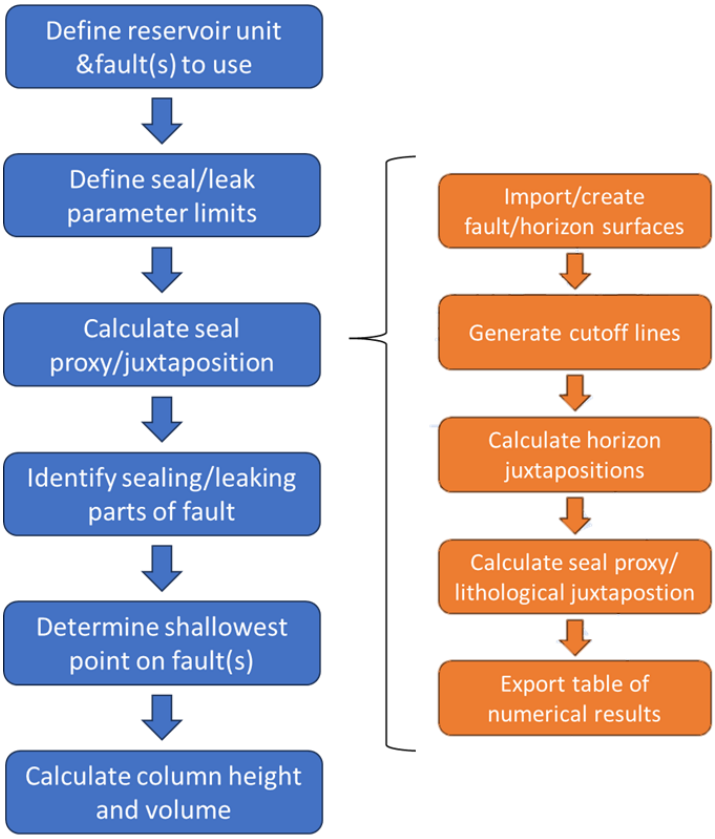

Figure 2. High level workflow steps to determine fault spill point and resultant column height/volume shown in blue. Steps undertaken in MOVE are shown in orange.

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Model building, importing/exporting, data & analysis in MOVE 2026

MOVE 2026 release is loaded with improvements to Model Building and Data & Analysis. One of the most exciting additions is the Property Modelling tool which allows to interpolate and extrapolate attribute values across volumes. Also, in Data & Analysis we have improved the attribute transfer functionality in the Query tool, which now supports two-way attribute transfer between objects.

Introduction to the new property modelling tool

In all **MOVE** previous releases, attributes representing rock properties could be assigned or created, transferred and manipulated. In this new **MOVE 2026** release, we have made a step forward by developing the Property Modelling tool, included in **MOVE** Core.

Property Modelling allows to extrapolate and interpolate attributes from discrete inputs to estimate the continuous spatial distribution for a certain value.

Simple Kriging can be used to estimate the 3D distribution of rock properties, such as porosity, permeability or grades (or any other attributes) across a GeoCellular volume. User-defined spatial correlation parameters can be used to adjust the output for each attribute modelled. Anisotropy can be introduced to account for directionality in the estimation.

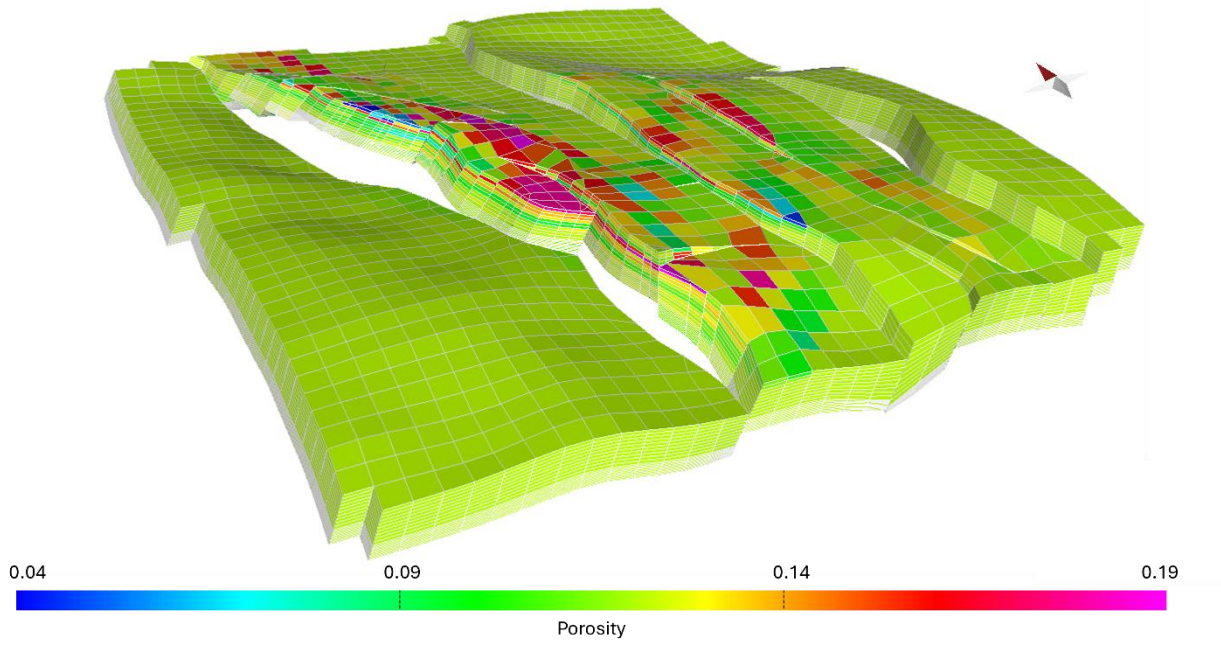

Figure 3. Modelled porosity from well data across a geoocellular volume that represents a faulted multilayer stratigraphical interval. The GeoCellular volume was created with the Create Volume from Faults and Horizons workflow (Model Building > Create Volume tool). Cells are coloured mapped with the GeoVol tool (Data and Analysis).

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Additionally, users can take advantage of powerful workflows combining Property Modelling with other tools:

- Build up rock properties from local inputs such as wells/drill holes and generate continue distributions across the volume. Combine this with the GeoVol tool to filter the distribution based on a user-defined input and calculate and visualise the volume of an exploration target.
- Export volumes and properties and to numerical reservoir simulations such as **PE**'s ***REVEAL***.

Open Mining Format (OMF) importing and exporting

New in MOVE 2026, now MOVE supports importing and exporting points, lines, surfaces, and volumes using the Open Mining Format (OMF). This enhancement significantly expands data exchange and connectivity options within MOVE, enabling seamless integration with a range of OMF compatible applications.

Take advantage of MOVE's powerful tools to create accurate, geologically valid 2D and 3D models that can be easily edited and now transferred across. By adopting OMF, MOVE promotes open interoperability, ensuring your geological data flows efficiently between systems.

Improvements in the Query tool

The Query tool now supports selective two-way attribute transfer between objects or parts.

- A new attribute transfer interface has been added to the Spatial Query tab for the transfer of a single attribute or a selection of attributes.
- It is possible to choose the attribute transfer direction between objects, from Target Selection to Source or from Source to Target Selection.
- Options have been introduced for combining results in instances where more than one attribute value is transferred to an object or a part. These options include operations for combining numerical values (Average, Total, Count, Min, Max) and for text values (concatenate, Value:).

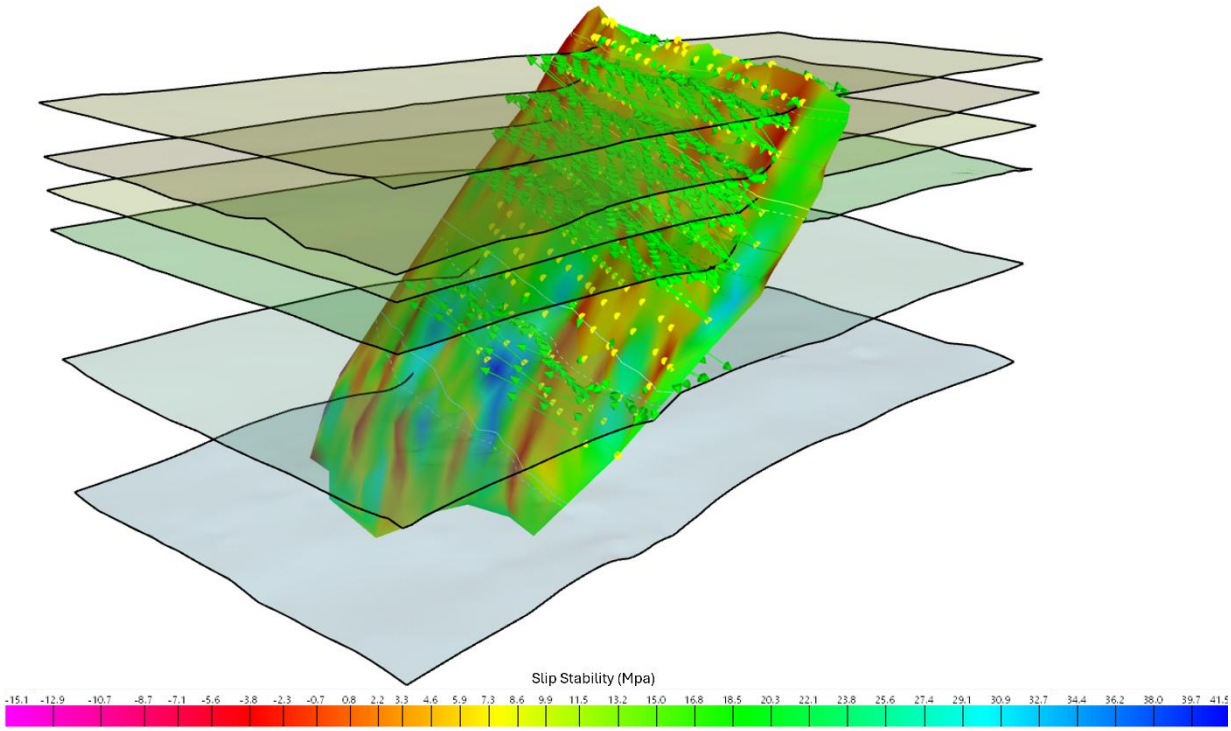

Figure 4. Transferring attributes from a fault to a set of horizons attached to the outcome of a Within Distance spatial query.

Well log Quick Editor menu

Options to enable further customization of well log visualization have been added to the Well log tab in the Quick Editor. In addition to Flip the well visualization and the reference grid to the right or the left of the well, logs' traces can now be scaled, colour filled and smooth.

Improvements for the Attribute Analysis Calculator

The Attribute Analysis Calculator offers a powerful functionality to create custom calculations and logic functions. In this regard, new string operations have been included: *NUM2STR* and *STR2NUM* allow to convert numerical characters into real numbers. The *CONCAT* operation joins up to three attributes in a string.

Kinematic modelling improvements

2D Strain Capture

2D Strain Capture is now available in the 2D Move-on-Fault, enabling strain associated with fault displacement to be calculated in sections, displayed and saved as attributes.

Previously, strain capture during forward modelling or geological restoration was only available in 3D using the Strain Capture tool, included within the 3D Kinematic Modelling module, and in Fault Response Modelling. In **MOVE 2026**, strain capture is possible in 2D structural geology sections, enabling quick analysis of strain and displacement patterns. For example, identifying high strain areas may provide exploration opportunities or predict drilling risks.

2D strain is calculated based on modelling fault slip and associated deformation with the range algorithms available, either in reference to the initial state (Langrangian) or to the final state (Eulerian). This approach stays true to the rules and principles of structural balancing, restoration and forward modelling, without sacrificing computational efficiency, which translates in fast and geologically valid results.

The strain attributes calculated are Finite Strain fe1, Finite Strain fe3, Finite Strain fe1 Dip and Dip Azimuth, Finite Strain fe3 Dip and Dip Azimuth, Horizontal Displacement and Vertical Displacement. These values can be saved in a point grid, which can then be coloured depending on the strain attribute that is displayed. Attribute values are saved and can be inspected with the Vertex Attributes analysis table.

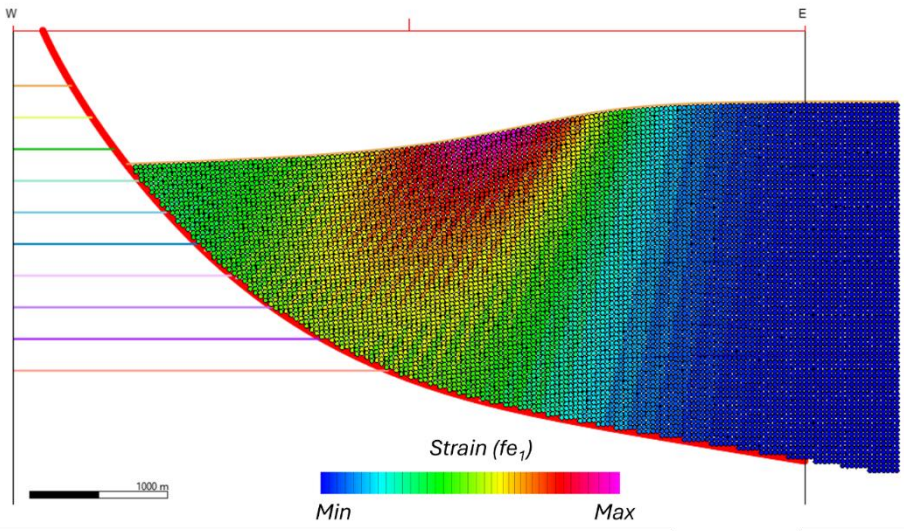

Figure 5: Attached colour mapped point grid on the hanging wall of a modelled listric fault after simulating one step of hanging wall slip.

Improved handing of pressure/stress logs in Stress Analysis

Pore Pressure and principal stress (Sigma 1, Sigma 2 and Sigma 3) data from wells is now automatically used to update Pressure Profile gradients in the Stress Analysis module. Before, the user had to manually modify the pore pressure and stress profiles to match data inserted, and only pore pressure logs could be inserted. Now, gradients will automatically match the inserted well log data points.

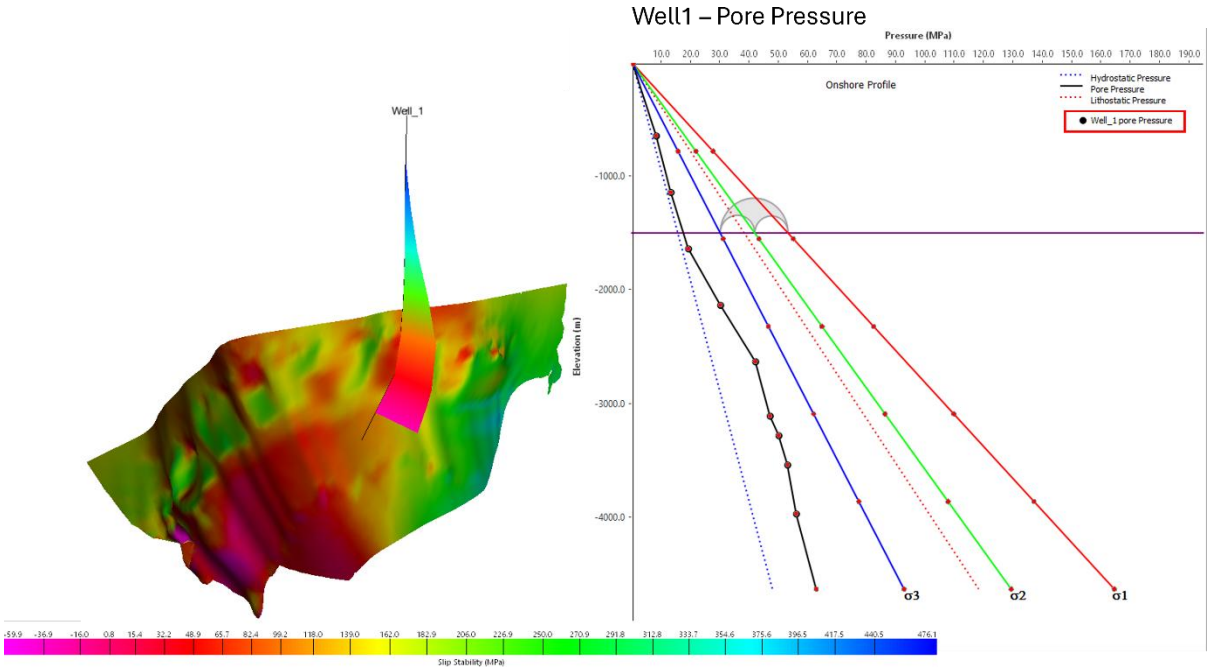

Figure 6: Automatically updated Pore Pressure profile from well log data.

Additionally, MOVE 2026 can plot typical stress (Sigma 1, Sigma 2 and Sigma 3) and pore pressure profiles suggested for different fault slip and hydraulic scenarios, including normal, reverse, and strike-slip regimes, with or without pore fluid overpressure. These estimates are based on average stress profiles published by Zoback (2007)*, derived from well measurements. This functionality enables you to generate stress predictions consistent with geological contexts or compare your data against typical values, helping to constrain and validate your analysis.

**Zoback, M.D., Reservoir Geomechanics; 2007; Cambridge.*

Other highlights in MOVE 2026

User-defined amplitude data ranges are now supported in the 2D SEGY import

Amplitude data ranges from imported SEG-Y can now be investigated and modified. The user has the option to review a preview of the seismic image and the histogram of the amplitude data. If required, Minimum and Maximum values may be adjusted. This is useful for data filtering when extreme values hinder the seismic image generation.

Improvements to MOVE Link for GST, including Profiles support

MOVE 2026 is now compatible with 3.11, 3,13 and 3.14 GST versions. Additionally, we have included multiple important additions to the GST Link, mainly revolving around the use of Profiles.

Profiles are a Feature Class available in GST that can store geological sections. This means that GST Profiles can be loaded as **MOVE** sections, edited in **MOVE**, and then saved in GST Storage as complete sections. Profiles from GST can now be used as part of the standard modelling workflows, and in turn **MOVE** sections can now be saved in GST for use by the whole organisation.

Improvements to MOVE Link for Petrel

Numerous performance improvements have been added to the MOVE Link for Petrel to ensure that objects are transferred correctly between the two programs. Now objects within Petrel interpretation window can be transferred to **MOVE**. Also, information about connected objects can be displayed as a dedicated symbology. This can be used to highlight disconnected objects in the model browser, if for example objects are deleted in Petrel.

The MOVE Link for Petrel in **MOVE 2026** supports the Petrel versions Petrel 2022, 2023 and 2024.

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MOVE 2026, IPM 14 – Extended list of updates and fixes

As well as the major changes and additions outlined above, please find below a comprehensive list of updates and improvements to ***MOVE 2026*** organised by the ***MOVE*** interface tabs.

Please note that fixes marked with * were also developed in, or back ported to the ***MOVE 2024, IPM 13.5*** version as part of our regular updates to the commercial version throughout last year.

General application changes

- Ask PE is now available as a chat box to interact with the MOVE Help pages and tutorials.
- 3D Regular Grid - Object Properties - bounding box z Minimum and z Maximum are now assigned correctly.
- The preference "Create Unique Object Names" when copying-pasting object is now saved between MOVE instances. By default this option is disabled *.

User interface changes

- Added a new context menu item when inserting: insert into set.
- Improved the attribute transfer interface in the Query tool.
- Well marker display settings are now preserved when loading files from previous versions.
- Well Marker tool: incorrect error message when the start measured distance (MD) of the well is not zero no longer displays.
- Well log visualisation improvements: 1. It is now possible to flip individual logs within a well. 2. In 2D views, Line logs are drawn on top of filled logs, and filled logs with smaller scaling ranges are drawn on top of those with larger scaling ranges *.
- Fixed an issue where some images were appearing black when opened in map views *.
- Line style attribute is now visible to user *.
- Newly created points will display labels if points in the existing group are showing theirs. Measured depth values for Wells are now displayed in the Default Display Units instead of defaulting to metres.
- Surface geometry. When points are selected on surfaces, and the attributes are undefined, the status bar now says undefined instead of printing a very large number as the value Surface geometry *.
- In Quick Editor, when a well is selected and the well head is not displaying, the Show Well Head checkbox is now unchecked *.
- Fixed an issue where Well selection within Section Views was not working correctly when symbols are displayed in metric size *.

File format and import/export

- Importing data in Open Mining Format (OMF) is now available.
- It is now possible to export data to Open Mining Format (OMF).
- SEGY import: an option to set the amplitude data ranges is now provided *.

- Add Properties to Volumes from Wells will now add properties from a Well Log that contains other properties named dip and/or azimuth.
- When printing and exporting to PDF 2D Views, issue fixed where gridlines were not being printed correctly *.
- GOCAD import: when importing a Voxet file, and choosing to load as a GeoCellular volume, a GeoCellular volume is now created.
- Fixed an issue where polygon selection of points in 2D views was incorrect when opening the Vertex Attributes Analyser with the selected points*.
- Fixed an issue where the option "Use the file name for object names" did not work when importing DXF files *.
- Fixed an issue with 3D Regular Grids created in MOVE not being converted correctly to valid 3D Seismic cubes *.
- When importing ASCII data into MOVE, floating point ("real") attributes are now imported using the current document display units for the attribute type of the imported attribute *.
- The Shapefile exporter now includes options to export data in Lat/Long *.
- When 3D Regular Grid Objects are deleted. The relevant data is removed from the MOVE document when it is saved.
- Crash fixed when loading large Seismic Cubes into memory.

Model building

- New Property Modelling tool added.
- Measured Depth values for Wells are now displayed in the Default Display Units instead of defaulting to metres.
- In Project to Section, Advanced options have been renamed for clarity.
- In the Edit Tool the Retriangulate option, when used with a complete mesh surface, will attempt to clean any invalid triangle edges or connections.
- Add Properties to Volumes from Wells will now add properties from a Well Log that contains other properties named dip and/or azimuth.
- Issue fixed where opening the Extend tool, choosing Extend Line and then selecting a line could cause a crash *.
- Option to create a vertex cloud from the displayed cells of a 3D Regular Grid has been added to the 3D Regular Grid context menu *.
- Converting polygon to mesh where one or more polygon vertices generate near zero degree angles no longer causes MOVE crash *.
- Surface with Boundaries tool: improvements made to Multiple Fault calculation *.
- It is now possible to create a clipped 3D Regular grid from an existing grid.

Data and analysis

- Implemented new Multiple Value options in attribute transfer in the Query tool.
- In the Measure tool, added angle measurements in 2D and in 3D.
- Attribute Analysis Calculator: CONCAT function now takes double, int and string arguments.
- Attribute Analysis Calculator: real, integer and string arguments can now be concatenated.
- Attribute Analysis Calculator: three values can now be concatenated.
- In the Query Tool, the Spatial Query options has been improved to allow a wider range of queries, especially in Map view *.

- NUM2STR and STR2NUM functionality has been added to the Attribute Analysis Calculator and the Query Tool, enabling conversion between strings and numbers arguments.
- In the Surface Geometry Analysis tool, when points are selected on surfaces, and the attributes are undefined, the status bar now says undefined instead of printing a very large number as the value Surface geometry *.
- Fixed an issue where objects could not be removed from a section with the Object Properties dialog if multiple objects were selected *.

View

- Fixed an issue where seismic time or depth slices appeared rotated and mirrored in Map View.*

2D and 3D Kinematic Modelling

- 2D Strain Capture is now available in 2D Move-on-Fault.
- In 2D Move-on-Fault and Horizons From Fault, session handling has been improved and "Save the current session" button has been added *.

Stress Analysis

- Loading principal stress magnitudes (Sigma 1, Sigma 2, Sigma 3) from well logs is now possible.
- Auto-update Pressure Profile is now available to synchronize loaded logs of Pore Pressure, Sigma 1, Sigma 2 and/or Sigma 3.
- Stress Analysis now allows entry of pore pressure values greater than 10000 psi.
- In Stress Analysis, the pressure lines calibrated with well data are now synced to the water depth option.
- A new slip setting feature was added based on Zoback's pressure profiles for both normal and over-pressured reservoirs, in normal, reverse, and strike-slip settings.
- Fixed an error in Stress Analysis where incorrect stress attributes were generated if a Topography (Free Surface) was collected *.

MOVE connections to RESOLVE and OpenServer (API)

- Operations added to Create Boundary as Line, Separate Mesh, Create Points at Face Centers and Create Points at Face Corners from RESOLVE and OpenServer (API) ("MOVE.CreateBoundaryAsLine()", "MOVE.SeparateMesh()", "MOVE.CreatePointsAtFaceCenters() and "MOVE.CreatePointsAtFaceCorners()") *.
- Operations added to Join the selected lines from RESOLVE and OpenServer (API) ("MOVE.JoinLines()") *.
- Operations added to Split the selected line by a given line from RESOLVE and OpenServer (API) ("MOVE.SplitLineByLineWithId(int objectId)" and ("MOVE.SplitLineByLineNamed(string objectName").
- From OpenServer, in 2D Move-on-Fault, fixed an issue were Join Beds horizons was not always picked up when applying *.

- Operations added to delete a section and rename a section from RESOLVE and OpenServer (API) ("MOVE.DelSection(sectionName)")", "MOVE.RenameSection(currentName,newName)".
- Operation added to Reset Trace/Posts of the selected section from RESOLVE and OpenServer (API) ("MOVE.ResetSectionTraceAndPosts()").
- Export to ASCII is now available from RESOLVE and OpenServer (API) ("MOVE.Export("ASCII","exportFilePath")").
- Clipping tool is now exposed to RESOLVE and OpenServer (API) (MOVE.Clipping) *.
- GeoVol Display tool is now exposed to RESOLVE and OpenServer (API) (MOVE.GeoVol) *.
- Merge Point Clouds is now exposed to RESOLVE and OpenServer (API) ("MOVE.MergePointClouds(mergedName)") *.
- Create Shape tool is now exposed to RESOLVE and OpenServer (API) (MOVE.Shape) *.

MOVE Link for Petrel

- Plain folders within interpretation folders in Petrel now appear.
- Petrel Regular Surfaces in interpretation windows can now be transferred to MOVE.
- Fixed an issue of incorrect unit mapping when transferring objects in feet from Petrel via Link for Petrel to a MOVE model in metres *.
- In the MOVE Link for Petrel, it is now possible for the user to disconnect objects from the Petrel project *.
- Fixed issue where in some instances the well track was not being transferred *.
- Objects are now identified as Connected/Disconnected in the Model Browser *.
- Measured Depth values for Wells are now displayed in the Default Display Units instead of defaulting to metres *.
- MOVE Core installer now installs the Petrel Link folder *.
- Geocellular volumes can now be transferred to Petrel as 3D Grids from MOVE *.
- It is now possible to transfer Wells from MOVE to Petrel.
- Two way time values are carried for wells by communicating the Well Log that has the time-depth relation.

MOVE Link for GST

- It is now possible to transfer MOVE Sections to/from GST Profiles *.
- The MOVE objects for upload to GST are now listed in alphabetical order *.
- It is now possible to lock objects within polygon extents *.
- The MOVE Link for GST now supports connections with GST 3.13 databases *.

To find out more about the developments, enhancements, and bug fixes in MOVE 2026, IPM 14 please visit the PE Client Web User Area.