

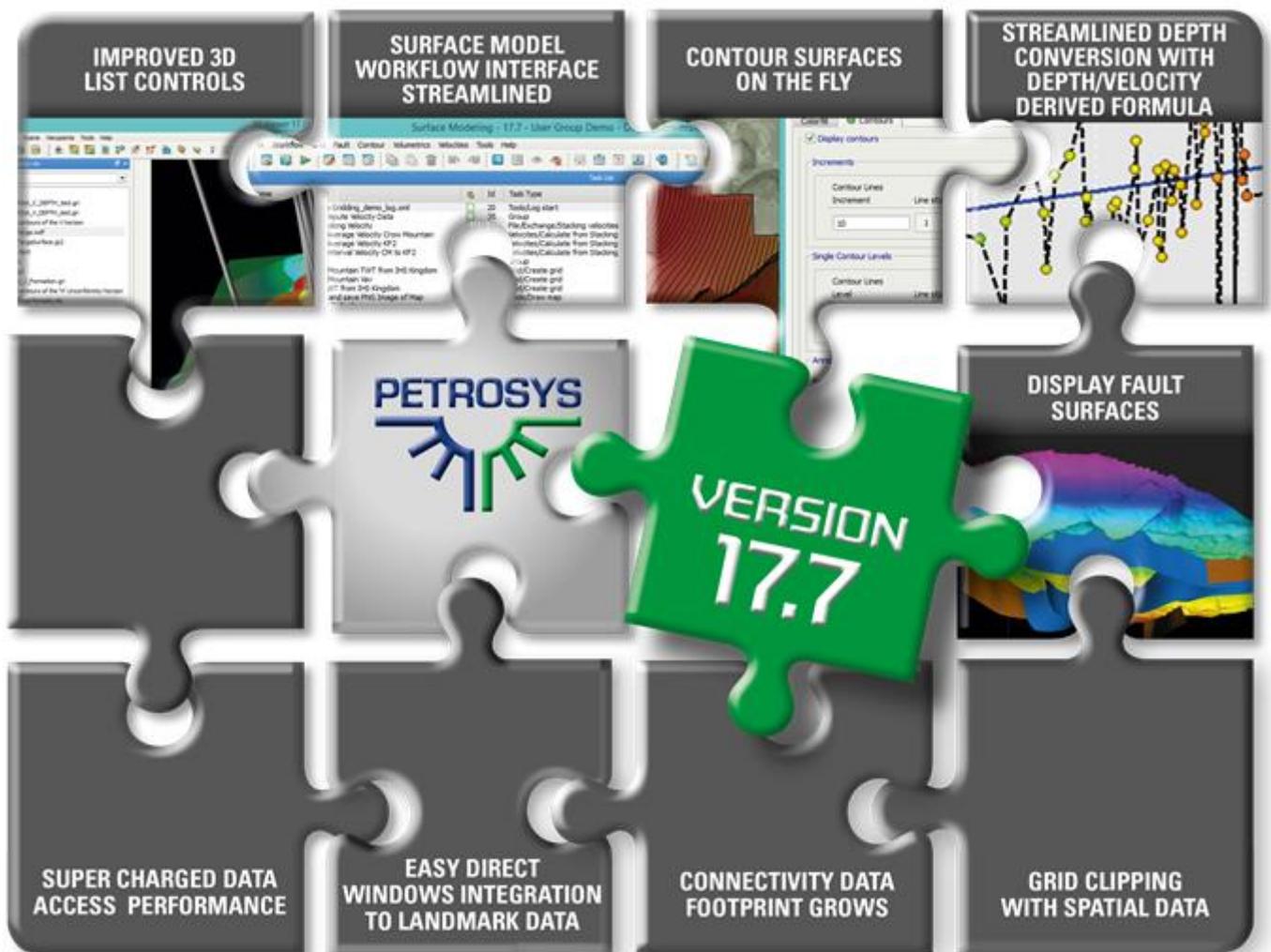
# SOFTWARE RELEASE NOTES

## Version 17.7sp6

Petrosys v17.7 continues to accelerate sub-surface programs by connecting data and workflows more efficiently. Pieces of the exploration and development puzzle come together to raise mapping standards and efficiencies.

In this release mapping workflows are optimised through a collection of usability, performance, connectivity, automation, direct data access, third-party connectivity and data footprint enhancements, which continue to see Petrosys lead the industry in sub-surface mapping.

The following pieces of the mapping workflow now come together more effectively



## Super Charged Data Access with Automatic Caching

Petrosys 17.7, delivers between 2 and 10 times data access performance acceleration through intelligent data caching.

When accessing data from any of our richly supported third-party connections, the data is automatically added to a local disk cache ready for the next map redraw or re-gridding operation. The data cache is shared among all applications started from the same Petrosys Launcher window. The bottom line result, significantly improved performance.

Benchmarked examples illustrate the performance gains for the second access to data:



Performance Up

Data Access Time Down



- Displaying a cached 10000 x 10000 Paradigm grid was 3x faster
- Displaying 3000 cached Petrel 2D seismic lines was 6x faster
- Displaying cached wells from Paradigm was 10x faster
- Displaying 3000 cached DUG 2D seismic lines was 100x faster
- Displaying a cached 10000 x 20000 Petrel 3D seismic surface was 2x faster

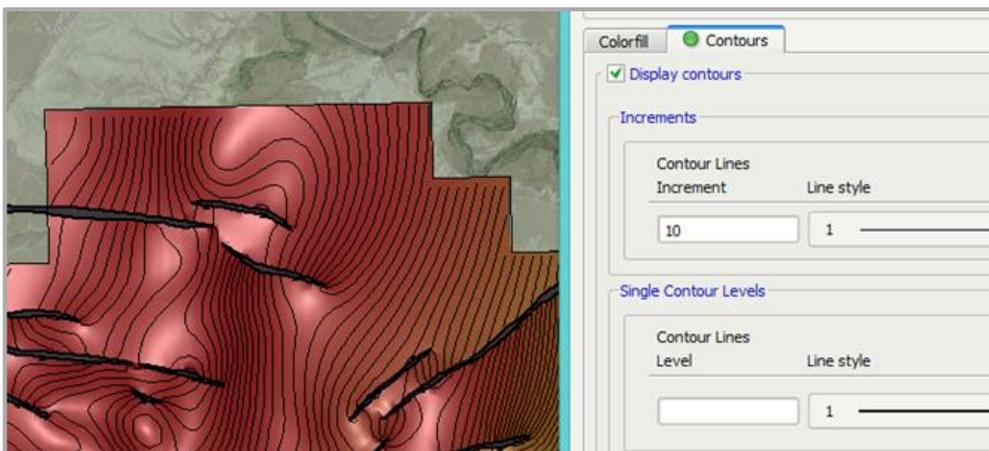
## Add Map Contours on the Fly

It is now possible to directly compute and display contours from the Grid and Seismic Surface display options in Petrosys Mapping.

The contouring levels and parameters user interface has been upgraded to improve the ease of adding in multiple levels of styles as well as allow specific absolute levels to have specific styling.

This accelerates the ability to easily display contours, without needing to use the separate Surface Modeling application to import your surface and then compute contour files.

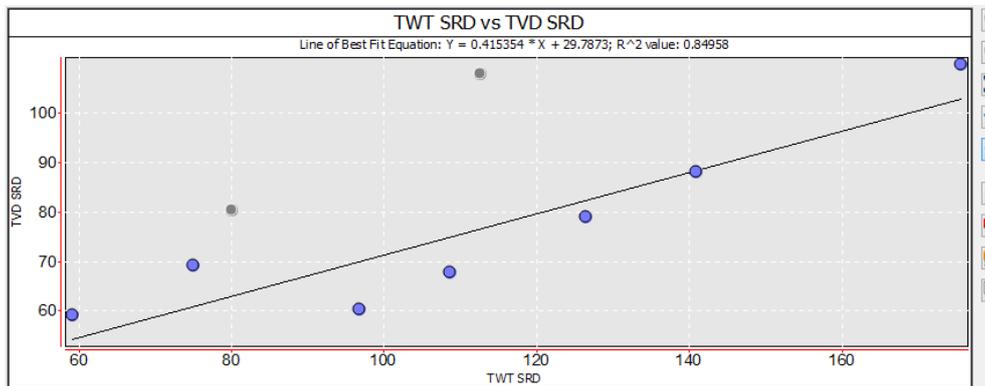
The result, less data files are created and need to be managed, along with contours being more effectively mapped.



## Improve Your Depth Conversion by Directly Assessing the Depth/Velocity Relationship

A new option available in the Surface Modeling application will automatically create grid arithmetic tasks for depth conversion based on a formula derived from the depth/velocity relationship. The formula is generated from checkshot, formations/zones of selected wells.

The data points used are visually reviewed in a cross plot chart for analysis, which also enables any outlier or error points to be excluded from the formula, creating a more accurate model fit.



The derived formula is then used to automatically generate surface modelling tasks which depth convert your chosen time grid.

Line of best fit equation: Linear     $TVD = 0.415354 * TWT + 29.7873$

Create a linked depth conversion arithmetic task

Input TWT Grid: twl.gri

Output Depth Grid: depth.gri

The option is available from Surface Modeling using the "/Velocities/Well Checkshot Depth Conversion" menu option.

In addition to "Linear" line of best fit: Petrosys charts now support "Polynomial", "Exponential", "Power" and "Logarithmic" lines of best fit.

## Velocity Grids from 3D Stacking Velocities Using Interpolation

Stacking velocity interpolation has been introduced to calculate velocity grids from 3D stacking velocity datasources and TWT horizons.

The new functionality is in the Surface Modeling application's 'Grid/Create Grid' task. It can be enabled under the 'Methods' tab by setting the Operation field to '3D Velocity Interpolation'. Unlike standard gridding, the stacking velocity interpolation option preserves the stacking velocity high frequency information during the interpolation process giving a much better result to the output velocity grid.

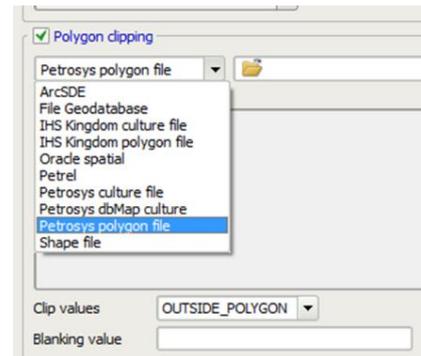
This method also supports extrapolation of velocity cube data on a user specified distance using the "Take nearest trace" approach.

## Back Interpolate Directly to Spatial Data Sources

It is now possible to back interpolate grid values directly to supported spatial data sources: Excel, ESRI File Geodatabase, Petrosys contour file, Petrosys culture file, shape file and dbMap Culture.

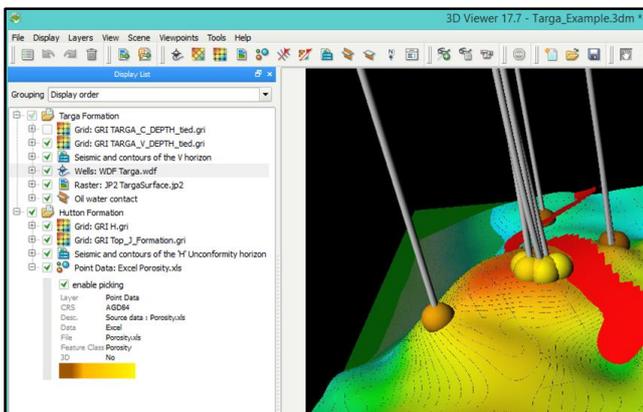
# Use any Spatial Polygon in Surface Modeling for Grid Clipping

The grid clipping operation in Surface Modeling Grid/Create Grid has been enhanced to allow the use of any of the spatial data format supported by Petrosys: Esri ArcSDE, Esri File Geodatabase, IHS Kingdom culture file, IHS Kingdom polygon file, Oracle spatial, Petrel, Petrosys culture file, Petrosys dbMap culture, Petrosys polygon file and shapefile.

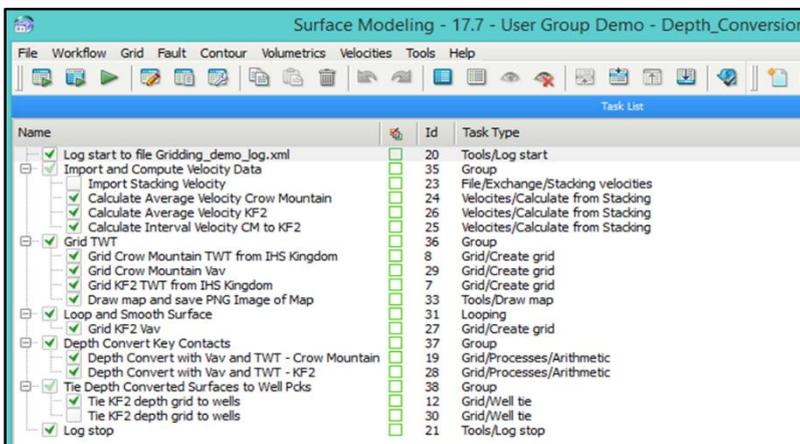


# 3D Viewer Display List & Surface Modeling User Interface Upgrade

The 3D Viewer and Surface Modeling applications now have the same list (display layer/task) management and grouping capability as the mapping canvas. This improves consistency, provides a more modern look and navigation feel, and dramatically improves user interaction and control.



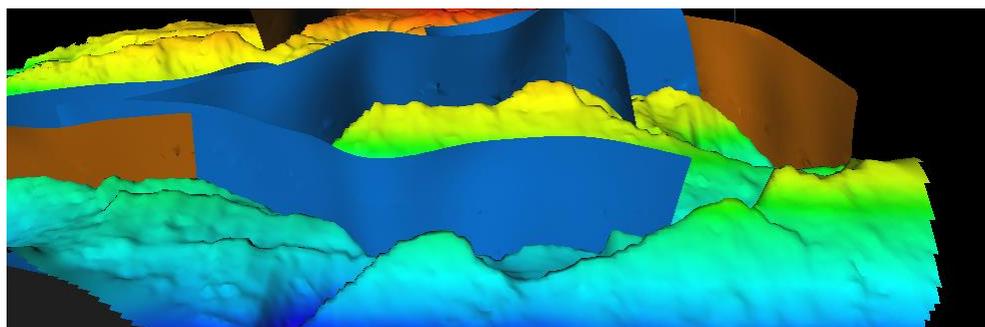
In the 3D Viewer, the list window is now dockable and visible within the main application window. Drag-and-drop of the layers along with grouping lets you easily arrange the list view in the way that best suits your data.



The Petrosys Surface Modeling interface provides: grouping of modelling tasks into logical collections of work, drag and drop movement of workflows steps, and a tree widget to collapse and expand key parts of the modelling workflow.

## 3D Viewer Fault Surface Display From Third-party Sources

Fault surfaces from Petrel, OpenWorks and Paradigm Epos can now be directly displayed in the 3D Viewer.



## Calculate Fault Polygons Automatically When Gridding Using Fault Sticks

Petrosys users can now automatically calculate fault polygons from their fault stick surfaces and horizon data.

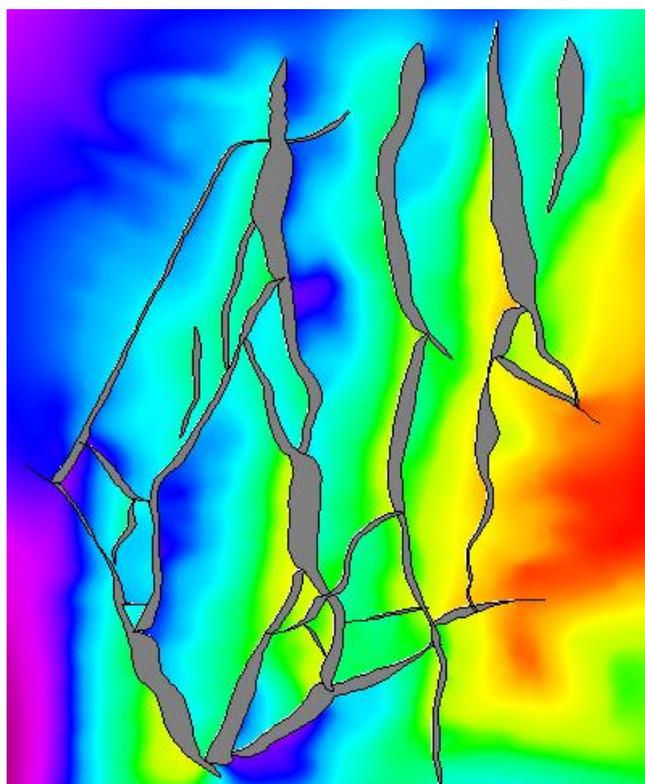
The Surface Modeling "Grid/Create Grid" option has been upgraded to read and use fault sticks, now generating estimated output fault polygons as well as the usual grid output.

When using fault sticks in gridding, fault polygons are calculated using the estimated horizon/fault stick contacts. These fault polygons are embedded within the output grid file and may optionally be saved to a separate fault file. The fault polygons may also be smoothed spatially if requested by the user and their Z-values are populated so that they tie to the output grid surface.

One of the major advantages of the Petrosys algorithm is that there is no pre-requisite surface framework modeling required to run this option, other than to make sure the fault sticks are all assigned to their corresponding fault surface. This means the workflow for generating fault polygons from interpretation data becomes much simpler than in other packages.

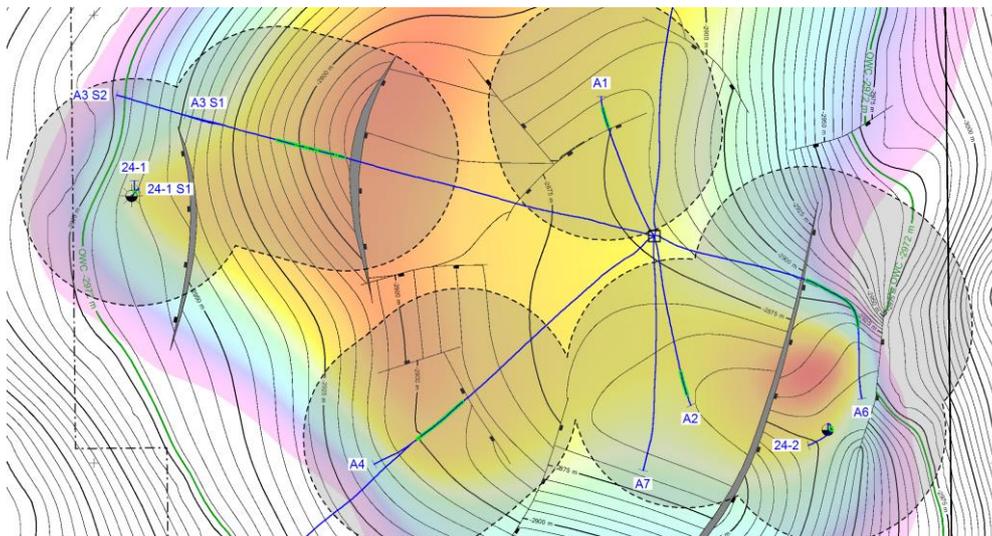
To select this option, set the "Fault type" to "Fault sticks" under the "Faults" tab in the "Grid/Create Grid" option.

The output grid and automatically generated fault polygons for the gulfaks data set (top ness horizon) are displayed below:



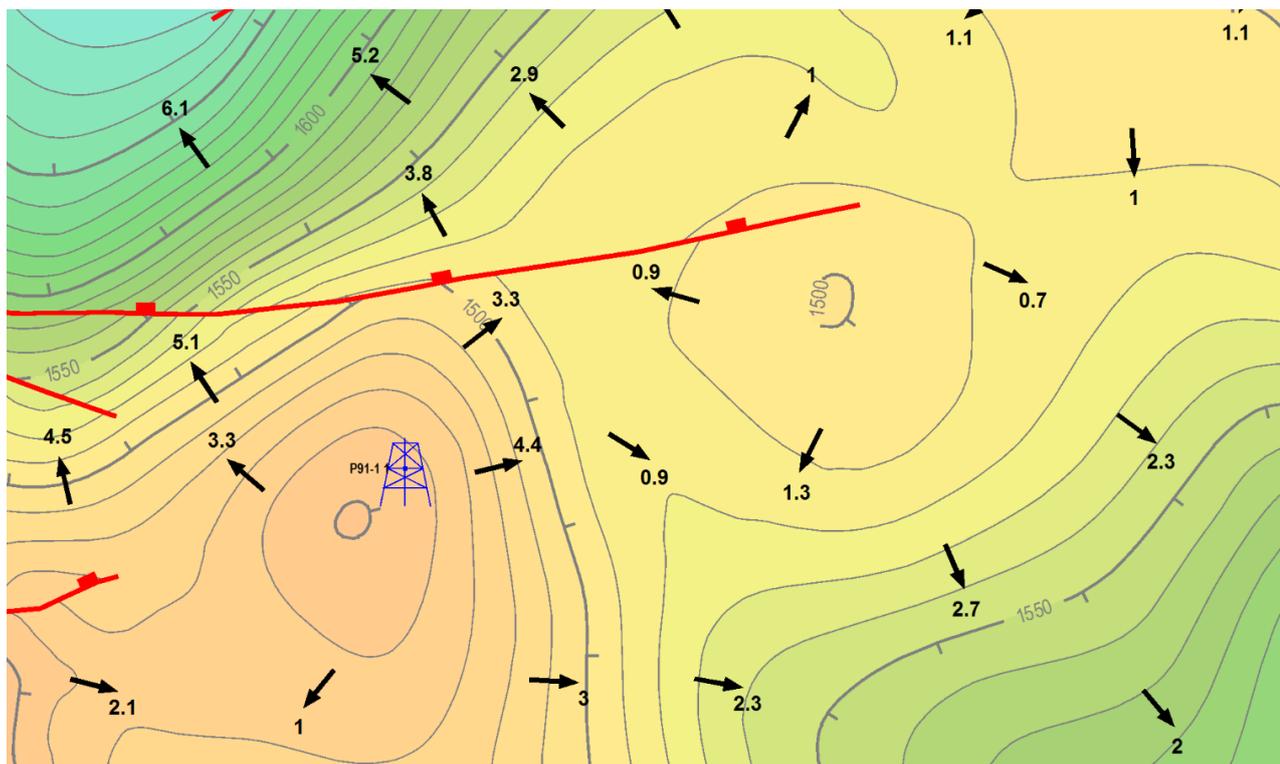
## Spatial Editor Buffer Generation - Merge Shapes

Overlapping buffered shapes created by the Spatial Editor can be merged into single shapes. For example, overlapping drainage areas can now be turned into a single shape, simplifying area and volume calculations. Another good use for this would be with the "Polygon" well tie method - buffer around the well locations and restrict the grid flexing to within the polygons around well clusters



## Improvements to Presentation Quality Mapping

Display GIS Directional Annotation Enhancements: GIS data with an orientation can now have annotation aligned with that orientation. This allows symbols that have an angular direction to have annotation that plots at that directional value. Directional GIS arrows and better labelling are useful for geological dip and azimuth maps, plotting micro-seismic parameters, displaying current data, or mapping anything with a directional component.



## Directly Connected Subsurface Data Footprint Continues to Grow

Building on the established footprint of subsurface data types supported by Petrosys direct connections across a wide spectrum of E&P applications, Petrosys 17.7 provides a stronger than ever tool for the exchange of data.

- Import seismic to SDF and dbMap from Trango, KDM, Finder and OpenWorks.
- Import 3D seismic surfaces from GeoFrame in the Surface Exchange tool.
- Export grids to OpenWorks and IHS Petra in the Grid Exchange tool.
- Import spatial data from MapInfo file into any GIS supported format in the Spatial Data Translator tool.
- Import Roxar Irap ASCII grid files directly to Petrosys grid files.

## Move Surfaces + Grids between GeoFrame and OpenWorks

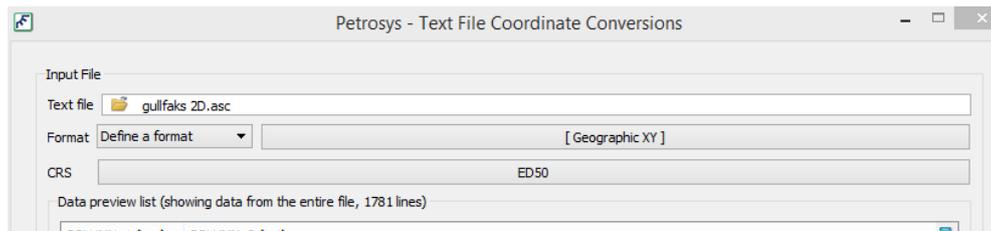
The Exchange framework has been extended to allow transfers between even more of your data sources. Seismic Surface Exchange now supports GeoFrame surfaces for input, while Grid Exchange adds OpenWorks as an output data source alongside GoCad and Rescue as new input sources. This simplifies the error prone process of transferring data between, for example, GeoFrame and OpenWorks to a single, repeatable task.

## Easy Direct Windows Connectivity to OpenWorks and SeisWorks

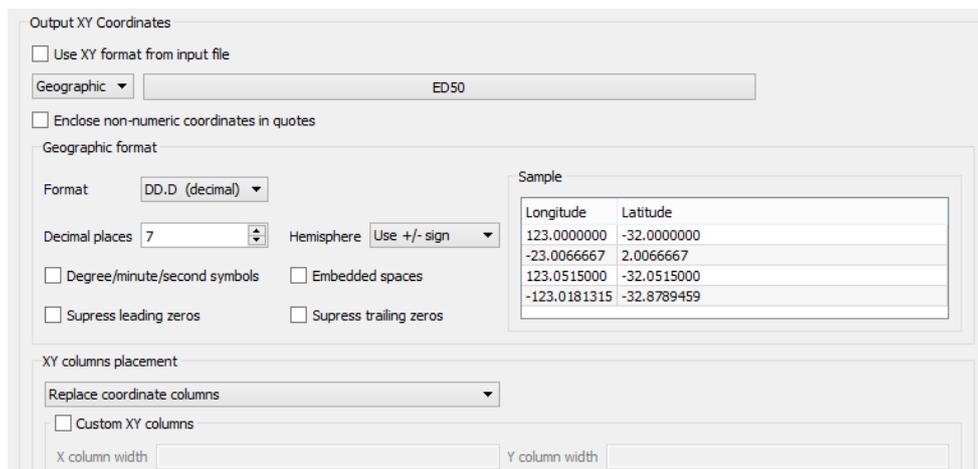
On Windows direct support has been added for connecting to OpenWorks and SeisWorks (R5000.8 and R5000.10). Simply by installing the OpenWorks application on your Windows desktop, Petrosys can now connect to your OpenWorks and SeisWorks projects without the need for a dispatch server to be configured on Linux.

## CRS Point Conversion Tool for Bulk Conversion of Coordinates

A new option to allow CRS conversion of a selected XY coordinate pairs is available in the Launcher under the menu option /CRS/Text File CRS Conversion. It is also available in the Surface Modeling application under the menu /File/Exchange/Text File CRS Conversion where it can be added to workflows and scripted for automation purposes

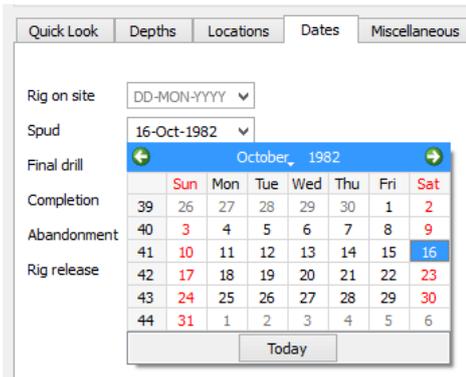


A rich set of options allow full control over the output file format. The output format can be explicitly defined or it can be set to match the input format file.



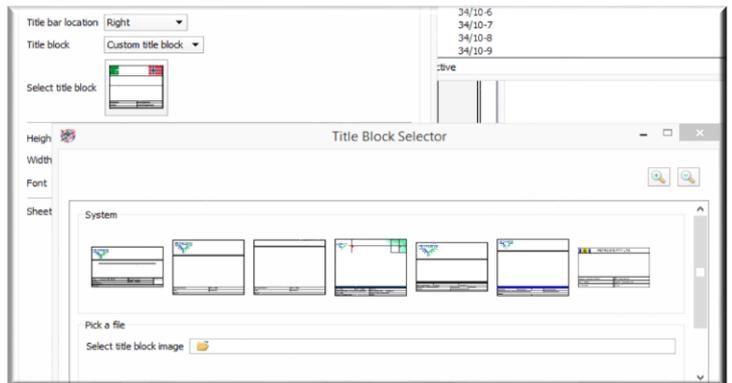
# User Interface Streamlining

Petrosys continually strives to improve the user interface experience of its applications. Refining the user interface to reduce mouse movements and mouse clicks.



Petrosys 17.7 adds a new, easy to use date and time picker, allowing much simpler and reliable entry and selection for dates.

Additionally the title bar edit dialog in the map-sheet edit interface now provides a graphical title block selector. This allows much easier selection of title blocks from either the current project or from the central location where company defined standard title blocks are stored.



# Platform Support – Petrosys Application is 64bit Only

Petrosys 17.7 is available as a 64-bit application only, with 32-bit versions no longer available. This allows Petrosys to start using the full power of 64-bit platforms.

Note that Petrosys can still connect to the full range of supported 32-bit third-party applications and retains the capability to access all files created in 32-bit versions. See the Petrosys connectivity support table on the Petrosys website under the Support section for details on the supported versions and platforms.

# Online Help – How to Videos

Petrosys online help now contains hyperlinks to a selection of “how to” videos, hosted on the Petrosys YouTube channel, along with a range of contents updates. Look for this video playback button in the help:



## Detailed Release Notes Summary 17.7.6

### Enhancements

#### *dbMap - Client*

[59554](#) Default query set has been upgraded and includes new OpenWorks queries

## Detailed Release Notes Summary 17.7.6

### Bug Fixes

#### *Mapping - GIS, Spatial and Culture*

[42000](#) Support added for international character sets in Arc Shapefile annotation display

#### *Mapping - Wells*

[59396](#) Fixed crash when filtering well list

#### *Spatial Editor*

[50134](#) Improved handling for dbMap culture in the Spatial Editor

#### *Surface Modeling - Gridding*

[59410](#) Grid clipping using Petrel polygons works with culture data with no attributes

## Petrosys Release 17.7.6

Detailed Release Notes

### [dbMap - Client](#) [Enhancements](#)

#### **Default query set has been upgraded and includes new OpenWorks queries** 59554

The default set of queries supplied by Petrosys have been enhanced for OpenWorks. This enables more options for creating well selections and annotating OpenWorks wells when displaying on a map.

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### [Mapping - GIS, Spatial and Culture](#) [Bug Fixes](#)

#### **Support added for international character sets in Arc Shapefile annotation display** 42000

Display/GIS now handles UTF-8 character encoding for Arc Shapefiles. In previous versions, Display/GIS assumed the Shapefile was in the local system encoding in some cases which could have led to the text being rendered with the wrong character set.

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### [Mapping - Wells](#) [Bug Fixes](#)

#### **Fixed crash when filtering well list** 59396

Well list has been fixed to handle specific cases of filtering when filter condition is typed quickly.

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### [Spatial Editor](#) [Bug Fixes](#)

#### **Improved handling for dbMap culture in the Spatial Editor** 50134

Support for editing dbMap culture in the Spatial Editor has been improved:

- Opening feature classes is faster because only shapes within the current map sheet are read
- When saving changes, only shapes that have been modified are written back to the database. This is both faster and more robust due to writing less data.

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### [Surface Modeling - Gridding](#) [Bug Fixes](#)

#### **Grid clipping using Petrel polygons works with culture data with no attributes** 59410

The 'Grid/Create Grid' option now allows Petrel culture data with no attributes to be used as a clipping polygon.

## Detailed Release Notes Summary 17.7.5

### Enhancements

#### *Configuration - Configuration Files*

[58676](#) Updated LIMS spotfire link (Santos only)

#### *dbMap - Client*

[30971](#) Well header Country, State, Basin, JV, and Permit values now queried from web service (Santos only)

#### *Mapping - Wells*

[46630](#) Added support for adding and selecting wells by formation tops to Petrel, DUG Insight®, IHS Petra, Paradigm-Epos® and SeisWare™ selection lists

#### *Seismic (SDF) Editor*

[10392](#) Mistie report improvements - Intersection coordinates, bulk shift as data column and elevation data fixes

#### *Surface Modeling - General*

[51797](#) Tools/Create directory - Directory selector used in interactive scripting

## Detailed Release Notes Summary 17.7.5

### Bug Fixes

#### *Connections, Import and Export*

- [58788](#) Import Seismic to SDF - More than 26 horizons are now allowed to be imported in one import run
- [58980](#) Import ASCII file to SDF - Horizon selection lists now work correctly in new projects

#### *Connections, Import and Export - DUG Insight*

- [58808](#) Support added for selecting fault sticks with duplicate names

#### *Connections, Import and Export - IHS*

- [59100](#) IHS Kingdom - Performance improvement in extracting some seismic and well data types

#### *Connections, Import and Export - Petrel*

- [50720](#) Newline characters were causing Wells Import Wizard to fail with Petrel as an output datasource

#### *dbMap - Client*

- [58905](#) Assets edit list - Selection in items list no longer jumps around
- [59141](#) Mapping - Query lookup list now sort on the correct column

#### *Mapping - General*

- [49891](#) Text keyword substitution for MAPFILE.BASENAME now works correctly for sub-directories
- [58543](#) Fixed crash in scrolled lists when mouse cursor is dragged over selection checkboxes with LMB pressed down

#### *Surface Modeling - Exchange*

- [58539](#) Grid Exchange 'Use faults' displays Petrel model grid faults
- [58934](#) Grid Exchange - Improved mismatched CRS warning message

#### *Surface Modeling - General*

- [57866](#) Surface Modeling - Clearing of data cache now works

# Petrosys Release 17.7.5

Detailed Release Notes

## [Configuration - Configuration Files](#) [Enhancements](#)

### **Updated LIMS spotfire link (Santos only)**

58676

Updated the Santos-specific configuration for LIMS spotfire web links.

## [Connections, Import and Export](#)

## [Bug Fixes](#)

### **Import Seismic to SDF - More than 26 horizons are now allowed to be imported in one import run**

58788

In certain SDF import options like "Import/Petrosys/Seismic..." or "Import/Landmark/OpenWorks/Seismic..." where the horizon name is automatically created and matched to the input there was a limit of 26 horizons that could have been imported in one import. This limit has now been removed and the only limit is the current SDF maximum number of horizons limit of 500.

### **Import ASCII file to SDF - Horizon selection lists now work correctly in new projects**

58980

The horizon selection buttons in the 'Import/ASCII Fixed Format File to SDF' option now work properly when the project is new or the SDF file is changed in the import dialog. Previously in these cases either no horizon selector popped up or the wrong horizons were shown.

## [Connections, Import and Export - DUG Insight Bug Fixes](#)

### **Support added for selecting fault sticks with duplicate names**

58808

Support for selection of fault sticks with the same names has been added. Previously if two or more fault sticks had the same name the selection as saved and restored via task files could have been incorrect.

Additionally the fault stick selection list is now sortable by clicking on the column headers.

## [Connections, Import and Export - IHS](#)

## [Bug Fixes](#)

### **IHS Kingdom - Performance improvement in extracting some seismic and well data types**

59100

The performance in extracting 2D seismic and well path data from IHS Kingdom has been dramatically improved in a number of scenarios.

## **Newline characters were causing Wells Import Wizard to fail with Petrel as an output datasource**

50720

Using the Wells Import Wizard to import well header data containing newline characters to Petrel would fail. This has now been fixed and newline characters are now handled correctly.

## **Well header Country, State, Basin, JV, and Permit values now queried from web service (Santos only)**

30971

For Santos only, the basic well header dialog now retrieves values from the Santos GIS Web service for the following fields:

- Country
- State
- Basin (Geological province)
- Initial Joint Venture
- Current Joint Venture
- Initial Permit (new)
- Current Permit (new)

When creating a new well, these values are automatically populated using the surface location of the well and it's spud date. If multiple values are returned from the web service for a particular field, say two Current Permits are returned, then you are prompted to select one of the values.

When editing an existing well, it is only possible to select values returned from the web service for the above fields. If the spud date or surface location of the well is changed, it will re-query the web service and automatically populate with new values, in cases where this causes them to change.

As part of this change, the old Expl. license and Bus. unit fields linked to the Initial and Current Joint ventures are no longer shown on the well header.

## **Assets edit list - Selection in items list no longer jumps around**

58905

In the Assets lists when selecting an Item in the right list it will no longer jump around if that location had multiple Items associated with it. Additionally the lists now do not automatically horizontal scroll back to the left each time an item is selected.

## **Mapping - Query lookup list now sort on the correct column**

59141

Query lookup selection lists now sort on the correct column when clicking on the column header to sort. Previously it was sorting by the column immediately to the right.

## **Text keyword substitution for MAPFILE.BASENAME now works correctly for sub-directories**

49891

The text substitution feature for the keyword <<MAPFILE.BASENAME>> will now use the correct file name and path when the file is located in a project sub-directory (sub-folder).

## Fixed crash in scrolled lists when mouse cursor is dragged over selection checkboxes with LMB pressed down

58543

Some instances of lists, particularly list of seismic lines, will no longer crash when using the left mouse button to click and drag over items in the list.

### [Mapping - Wells](#) [Enhancements](#)

## Added support for adding and selecting wells by formation tops to Petrel, DUG Insight®, IHS Petra, Paradigm-Epos® and SeisWare™ selection lists

46630

The wells selection lists for Petrel, DUG Insight®, IHS Petra, Paradigm-Epos® and SeisWare™ have been enhanced to allow adding or selecting wells which contain a given selection of formation tops. The resulting well selection list files can then be used to filter well selections for display or gridding.

### [Seismic \(SDF\) Editor](#) [Enhancements](#)

## Mistie report improvements - Intersection coordinates, bulk shift as data column and elevation data fixes

10392

The mistie matrix report in the SDF Seismic Editor has been improved in the following ways:

- The option has been renamed from 'Mistie matrix' to 'Mistie (CSV Format)' to make it more obvious this report option can be used to create CSV style format files that can be imported into other parts of the software or Excel.
- The coordinates of the mistie intersection can be output to the report file as additional columns. This allows the mistie report to be used in gridding to grid up the misties or displayed on the map using bubble maps or GIS displays.
- The bulk shift value used for each mistie can be output to the report files as additional columns next to the horizon TWT values.
- The report filename can be entered as .csv, .txt, .asc or .prn file. Previously the .prn suffix was forced onto the filename.
- When using elevation data types (EMSL or EDATUM) the values are now output correctly to the file. Previously when using the 'Include data values' option no data values would appear in the file.
- When using elevation data types (EMSL or EDATUM) a horizon selection is not required.
- A new option to force the mistie value to be output as an absolute (always positive) value has been added.

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### [Surface Modeling - Exchange](#)

### [Bug Fixes](#)

## Grid Exchange 'Use faults' displays Petrel model grid faults

58539

In the Exchange Grids option the 'Use faults' option is now honored and Petrel model grid faults are added to the output grid if selected.

## Grid Exchange - Improved mismatched CRS warning message

58934

Updated the Grid Exchange mismatched CRS warning message to say these grids will not be copied.

### [Surface Modeling - General](#) [Enhancements](#)

## Tools/Create directory - Directory selector used in interactive scripting

51797

The directory field in Tools/Create directory is now a directory selector dialog when used in interactive scripting.

### **Surface Modeling - Clearing of data cache now works<sup>57866</sup>**

The option to clear the data source cache for a task (Workflow/Clear User Cache) now works correctly. Previously it would not clear the cache at all.

Use this option to clear the cached data from the current Petrosys session so that any new data added in the connected application will be retrieved on the next gridding run.

## Detailed Release Notes Summary 17.7.4

### Enhancements

#### *Application - Printing and Publication*

[57913](#) CGM Output - Transparency support enabled by default

#### *Connections, Import and Export*

[57391](#) Exchange of Grids and Seismic Surfaces now uses a configurable tolerance for false easting and northing comparisons

[54165](#) Paradigm-Epos well selection lists are now able to be refreshed

#### *Connections, Import and Export - Esri*

[58407](#) Support added for ArcMap 10.4

#### *Connections, Import and Export - Paradigm-Epos*

[53362](#) Added support for Paradigm 15.5 (2015.5) on Linux and Windows

#### *Coordinate Reference Systems*

[54703](#) Molodensky-Badekas datum transformation method supported

#### *Surface Modeling - Gridding*

[43284](#) Use fault stick surfaces in gridding to calculate fault polygon estimates automatically

## Detailed Release Notes Summary 17.7.4

### Bug Fixes

#### *Application - User Interface*

[58375](#) Pattern selector now shows the last pattern in the library

#### *Connections, Import and Export*

[58293](#) Grid Exchange - writing to OpenWorks now uses the correct CRS for interpretation projects

[58473](#) Finder/EPPR database selection of wells using query is now working (Saudi Aramco only)

[36209](#) Export of grids to Rescue format does not crash

[57267](#) Opening .dbm file no longer shows errors if replacement connection prompt is cancelled

#### *Connections, Import and Export - GeoFrame*

[58400](#) GeoFrame grid CRS scale factor is read correctly

#### *Connections, Import and Export - IHS*

[58550](#) 3D seismic surfaces now display from IHS Kingdom

#### *Connections, Import and Export - Paradigm-Epos*

[57702](#) Well names are shown even if GUID field exists

#### *Connections, Import and Export - Petrel*

[58239](#) Read working reference datum for Petrel Wells when datum list is empty

#### *Mapping - Seismic*

[57396](#) Display Upholes and Permanent markers options reinstated

[58271](#) Seismic lines are highlighted correctly when selected in list by clicking on checkbox column

#### *Spatial Data Translator*

[58410](#) Crash on start-up due to specific project defaults fixed

#### *Spatial Editor*

[57313](#) Spatial Editor correctly handles in-cell attributes editing

[51747](#) Spatial Editor allows separate fault vertices to be located extremely close to each other

#### *Surface Modeling - General*

[57883](#) 3D Velocity Interpolation no longer crashes when SEGY files have inlines or xlines not starting from 1

#### *Surface Modeling - Gridding*

[57985](#) Polygon selection correctly restored from saved .tsk file

[57435](#) Petrel well formations are now shown when interpreter is not blank

## Petrosys Release 17.7.4

Detailed Release Notes

### [Application - Printing and Publication](#)      [Enhancements](#)

#### **CGM Output - Transparency support enabled by default**      57913

Output to CGM files now has support for transparency turned on by default. Previously the transparency support had to be enabled with the "\_ty" option on the plotter properties dialog.

Note that support for correctly rendering the transparent elements is not universal for third-party CGM readers.

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### [Application - User Interface](#)

### [Bug Fixes](#)

#### **Pattern selector now shows the last pattern in the library**      58375

The graphical fill style pattern selector now shows the last pattern in the pattern library.

### [Connections, Import and Export](#)      [Enhancements](#)

#### **Exchange of Grids and Seismic Surfaces now uses a configurable tolerance for false easting and northing comparisons**      57391

In the Exchange application, for Grids and Seismic Surfaces a configurable tolerance can now be used for the comparison of 'false easting' and 'false northing' values between source and target coordinate reference systems. This allows data with close but not exact CRS values to be imported. The tolerance value is set using the "sqc file" configuration system using the crs.sqc file and the key CRS\_TOLERANCE\_FOR\_EXCHANGE. Contact Petrosys support for help in configuring this option.

#### **Paradigm-Epos well selection lists are now able to be refreshed**      54165

If you are using a Paradigm-EPOS-selection-list to filter the wells being displayed on a map for example, and you add or remove wells using the Well Data Manager in Paradigm, you can now use the right mouse button "Update" option to refresh the list of wells posted on the map. Previously you had to exit and re-start Mapping for the changes to come into effect.

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### [Connections, Import and Export](#)

### [Bug Fixes](#)

#### **Grid Exchange - writing to OpenWorks now uses the correct CRS for interpretation projects**      58293

When writing grids to OpenWorks Interpretation projects using the Exchange/Grid option, it now correctly uses the CRS from the interpretation project, instead of the CRS from the master project.

#### **Finder/EPPR database selection of wells using query is now working (Saudi Aramco only)**      58473

User-defined and Using-form selection options are now working correctly for Saudi Aramco's custom Finder wells configuration connection to the EPPR database.

#### **Export of grids to Rescue format does not crash**      36209

The option to export grids to Rescue format will now work without crashing.

## Opening .dbm file no longer shows errors if replacement connection prompt is cancelled

57267

If you open a .dbm file containing third-party connections, such as OpenWorks/SeisWorks, and you have not previously connected to the connection/project, it no longer shows MX errors relating to NULL values if you cancel the prompt to select a replacement connection.

### [Connections, Import and Export - Esri](#)    [Enhancements](#)

#### Support added for ArcMap 10.4

58407

Support has been added for ArcMap version 10.4 for the embedded ArcMap plugin. The embedded ArcMap plugin allows Petrosys grid, contour and fault files to be rendered directly within the ArcMap application.

---

### [Connections, Import and Export - GeoFrame](#)    [Bug Fixes](#)

#### GeoFrame grid CRS scale factor is read correctly

58400

In previous versions, the CRS scale factor read from GeoFrame for use with grids (importing or display) was not read correctly. In many circumstances this did not matter as the correct CRS would be matched via other means, but for certain cases the CRS used for the grid would be incorrect, resulting in the grid appearing in an incorrect location.

---

### [Connections, Import and Export - IHS](#)    [Bug Fixes](#)

#### 3D seismic surfaces now display from IHS Kingdom

58550

An issue with 3D seismic surfaces from IHS Kingdom intermittently not displaying has been fixed.

### [Connections, Import and Export - Paradigm-Epos](#)[Enhancements](#)

#### Added support for Paradigm 15.5 (2015.5) on Linux and Windows

53362

Paradigm 15.5 (Epos 4.3) is now supported as a data source in all features that previously supported Paradigm 15 (Epos 4.3), Paradigm 14 (Epos 4.2) & 14.1 (Epos 4.2.1) data on both Linux and Windows.

Paradigm 2011, 2011.3 (Epos 4.1), Paradigm 14, 14.1 (Epos 4.2) and Paradigm 15 (Epos 4.3) continue to be supported as data sources.

---

### [Connections, Import and Export - Paradigm-Epos](#)[Bug Fixes](#)

#### Well names are shown even if GUID field exists

57702

Previous versions of Mapping could crash or wells read from Paradigm EPOS were blank if the Paradigm EPOS project had wells with the 'GUID' attribute set.

---

### [Connections, Import and Export - Petrel](#)    [Bug Fixes](#)

#### Read working reference datum for Petrel Wells when datum list is empty

58239

The working reference level was not read from Petrel when it was not explicitly listed in the well's reference levels list. This issue has now been fixed and the well's working reference level is always read.

## **Molodensky-Badekas datum transformation method supported**

54703

Petrosys includes support for datum transformations using the Molodensky-Badekas method, including the Position Vector and Coordinate Frame variants.

---

### Mapping - Seismic

### Bug Fixes

## **Display Upholes and Permanent markers options reinstated**

57396

The Mapping/Display/Upholes and Permanent markers options are now available for dbMap database clients, after being inadvertently removed in version 17.7.

## **Seismic lines are highlighted correctly when selected in list by clicking on checkbox column**

58271

Seismic line selected in the list by clicking on the checkbox are now correctly highlighted on the map.

---

### Spatial Data Translator

### Bug Fixes

## **Crash on start-up due to specific project defaults fixed**

58410

An issue where the Spatial Data Translator could crash on start-up has been fixed. The crash could occur if the Excel format definition stored in the projects default file (panels.pnd) did not match the last Excel file used.

---

### Spatial Editor

### Bug Fixes

## **Spatial Editor correctly handles in-cell attributes editing**

57313

Spatial Editor correctly applies changes to the attribute and updates layer.

## **Spatial Editor allows separate fault vertices to be located extremely close to each other**

51747

In previous versions fault vertices that were only moderately close together (10 meters for example) would be incorrectly removed by the Spatial Editor when a fault file was saved.

---

### Surface Modeling - General

### Bug Fixes

## **3D Velocity Interpolation no longer crashes when SEGY files have inlines or xlines not starting from 1**

57883

Fixed crash when using 3D velocity interpolation while reading 3D SEGY file where the inline or xline starting index or scale increment where not 1.

---

### Surface Modeling - Gridding

### Enhancements

## **Use fault stick surfaces in gridding to calculate fault polygon estimates automatically**

43284

Petrosys users can now automatically calculate fault polygons from their fault stick surfaces and horizon data.

The Surface Modeling "Grid/Create Grid" option has been upgraded to read and use fault sticks, now generating estimated output fault polygons as well as the usual grid output.

When using fault sticks in gridding, fault polygons are calculated using the estimated horizon/fault stick contacts. These fault polygons are embedded within the output grid file and may optionally be saved to a separate fault file. The fault polygons may also be smoothed spatially if requested by the user and their Z-values are populated so that they tie to the output grid surface.

One of the major advantages of the Petrosys algorithm is that there is no pre-requisite surface framework modeling required to run this option, other than to make sure the fault sticks are all assigned to their corresponding fault surface. This means the workflow for generating fault polygons from interpretation data becomes much simpler than in other packages.

To select this option, set the "Fault type" to "Fault sticks" under the "Faults" tab in the "Grid/Create Grid" option.

---

## Surface Modeling - Gridding

## Bug Fixes

### **Polygon selection correctly restored from saved .tsk file** 57985

In the Surface Modeling application using the Grid/Create Grid option the polygon selection for polygon clipping is now correctly restored from saved .tsk files. Previously the selection was restored correctly but the on-screen selection was not shown correctly.

### **Petrel well formations are now shown when interpreter is not blank** 57435

In previous version well formation tops may not have been retrieved from a Petrel project if the formation had interpreters specified.



## Detailed Release Notes Summary 17.7.3

### Enhancements

#### *Connections, Import and Export*

- [52481](#) OpenWorks/SeisWorks and GeoFrame project selection is now clearer whether to select a Dispatch or Direct connection
- [41575](#) Oracle wallet and other external authentication methods are now fully supported for OpenWorks / SeisWorks database access
- [50131](#) File format converter added to Launcher Tools menu

## Detailed Release Notes Summary 17.7.3

### Bug Fixes

#### *Application - Printing and Publication*

[57221](#) Print functionality restored in Picture Viewer

#### *Configuration - General*

[56189](#) Unreadable client configuration files no longer crash Mapping on start-up

#### *Connections, Import and Export*

[57291](#) Import GeoFrame 2012 Direct crash when selecting a survey fixed

[54468](#) Well Import Wizard - Duplicate formation top entries no longer created when importing to dbMap PPDM3.8 a second time

#### *Connections, Import and Export - OpenWorks*

[56196](#) Display/Grid OpenWorks now works with Oracle wallet and other external authentication methods

#### *dbMap - Client*

[56279](#) PPDM3.8 well formation screen now shows correct subsea depth

#### *Mapping - General*

[57010](#) Raster image processing now works in dynamic map sheet mode

#### *Mapping - GIS, Spatial and Culture*

[56979](#) Display/Culture/Petrosys .cul File no longer shows errors for missing culture files

#### *Mapping - Wells*

[55742](#) dbMap Checkshot survey points panel can now handle more than 5000 points

#### *Spatial Data Translator*

[56887](#) String type input data are now written to Excel as they are from the input data source

#### *Surface Modeling - General*

[45094](#) Statistics window in the Sample Data Editor now closes when clicking on [x]

#### *Surface Modeling - Gridding*

[56129](#) Grid/Merge/Regrid does not create contour file

[56267](#) Stacking velocities SDF compute option no longer hangs on corrupted data

#### *Velocities/Depth Converter*

[56846](#) Analyse data in chart no longer crashes when selecting logarithmic line of best fit

## Petrosys Release 17.7.3

Detailed Release Notes

### Application - Printing and Publication

### Bug Fixes

#### **Print functionality restored in Picture Viewer** 57221

Print menu option and corresponding tool bar button functionality has been restored allowing printing content of Picture Viewer.

### Configuration - General

### Bug Fixes

#### **Unreadable client configuration files no longer crash Mapping on start-up**

56189

In rare situations the installed client specific files could have unexpected permissions where they are not readable by any user. In this situation the application now gives an error message indicating the permissions problem and continues where previously it could have crashed.

### Connections, Import and Export

### Enhancements

#### **OpenWorks/SeisWorks and GeoFrame project selection is now clearer whether to select a Dispatch or Direct connection** 52481

Improvements have been made when selecting OpenWorks, SeisWorks and GeoFrame projects to make it clearer whether to use a Dispatch or Direct type of connection, especially on Windows.

Options that require development kit access now make better use of information in connections.xml to control what connections are available. For example, if you only have a Dispatch server entry defined in connections.xml for Windows, you will not see any Direct connections available for Mapping/Display/Grid options. Previously both types of connections would appear for selection, but choosing a Direct connection would not work.

Similarly, connections.xml can be configured on Linux to filter out the Dispatch server, so that only Direct connections are available for selection. This is particularly helpful when Petrosys project directories are shared between Windows and Linux.

#### **Oracle wallet and other external authentication methods are now fully supported for OpenWorks / SeisWorks database access** 41575

Connections to OpenWorks/SeisWorks R5000+ databases using Oracle wallet and other external authentication methods, like Microsoft Active Directory, Kerberos or LDAP, are now fully supported, so that you are no longer prompted to enter a username and password.

Since version 17.4, Petrosys could connect using these authentication methods, however you were prompted for a username/password, and you had to make sure they were both blank before pressing OK to connect.

To enable this functionality you need to set the ExternalUser tag to yes for your OpenWorks entry in connections.xml. e.g.

```
<Connection>
  <DatabaseId>0W5K10</DatabaseId>
  <DBType>ORACLE</DBType>
  <AppType>OpenWorks</AppType>
  <Version>R5000.10</Version>
  <ExternalUser>yes</ExternalUser>
  <EnvironmentScript>/ps_rels/petrosys/local/ps_lgc5000_10.csh</EnvironmentScript>
</Connection>
```

Note:

1. Oracle Wallet and other external authentication methods require Petrosys to be configured to use the same SQL\*Net configuration location for tnsnames.ora and sqlnet.ora files as OpenWorks.
  - On Linux, you need to set the ps\_tns\_admin value in petrosys.cfg
  - On Windows, you do this using the Tools/Configuration/Database option.

## File format converter added to Launcher Tools menu<sup>50131</sup>

A tool to help with file format conversion that was previously only available from the command line has been added to the /Tools/File Format Converter option in the Launcher.

This tool is useful for advanced users to define text file format conversions that are record and card based. The tool also can be used to generate saved format definitions that can be used by the SEGY importer option.

---

## Connections, Import and Export

## Bug Fixes

### Import GeoFrame 2012 Direct crash when selecting a survey fixed <sup>57291</sup>

A crash when selecting a survey in the Import/GeoFrame/IESX/GF2012 Direct option has been fixed.

### Well Import Wizard - Duplicate formation top entries no longer created when importing to dbMap PPDM3.8 a second time <sup>54468</sup>

When using the Well Import Wizard to load formation tops into a dbMap PPDM3.8 database from a data source for the second time with the Merge-Replace option selected now replaces any occurrences for existing formation and interpreter combinations in each well. Previously it would result in duplicate well formation top entries for each formation and interpreter that already existed.

---

## Connections, Import and Export - OpenWorks Bug Fixes

### Display/Grid OpenWorks now works with Oracle wallet and other external authentication methods <sup>56196</sup>

Mapping/Display/Grid options from OpenWorks now allows connections to databases using Oracle wallet or other external authentication methods, like Microsoft Active Directory, Kerberos or LDAP.

Previously, when you tried to connect to the OpenWorks project using one of these authentication methods, you were prompted to enter a username and password and had to make them blank. This would then result in the connection button being reset to show "Connect", and you could not select or display any grids.

This has been fixed by adding support for the ExternalUser tag in connections.xml, which also means you are no longer prompted for a username/password when trying to connect to OpenWorks.

Note that this fix only applies to new OpenWorks connections. Any existing OpenWorks connections in Mapping/File/Connection Manager will need to be removed and re-added.

---

## dbMap - Client

## Bug Fixes

### PPDM3.8 well formation screen now shows correct subsea depth <sup>56279</sup>

The PPDM3.8 client specific implementation of the well formation screen now computes and shows the subsea depth correctly. Previously it was just showing the subsea depth as the negative of the TVD.

---

## Mapping - General

## Bug Fixes

### **Raster image processing now works in dynamic map sheet mode** 57010

The Image Processing function in the Display/Picture/Raster Image.. option now works when the map sheet mode is dynamic. Previously it would crash in this mode.

---

## Mapping - GIS, Spatial and Culture

## Bug Fixes

### **Display/Culture/Petrosys .cul File no longer shows errors for missing culture files** 56979

When a dbm containing a Display/Culture/Petrosys .cul File layer is opened and the culture file cannot be found, the file resolution dialog allows the missing culture file to be located. In previous versions, an error for the missing file would be shown, even if the missing culture file was correctly resolved using file resolution.

---

## Mapping - Wells

## Bug Fixes

### **dbMap Checkshot survey points panel can now handle more than 5000 points** 55742

The dbMap well checkshot survey points panel can now handle surveys that contain more than 5000 points. Previously the application would crash when trying to open the checkshot survey points panel with surveys of this size.

---

## Spatial Data Translator

## Bug Fixes

### **String type input data are now written to Excel as they are from the input data source** 56887

Fixed bug where input data with string type is written to Excel as numbers.

---

## Surface Modeling - General

## Bug Fixes

### **Statistics window in the Sample Data Editor now closes when clicking on [x]** 45094

The Statistics window in the Sampled Data Editor can now be closed using the X from the top right of the window.

---

## Surface Modeling - Gridding

## Bug Fixes

### **Grid/Merge/Regrid does not create contour file** 56129

Contour file is created now when contouring tab is active during Grid/Merge/Regrid option run from Surface Modeling.

### **Stacking velocities SDF compute option no longer hangs on corrupted data** 56267

An error where attempting to grid a corrupted SDF could lead to a program hang has been fixed.

**Analyse data in chart no longer crashes when selecting logarithmic line of best fit**

56846

In previous versions, the data analysis chart could hang when logarithmic function was selected and the X Axis fixed range was set to start from 0. Now it is fixed to show error message when this happens.

## Detailed Release Notes Summary 17.7.2

### Enhancements

#### *Connections, Import and Export - SEGY*

[51165](#) Stacking velocity files can now have a specific velocity value assigned as missing

#### *Mapping - Wells*

[55877](#) Removed Lithostrat formation system restriction when creating new Well formation tops (Beach only)

#### *Surface Modeling - General*

[51045](#) Added stacking velocity interpolate operation in Grid/Create Grid to produce velocity grids from 3D stacking velocities

## Detailed Release Notes Summary 17.7.2

### Bug Fixes

#### *Application - Printing and Publication*

[55358](#) Raster Image Export: Line widths are automatically scaled according to output DPI to better match the screen

#### *Mapping - General*

[54555](#) Closing Mapping with a large number of layers is no longer slow

#### *Spatial Editor*

[56049](#) Editing shape files that are displayed via Display/GIS no longer corrupts the shape file when saving

#### *Surface Modeling - General*

[55509](#) Dynamically generated maps now use the full palette from the template dbm file

[55510](#) Page size displayed in Draw Map option for PDF output now accurate

## Petrosys Release 17.7.2

Detailed Release Notes

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### Application - Printing and Publication

### Bug Fixes

#### **Raster Image Export: Line widths are automatically scaled according to output DPI to better match the screen** 55358

For raster image export the relative scaled line weights, those indicated by a line width of 1 to 8, are now scaled to the resolution of the raster image and hence better match how the line weights look on screen. The result of this change is more visible in higher resolution raster images (e.g. > 150dpi) where before even thick lines on screen would look very thin in the resulting raster export.

---

### Connections, Import and Export - SEGY Enhancements

#### **Stacking velocity files can now have a specific velocity value assigned as missing** 51165

A new option 'Velocity missing value' is now available when reading stacking velocities from SEGY or text files. If entered, any value in the input data that matches the provided value will be read as missing from the stacking velocity.

---

### Mapping - General

### Bug Fixes

#### **Closing Mapping with a large number of layers is no longer slow** 54555

In previous 17.7. versions, closing mapping with an active map containing a very large number of layers of certain types (such as colorfill grid display) could be very slow.

---

### Mapping - Wells

### Enhancements

#### **Removed Lithostrat formation system restriction when creating new Well formation tops (Beach only)** 55877

The restriction that a new well formation must come from the Lithostrat formation system has now been removed when creating new well formations tops.

---

### Spatial Editor

### Bug Fixes

#### **Editing shape files that are displayed via Display/GIS no longer corrupts the shape file when saving** 56049

In previous 17.7 versions, saving a shape file in the Spatial Editor while the shape file was also displayed on the map via Display/GIS did not write all files associated with the shape file, leaving it in a corrupted state. This is now fixed.

## Added stacking velocity interpolate operation in Grid/Create Grid to produce velocity grids from 3D stacking velocities <sup>51045</sup>

Stacking velocity interpolation has been introduced to calculate velocity grid from 3D stacking velocity datasource and TWT horizon(s).

The new functionality is under normal Grid/Create Grid task and it can be enabled under 'Methods' tab by setting the Operation field to '3D Velocity Interpolation'. However, unlike standard gridding, the stacking velocity interpolation option preserves stacking velocity high frequency information during interpolation process giving a much better result to the output velocity grid.

This method also supports extrapolation of velocity cube data on user specified distance using the "Take nearest trace" approach.

Output is set by Output geometry tab, so in order to utilize high resolution TWT data user should set the output geometry accordingly.

Please note that there are several constraints in this release.

- Only one datasource, which must be a SEGY file with regular 3D stacking velocities (cube), is allowed as input datasource.
- Faults, Clipping, Reporting, Smoothing, Contouring are disabled.
- GIP data is not generated and can not be modified.

## Dynamically generated maps now use the full palette from the template dbm file <sup>55509</sup>

The Surface Modeling workflow option to draw maps will now use the saved palette from the template dbm file. Previously, if the project palette did not match the template palette items could be drawn in the wrong colour.

## Page size displayed in Draw Map option for PDF output now accurate <sup>55510</sup>

Previously the page size displayed in the Draw Map option could be incorrect. In the case where the tsk file was upgraded from an older version the page size may have been listed as A4 when it should have been shown as a Custom size of 600mmx300mm. This misleading page size could lead to the perception that the line weights in the generated PDF were thinner than expected. This problem has been fixed so correct page size is indicated to the user.

# Detailed Release Notes Summary 17.7.1

## Enhancements

### *Connections, Import and Export*

[51043](#) Support added for importing Roxar RMS IRAP ASCII files to Petrosys grid files

[55236](#) Primary connection database logon screen now includes the word 'Petrosys' in the window title

### *Surface Modeling - Exchange*

[54668](#) Added 'dipping beds' well log configuration for wells exchange between dbMap and Petrel (Santos only)

### *Surface Modeling - General*

[54756](#) Grid/Process/Arithmetic - New 'Normalized Grid' function template

# Detailed Release Notes Summary 17.7.1

## Bug Fixes

### *Application - User Interface*

[54646](#) Fixed crash when closing dialog containing list with list column filter popped up

### *Connections, Import and Export - Paradigm-Epos*

[55331](#) Fixed an intermittent crash when reading well headers from Paradigm

### *Connections, Import and Export - Petrel*

[54322](#) Petrosys now correctly reads a Petrel wells Time-Depth relation information

### *dbMap - Client*

[54381](#) Formation tops list shows correct formations type for F, S and G (Santos only)

### *Mapping - General*

[55085](#) Fixed crash when drawing cgm with gradient in use

[53754](#) Contours generated and drawn on-the-fly from grid or surface layers are rendered in visible colors

### *Mapping - GIS, Spatial and Culture*

[55347](#) Restored the ability to edit the thematic series color double clicking on color in the list

[55337](#) Querying attribute value from GIS data source now works when reading data from cache

[54697](#) Annotation no longer posted at wrong location when both start and end of symbol are used

[54969](#) Cancelled redraw now draws fully on next redraw

### *Mapping - Seismic*

[47993](#) User defined query button now visible for Display/2D Seismic when using KDM

[52763](#) Display/2D Seismic/Petrel horizon selection now remembered

### *Mapping - Wells*

[55568](#) Display/Wells - Crash on formation selection when using list filtering has been fixed

### *Spatial Data Translator*

[54768](#) Merge/Keep/Replace handles attribute values with embedded quotes

### *Spatial Editor*

[55142](#) Adding attributes during creation of Excel spreadsheet is now working

### *Surface Modeling - Exchange*

[55070](#) Petrel horizon name shown in 3D surface exchange surface list

### *Surface Modeling - General*

[55441](#) Grid/Merge/Regrid does not delete the output grid when clipping is used

[55437](#) Grid/Process/Calculate Mean Inside Polygon option's polygon selection fixed

### *Surface Modeling - Gridding*

[54873](#) Grid/WellTie and Grid/Phantom correction grid min/max Z range values are honoured

[54495](#) Spatial/Oracle Spatial now filters data within Area-Of-Interest

### *Surface Modeling - Volumetrics*

[54980](#) Volumetrics calculations will pick up modified clipping polygons when process is re-run

### *Wells (WDF) Editor*

[55018](#) Numeric data from WDF lists is displayed in chart correctly

# Petrosys Release 17.7.1

## Detailed Release Notes

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### Application - User Interface

### Bug Fixes

#### **Fixed crash when closing dialog containing list with list column filter popped up** 54646

Previously the application may have crashed if a panel with a scrolled list was closed while the list column filter selector control was visible.

### Connections, Import and Export

### Enhancements

#### **Support added for importing Roxar RMS IRAP ASCII files to Petrosys grid files** 51043

Support has been added for Irap classic ASCII grid files as exported by Roxar RMS and Petrel applications. The option can be found under the Import/Roxar (IRap)/Grid Irap ASCII menu option.

#### **Primary connection database logon screen now includes the word 'Petrosys' in the window title** 55236

The title of the login window for dbMap/PPDM databases has been updated to be called 'Petrosys database logon' so it is clear that it is being displayed from within the Petrosys application.

---

### Connections, Import and Export - Paradigm-Epos

### Bug Fixes

#### **Fixed an intermittent crash when reading well headers from Paradigm** 55331

An intermittent crash has been fixed when reading wells from Paradigm, where there was a mismatch in the type of a header field between different wells.

---

### Connections, Import and Export - Petrel

### Bug Fixes

#### **Petrosys now correctly reads a Petrel wells Time-Depth relation information** 54322

A bug has been fixed in the Petrosys-Petrel data link that was causing a wells time-depth relationship (TDR) to only be read when it was generated from a checkshot survey. This has now been fixed and any TDR, whether generated from any source (well log, checkshot, marker collection, well log calculated from velocity model, etc).

---

### dbMap - Client

### Bug Fixes

#### **Formation tops list shows correct formations type for F, S and G (Santos only)** 54381

A bug has been fixed which caused the formation types of F, S and G to be incorrectly displayed in the Formation tops lists for a well.

---

### Mapping - General

### Bug Fixes

#### **Fixed crash when drawing cgm with gradient in use** 55085

Fixed crash in Mapping when map content has cgm (e.g. well symbols, north arrow, title blocks) and gradient in use.

## Contours generated and drawn on-the-fly from grid or surface layers are rendered in visible colors 53754

Contours drawn from the grid based layers (Contouring on the fly) are now drawn in the correct color. In the previous version, sometime contours were drawn in the surface gradient color, effectively making them invisible.

---

### Mapping - GIS, Spatial and Culture

### Bug Fixes

#### Restored the ability to edit the thematic series color double clicking on color in the list 55347

Thematic series colors can be selected by double clicking in the color column in the list

#### Querying attribute value from GIS data source now works when reading data from cache 55337

Querying attribute value from GIS data source now works when reading data from cache

#### Annotation no longer posted at wrong location when both start and end of symbol are used 54697

Display/GIS annotates values against oriented symbols correctly. In previous version, values were posted at the same location if more than one posting location was used.

#### Cancelled redraw now draws fully on next redraw 54969

Cancelling a Display/GIS redraw will now fully draw on the next redraw. Previously the subsequent redraw would only draw up to the point the previous draw was cancelled

---

### Mapping - Seismic

### Bug Fixes

#### User defined query button now visible for Display/2D Seismic when using KDM 47993

In previous version on 2D Seismic display panel for KDM data source the user-defined query button was not visible. This issue has now been fixed.

#### Display/2D Seismic/Petrel horizon selection now remembered 52763

In previous versions, when displaying 2D seismic from Petrel the selected horizon was not remembered when double clicking the display layer. This has been fixed.

---

### Mapping - Wells

### Bug Fixes

#### Display/Wells - Crash on formation selection when using list filtering has been fixed 55568

When using the formation selector in the /Display/Wells panel in Mapping, the application could crash if the list filtering was enabled.

---

### Spatial Data Translator

### Bug Fixes

#### Merge/Keep/Replace handles attribute values with embedded quotes 54768

Spatial Data Translator Merge/Keep/Replace will now handle attribute value more robustly. In previous version, Merge/Keep/Replace did not work if the attribute value had a single quote in it

---

### Spatial Editor

### Bug Fixes

#### Adding attributes during creation of Excel spreadsheet is now working 55142

Fixed bug where spatial editor failed to create new attributes for a new Excel file.

**Added 'dipping beds' well log configuration for wells exchange between dbMap and Petrel (Santos only)** 54668

Added client-supplied configuration to exchange dipping beds well logs between dbMap and Petrel.

---

**Petrel horizon name shown in 3D surface exchange surface list**<sup>55070</sup>

When using Petrel as an input datasource to the 3D surface exchange tool, the horizon name was not shown in the list of horizons. This has now been fixed.

---

**Grid/Process/Arithmetic - New 'Normalized Grid' function template** 54756

Added Grid/Process/Arithmetic 'normalized grid' function into the existing formula templates.

---

**Grid/Merge/Regrid does not delete the output grid when clipping is used** 55441

Previously the Grid/Merge/Regrid could delete output grid if clipping was enabled. This has now been fixed.

**Grid/Process/Calculate Mean Inside Polygon option's polygon selection fixed** 55437

The option 'Grid/Processes/Calculate Mean inside polygon' now allows the correct selection of polygons in the dialog.

---

**Grid/WellTie and Grid/Phantom correction grid min/max Z range values are honoured** 54873

Grid/WellTie and Grid/Phantom correction grid min/max Z range values are honoured.

**Spatial/Oracle Spatial now filters data within Area-Of-Interest**<sup>54495</sup>

Grid/Create using GIS data sources now filters data within the specified Area-Of-Interest correctly. In previous version, it loaded all data from the input GIS data sources.

---

**Volumetrics calculations will pick up modified clipping polygons when process is re-run** 54980

Volumetrics calculation will use the current version of clipping polygon if that polygon changed between running the task.

---

**Numeric data from WDF lists is displayed in chart correctly** 55018

Numeric data from WDF lists is represented correctly in "Chart Analysis" panel now.

## Detailed Release Notes Summary 17.7.5

### Enhancements

#### *Configuration - Configuration Files*

[58676](#) Updated LIMS spotfire link (Santos only)

#### *dbMap - Client*

[30971](#) Well header Country, State, Basin, JV, and Permit values now queried from web service (Santos only)

#### *Mapping - Wells*

[46630](#) Added support for adding and selecting wells by formation tops to Petrel, DUG Insight®, IHS Petra, Paradigm-Epos® and SeisWare™ selection lists

#### *Seismic (SDF) Editor*

[10392](#) Mistie report improvements - Intersection coordinates, bulk shift as data column and elevation data fixes

#### *Surface Modeling - General*

[51797](#) Tools/Create directory - Directory selector used in interactive scripting

## Detailed Release Notes Summary 17.7.5

### Bug Fixes

#### *Connections, Import and Export*

[58788](#) Import Seismic to SDF - More than 26 horizons are now allowed to be imported in one import run

[58980](#) Import ASCII file to SDF - Horizon selection lists now work correctly in new projects

#### *Connections, Import and Export - DUG Insight*

[58808](#) Support added for selecting fault sticks with duplicate names

#### *Connections, Import and Export - Petrel*

[50720](#) Newline characters were causing Wells Import Wizard to fail with Petrel as an output datasource

#### *dbMap - Client*

[58905](#) Assets edit list - Selection in items list no longer jumps around

[59141](#) Mapping - Query lookup list now sort on the correct column

#### *Mapping - General*

[49891](#) Text keyword substitution for MAPFILE.BASENAME now works correctly for sub-directories

[58543](#) Fixed crash in scrolled lists when mouse cursor is dragged over selection checkboxes with LMB pressed down

#### *Surface Modeling - Exchange*

[58539](#) Grid Exchange 'Use faults' displays Petrel model grid faults

[58934](#) Grid Exchange - Improved mismatched CRS warning message

#### *Surface Modeling - General*

[57866](#) Surface Modeling - Clearing of data cache now works

## Petrosys Release 17.7.5

Detailed Release Notes

### [Configuration - Configuration Files](#) [Enhancements](#)

#### **Updated LIMS spotfire link (Santos only)**

58676

Updated the Santos-specific configuration for LIMS spotfire web links.

### [Connections, Import and Export](#)

### [Bug Fixes](#)

#### **Import Seismic to SDF - More than 26 horizons are now allowed to be imported in one import run**

58788

In certain SDF import options like "Import/Petrosys/Seismic..." or "Import/Landmark/OpenWorks/Seismic..." where the horizon name is automatically created and matched to the input there was a limit of 26 horizons that could have been imported in one import. This limit has now been removed and the only limit is the current SDF maximum number of horizons limit of 500.

#### **Import ASCII file to SDF - Horizon selection lists now work correctly in new projects**

58980

The horizon selection buttons in the 'Import/ASCII Fixed Format File to SDF' option now work properly when the project is new or the SDF file is changed in the import dialog. Previously in these cases either no horizon selector popped up or the wrong horizons were shown.

### [Connections, Import and Export - DUG Insight Bug Fixes](#)

#### **Support added for selecting fault sticks with duplicate names**

58808

Support for selection of fault sticks with the same names has been added. Previously if two or more fault sticks had the same name the selection as saved and restored via task files could have been incorrect.

Additionally the fault stick selection list is now sortable by clicking on the column headers.

### [Connections, Import and Export - Petrel](#)

### [Bug Fixes](#)

#### **Newline characters were causing Wells Import Wizard to fail with Petrel as an output datasource**

50720

Using the Wells Import Wizard to import well header data containing newline characters to Petrel would fail. This has now been fixed and newline characters are now handled correctly.

### [dbMap - Client](#)

### [Enhancements](#)

#### **Well header Country, State, Basin, JV, and Permit values now queried from web service (Santos only)**

30971

For Santos only, the basic well header dialog now retrieves values from the Santos GIS Web service for the following fields:

- Country
- State
- Basin (Geological province)
- Initial Joint Venture
- Current Joint Venture
- Initial Permit (new)
- Current Permit (new)

When creating a new well, these values are automatically populated using the surface location of the well and it's spud date. If multiple values are returned from the web service for a particular field, say two Current Permits are returned, then you are prompted to select one of the values.

When editing an existing well, it is only possible to select values returned from the web service for the above fields. If the spud date or surface location of the well is changed, it will re-query the web service and automatically populate with new values, in cases where this causes them to change.

As part of this change, the old Expl. license and Bus. unit fields linked to the Initial and Current Joint ventures are no longer shown on the well header.

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## dbMap - Client

## Bug Fixes

### **Assets edit list - Selection in items list no longer jumps around** 58905

In the Assets lists when selecting an Item in the right list it will no longer jump around if that location had multiple Items associated with it. Additionally the lists now do not automatically horizontal scroll back to the left each time an item is selected.

### **Mapping - Query lookup list now sort on the correct column** 59141

Query lookup selection lists now sort on the correct column when clicking on the column header to sort. Previously it was sorting by the column immediately to the right.

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## Mapping - General

## Bug Fixes

### **Text keyword substitution for MAPFILE.BASENAME now works correctly for sub-directories** 49891

The text substitution feature for the keyword <<MAPFILE.BASENAME>> will now use the correct file name and path when the file is located in a project sub-directory (sub-folder).

### **Fixed crash in scrolled lists when mouse cursor is dragged over selection checkboxes with LMB pressed down** 58543

Some instances of lists, particularly list of seismic lines, will no longer crash when using the left mouse button to click and drag over items in the list.

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## Mapping - Wells

## Enhancements

### **Added support for adding and selecting wells by formation tops to Petrel, DUG Insight®, IHS Petra, Paradigm-Epos® and SeisWare™ selection lists** 46630

The wells selection lists for Petrel, DUG Insight®, IHS Petra, Paradigm-Epos® and SeisWare™ have been enhanced to allow adding or selecting wells which contain a given selection of formation tops. The resulting well selection list files can then be used to filter well selections for display or gridding.

## Mistie report improvements - Intersection coordinates, bulk shift as data column and elevation data fixes 10392

The mistie matrix report in the SDF Seismic Editor has been improved in the following ways:

- The option has been renamed from 'Mistie matrix' to 'Mistie (CSV Format)' to make it more obvious this report option can be used to create CSV style format files that can be imported into other parts of the software or Excel.
- The coordinates of the mistie intersection can be output to the report file as additional columns. This allows the mistie report to be used in gridding to grid up the misties or displayed on the map using bubble maps or GIS displays.
- The bulk shift value used for each mistie can be output to the report files as additional columns next to the horizon TWT values.
- The report filename can be entered as .csv, .txt, .asc or .prn file. Previously the .prn suffix was forced onto the filename.
- When using elevation data types (EMSL or EDATUM) the values are now output correctly to the file. Previously when using the 'Include data values' option no data values would appear in the file.
- When using elevation data types (EMSL or EDATUM) a horizon selection is not required.
- A new option to force the mistie value to be output as an absolute (always positive) value has been added.

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## Surface Modeling - Exchange

## Bug Fixes

### Grid Exchange 'Use faults' displays Petrel model grid faults 58539

In the Exchange Grids option the 'Use faults' option is now honored and Petrel model grid faults are added to the output grid if selected.

### Grid Exchange - Improved mismatched CRS warning message 58934

Updated the Grid Exchange mismatched CRS warning message to say these grids will not be copied.

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## Surface Modeling - General

## Enhancements

### Tools/Create directory - Directory selector used in interactive scripting 51797

The directory field in Tools/Create directory is now a directory selector dialog when used in interactive scripting.

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## Surface Modeling - General

## Bug Fixes

### Surface Modeling - Clearing of data cache now works 57866

The option to clear the data source cache for a task (Workflow/Clear User Cache) now works correctly. Previously it would not clear the cache at all.

Use this option to clear the cached data from the current Petrosys session so that any new data added in the connected application will be retrieved on the next gridding run.