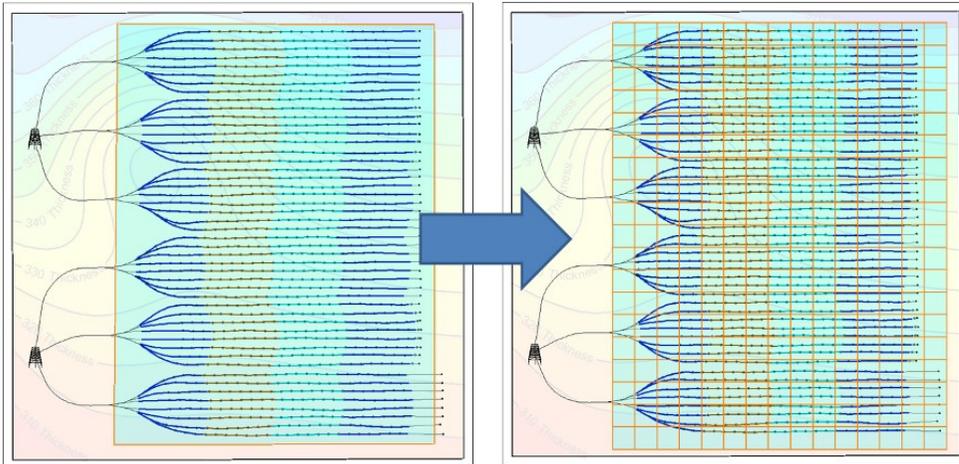


Introducing the Spatial Editor

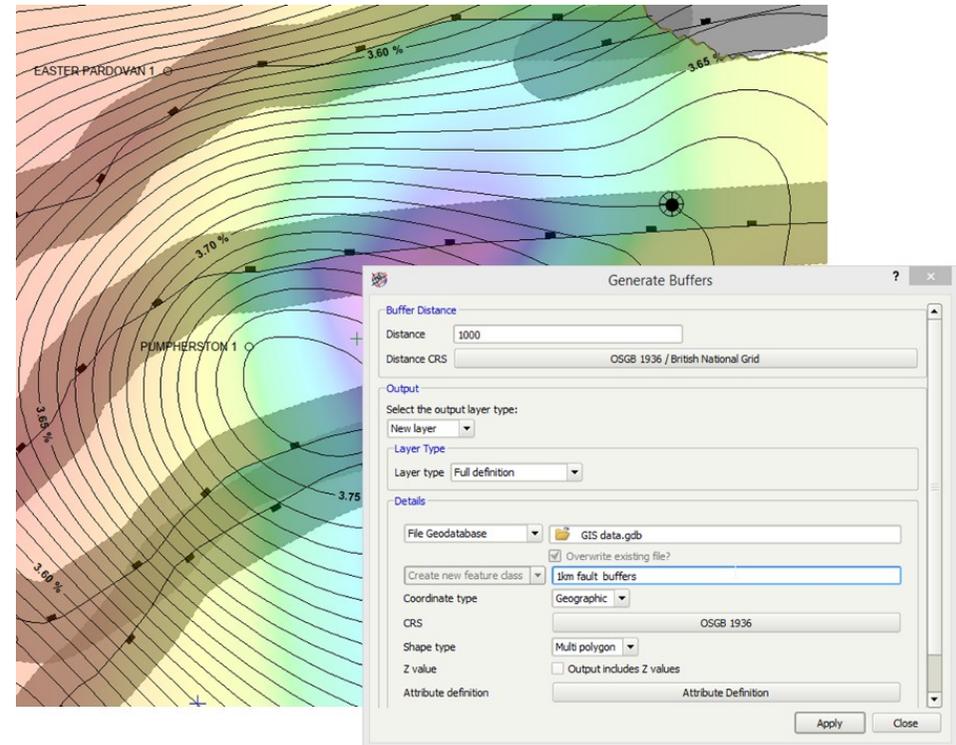
New in Petrosys 17.6, the Spatial Editor is a powerful tool for interactively creating and editing spatial data using the Mapping application. Working from detailed feedback offered by a range of clients, the editor has been designed from the ground up as both an upgrade and significant extension of the user interface and functionality previously offered by the Petrosys Contours, Faults and Polygons Editor. Key features include:

- The creation and modification of point, line, polygon, fault and contour data from a wide range of first and third party data sources,
- Support for data from a range of data stores, including Esri formats (shapefile/File Geodatabase), Excel spreadsheets and all Petrosys spatial data formats (fault files, contour files, culture files, dbMap culture groups and more).
- Automatic generation of polygons from shape and point data.
- Generation of buffer polygons surrounding shape and point data.
- Significant improvements to point data editing.
- Subdivision of larger polygons into smaller, individual shapes.
- Interactive modification of attributes.
- Back interpolation of attribute values from map display layers.



The Spatial Editor allows for instantaneous subdivision of production polygons, allowing more detailed volumetric analysis to be performed simply and efficiently.

The Spatial Editor provides a full suite of operations for generating new points, lines and polygons from existing map data. Buffer zones may be generated automatically to within a specified range of a given spatial feature, facilitating the development of wells in unconventional structures, where careful planning around structures such as faults is crucial for the effective and reliable extraction of resources. Subdivision of polygons allows the accuracy of volumetric analysis to be improved, by increasing the resolution of volume analysis over a given region. Attributes may also be modified using the editor, granting full control over data stored in a wide range of industry standard spatial data stores.



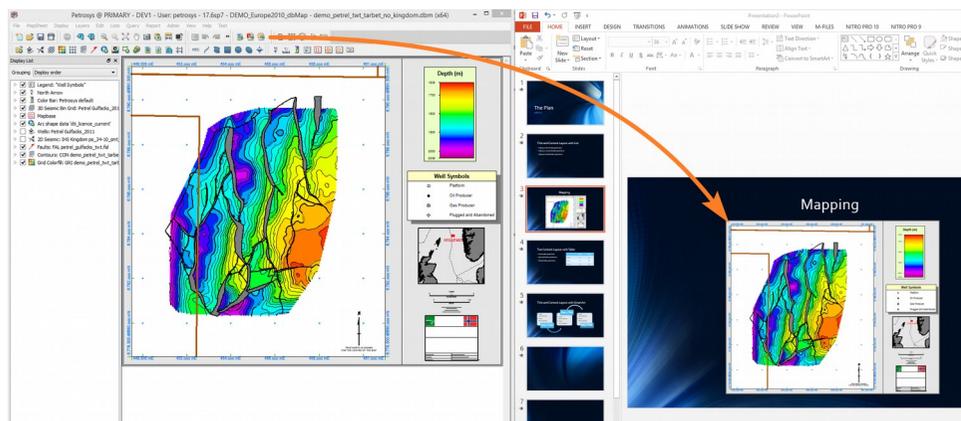
The Buffer tool provided by the Spatial Editor allows buffer zones to be easily represented around geological features and production assets. In this example buffer zones have been generated surrounding faults, allowing more effective planning of unconventional wells.

Of course a full suite of contour and fault editing tools are also offered, building on those previously available in the Contours, Faults and Polygons Editor, and designed to meet the needs of existing workflows making use of the tool. Other operations allow outlines to be generated on the fly, providing a means of highlighting production or exploration data within a given region, and expressing directional bias over a given region using shape anisotropy.

All of this in addition to a range of smaller features, user interface improvements and stability tweaks makes the Spatial Editor a major addition to the broad range of tools provided by the Petrosys Mapping suite.

One button direct export to Microsoft PowerPoint

Export to Powerpoint is now as easy as a single button press. Start PowerPoint, select the slide and slide element where you want the map image to be placed and press the "Quick PowerPoint export" icon in the toolbar.



For more control over the exported image use the "/File/Export/PowerPoint/Export..." option.

On the Fly Gridding of Formation Depth, Time and Velocities From Well Checkshot Data

Zone depth, time and velocity (interval and average) can now be modeled directly from well data sources. All values are computed on the fly from either zone/formation picks or associated checkshot data.

Directly Display and Contour IHS Kingdom Grids

Support for grids from IHS Kingdom has been expanded to include display, visualisation, data exchange and contouring.

In Mapping and 3D Viewer, grids from IHS Kingdom can now be displayed directly from a valid IHS Kingdom data source. Grid data from IHS Kingdom is also available as both an input and output data source in the Grid Exchange tool. Finally, Surface Modeling can be used to contour grids from IHS Kingdom directly, without having to convert the grids to an intermediary format.

Added Support for IHS Kingdom ASCII Culture/Polygon Formats

Support for the IHS Kingdom ASCII culture and polygon formats has been added to Display GIS and the Spatial Data Translator. Data may now be directly displayed from this format, as well as transferred to all output data sources supported by the Spatial Data Translator.

Added Support for Paradigm 14

Both the Windows and Linux editions of Petrosys now support Paradigm 14. Petrosys continues to maintain support for both Paradigm 2011 (Epos 4.1) and Paradigm 2011.3 (Epos 4.1). Petrosys no longer supports Paradigm Epos 4.0.

Added Support for OpenWorks R5000.10

Maintaining Petrosys' leading position in third-party connectivity, Petrosys now supports connection to OpenWorks R5000.10 data. R5000.10 is available as a data source in all features where R5000 is supported.

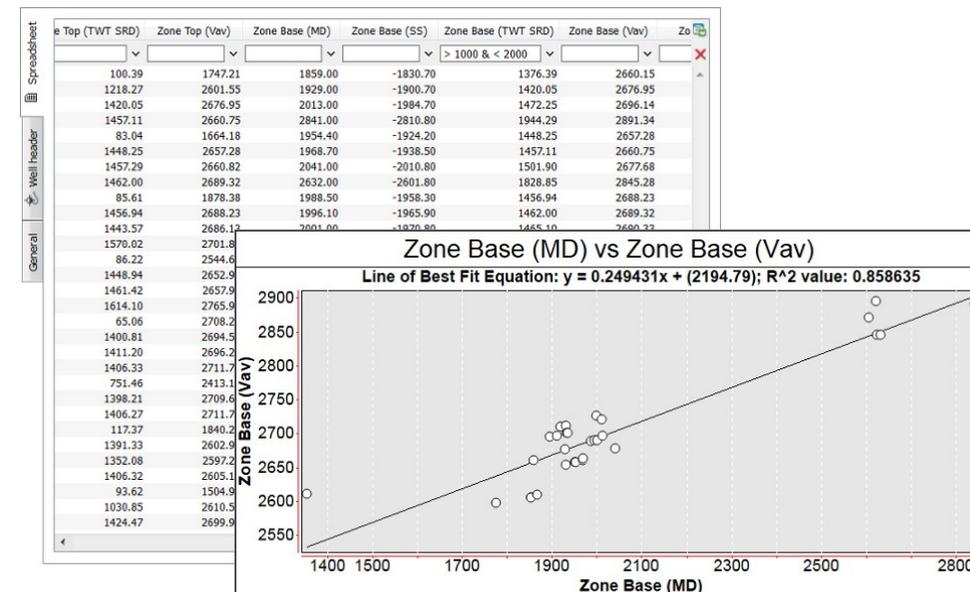
Note: R5000.10 support requires the Version tag to be set to **R5000.10** in connections.xml.

Added Support for Px/11 Seismic Format

Seismic data may now be read from the OGP Px/11 format in a range of contexts. Data may be displayed, imported and modeled from the format.

Efficient, Effective Data Analysis Using Cross Plots

A new addition to the wide range of data analysis tools provided by Petrosys, Cross Plots allow any two values from a list to be analysed in a fully customisable chart. Accessed by right clicking any of the lists throughout the application, values (columns) from the list are assigned interactively to the X and Y axes of the chart.



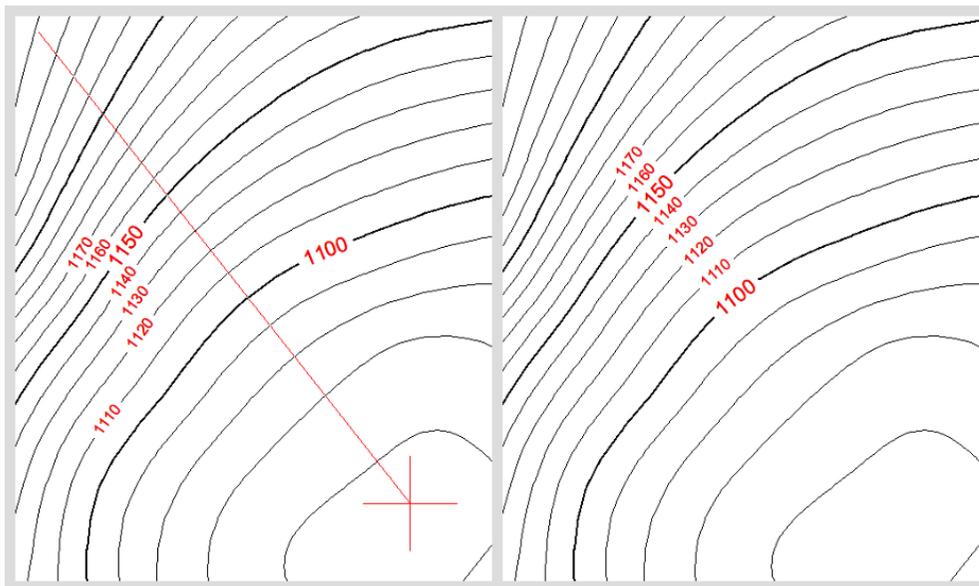
The appearance of each chart is fully customisable, and may include the correlation coefficient derived from the relationship between the two values. Charts may also be output to a range of image formats or PDF.

New Data Sources for Seismic Surface and Fault Stick Exchange

The range of data sources supported by the 3D Seismic Surface and Fault Stick exchange tools has been expanded. 3D Seismic Surface exchange now accepts SeisWare and IHS Kingdom as input data sources, with Petrel added as both an input and output data source. Petrel has also been added as an input data source to the Fault Stick exchange tool.

Improved Contour Annotation

Contour annotation has been significantly improved in 17.6. When initially displayed, contour label positioning has been improved in a number of situations, reducing and in some cases eliminating the need for manual adjustment of annotations after being displayed.



Re-aligning contour labels using overpost correction.

In addition, contour annotations may also now be modified using the manual overpost correction interface provided by the Mapping application, allowing a much finer degree of control to be exercised over the placement and appearance of annotations, and even for new annotations to be created for a given contour if required.

Greater Control Over Video Quality in 3D Viewer Animations

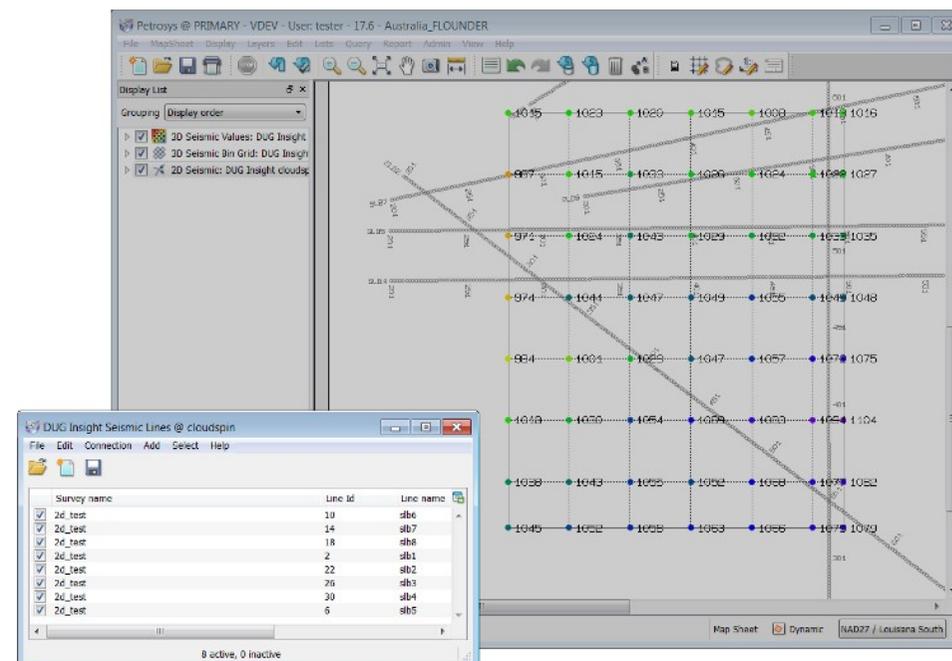
The quality of videos produced from animations in the 3D Viewer can now be controlled more precisely, with the addition of a drop-down menu allowing the video quality, resolution and aspect ratio (frame size) to be specified.

Dramatic Performance Increases When Displaying Large Grids

Thanks to a range of optimisations implemented in 17.6, the performance of the Mapping application has been significantly improved when working with very large grids in the Petrosys grid format (*.gri). Some results indicate that grids which once took minutes to display are drawn almost instantaneously.

Broader, More Flexible Support for Database Lists

Working with data across a range of database connections has been significantly improved. The same Lists functionality used to access data from Petrosys dbMap may now also be used to manage access to database records from DUG Insight, IHS Petra, Paradigm-Epos, Petrel and SeisWare.



In addition, it is also possible to populate database lists using existing Petra WSN files or Paradigm selection list files.

Support for Esri Desktop 10.3 Added to Esri Plugin

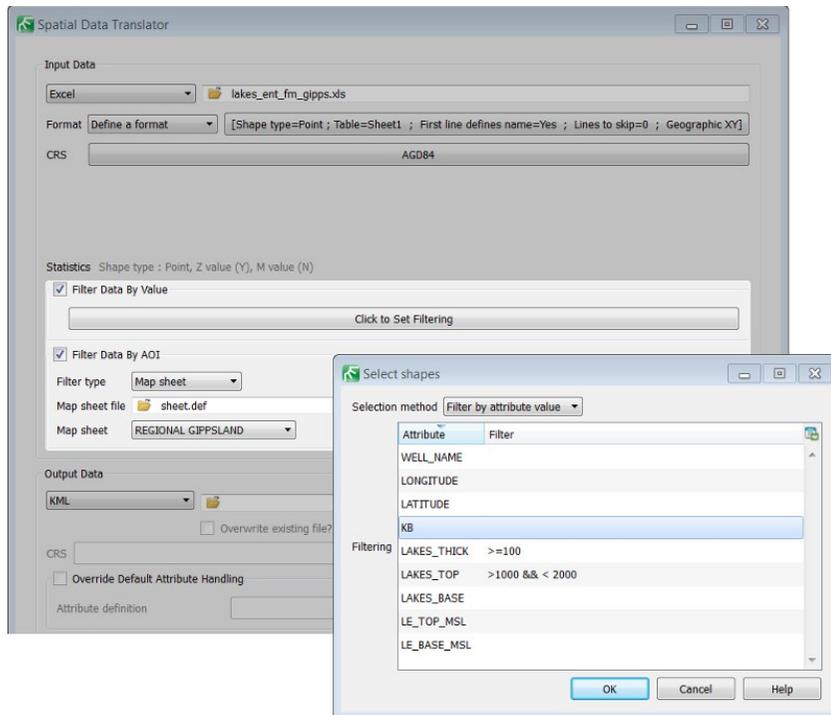
The Petrosys Esri plugin has been updated to support all Esri 10.3 products, allowing for a tighter level of integration with Esri products, and enabling a greater degree of cross-compatibility between the Esri and Petrosys desktop applications.

More information about the Petrosys Esri plugin can be found by contacting your local Petrosys sales or support representative.

An Improved Spatial Data Translator

Petrosys 17.6 sees the implementation of a wide range of improvements to the Spatial Data Translator, which is used to exchange spatial information between a wide range of spatial data stores.

The addition of the powerful and straightforward filtering options already employed throughout lists in the Petrosys application allows selective data transfer to be performed more efficiently than ever before. Attribute configuration allows a very fine degree of control over attributes created and written to in the output data source.



Support for a number of new input and output data sources has now been added. Excel can now be used as an output data source for spatial data. IHS Kingdom ASCII culture and polygon files are now supported as both an input and output data source.

ESPG 8.5 CRS Database Now in Use Throughout Petrosys

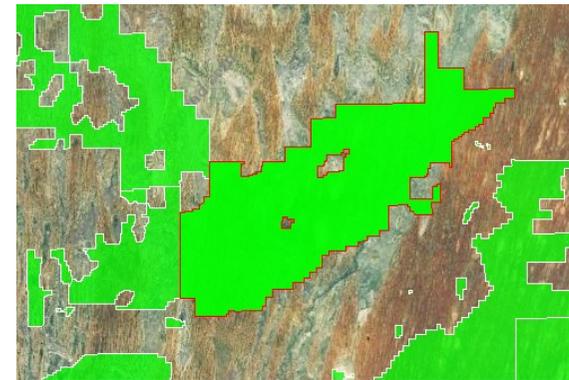
The EPSG CRS database used by Petrosys has been upgraded from version 7.11 to 8.5, allowing access to the latest improvements to the database. More information about the additions to the database made in 8.5 can be found at <http://www.epsg.org>.

Import and Export Petrel Gradients

Gradients can now be imported and exported from the Petrel gradient format (.alut) simply by selecting appropriate gradient within the Gradient Editor.

Better Support for Spatial Data with Exclusion Zones

Exclusion zones (holes) in spatial data will now be accurately reproduced when displayed in Mapping, allowing GIS and culture data from all supported data sources to be represented in full.



Exclusion zones in polygon spatial data, e.g. lease boundaries with exclusions

This improvement marks the addition of a feature which has long been missing from Petrosys, further improving the already robust support for GIS and spatial data, and adding to the ever expanding suite of spatial data manipulation and visualisation tools provided by the Petrosys application.

Fast, Direct and Versatile Transfer of Well Data to Petrel

Data can now be written to Petrel using the Wells Import Wizard, opening up a broad range of new data transfer opportunities, and further improving the versatility of Petrosys as a robust data management tool. Data can be read from any of the numerous well data sources supported by Petrosys, including, but not limited to, PPDM databases, Paradigm Epos, OpenWorks, GeoFrame and WDF.

Petrel well data can be transferred selectively, using a Petrel project or selection file to specify a sub-set of data. Alternatively a selection can be made directly, using the wildcard and query functionality available in Petrosys.

The addition of Petrel support coupled with the integration of the wizard into the workflow framework provided by Surface Modeling also means that updating Petrel data stores can now be automated and re-run by simply running a task.

This feature was originally added in 17.5, but as many clients elected to upgrade directly to the 17.6 release, is mentioned here again to increase awareness of the feature.

Complete Support for Gridding Stacking Velocities

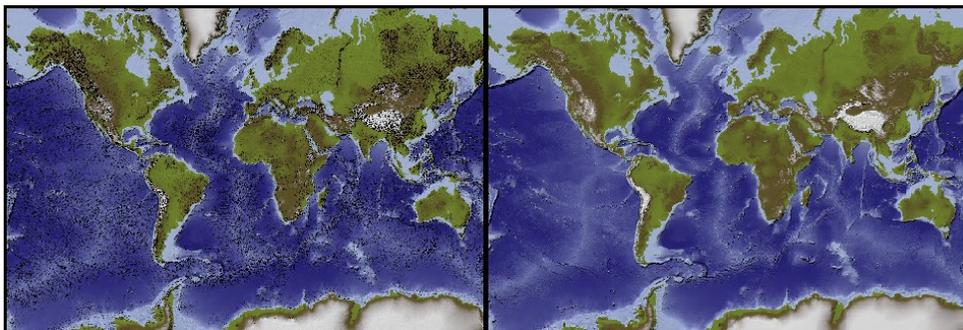
The options made available for gridding seismic velocities have been diversified, with the addition of stacking velocities as a new input data source to the Create Grid grid option in Surface Modeling. This significantly improves the simplicity and time required for generating a grid from stacking velocities, turning a process which previously involved up to seven steps, taking as long as an hour into a single step workflow, which in most cases can be performed in only minutes.

Raw, interval or average velocities may now be computed and modeled from stacking velocity data extracted from supported ASCII or SEGY files, or loaded directly from a Petrosys seismic data file (SDF) or dbMap database. Velocities may be interpolated using times extracted from supported third party or Petrosys grids, or alternatively with a user-specified constant value.

The addition of stacking velocity gridding is part of an overall effort to improve depth conversion in Petrosys, which has seen the introduction of a range of tools for streamlining all parts of the depth conversion workflow.

Clearer Surface Visualization Using the Sun Shaded Method

Thanks to improvements in the algorithm used by the sun shaded grid display method, the occurrence of visual noise and other display artefacts in surfaces rendered using this method has been significantly reduced. This is especially noticeable in regions of low surface variability (i.e. "flat" areas) and grids with a substantially finer resolution than the pixel dimensions of the sun shaded image.



Heavily exaggerated (to highlight the improvement) sun shaded grid displayed in 17.5 (left) versus the same grid displayed in 17.6 (right). The algorithm used by the sun shaded method has resulted in a vast reduction in the amount of visual "noise" - visible as black pixels in this example - present in some grid visualisations, resulting in much clearer images.

The introduction of these changes will mean that region scale sun shaded displays - in particular state or country wide surfaces created from high resolution digital terrain models such as the popular SRTM 90 meter data - will now appear with a visual fidelity unmatched in previous iterations of the software. This allows the use of the widest possible range of digital terrain models, at nearly any map scale.

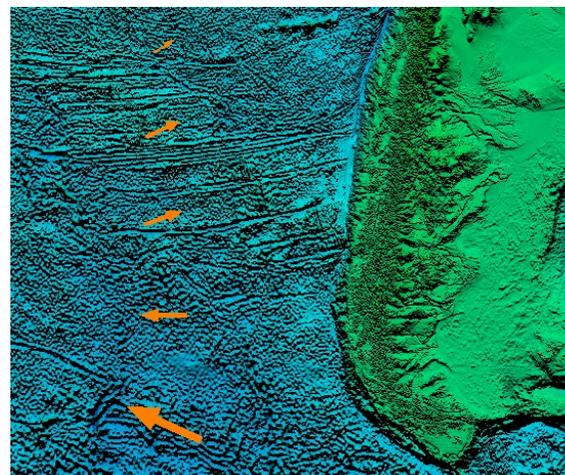
Interactive Area of Interest Definition in Mapping Now Consistent Across All Applications

The functionality of tools requiring the interactive definition of a rectangular area of interest (for example when zooming or interactively creating a map sheet) has been modified slightly, bringing it into line with the functionality of other similar software packages in the E & P data management space.

An area of interest may now be defined by clicking and dragging the mouse within the map canvas, then releasing the mouse button. Previously, the user was required to click once, move the mouse to define the required area of interest, then click again to finalise that area.

Enabled Mapping of Directional Quantities Using Thematic Mapping

With correlation between directional quantities in spatial attributes playing an increasingly significant role in exploration, the need for an effective and straightforward means of identifying patterns and regional trends in spatial and GIS data is more important than ever before. To address this need, the visualisation and analysis of GIS and spatial information has been significantly improved, to allow direction and magnitude to be expressed in point data.



Mapping ocean currents off the southern coast of South America, made possible by applying thematic mapping in conjunction with current magnitude and azimuth values.

The length, azimuth, color and proportion of points may now be adjusted using attribute values, allowing for effective visualisation of vector and other directional quantities. This enables regional trends and patterns to be more easily identified within data sets, which can prove an invaluable tool in modeling complex and unconventional structures. This added functionality builds on the already comprehensive suite of tools provided by the Petrosys GIS visualisation framework, which offers a powerful and versatile means of working with spatial data.

Ceased Support for Red Hat Linux 4

The Linux edition of Petrosys is no longer supported on Red Hat Linux 4. Petrosys continues to maintain support for Red Hat Linux 5 and higher.

Support for Petrel 2015.1 and Paradigm 15

The latest 2015 versions of Petrel and Paradigm are supported in this release.

3 entries

Petrosys Release 17.6.10 Enhancements

Connections, Import and Export

[50796](#) Improved ease of upgrade process for thirdparty connections version increments

Connections, Import and Export - Paradigm-Epos

[53000](#) Paradigm 15 (2015) supported

Connections, Import and Export - Petrel

[51960](#) Petrel 2015.1 supported

Petrosys Release 17.6.10

Bug Fixes

Connections, Import and Export

[53033](#) Grid exchange no longer compares non-key fields when re-opening a task

Connections, Import and Export - Paradigm-Epos

[53686](#) Fixed bug causing the Paradigm plugin to fail when reading well headers

[53700](#) Paradigm connection no longer times out when retrieving wells from a project with zero wells

Connections, Import and Export - SEG Y

[53470](#) Stacking velocity exchange format selectors now use consistent terminology for Petrosys supplied formats

dbMap - Client

[53534](#) Well Tests screen now allows a new row to be created (Santos specific)

Mapping - Editors

[53735](#) Gradient Editor: Fixed crash when inverting gradient with exact values

Surface Modeling - Gridding

[50199](#) Creating grid from OpenWorks point data will restore from tsk file correctly

[50200](#) Data scan now works for OpenWorks point data sources

[50198](#) Multiple OpenWorks point data sources supported in tsk files

[53340](#) Grid/WellTie - Mistie report now does not contain fault points when faults are enabled

Petrosys Release 17.6.10

Detailed Release Notes

[Connections, Import and Export Enhancements](#)

Improved ease of upgrade process for thirdparty connections version increments 50796

The Connection Manager now has functionality to manually or automatically upgrade thirdparty connections to newer versions.

Previously connections had to be removed and then re-added for each project.

For the manual option, an Upgrade button has been added to the File/Connection manager screen. This supports changing the database/server and version for Paradigm, OpenWorks, SeisWorks and GeoFrame connections.

The automatic upgrade is only available for Paradigm connections, where the PNS database/server remains the same, but the version has changed. It also enables Petrosys *.dbm, *.tsk and *.3dm files containing connections to older Paradigm versions for the same PNS database/server to be used without the need to select a replacement connection. The automatic option is controlled by configuration file and is turned off for all clients, except Santos. Please contact Petrosys support if you would like this option enabled.

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

Grid exchange no longer compares non-key fields when re-opening a task 53033

When opening an existing Grid exchange task, previous versions would compare all fields of the input data source to determine which grids were selected. Now only key fields are compared to ensure a change in a non-key field, such as comments, does not affect the grid selection.

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

Paradigm 15 (2015) supported 53000

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

Paradigm 2011 (Epos 4.1), Paradigm 2011.3 (Epos 4.1.3), Paradigm 14 (Epos 4.2) and Paradigm 14.1 (Epos 4.2.1) continue to be supported as data sources.

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

Fixed bug causing the Paradigm plugin to fail when reading well headers 53686

A bug has been fixed that could potentially cause the Paradigm plugin to stop working when reading well headers on Windows.

Paradigm connection no longer times out when retrieving wells from a project with zero wells 53700

An issue which caused dbMap to hang for five minutes while attempting to retrieve wells from a Paradigm project with no wells has been fixed.

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

Petrel 2015.1 supported 51960

Petrosys connectivity to Schlumberger's Petrel now supports direct interaction with Petrel 2015.1.

Support for Petrel 2015.1 includes the ability to:

- Import Model grid horizons and 3D seismic interpretation horizons to a Petrosys grid file
- Import faults from Model grids to a Petrosys fault file
- Import 2D and 3D seismic navigation and horizon interpretation data to a Petrosys SDF
- Directly display Model grid horizons, Input surface grids and 3D seismic interpretation horizons in Mapping
- Directly contour Model grid horizon data and Input surface grids in Surface Modeling
- Directly grid 2D and 3D seismic horizon interpretation data in Surface Modeling

- Directly display, grid and import well data.
- Directly display 2D seismic navigation and horizon interpretation in Mapping
- Directly display 3D seismic bin grids in Mapping
- Directly display Structural Model fault surfaces in 3DViewer
- Directly display fault sticks in 3DViewer
- Export Petrosys and other third party grids to Petrel

Petrosys continues to maintain support for connections to Petrel 2012.x, 2013.x., 2014.x

Connections, Import and Export - SEGY Bug Fixes

Stacking velocity exchange format selectors now use consistent terminology for Petrosys supplied formats 53470

SEGY stacking velocity exchange format selector now uses "System" for Petrosys provided format definitions. Previously Petrosys provided format definitions were termed "Standard" which was inconsistent with the Text stacking velocity exchange format selector.

dbMap - Client Bug Fixes

Well Tests screen now allows a new row to be created (Santos specific) 53534

Previously the user would receive an error when attempting to create a new well test record. This has been fixed so new records can successfully be created.

Mapping - Editors Bug Fixes

Gradient Editor: Fixed crash when inverting gradient with exact values 53735

The gradient editor's invert operation is now performed correctly on gradients with exact values.

Surface Modeling - Gridding Bug Fixes

Creating grid from OpenWorks point data will restore from tsk file correctly 50199

Versions 17.6sp9 and earlier have a bug where OpenWorks point data sources would not be restored from tsk file correctly. This has been rectified.

Data scan now works for OpenWorks point data sources 50200

Versions 17.6sp9 and earlier have a bug where the "Data Scan" option for OpenWorks point data sources would not work. This has been rectified.

Multiple OpenWorks point data sources supported in tsk files 50198

Version 17.6sp9 and earlier had an issue where the Surface Modelling tsk file could not have more than one OpenWorks point data source. Multiple OpenWorks point data sources will now work.

Grid/WellTie - Mistie report now does not contain fault points when faults are enabled 53340

The generated mistie report now does not have extra points when using fault Z values.

1 entries

Petrosys Release 17.6.9 Enhancements

Application - General

[52876](#) WMS Server: Trusted Address List is now independent of its authentication method

6 entries

Petrosys Release 17.6.9

Bug Fixes

Connections, Import and Export

[52654](#) dbMap SQL functions `ps_bin_grid_inline/xline_spacing` now return the spacing in units of bin grid CRS

Connections, Import and Export - DUG Insight

[52060](#) DUG Insight - Added ability to read 3D horizon data with negative tile indexes

Documentation - Online Help

[44059](#) Petrosys SQL function documentation updated

Mapping - Editors

[52310](#) Help text for Spatial Editor polygon clip is correct when first shown

Surface Modeling - General

[52869](#) Fixed a crash when loading older version `tsk` files that have text file input data

[52660](#) Calculating grid mean inside polygon now works for rotated grids

7 entries

Petrosys Release 17.6.9

Detailed Release Notes

[Application - General](#)

[Enhancements](#)

WMS Server: Trusted Address List is now independent of its authentication method 52876

The Petrosys WMS Server has had its Trusted Address List feature changed to be independent of the authentication method set on the server.

Previously, an incoming request would always be accepted if authentication was disabled. If authentication was enabled then if the request was from a trusted IP address/hostname there wouldn't be a need to authenticate with the server.

This has now changed, regardless of the authentication setting for the server, firstly the incoming request is checked to see if it is part of the Trusted Address List. If the request is not trusted then the request will fail with a HTTP 403 Forbidden error. If there is no list of Trusted Addresses then the request will automatically move on to the next step of authentication. The final step of authentication is either accepting the request if authentication is disabled or, if enabled, prompting for user credentials to authenticate with the specified Oracle database.

[Connections, Import and Export](#)

[Bug Fixes](#)

dbMap SQL functions ps_bin_grid_inline/xline_spacing now return the spacing in units of bin grid CRS 52654

Previously the ps_bin_grid_inline_spacing and ps_bin_grid_xline_spacing functions always returned spacing between inlines and xlines in metres. These functions now return the spacing in the units of the bin grid CRS.

In addition to this, a new function ps_bin_grid_spacing_units has been added, to return the units of the bin grid CRS.

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

DUG Insight - Added ability to read 3D horizon data with negative tile indexes 52060

In previous version when reading DUG Insight 3D horizon data if the horizon data tile index started from a negative number those tiles with negative indexes were discarded. This is now fixed and all tiles are read.

[Documentation - Online Help](#)

[Bug Fixes](#)

Petrosys SQL function documentation updated 44059

The list of Petrosys SQL functions (in topic sqptrfnc), plus associated documentation has been updated to reflect current behaviour.

[Mapping - Editors](#)

[Bug Fixes](#)

Help text for Spatial Editor polygon clip is correct when first shown 52310

In previous versions, the help text on the Spatial Editor/Operations/Polygon Clip was always set initially to the text for the "Clip Outside" method which could cause confusion.

[Surface Modeling - General](#)

[Bug Fixes](#)

Fixed a crash when loading older version tsk files that have text file input data 52869

Fixed a crash when loading an older version .tsk file that had tasks with gridding input data from text files. The crash would occur when opening the .tsk file.

Calculating grid mean inside polygon now works for rotated grids 52660

Calculating grid mean inside a polygon now works for rotated grids. Previously rotated grids could cause the number of points inside the polygon to be incorrectly determined to be zero, thus not calculating the mean.

Petrosys Release 17.6.8 Enhancements

Connections, Import and Export

- [52152](#) Formation importing into Petrosys PPDM 3.8 data model now uses a generated sequence number for the formations UID
- [52244](#) New dbMap SQL functions to return bin grid origin location and CRS information
- [52412](#) WIS LIMS - Desktop - Link to the LIMS SpotFire website has been updated (Santos only)
- [52772](#) Well Import Wizard now allows 20 characters for Formation Interpreter when importing to dbMap (PPDM 3.8 data model only)

Connections, Import and Export - OpenWorks

- [52363](#) Updated OpenWorks environment script template for Linux RH6 installation of OpenWorks R5000.10
- [52050](#) Windows - /File/Print to ZGF has a clearer error message

Connections, Import and Export - Petrel

- [52026](#) Improved performance reading 2D seismic interpretation data from Petrel

dbMap - Client

- [52755](#) Updated Well Coal Summary dialog to show density value (Origin only)

Mapping - General

- [43194](#) PLDB - Desktop - Added the ability to display drilling opportunity paths

Surface Modeling - General

- [51435](#) Scripting functions getWellAttrName from attribute Id added to aid sand summary workflows

23 entries

Petrosys Release 17.6.8

Bug Fixes

Connections, Import and Export

- [16452](#) dbMap import of seismic lines - Line names are no longer limited to 20 characters
- [52002](#) KDM Line acquisition screen now shows all data
- [52349](#) Seismic Survey Alias panel now allows 20 char Source code to match the database
- [52657](#) Stacking Velocities - Preview display is decimated correctly
- [51997](#) Well Import Wizard - loading directional surveys into dbMap now handles negative azimuths correctly
- [51981](#) Wells Import Wizard - Corrected unit conversion when importing formation tops into a project that is in USft

Connections, Import and Export - Paradigm-Epos

- [52368](#) Wells loaded from Paradigm using an Epos Wells DB selection filter now loads the correct wells

Connections, Import and Export - Petrel

- [52059](#) Petrel directional surveys with US feet X / Y offsets are now handled correctly

dbMap - Administration

- [52160](#) Directional survey - Linear compute method is now mapped correctly for PPDM3.8

dbMap - Client

- [52632](#) Seismic line labels in the edit list and header dialog now show USft rather than km (BP-America only)

Mapping - Editors

- [50889](#) Spatial Editor always allows editing of projected data in the same CRS as the map sheet
- [51970](#) Creating new fault files using the Spatial Editor no longer crashes
- [52053](#) Spatial Editor uses correct map sheet border type when checking CRS validity

Mapping - General

- [51965](#) Mapping on Windows renders something to the screen for all shapes being drawn

Mapping - GIS, Spatial and Culture

- [52110](#) Spatial Editor: Allows saving of contours with single point lines
- [52085](#) Display/Color Bar shows correct Color Bar for Display/GIS - Thematic Gradient

Mapping - Wells

- [49367](#) Mapping - WDF layers with corrupt fields will no longer crash the application

Seismic (SDF) Editor

- [45226](#) Double clicking in horizon editor list to change activity has been restored

StatX

- [52455](#) Mouse selection of upholes fixed

Surface Modeling - General

- [51949](#) Looping over strings and script prompting now works

Surface Modeling - Gridding

- [48839](#) Filtering can now be applied to any column
- [22577](#) Fixed memory error in Trend Surface operation when also smoothing
- [52439](#) Grid/Create grid error message now fully displayed when contouring the same contour file

Petrosys Release 17.6.8

Detailed Release Notes

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

Formation importing into Petrosys PPDM 3.8 data model now uses a generated sequence number for the formations UID 52152

The configuration of the Petrosys PPDM 3.8 data model has been changed to automatically generate a unique identifier for new formations being created (rather than using the formation name) during the importing of well formation tops using the Wells Import Wizard.

New dbMap SQL functions to return bin grid origin location and CRS information 52244

Several new dbMap SQL functions are available for returning information related to bin grids for IHS Kingdom, OpenWorks and GeoFrame connections. The new functions are:

- ps_bin_grid_origin_lat
- ps_bin_grid_origin_lon
- ps_bin_grid_inline_start
- ps_bin_grid_inline_end
- ps_bin_grid_inline_increment
- ps_bin_grid_xline_start
- ps_bin_grid_xline_end
- ps_bin_grid_xline_increment
- ps_bin_grid_crs_wkt
- ps_bin_grid_datum_key

Further information about the functions are available from the 'dbMap functions' button on the Admin/Reports/Edit screen.

WIS LIMS - Desktop - Link to the LIMS SpotFire website has been updated (Santos only) 52412

The link to the LIMS SpotFire website has been updated.

Well Import Wizard now allows 20 characters for Formation Interpreter when importing to dbMap (PPDM 3.8 data model only) 52772

The Wells Import Wizards now allows interpreters of 20 characters to be used (increased from 12) when importing data into a PPDM 3.8 dbMap database.

[Connections, Import and Export](#)

[Bug Fixes](#)

dbMap import of seismic lines - Line names are no longer limited to 20 characters 16452

Previously the import of 2D seismic lines to dbMap option had a limit that line names could not be longer than 20 characters. The limit of the line names is now limited only by the size of the line name column in the database.

KDM Line acquisition screen now shows all data 52002

The line acquisition screen now correctly shows all data in the list. Previously some data was not shown depending on the acquisition design.

Seismic Survey Alias panel now allows 20 char Source code to match the database 52349

Previously the SOURCE value for the seismic survey alias screen could only store 12 characters. It has been updated to store 20 which is the limit in the database.

Stacking Velocities - Preview display is decimated correctly 52657

In previous versions, data displayed in the stacking velocity preview chart may have been decimated twice. This bug has now been fixed.

Well Import Wizard - loading directional surveys into dbMap now handles negative azimuths correctly 51997

When importing directional survey data into a Petrosys-dbMap database using the Exchange/Well Import Wizard, valid azimuth values are now loaded correctly. Previously, if the azimuth was -100.0 or less, the import would return an error that the AZIMUTH value was larger than the specified precision allowed, and the survey would not load for that well.

This was only an issue loading data into Petrosys-dbMap databases. None of the other output data sources had this problem.

Wells Import Wizard - Corrected unit conversion when importing formation tops into a project that is in USft 51981

A bug introduced in v17.5.0 has been fixed that caused depth units to be converted twice when importing formation tops from a well that was in metres to a data source that is in USft.

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

Updated OpenWorks environment script template for Linux RH6 installation of OpenWorks R5000.10 52363

The OpenWorks environment script template has been updated to be compatible with the Linux RedHat 6 OpenWorks software application installation.

Windows - /File/Print to ZGF has a clearer error message 52050

The option to export to ZGF file format on Windows is not supported. A clearer error message is now shown for this case.

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

Wells loaded from Paradigm using an Epos Wells DB selection filter now loads the correct wells 52368

A bug has been fixed when using an Epos Well DB selection filter in which it was loading all wells from the connected Project. It now correctly only loads the wells associated with the selected Epos Well DBs.

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

Improved performance reading 2D seismic interpretation data from Petrel 52026

A significant performance improvement has been made when reading 2D seismic interpretation data from Petrel. This will result in improved performance in display, gridding and exchange for Petrel input data sources.

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

[Bug Fixes](#)

Petrel directional surveys with US feet X / Y offsets are now handled correctly 52059

In previous versions of Petrosys, when displaying directional surveys from a Petrel project which used US feet XY units the offsets were not computed correctly. Petrel projects with XY units in US feet are now supported.

[dbMap - Administration](#)

[Bug Fixes](#)

Directional survey - Linear compute method is now mapped correctly for PPDM3.8 52160

The Petrosys PPDM38 data model reference table for Directional Survey compute method has been updated to correctly identify the methods used in the application software.

[dbMap - Client](#)

[Enhancements](#)

Updated Well Coal Summary dialog to show density value (Origin only) 52755

The Well Coal Summary dialog has been updated to show density value in the scrolled list of data.

[dbMap - Client](#)

[Bug Fixes](#)

Seismic line labels in the edit list and header dialog now show USft rather than km (BP-America only) 52632

The Seismic line edit list Line Length column and header dialog labels have been updated to indicate that line lengths are in USft and not kms.

[Mapping - Editors](#)

[Bug Fixes](#)

Spatial Editor always allows editing of projected data in the same CRS as the map sheet

50889

The Spatial Editor has been changed from previous versions to always allow editing of Projected data using a CRS that is the same as the current map sheet. Previous versions disallowed this in cases where reprojection failed within the extents of the map sheet.

Creating new fault files using the Spatial Editor no longer crashes

51970

A bug was introduced in Petrosys 17.6.7 that caused a crash when a new fault file was created using the Spatial Editor - this has been fixed in version 17.6.8.

Spatial Editor uses correct map sheet border type when checking CRS validity

52053

The Spatial Editor allows editing of data in a different CRS from the map sheet. There are some checks required on the map sheet CRS and the data CRS to ensure that reprojection is valid within the bounds of the map sheet. In previous versions this validity check was done incorrectly assuming a map sheet with a projected border which could lead to a larger error than expected and hence editing being disallowed in circumstances when it shouldn't.

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

PLDB - Desktop - Added the ability to display drilling opportunity paths

43194

Petrosys mapping now support displaying directional surveys (or directional prognosis) for drilling opportunities.

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

Mapping on Windows renders something to the screen for all shapes being drawn

51965

In previous versions, the Windows version of Mapping did not render anything to the screen for shapes in certain circumstances - in particular where a polygon was being drawn where all points on the polygon ended up on the same pixel on the screen. This has been corrected so at least a single pixel will now always be drawn.

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

[Bug Fixes](#)

Spatial Editor: Allows saving of contours with single point lines

52110

Spatial Data Translator and Spatial Editor now handle contour lines with single point.

Display/Color Bar shows correct Color Bar for Display/GIS - Thematic Gradient

52085

Mapping will now show correct Color Bar for Display/GIS - Thematic/Gradient.

[Mapping - Wells](#)

[Bug Fixes](#)

Mapping - WDF layers with corrupt fields will no longer crash the application

49367

Occasionally mapping layers of wells from the WDF file could have inconsistent or corrupted parameters. The application will now not crash in this situation, allowing the corrupted parameters to be fixed manually using the display/modify dialog for that layer.

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

[Bug Fixes](#)

Double clicking in horizon editor list to change activity has been restored

45226

The ability to double click (or single click depending on system settings) to change the horizon activity has been restored in the Seismic (SDF) editor option Edit/Seismic Data/Horizons/Define.

[StatX](#) [Bug Fixes](#)

Mouse selection of upholes fixed

52455

The selection and interaction of upholes using the mouse has been fixed. Left mouse button now selects an uphole, right mouse button deletes the uphole and double-click brings up the uphole information and depth/time graph.

Surface Modeling - General Enhancements

Scripting functions getWellAttrName from attribute Id added to aid sand summary workflows 51435

Added scripting functions to convert well zone/formation attribute IDs to user friendly names.

Surface Modeling - General Bug Fixes

Looping over strings and script prompting now works 51949

Looping over strings handles correctly all input strings the user enters when the looping variable is set to Interactive.

Surface Modeling - Gridding Bug Fixes

Filtering can now be applied to any column 48839

Fixed bug in filter for Surface Modeling - Gridding. The filter was not setup correctly and filtering of input data was not applied.

Fixed memory error in Trend Surface operation when also smoothing 22577

When doing gridding using the "Trend Surface" operation and using smoothing a UT:1002 memory error was displayed. This error has now been fixed.

Grid/Create grid error message now fully displayed when contouring the same contour file 52439

The error message produced when trying to contour a grid that was produced from the same contour file is now clearer with the contour filename not truncated.

10 entries

Petrosys Release 17.6.7 Enhancements

Application - Launcher

[51561](#) Grid AOI crawler: Added ability to run in batch mode

Application - Printing and Publication

[50110](#) One button direct export to Microsoft PowerPoint

Connections, Import and Export

[46294](#) Added support for reading Author Preferred TD-charts from IHS Kingdom

[51229](#) Increased the allowed number of shot points when reading 2D seismic information from SeisWorks

[51517](#) Wells Import Wizard now prevents import of formation top depths that are outside of the existing stratigraphic order (Santos only)

[51504](#) Spatial Data Translator automatically sets Petrel data type based on input data

[51419](#) Added Max TVD information for writing wells from PPDM to Petrel (Talisman-Vietnam only)

dbMap - Client

[48469](#) Test Analysis/LIMS update - dbMap/Desktop screens (Santos only)

Mapping - General

[38537](#) Display/Scale Bar now allows editing/creation from the scale bar display dialogue

Mapping - Seismic

[51345](#) Increased the angle tolerance used to determine if a 3D survey is rectangular

9 entries

Petrosys Release 17.6.7 Bug Fixes

Configuration - Configuration Files

[51687](#) Fixed missing panel error when opening Asset Items Report (Origin only)

Connections, Import and Export

[51640](#) IHS Kingdom Oracle connections once again reads well directional and checkshot survey information correctly

[51226](#) Kingdom connections using Oracle now support user credentials from the Connection Manager

[51395](#) Paradigm grid lists now have the correct Epos user information displayed

[51344](#) Enabled lazy loading of Kingdom grid data type information

Mapping - Editors

[51005](#) Spatial Editor improvements to fault handling

[51319](#) Spatial editor polygon clipping panel works correctly with default panel settings

Mapping - GIS, Spatial and Culture

[51341](#) Display/GIS: Annotation that is not at the center position is now drawn if the shape is not drawn

Mapping - Grids, Surfaces and Sampled Data Files

[51351](#) Listing grids from Petrel is now more robust when Petrosys cannot read a grid

Petrosys Release 17.6.7

Detailed Release Notes

19 entries

[Application - Launcher](#) [Enhancements](#)

Grid AOI crawler: Added ability to run in batch mode 51561

The Grid AOI crawler now supports running in batch mode. A button has been added to the panel which allows the current panel settings to be saved to an XML file. A command line option has been added to allow the crawler to be run in batch mode using a previously saved XML file. The command has the following form:

```
dbmap -grid_aoi_crawler -batch -file <xml file>
```

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

One button direct export to Microsoft PowerPoint 50110

Export to Microsoft Powerpoint is now as easy as a single button press. Start PowerPoint, select the slide and slide element where you want the map image to be placed and press the "Quick PowerPoint export" icon in the toolbar.

[Configuration - Configuration Files](#) [Bug Fixes](#)

Fixed missing panel error when opening Asset Items Report (Origin only) 51687

Replaced a missing panel definition within dbaitemq.pnx which was causing an error message to appear when opening the Asset Items Report dialog.

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

Added support for reading Author Preferred TD-charts from IHS Kingdom 46294

IHS Kingdom connections have had support added for reading TD-chart data using either 'Project mode' or 'Author preferred mode'. This option is made available at the time of adding or reconnecting an IHS Kingdom project in the Connection Manager and can be changed as needed. Throughout the application when using TD-chart data from IHS Kingdom, the user must specify in which Author to read the TD-charts. Depending on the active TD-chart mode, this will determine how Petrosys reads the TD-chart data from the Kingdom project.

Increased the allowed number of shot points when reading 2D seismic information from SeisWorks 51229

The number of shot points allowed when reading 2D seismic information from SeisWorks has been increased from 110,000 to 250,000. A possible crash has also been fixed which could occur if this limit was exceeded.

Wells Import Wizard now prevents import of formation top depths that are outside of the existing stratigraphic order (Santos only) 51517

When importing well formation tops into dbMap, it is now no longer possible to import depth changes that affect other formations due to preserving the existing stratigraphic order.

An error will be issued when a formation top depth being imported is either: less than the depth of the previous formation's top depth, or greater than the next formation's top depth, or finally if the depth is greater than the base depth of the parent formation.

Spatial Data Translator automatically sets Petrel data type based on input data 51504

When exporting data to Petrel via Exchange/Spatial Data Translator, Spatial Data Translator now sets the Petrel type according to the input data.

Added Max TVD information for writing wells from PPDM to Petrel (Talisman-Vietnam only) 51419

A wells max TVD depth information will now be written to Petrel when using the Well Import Wizard.

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

IHS Kingdom Oracle connections once again reads well directional and checkshot survey information correctly 51640

A bug, introduced in Petrosys 17.4sp1, which caused the reading of directional and checkshot survey information for Oracle based IHS Kingdom connections to fail, has now been fixed.

Kingdom connections using Oracle now support user credentials from the Connection Manager 51226

A bug, which was introduced into Petrosys 17.4sp1, where user credentials entered via the Connection Manager dialogs were not being used when establishing the connection to Kingdom's Oracle database has been fixed.

Paradigm grid lists now have the correct Epos user information displayed 51395

A bug has been fixed to show the correct Epos user information for a grid when listing grids from a Paradigm project.

Enabled lazy loading of Kingdom grid data type information 51344

With the introduction of reading grids from IHS Kingdom connection in 17.6.0 a performance issue was introduced during the connection phase. This performance issue has now been addressed, by delaying the reading of a grid's data type until grid data is being used in the application. This information is cached and is only read once within an application session.

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

Test Analysis/LIMS update - dbMap/Desktop screens (Santos only) 48469

In dbMap/Desktop, buttons that previously showed test analysis data coming from the dbMap database have been replaced with links to launch the Santos SpotFire website.

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

Spatial Editor improvements to fault handling 51005

Several improvements related to the editing of faults have been made to the Spatial Editor:

- The properties of the fault file can be modified during editing (including adding surfaces and groups)
- Faults can be assigned to different surfaces

- Newly created polyline faults are oriented correctly for symbols to appear on the outside of the fault
- Polyline faults can be created in several segments
- Linking faults together preserves fault Z-values
- Compressing polyline faults preserves apex points
- The swap sides operation (to change where symbols appear) is enabled for faults with Z-values

Spatial editor polygon clipping panel works correctly with default panel settings 51319

In previous versions the Spatial Editor/Operations/Polygon Clip option did not work correctly if the panel settings were not modified prior to pressing OK.

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

Display/Scale Bar now allows editing/creation from the scale bar display dialog 38537

The "Display/Map Elements/Scale Bar..." dialog now has Edit, Copy and New buttons to directly access the scale bar editing options.

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

Display/GIS: Annotation that is not at the center position is now drawn if the shape is not drawn 51341

Display/GIS can now annotate attributes at position other than Center if the shape is not drawn.

[Mapping - Grids, Surfaces and Sampled Data Files](#) [Bug Fixes](#)

Listing grids from Petrel is now more robust when Petrosys cannot read a grid 51351

Previously, if a single grid was unable to be read from a Petrel project, reading all grids would fail for the Petrel project. This issue has now been fixed with the offending grids skipped and a message written to diagnostics recording the error.

Increased the angle tolerance used to determine if a 3D survey is rectangular

51345

When reading a 3D survey from a data source, Petrosys checks the angles at the corner points to determine if the survey is rectangular. The tolerance used in these calculations has been increased from 0.286 degrees to 0.5 degrees, and the angle tolerance is now configurable to allow fine tuning at client sites when needed.

Petrosys Release 17.6.6 Enhancements

Connections, Import and Export

- [50448](#) Improved the performance of using DUG Insight projects in Petrosys
- [50691](#) Added SQC configuration for auto Top and Base WDF zone assignment in the Wells Import Wizard
- [51020](#) Spatial Data Translator supports SDE nvarchar2 data types
- [49919](#) Petrosys ArcMap plugin supports ArcMap 10.3
- [50911](#) Updated wells logs configuration for importing RFT logs to Petrel - Santos only

dbMap - Client

- [27148](#) Refreshed user-interface and several bug-fixes for dbMap spreadsheets

Documentation - Online Help

- [49858](#) Completed help for point data thematic styling

6 entries

Petrosys Release 17.6.6

Bug Fixes

Connections, Import and Export

- [50954](#) OGP P1/11 import to SDF no longer fails to find coordinate data
- [50687](#) Manually-mapped formation details are now correctly imported to WDF formation classes

Mapping - General

- [50533](#) Gradients, descriptions and other items that have percent symbols in their name are now displayed correctly

Mapping - Seismic

- [50539](#) Enabled reading of 3D SEG Y that do not have rectangular inline/crossline data

Surface Modeling - Gridding

- [50798](#) Performance of Grid/Create Grid using text or Excel input data is no longer degraded

Wells (WDF) Editor

- [50355](#) WDF editor supports extended set of characters in file names on Windows

Petrosys Release 17.6.6

Detailed Release Notes

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

Improved the performance of using DUG Insight projects in Petrosys 50448

The performance and responsiveness of using a DUG Insight project in Petrosys has been improved, by implementing some lazy loading of data, when doing any of the following:

- connecting to a DUG Insight project
- selecting 3D surveys
- selecting 2D, 3D and grid horizons

The following functionality is unaffected by these improvements due for the need to load all data at the time of loading the project:

- importing to SDF

Added SQC configuration for auto Top and Base WDF zone assignment in the Wells Import Wizard 50691

The Wells Import Wizard auto assignment of top and base of zones when importing to WDF is now configured through SQC to allow the specification of keywords used to perform the assignment.

Spatial Data Translator supports SDE nvarchar2 data types 51020

Spatial Data Translator now supports SDE nvarchar2 (SE_NSTRING_TYPE) data types.

Petrosys ArcMap plugin supports ArcMap 10.3 49919

The Petrosys ArcMap plugin is now supported in ArcMap 10.3. To install the ArcMap plugin, Petrosys 17.6.6 (or greater) should be installed after ArcMap is updated to 10.3.

Updated wells logs configuration for importing RFT logs to Petrel - Santos only 50911

Updated Santos-specific RFT well log configuration and input query from client-supplied sources.

[Connections, Import and Export](#)

[Bug Fixes](#)

OGP P1/11 import to SDF no longer fails to find coordinate data 50954

Importing 2D seismic lines from OGP P1/11 data files to SDF would fail due to an invalid positioning object selection. This issue has now been resolved.

Manually-mapped formation details are now correctly imported to WDF formation classes 50687

Modifying the formation mapping with the Wells Import Wizard while importing well formations to WDF would result in a WDF formation class name of "Imported zone". This issue has now been resolved and the modified formation details are correctly represented in the output WDF file.

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

Refreshed user-interface and several bug-fixes for dbMap spreadsheets 27148

The dbMap spreadsheets module has been updated with several bug fixes and a refreshed user interface making use of functionality added since version 17.0. For further information on using the dbMap spreadsheets module please contact Petrosys support.

[Documentation - Online Help](#) [Enhancements](#)

Completed help for point data thematic styling 49858

The thematic styling of point data display feature introduced in 17.6.3 is now fully documented.

[Mapping - General](#)

[Bug Fixes](#)

Gradients, descriptions and other items that have percent symbols in their name are now displayed correctly

50533

In Mapping certain places would not display names properly in the status bar, or could crash, where the names had percent symbols (%) in them. For example using a gradient with a % in the name could crash when the associated grid was clicked on. Other places that could have had the same issue were overpost correction of items, grid orthocontour and display of drawing tool elements.

Mapping - Seismic

Bug Fixes

Enabled reading of 3D SEGY that do not have rectangular inline/crossline data

50539

Creating a 3D bin grid from a 3D SEGY file that does not have a rectangular inline/crossline area is now supported.

Surface Modeling - Gridding

Bug Fixes

Performance of Grid/Create Grid using text or Excel input data is no longer degraded

50798

A bug was introduced in version 17.6.0 that caused gridding of text and/or Excel data to be significantly slower than in previous versions.

Wells (WDF) Editor

Bug Fixes

WDF editor supports extended set of characters in file names on Windows

50355

WDF editor now opens WDF file containing all (non-control) characters supported by current encoding page in its file name correctly.

Enhancements

Petrosys release 17_6_5 [13 entries]

Connections, Import and Export

- [50064](#) Added Spud date, Completion date and Formation at TD to OpenWorks well header screen
- [47667](#) Spatial Data Translator now extracts list of available feature classes more efficiently
- [49064](#) Wells Import Wizard can now write formation attributes to dbMap - Santos only
- [47670](#) Right clicking the CRS selector while loading data into dbMap from a SEGY file now chooses the project default

Connections, Import and Export - Petrel

- [49063](#) Wells Exchange Wizard can now write additional formation attributes from dbMap to Petrel

dbMap - Client

- [47319](#) Increased the length of the Name field in a dbMap seismic survey header

Documentation - Online Help

- [49859](#) Added help documentation for Grid AOI Crawler

Mapping - Editors

- [47674](#) Improved polygon clipping in the Spatial Editor
- [47455](#) Improved control over shape visibility in Spatial Editor
- [48417](#) Improvements to Buffered Shapes operation in the Spatial Editor
- [49296](#) Spatial editor now allows modification of shape type when using Save As

Surface Modeling - General

- [47435](#) Added scripting functions to extract horizon details from seismic data sources

Surface Modeling - Gridding

- [48329](#) Grid Arithmetic now honors the interpolation method of input grids

Bug Fixes

Petrosys release 17_6_5 [21 entries]

Application - General

[47290](#) Windows platform now correctly reported by diagnostic logs

Connections, Import and Export

[46019](#) Correct offsets now applied to seismic data exported using the Western format

[50145](#) Fixed issues when updating reservoir summary data in Petrel

[50437](#) Petrel no longer crashes when the top depth of a reservoir is missing during an import

[50407](#) Re-enabled import of well zones to Petrel

[46758](#) SEGY custom format filename no longer used as the default when exporting to Excel

[47563](#) SEGY stacking velocity exchange - all formats' matching percentage is 0%

dbMap - Client

[50311](#) Special characters no longer result in generation of invalid XML by Mapping/Reports (Linux)

[50312](#) User-defined filter queries with parameters now function correctly for Drilldown reports

Mapping - Editors

[50401](#) Multiple improvements to spatial editor performance and robustness

[49892](#) Spatial Editor no longer crashes when saving open polygons in vertex mode

[47451](#) Spatial Editor no longer becomes stuck in pan mode

[48581](#) Improved versatility of copy/paste shortcuts in the Spatial Editor

[49688](#) Spatial Editor back interpolate to polyline faults now sets Z-values on all vertices

Mapping - General

[49956](#) Displaying CGM*PIP seismic traces no longer results in a crash

Mapping - GIS, Spatial and Culture

[49606](#) Querying attributes in dbMap GIS data from Mapping now functions correctly

[50371](#) Culture selection lists containing more than 254 elements now function correctly in Display GIS

Mapping - Publication

[48891](#) WMS Server now correctly publishes maps containing dbMap culture layers

Surface Modeling - Gridding

[50272](#) Optimised handling of grid files containing embedded faults with large numbers of points

[46001](#) Output grid geometry now correctly determined from input grid AOI when using Merge and Regrid options

Wells (WDF) Editor - General

[49293](#) Wells (WDF) Editor now prompts user to save changes before exiting the directional survey tab

Detailed Release Notes

Petrosys release 17_6_5 [34 entries]

Application - General

Bug Fixes

Windows platform now correctly reported by diagnostic logs⁴⁷²⁹⁰

Running diagnostics on 64 bit Windows operating systems will now write the correct operating system and Petrosys version to the output log file. Previously, this information was not indicated by the log file.

Connections, Import and Export Enhancements

Added Spud date, Completion date and Formation at TD to OpenWorks well header screen⁵⁰⁰⁶⁴

The OpenWorks well header screen now displays the following additional new fields: Spud date, Completion date and Formation at TD.

Spatial Data Translator now extracts list of available feature classes more efficiently⁴⁷⁶⁶⁷

The Spatial Data Translator now extracts the list of available feature classes from Oracle Spatial and ArcSDE faster, in some cases by up to 500%.

Wells Import Wizard can now write formation attributes to dbMap - Santos only⁴⁹⁰⁶⁴

The Wells Import Wizard can now be used to write formation attributes to dbMap.

Right clicking the CRS selector while loading data into dbMap from a SEG Y file now chooses the project default⁴⁷⁶⁷⁰

Right clicking the CRS selector made available while loading data into a dbMap database from a SEG Y file now chooses the project default. Previously, right clicking this field would have no effect on the value of the field.

Connections, Import and Export

Bug Fixes

Correct offsets now applied to seismic data exported using the Western format⁴⁶⁰¹⁹

Seismic data will now be exported correctly to text files using the "Western" format. Previously, a bug in the Western format used by the export meant that the incorrect offsets were being applied to X/Y values. Offsets of 26-35 and 36-45 (for X and Y values respectively) are now applied.

Fixed issues when updating reservoir summary data in Petrel⁵⁰¹⁴⁵

When updating existing reservoir summaries in Petrel using the Wells Exchange Wizard, attributes for an individual reservoir summary would not be updated if its depths had not changed. Details of the error were not reported correctly in the HTML report. These issues have been rectified and now existing reservoir summaries are updated correctly in Petrel.

Petrel no longer crashes when the top depth of a reservoir is missing during an import⁵⁰⁴³⁷

A crash has been fixed which occurred when a reservoir being imported from Petrel had no top depth information.

Re-enabled import of well zones to Petrel⁵⁰⁴⁰⁷

There was a configuration issue which prevented the Wells Import Wizard allowing the exchange of well zones to Petrel. This issue has now been fixed, allowing well zones to be selected when Petrel is the output data source and the input data source supports reading zones.

SEG Y custom format filename no longer used as the default when exporting to Excel⁴⁶⁷⁵⁸

A bug has been fixed, which resulted in the default filename used when exporting data from a scrolled list to an Excel spreadsheet matching the name of any newly defined SEG Y formats. This could make it easy to overwrite a newly defined SEG Y format if exporting to Excel immediately after saving the format, and the output filename was not inspected closely.

SEG Y stacking velocity exchange - all formats' matching percentage is 0%⁴⁷⁵⁶³

The correct "matching percentage" will now be displayed while multiple 2D SEG Y files are selected in the Stacking Velocities Exchange panel. Previously, a bug meant the matching percentage was incorrectly reported as 0% while multiple files were selected.

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

Wells Exchange Wizard can now write additional formation attributes from dbMap to Petrel 49063

Additional well formation attributes can now be written to Petrel using the Wells Exchange Wizard. This change includes client-specific configuration for reading additional formation attributes from dbMap.

[dbMap - Client Enhancements](#)

Increased the length of the Name field in a dbMap seismic survey header 47319

The length of the Name field for Seismic Surveys in dbMap has been increased from 40 to 100 characters.

[dbMap - Client Bug Fixes](#)

Special characters no longer result in generation of invalid XML by Mapping/Reports (Linux) 50311

In previous Linux releases of dbMap, characters which were invalid for UTF-8 encoding could be written to an XML report output file without being converted. This would result in a failure to produce a HTML report using the internal XSLT engine. Now, all XML produced from Mapping/Reports is explicitly converted to UTF-8 before being processed.

User-defined filter queries with parameters now function correctly for Drilldown reports 50312

When running a drilldown report using a user-defined data selection query which incorporated run-time parameters, the parameters were not being substituted prior to executing the filter SQL. This resulted in an invalid filter query and no data being returned for the drilldown report. The run-time parameter substitution has now been restored for these queries.

[Documentation - Online Help Enhancements](#)

Added help documentation for Grid AOI Crawler 49859

Help documentation has been added for the Grid AOI Crawler. Documentation may be accessed using the Help button in the Grid AOI Crawler panel, or by browsing to the relevant topic using the help browser.

[Mapping - Editors Enhancements](#)

Improved polygon clipping in the Spatial Editor 47674

Polygon clipping in the Spatial Editor has been improved. Where previously clipping a polygon would remove a section of the polygon, while preserving the remaining portion as an open line, polygons are now closed along the edge used to apply the clipping, meaning they remain as closed shapes. These improvements also mean that clipping interior boundaries from polygons (for example in shapes resembling a ring) will be performed correctly.

Improved control over shape visibility in Spatial Editor 47455

Two new options have been added to the right mouse button menu for polygon data selected in the Mapping canvas while the Spatial Editor is active: "Show All" and "Hide All". These options allow all polygons in the current layer to be made visible or invisible respectively.

Improvements to Buffered Shapes operation in the Spatial Editor 48417

The Buffer Shapes operation in the Spatial Editor has been improved in several ways:

- Buffer generation is now generally more reliable.
- Generated buffers now consistently follow the source shape (in previous 17.6 versions, certain types of source shape could result in the generated buffer being located incorrectly).
- Direct control may now be exercised over the shape of the buffer around corners and the ends of lines.
- Generated buffers can now include multiple polygons and holes.
- Negative buffer distances are now handled better.

Spatial editor now allows modification of shape type when using Save As 49296

The Spatial editor now allows the shape type (point, line or polygon) to be changed when using Save As to save data to a different format.

Mapping - Editors

Bug Fixes

Multiple improvements to spatial editor performance and robustness 50401

Spatial Editor performance has been improved in a number of ways. Specific improvements have been made in the following areas:

- Editing attributes for multiple shapes
- Opening and closing layers with large numbers of shapes
- Removing unnecessary drawing
- Interactive selection and browsing

Spatial Editor no longer crashes when saving open polygons in vertex mode 49892

A crash has been fixed in the Spatial Editor, which would occur while saving polygon data with open rings (i.e. lines) while in vertex mode. This will no longer occur, allowing polygon data of this type to be saved correctly.

Spatial Editor no longer becomes stuck in pan mode 47451

In certain circumstances, panning in the spatial editor could cause the application to become stuck in pan mode with no way to exiting. This has now been fixed.

Improved versatility of copy/paste shortcuts in the Spatial Editor 48581

The copy and paste shortcuts used by the Spatial Editor now work when the mapping canvas does not have focus.

Spatial Editor back interpolate to polyline faults now sets Z-values on all vertices 49688

Back interpolating to faults from a grid with equivalent embedded faults now sets Z-values on all relevant vertices. Previously, using back interpolation under these conditions would result in Z-values not being set for all vertices.

Mapping - General

Bug Fixes

Displaying CGM*PIP seismic traces no longer results in a crash 49956

A crash has been fixed, which would occur while displaying certain CGM files containing CGM traces. These files will now be displayed correctly.

Mapping - GIS, Spatial and Culture

Bug Fixes

Querying attributes in dbMap GIS data from Mapping now functions correctly 49606

Querying attributes from spatial data displayed using Display GIS now functions correctly. Previously, querying data from the map would only show attributes associated with the first selected feature with features subsequently selected on the map not queried.

Culture selection lists containing more than 254 elements now function correctly in Display GIS 50371

Displaying spatial data using a selection file containing more than 254 items now functions correctly. In previous versions, using selection files with more than 254 items could result in Display GIS becoming unresponsive.

Mapping - Publication

Bug Fixes

WMS Server now correctly publishes maps containing dbMap culture layers 48891

Maps containing dbMap culture layers will now be published correctly by the Petrosys WMS server. In previous versions, maps containing culture layers from dbMap would not be published correctly by the server, resulting in a failure when the client attempted to read the capabilities of the corresponding map service.

Surface Modeling - General

Enhancements

Added scripting functions to extract horizon details from seismic data sources 47435

Scripting functions have been added allowing information to be extracted from horizons in seismic data sources. Each function takes the required XML as input and returns the corresponding information as a string of text. This can be used to include information from the horizon in gridding workflows, for example the name of a grid.

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

Grid Arithmetic now honors the interpolation method of input grids 48329

Grid Arithmetic now considers the interpolation method of the input grid or grids when creating the output grid. If all input grids have the same interpolation type, this interpolation type will be used for the output grid. If there is a mismatch, the output grid will use "bicubic" interpolation.

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

Optimised handling of grid files containing embedded faults with large numbers of points 50272

Grid files containing faults with a large number of coordinate points (>10000) could sometimes be very slow to open, due to a problem introduced in Petrosys 17.4. This has now been fixed.

Output grid geometry now correctly determined from input grid AOI when using Merge and Regrid options 46001

Using either the Blend or Regrid options (both available from the /Grid/Merge menu) with the output geometry area of interest type set to "Data" will now function correctly. Previously, the area of interest was not being determined correctly from the input data, resulting in a task failure.

Wells (WDF) Editor - General

Bug Fixes

Wells (WDF) Editor now prompts user to save changes before exiting the directional survey tab 49293

The Wells (WDF) Editor now prompts the user to save any changes made in the directional survey tab prior to exiting the tab. Previously, no such prompt would be displayed, resulting in changes being lost if the tab was mistakenly exited, or if focus on the tab was lost (for example by clicking somewhere else in the editor).

Enhancements

Petrosys release 17_6_4 [4 entries]

Client specific

[49880](#) Removed limit constraints on Water depth values on the Well Header dialog - Santos Only

Connections, import and export

[50016](#) Added support for Paradigm 14.1 on Linux and Windows

[49999](#) OpenWorks/SeisWorks plugin now supports Kerberos authentication method

General

[49879](#) Grid AOI crawler includes sub-directories as part of a parent project

Bug Fixes

Petrosys release 17_6_4 [10 entries]

Client specific

[49949](#) Fixed error message when cancelling compute reservoir TVD, TVT, TST operation (Santos-specific)

Connections, import and export

[48525](#) Grids from OpenWorks now read the CRS from the header rather than the connection

General

[50093](#) CGM Display - Significant performance improvement in display of certain types of CGM files

[50007](#) Grid AOI crawler crashed when attempting to read certain corrupt grid files

[49867](#) Grid AOI crawler sources the grid creation date from the corresponding header information

[50014](#) Grid AOI crawler treats grids with a Local XY CRS as errors

[49866](#) Grid AOI Crawler writes out grid outlines where a preferred CRS transform is not set

Mapping

[49875](#) Contours outside zoom area are now displayed correctly

Mapping/Spatial

[49927](#) Thematic scan no longer crashes for dbMap GIS

Surface Modeling/Gridding

[50099](#) Grid & Well Tie of well data always uses datconnect license - even for WDF

Detailed Release Notes

Petrosys release 17_6_4 [14 entries]

[Client specific](#)

[Enhancements](#)

Removed limit constraints on Water depth values on the Well Header dialog - Santos Only 49880

The constraint limits of ≥ -999 and ≤ 9999.99 for a Water Depth value has now been removed from the Well Header dialog.

[Client specific](#)

[Bug Fixes](#)

Fixed error message when cancelling compute reservoir TVD, TVT, TST operation (Santos-specific) 49949

The issue causing a "utfree" error message to appear when cancelling the Edit/Selected wells/Compute Reservoir TVD, TVT, TST operation from the dbMap Wells edit list has now been fixed.

[Connections, import and export](#)

[Enhancements](#)

Added support for Paradigm 14.1 on Linux and Windows 50016

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

Paradigm 2011 (Epos 4.1), Paradigm 2011.3 (Epos 4.1.3) and Paradigm 14 (Epos 4.2) continue to be supported as data sources.

OpenWorks/SeisWorks plugin now supports Kerberos authentication method 49999

The OpenWorks/SeisWorks plugins have been updated to support Kerberos authentication methods where a user does not need to provide a password to connect to the data source.

[Connections, import and export](#)

[Bug Fixes](#)

Grids from OpenWorks now read the CRS from the header rather than the connection 48525

Previously, grids read from OpenWorks would get a CRS that was assigned to the project containing the grid. This has now been changed so that the grid's CRS is read from the grid header information, which may be different to the CRS of the project.

[General Enhancements](#)

Grid AOI crawler includes sub-directories as part of a parent project 49879

The Grid AOI Crawler now considers any sub-directories of a Petrosys project as part of that project - as long as the sub-directories are not projects in their own right.

[General Bug Fixes](#)

CGM Display - Significant performance improvement in display of certain types of CGM files 50093

Certain types of CGM files, specifically ones out of Petrel with SDI that have large embedded bitmaps, are now orders of magnitude faster to display.

Grid AOI crawler crashed when attempting to read certain corrupt grid files 50007

In 17.6.3, certain corrupt grid files could cause the grid crawler to crash.

Grid AOI crawler sources the grid creation date from the corresponding header information 49867

In 17.6.3, the creation date was determined from the file system, but this has been changed to be read from the grid header as this gives a more accurate result.

Grid AOI crawler treats grids with a Local XY CRS as errors 50014

Local XY CRSs cannot be reprojected, so the grid outlines cannot be reliably converted to the output CRS.

Grid AOI Crawler writes out grid outlines where a preferred CRS transform is not set 49866

The way that the Grid AOI Crawler handles CRS conversion where a preferred transform is not set is now consistent with other parts of the software - this situation is treated as a warning rather than an error and the outline polygons are written to the generated file.

Mapping

Bug Fixes

Contours outside zoom area are now displayed correctly 49875

Fixed bug where contour lines were not displayed after edit/modify of a contour layer when in zoom in state, then continue to zoom out to full view.

Mapping/Spatial

Bug Fixes

Thematic scan no longer crashes for dbMap GIS 49927

Display/GIS no longer crashes when scanning attribute value for dbMap GIS data source.

Surface Modeling/Gridding

Bug Fixes

Grid & Well Tie of well data always uses datconnect license - even for WDF 50099

Gridding from well datasources checks out correct licenses

Enhancements

Petrosys release 17_6_3 [10 entries]

Client specific

[49664](#) Increased length of Line Name field from 9 to 20 characters in Well Header dialog (Santos only)

General

[49262](#) Added Grid AOI crawler

General - User interface

[48920](#) Improved consistency of right mouse button behaviour in the Spatial Editor

[47567](#) Spatial Editor now allows ESC key to be used to exit options in the same way as the RMB

[48918](#) Spatial Editor now allows selections to be modified using the CTRL key

Import and Export

[47645](#) Data may now be loaded from OGP P1/11 files with a non-standard file extension

Mapping/Spatial

[44924](#) Azimuth, length, color and proportion of point data symbols may now be scaled using attribute values

Surface Modeling

[37878](#) Added scripting support for text boxes to Draw Map option

[49618](#) Directories can now be created as part of Surface Modeling workflows

[36252](#) Velocity grids can now be created using using stacking velocity data

Bug Fixes

Petrosys release 17_6_3 [9 entries]

Function lists

[49813](#) Fixed crash in Assets loan status screen

GIS Editor

[38900](#) Color gradient now applied correctly for well symbols extracted from CGM files and displayed via Display GIS with thematic mapping

Import and Export

[49365](#) Exporting contours to a Petrosys polygon file using the RMB export option now functions correctly

[49414](#) Spatial Data Translator now writes missing values as empty cells when transferring data to Excel

Mapping/Spatial

[47240](#) Creating Excel worksheet with very long name no longer causes an error

[47874](#) Polygon Clip panel now defaults to the last used clipping method

[47278](#) Shape generation in the Spatial Editor now applies the correct ratio when anisotropy is applied

[48919](#) Smoothing in Spatial Editor now comparable with smoothing in CFP Editor

Petra plugin

[49719](#) Fixed IHS Petra connectivity issue

Detailed Release Notes

Petrosys release 17_6_3 [19 entries]

[Client specific](#)

[Enhancements](#)

Increased length of Line Name field from 9 to 20 characters in Well Header dialog (Santos only) 49664

The length of the Line Name field in the Basic Well header dialog has been increased to allow for 20 characters.

[Function lists](#)

[Bug Fixes](#)

Fixed crash in Assets loan status screen 49813

Assets loan status screen starts and functions as expected.

[General Enhancements](#)

Added Grid AOI crawler 49262

A grid AOI crawler has been implemented, designed to crawl directory structures for Petrosys grid files, generating a polygon file containing the outline of each grid located. The project name, directory path, file name, creation date, most recent modification date, creator, CRS and Z value range are also recorded as polygon attributes.

[General - User interface](#)

[Enhancements](#)

Improved consistency of right mouse button behaviour in the Spatial Editor 48920

Using the right mouse button (RMB) while operating various tools in the Spatial Editor will now exit the tool and return the editor to feature selection mode. This makes the operation of the editor more consistent with other parts of the application.

Spatial Editor now allows ESC key to be used to exit options in the same way as the RMB 47567

In the Spatial Editor, the right mouse button (RMB) is frequently used as a means of exiting a particular function, or to stop a particular action. In these contexts, the escape key (ESC) can now also be used to achieve this.

Spatial Editor now allows selections to be modified using the CTRL key 48918

The CTRL key can now be used to modify selections made while using various tools in the Spatial Editor. Holding the CTRL key and left clicking features in the Editor will add items to the current selection. Left clicking features which have already been selected will remove those items from the current selection. Multiple items can be added/removed from the current selection in the same way by clicking and dragging the mouse cursor around the required features.

[GIS Editor](#)

[Bug Fixes](#)

Color gradient now applied correctly for well symbols extracted from CGM files and displayed via Display GIS with thematic mapping 38900

Well symbols loaded from CGM files will now be colored correctly using the selected gradient when displayed using Display GIS and with thematic mapping applied.

[Import and Export](#)

[Enhancements](#)

Data may now be loaded from OGP P1/11 files with a non-standard file extension 47645

Previously, loading OGP P1/11 files required the file names to have a standard .p111 extension. This limitation has been removed, allowing the OGP import facilities to load P1/11 files with any file name.

[Import and Export](#)

[Bug Fixes](#)

Exporting contours to a Petrosys polygon file using the RMB export option now functions correctly 49365

The Export option available after right clicking a contour displayed on the Mapping canvas now functions correctly when used to export the specified contour to a Petrosys polygon file (.ply). In previous versions an error would be displayed and only the polygon header information was written to the output file.

Spatial Data Translator now writes missing values as empty cells when transferring data to Excel 49414

The Spatial Data Translator now writes missing values from the input data source as empty cells when the output data source is set to Excel. Previously, a zero (0) was written to each cell containing a missing value.

[Mapping/Spatial](#) [Enhancements](#)

Azimuth, length, color and proportion of point data symbols may now be scaled using attribute values 44924

The azimuth, length, color and proportion of symbols at point data locations may now be scaled using attribute values extracted from the point data set when displayed in Mapping using Display GIS. Scaling may be applied using the new options which have been added under the thematic mapping tab. The implementation of these options allow for the effective mapping of vector quantities at point locations, for example ocean currents or stress on faults.

[Mapping/Spatial](#) [Bug Fixes](#)

Creating Excel worksheet with very long name no longer causes an error 47240

An error is no longer displayed when creating an Excel worksheet with a very long name in the Spatial editor. Previously, creating an Excel worksheet with a name longer than 31 characters would result in a Fatal Assert error.

Polygon Clip panel now defaults to the last used clipping method 47874

The Polygon Clip panel in the Spatial Editor now defaults to the last used Clipping Method when re-launched. Previously, the panel would always default to Erase Outside, regardless of the previously used method.

Shape generation in the Spatial Editor now applies the correct ratio when anisotropy is applied 47278

Anisotropy applied to shapes generated using the Spatial Editor will now use the correct ratio. Previously, the correct ratio was not being applied, although anisotropy was visibly being expressed in the shapes generated.

Smoothing in Spatial Editor now comparable with smoothing in CFP Editor 48919

The behaviour of the smoothing tool in the Spatial Editor is now closer to the behaviour of the same tool in the CFP editor.

[Petra plugin](#) [Bug Fixes](#)

Fixed IHS Petra connectivity issue 49719

An issue which prevented connections to IHS Petra data sources was introduced in Petrosys 17.6.1. This issue has now been resolved and IHS Petra connectivity has been restored.

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

Added scripting support for text boxes to Draw Map option 37878

Text area and posting coordinates in /Display/Drawing Tools/Text can now be incorporated into maps generated using the Draw Map function in Surface Modeling.

Directories can now be created as part of Surface Modeling workflows 49618

Directories can now be created as part of Surface Modeling workflows. The option is invoked by selecting /Tools/Create Directory... from the main menu of the Surface Modeling application, then using the field provided to define the name and location of the directory.

Velocity grids can now be created using using stacking velocity data 36252

Surface Modeling can now be used to grid velocities derived from stacking velocity data. This functionality is made available as a new input data source in the Create Grid option, which can be used to calculate and model raw, interval or average velocities from stacking velocity data and time(s). Stacking velocity data can be extracted from a SEG Y or ASCII file, or loaded directly from a Petrosys SDF or dbMap database. The time(s) used to interpolate velocities can be read from third party or Petrosys grids, or set at a constant value.

Enhancements

Petrosys release 17_6_2 [10 entries]

Client specific

- [49061](#) Avoid changes to Petrel GUID values when updating casing, tubing, perforations and hydraulic fractures - Santos only
- [49095](#) Changed comment fields to multi-line text fields on RFT, FHC and SWC dialogs - Santos only
- [48054](#) Improved Well query performance when using well selection lists - Santos only

Configuration/Database Connections

- [26697](#) ArcSDE - Support added for "Operating system authentication" method when using Direct Connections

Connections, import and export

- [44140](#) Add support for OpenWorks R5000.10

Mapping

- [48149](#) Contour labeling manual correction mode allows map sheet edit when AOI is not changed
- [48866](#) Improved performance of Culture/GIS functionality using spatial queries

Petrel plugin

- [25234](#) CRS is now automatically detected for connections to Petrel

Surface Modeling

- [48369](#) Added looping over strings from external file
- [47531](#) Scripting function to tokenize string parameter

Bug Fixes

Petrosys release 17_6_2 [12 entries]

3D Viewer

- [48813](#) 3D Viewer no longer crashes on Linux when .3dm contains IHS Kingdom survey

Client specific

- [49164](#) Wells Import Wizard reading Reservoir Summary attributes from dbMap from the correct instance - Santos only

Connections, import and export

- [49255](#) Map-based Export Spatial Data now writes attributes with names longer than 10 characters to shapefile

Graphics/Plotting and Hardcopy

- [49295](#) Windows printing no longer clips some of map when printing to physical printers

Mapping

- [49250](#) Contours on rotated map sheet were not drawn correctly
- [49151](#) Export to PDF with map contents only now has correct contours
- [49397](#) Fixed crash when running with low memory and displaying grids with many polygon points
- [44610](#) WMS Capabilities option now shows results

Mapping/Spatial

- [49498](#) Display/GIS - Point symbol style no longer cleared when underlying Excel data is modified

Surface Modeling

- [47682](#) Preview list line count for Text input is again shown
- [49353](#) Volumetrics text log area report for thickness grids with multiple polygons fixed

Web map server

- [48982](#) WMS server handles layer selection and reordering

Detailed Release Notes

Petrosys release 17_6_2 [22 entries]

3D Viewer

Bug Fixes

3D Viewer no longer crashes on Linux when .3dm contains IHS Kingdom survey 48813

There was a bug in 3D viewer where it could crash on Linux when opening a .3dm file that included a 3D seismic survey display layer from IHS Kingdom project. This has now been fixed.

Client specific

Enhancements

Avoid changes to Petrel GUID values when updating casing, tubing, perforations and hydraulic fractures - Santos only 49061

When writing casing, tubing, perforations and hydraulic fracture data to Petrel an attempt is made to retain existing Petrel GUIDs by updating the existing completion data rather than deleting and re-creating it. This is done by writing a Petrosys unique identifier against each completion value in Petrel and then using this value for future data matching. If the Petrosys unique identifier does not exist in Petrel, an attempt is made to match the existing data based on attribute values.

Changed comment fields to multi-line text fields on RFT, FHC and SWC dialogs - Santos only 49095

The comment/remarks fields have been changed from single line text to multi line text entry fields on the RFT, FHC and SWC dialogs.

Improved Well query performance when using well selection lists - Santos only 48054

Query performance has been significantly improved (with up to 30x improvement during testing) when querying wells with a well selection list against the Santos database schema.

Client specific

Bug Fixes

Wells Import Wizard reading Reservoir Summary attributes from dbMap from the correct instance - Santos only 49164

When reading Reservoir Summary attributes from dbMap and there were multiple instances of the one sand for the one well, dbMap would read the attributes from the first instance only. This would affect the exchange of Reservoir Summaries using the Wells Import Wizard when dbMap was the input data source and the wells being exchanged had multiple instances of a sand with differing attributes.

Configuration/Database Connections Enhancements

ArcSDE - Support added for "Operating system authentication" method when using Direct Connections 26697

Support has been added for the "Operating system authentication" method of connecting to ArcSDE Geodatabases. This method uses the current operating system user's credentials to authenticate against the ArcSDE database without the need to prompt the user on connection and without the need for Petrosys to save any passwords.

To enable this set the "ExternalUser" property in the connections.xml entry to "yes" and remove the "UserID" property. For example the following connections.xml snippet will connect using this method to the SqlServer Geodatabase *mygeodatabase* on *mysdedatabasehost\mydbinstance*:

Connections, import and export Enhancements

Add support for OpenWorks R5000.10 44140

Petrosys now supports OpenWorks R5000.10 through the Petrosys OpenWorks and SeisWorks links.

Refer to help topic 'Multiple Connectivity - Configuration - OpenWorks' for details connecting to a R5000.10 installation.

Note: R5000.10 support requires the Version tag to be set to **R5000.10** in connections.xml.

Connections, import and export

Bug Fixes

Map-based Export Spatial Data now writes attributes with names longer than 10 characters to shapefile 49255

Exporting spatial data to shapefile from Mapping will work more robustly. In previous version, Export Spatial Data did not export attributes with name longer than 10 characters to shapefile.

Graphics/Plotting and Hardcopy

Bug Fixes

Windows printing no longer clips some of map when printing to physical printers 49295

Fixed printing on Windows clipping map to incorrect size when printing to physical printers.

Mapping

Enhancements

Contour labeling manual correction mode allows map sheet edit when AOI is not changed 48149

Added support to keep manually corrected contour labels when a map sheet is edited in a way that does not affect the CRS and area of interest, e.g. adding map sheet margins, map sheet annotations.

Improved performance of Culture/GIS functionality using spatial queries 48866

Culture and other GIS functionality that uses spatial queries has had a performance boost by the simplification of UID checking.

Mapping

Bug Fixes

Contours on rotated map sheet were not drawn correctly 49250

Fixed a bug where contours were not drawn rotated on a rotated map sheet.

Export to PDF with map contents only now has correct contours 49151

Fixed a bug in Mapping/File/Export/PDF where the PDF contained contour layers with a wrong offset.

Fixed crash when running with low memory and displaying grids with many polygon points 49397

A rare crash has been fixed when displaying grids with many embedded fault or clipping polygons when running low on memory. This crash was very unlikely to occur in the 64 bit version of Petrosys.

WMS Capabilities option now shows results 44610

The "Capabilities" button in the option to display a WMS image on the map (/Display/Picture/Raster/WMS) now works. Previously it would give an error about an invalid temporary file path on Windows or an obscure protocol error on Linux.

Mapping/Spatial

Bug Fixes

Display/GIS - Point symbol style no longer cleared when underlying Excel data is modified 49498

Point data displayed from Excel using Display GIS in dynamic mapsheet mode is now re-drawn correctly. Previously, the display could revert to the default point style if the Excel file was modified prior to the layer being re-drawn.

Petrel plugin

Enhancements

CRS is now automatically detected for connections to Petrel 25234

In previous versions of Petrosys, the CRS had to be manually selected when connecting to a Petrel project for the first time. Now the Petrel project's CRS is mapped to Petrosys automatically where possible, streamlining connections to Petrel. If no mapping is possible, Petrosys prompts for a CRS as in previous versions.

Surface Modeling

Enhancements

Added looping over strings from external file 48369

Looping over items stored in an external text file is now supported by scripting.

Scripting function to tokenize string parameter

47531

A new scripting function has been added that can split input string with specified delimiter(s).

Surface Modeling

Bug Fixes

Preview list line count for Text input is again shown

47682

17.6 introduced a bug where Surface Modeling's XYZ gridding data source panel did not show summary information in the file preview. This has now been fixed.

Volumetrics text log area report for thickness grids with multiple polygons fixed

49353

The total contributing area from all polygons for a thickness grid now shows the correct value in the text-based report. Previously the text report contained the total area of all polygons, while the XML and HTML reports contained contributing area.

Web map server

Bug Fixes

WMS server handles layer selection and reordering

48982

The Petrosys WMS server now only returns a raster image containing the selected layers. In 17.6sp1 it was possible for the WMS server to return an image containing data from layers that were not selected.

Enhancements

Petrosys release 17_6_1 [11 entries]

Connections, import and export

- [48357](#) Added a configurable timeout for the Dispatch Server forking child processes
- [43694](#) Formation tops can now be imported into OpenWorks on Linux
- [47400](#) Formation tops named with 'upper' and 'lower' now handled similar to 'top' and 'base' by the Wells Import Wizard
- [48898](#) Petrosys now supports Paradigm 2011.4 and Paradigm 14.1

dbMap

- [36112](#) Changes to existing panels and associated sqc for PPDM 3.8

General

- [44916](#) Petrosys Flex license usage now reports an error for per license user usage when an old version license server is in use

Mapping

- [44581](#) Raster image and PDF export now restores previously used output folder when re-opened

Mapping/Coordinate Reference Systems

- [37579](#) CRS EPSG database upgraded to version 8.5

Mapping/Editors

- [45509](#) Performance improved for data tables
- [47125](#) Spatial Editor performance improved for operations on contours

Mapping/Map Sheets

- [41769](#) Map sheet creation using Pick on Map now allows use of a map sheet template

Bug Fixes

Petrosys release 17_6_1 [29 entries]

3D Viewer

[43901](#) Suffixes used by Save to Raster now consistent

Connections, import and export

[48624](#) Dispatch connections to SeisWorks now function correctly

dbMap

[48540](#) dbMap SQL functions with number arguments now correctly handle NULL as an input

Import and Export

[47994](#) Grid Exchange CRS validation no longer fails when using 'Project default' CRS

[47365](#) Spatial Data Translator no longer allows Excel XYZ columns to be mapped to attribute values

[48106](#) Spatial Data Translator now handles contour lines with more than 10000 points

[47305](#) Spatial Data Translator now includes contour level in wrapper folder for KML files

[47310](#) Spatial Data Translator now loads input text file tsk files saved from 17.5 or earlier correctly

[47307](#) Spatial Data Translator now resets input fault settings correctly

[48092](#) Z-MAP "vertex" format files with geographic coordinates are generated with correct codes for the coordinate columns

[47436](#) Z-values may now be written to Petrosys Culture file point groups

Mapping/Contours

[48151](#) Contours exported from maps now output as single continuous lines

[48627](#) Error message no longer displayed when contours outside map sheet area

[48323](#) Gaps no longer left in contour lines by manual overpost correction

[47829](#) Moving multiple labels on same contour line no longer causes overdrawn label

[48325](#) Multiple labels on the same contour line can now be aligned

Mapping/Images

[48970](#) WMS display no longer crashes when using the linux rhel5 64-bit version of Petrosys

Mapping/Spatial

[48865](#) Line styles now read correctly for text and Excel files displayed in pre-17.6 dbm files

[48293](#) Point symbol style no longer cleared when underlying Excel data is modified

Mapping/Wells

[47518](#) Convert To True/Grid North buttons now correctly activated in Well Directional Survey Header panel

[45619](#) Creating new Well Checkshots now correctly determines SOURCE value when not provided by the user

[46483](#) OpenWorks Well formation tops dialog no longer truncates surface names

Paradigm-Epos plugin

[47364](#) Resolved issues when loading many wells from Paradigm Epos

Surface Modeling

[48655](#) Excel files with carriage return character in column headers now function correctly in Surface Modeling

[48273](#) Meta data now written to the output grid narrative by Bias gridding

[46529](#) Petrel ASCII format files now gridded correctly

[47552](#) Tools/Draw Map no longer crashes when selecting a template dbm with no associated map sheet

Web map server

[48272](#) Fixed response of WMS server using https protocol to "stop" command

Well data

[44377](#) Fixed Well Symbol Generator in Petrosys installs in C:\Program Files

Detailed Release Notes

Petrosys release 17_6_1 [40 entries]

3D Viewer

Bug Fixes

Suffixes used by Save to Raster now consistent

43901

File suffixes used by the Save to Raster option are now consistent with other parts of the application.

[Connections, import and export](#) [Enhancements](#)

Added a configurable timeout for the Dispatch Server forking child processes

48357

The Petrosys Dispatch Server can now be configured with a timeout to wait when launching dispatch server process for connecting to GeoFrame and OpenWorks on Linux from Windows.

The new timeout configuration is part of the generated initialisation script ps_dispatch and can be configured as needed.

Formation tops can now be imported into OpenWorks on Linux

43694

The Wells Import Wizard has been updated to allow formation tops to be imported into an OpenWorks project.

Formation tops named with 'upper' and 'lower' now handled similar to 'top' and 'base' by the Wells Import Wizard

47400

The Wells Import Wizard now automatically assigns Top and Base values to formations based on the input formation names under a wider range of circumstances. Previously values were assigned using the sub-strings 'top' and 'base'. This functionality has been extended to also use the sub-strings 'upper' and 'lower'.

Petrosys now supports Paradigm 2011.4 and Paradigm 14.1

48898

Petrosys now has support for Paradigm 2011.4 and Paradigm 14.1.

Connections, import and export

Bug Fixes

Dispatch connections to SeisWorks now function correctly

48624

A bug introduced in 17.5.4, which caused SeisWorks dispatch connections to fail when trying to connect, has been fixed.

[dbMap Enhancements](#)

Changes to existing panels and associated sqc for PPDM 3.8

36112

The efficiency and ease of use of dbMap pop-up data display/editing panels has been made consistent across all PPDM 3.8 well panels.

New Record Primary Key Auto-Creation - the "Create new record" function now has new auto population business rules for primary key fields.

Pop-up Reference Data Selectors - all data selection pop-up windows are now structured into one of four standard selection screens.

Standard Tabs:

- All tables that have a REMARK or COMMENT column now have a standard "Remarks" tab.
- All tables now have a "Record Info" tab showing the database create/update history of the record.

Numeric Units of Measure - all numeric measured fields now display the unit of measure from the PPDM_COLUMN.DEFAULT_UOM_ID field next to the numeric value.

dbMap Bug Fixes

dbMap SQL functions with number arguments now correctly handle NULL as an input

48540

Petrosys dbMap SQL functions which have a number as their argument now correctly return a result of NULL when the input was also NULL. Previously, an incorrect result of 0.00 was returned.

[General Enhancements](#)

Petrosys Flex license usage now reports an error for per license user usage when an old version license server is in use 44916

Per-usage license reporting (showing individual users of particular licenses) requires a reasonably current version of the Flex license server. This has been improved to display an error message when individual license usage could not be reported due to the license server version not being current enough.

Import and Export

Bug Fixes

Grid Exchange CRS validation no longer fails when using 'Project default' CRS 47994

CRS validation in the Grid Exchange tool no longer fails when using an input or output connection with the CRS set to "Project default". Connections using a "Project default" CRS may now be used with the tool, which was previously not possible owing to this failure.

Spatial Data Translator no longer allows Excel XYZ columns to be mapped to attribute values 47365

Attribute definition in the Spatial Data Translator no longer allows columns containing XYZ values in Excel files to be written to the output files as attribute values.

Spatial Data Translator now handles contour lines with more than 10000 points 48106

The Spatial Data Translator now writes output contour lines with more than 10000 points correctly. In previous versions, lines with more than 10000 points would be written in segments.

Spatial Data Translator now includes contour level in wrapper folder for KML files 47305

When writing contour data to a KML file using the Spatial Data Translator, the contour level is again used as the KML folder name.

Spatial Data Translator now loads input text file tsx files saved from 17.5 or earlier correctly 47310

The Spatial Data Translator now loads tsx files created in 17.5 or earlier correctly. In previous versions, the Spatial Data Translator would not work correctly in conjunction with these files.

Spatial Data Translator now resets input fault settings correctly 47307

Values used for input fault files are now set correctly by the Spatial Data Translator. In 17.6, in some cases, the input fault file fields (e.g. selected groups) may not have been set correctly.

Z-MAP "vertex" format files with geographic coordinates are generated with correct codes for the coordinate columns 48092

The Spatial Data Translator has the capability to write Z-MAP "vertex" format files. This format contains a numeric code to identify the type of columns. In previous versions, when geographic coordinates were written, the column codes were incorrectly set to the projected column codes.

Z-values may now be written to Petrosys Culture file point groups 47436

The Spatial Data Translator can now be used to write Z-values to Culture point groups from supported input data sources.

Mapping

Enhancements

Raster image and PDF export now restores previously used output folder when re-opened 44581

The output directory used by the Export PDF and Raster options now defaults to the previously used directory when re-opened. Previously, both options would default to the project directory when re-opened, regardless of the last used output directory.

Mapping/Contours

Bug Fixes

Contours exported from maps now output as single continuous lines 48151

A bug has been fixed, which caused contours exported from a map (using the right mouse button context menu option) to be output as line segments interspersed with gaps. This behaviour has been rectified. Contours exported using this option are now output correctly as a single, continuous line.

Error message no longer displayed when contours outside map sheet area

48627

Mapping no longer displays an error message when all contours are outside the current map sheet area. In 17.6.0, the error message cn:86 would be displayed, incorrectly stating there was a problem with the contour file.

Gaps no longer left in contour lines by manual overpost correction

48323

Manual overpost correction on contour data no longer leaves a gap in the contour line when the undo command is invoked after removing a label.

Moving multiple labels on same contour line no longer causes overdrawn label

47829

Contour lines will now be drawn correctly when moving more than one label on the same line. Previously, the line could sometimes be drawn over the labels being moved under these circumstances.

Multiple labels on the same contour line can now be aligned

48325

In 17.6, when more than one label on the same contour line was selected in manual correction mode, any alignment operation did not align all the labels correctly. This bug is now fixed in 17.6.1.

[Mapping/Coordinate Reference Systems Enhancements](#)

CRS EPSG database upgraded to version 8.5

37579

The EPSG CRS data available within Petrosys has been upgraded from version 7.11 to version 8.5. Please refer to <http://www.epsg.org> for specific details of changes between these versions.

[Mapping/Editors Enhancements](#)

Performance improved for data tables

45509

The responsiveness of the Spatial Editor user interface has been improved in a number of scenarios, particularly when displaying spatial data tables with many rows.

Spatial Editor performance improved for operations on contours

47125

The performance of the Spatial Editor when applying operations (such as smoothing or bending) to one or more selected contours has been significantly improved over what was offered in 17.6.0.

[Mapping/Images](#)

[Bug Fixes](#)

WMS display no longer crashes when using the linux rhel5 64-bit version of Petrosys

48970

In Petrosys versions 17.5.3 and 17.5.4 (Linux 64-bit only), Mapping/Display/Display Raster/WMS option would crash when attempting to connect to a WMS server. Other platforms were unaffected by this issue.

[Mapping/Map Sheets](#)

[Enhancements](#)

Map sheet creation using Pick on Map now allows use of a map sheet template

41769

The styles used for creating a new map sheet using the Pick on Map options (/MapSheet/New/Pick on Map/...) can now be set using an existing map sheet.

[Mapping/Spatial](#)

[Bug Fixes](#)

Line styles now read correctly for text and Excel files displayed in pre-17.6 dbm files

48865

Line/polygon styles used by Text and Excel files displayed using Display GIS will now be loaded correctly from dbm files created in Petrosys 17.5 and earlier. Previously line styles used by these file types were not being honored in dbm files created in versions earlier than 17.6.

Point symbol style no longer cleared when underlying Excel data is modified

48293

Point data displayed from Excel using Display GIS is now re-drawn correctly. Previously, the display could revert to the default point style if the Excel file was modified prior to the layer being re-drawn.

Mapping/Wells

Bug Fixes

Convert To True/Grid North buttons now correctly activated in Well Directional Survey Header panel 47518

A bug has been fixed which caused the Convert To True North/Grid North buttons to only become active after changes were saved in the dialog. These buttons now become active when the user makes any modification to the directional survey header, and will prompt to save changes before doing the conversion.

Creating new Well Checkshots now correctly determines SOURCE value when not provided by the user 45619

A problem has been fixed, which could occur when working out the SOURCE of a Well Checkshot survey created in a dbMap database not requiring a username and password. This has now been fixed by utilising the USER information of the dbMap connection if no SOURCE is provided on the New Checkshot dialog by the user.

OpenWorks Well formation tops dialog no longer truncates surface names 46483

A bug has been fixed that was causing the names of OpenWorks surfaces to be truncated in the Well formations tops dialog.

Paradigm-Epos plugin

Bug Fixes

Resolved issues when loading many wells from Paradigm Epos 47364

When loading many wells from Paradigm Epos, previous versions of Petrosys would crash if the time to prepare the data for transfer exceeded five minutes. This issue has been resolved by reducing the number of wells being transferred in a single transaction and the addition of an SQC-configurable timeout value for Paradigm connections.

Surface Modeling

Bug Fixes

Excel files with carriage return character in column headers now function correctly in Surface Modeling 48655

Attempting to grid an Excel file with header names containing a carriage return character previously produced the error message "ut:2580 Error processing XML file". This issue has now been fixed, allowing these files to be used correctly in Surface Modeling.

Meta data now written to the output grid narrative by Bias gridding 48273

Bias gridding now stores information about the parameters used by the gridding task in the grid narrative meta data.

Petrel ASCII format files now gridded correctly 46529

A bug has been fixed which prevented Petrel ASCII format files from being gridded successfully. Previously, some files using the format would fail in gridding, despite being successfully displayed in mapping using the Display GIS option.

Tools/Draw Map no longer crashes when selecting a template dbm with no associated map sheet 47552

A crash has been fixed which occurred when the Draw Map option (/Tools/Draw Map) was used in conjunction with a template dbm that used a map sheet definition file that could not be found. A warning is now displayed, stating that the map sheet definition associated with the selected dbm file cannot be found.

Web map server

Bug Fixes

Fixed response of WMS server using https protocol to "stop" command 48272

WMS server configured to run with SSL now handles "stop" commands correctly.

Fixed Well Symbol Generator in Petrosys installs in C:\Program Files 44377

The Well Symbol Generator (/Tools/Well Symbol Generator) now functions correctly when run from installations of Petrosys in C:\Program Files\Petrosys\.

Enhancements

Petrosys release 17_6 [89 entries]

3D Viewer

- [42680](#) Added support for File Geodatabases to 3D Viewer point data visualisation
- [41044](#) Improved quality of movies generated from animations

Administration/dbMap

- [30032](#) Added update history to the Code List Editor in Mapping
- [39123](#) Editing general PPDM Reference Tables now functions correctly on SQL Server connections
- [41789](#) Improved layout of export dialog in Stored SQL Queries & Reports editor

Configuration

- [33140](#) Added a configuration option to allow diagnostics to be turned on by default
- [42175](#) Added support for cross platform directory references to Path Mapping and Temporary Files

Configuration/Database Connections

- [40077](#) Dispatch connection dialog now shows the Name tag from connections.xml if it exists
- [39797](#) Increased maximum length of dispatch server names to 80
- [29435](#) Streamlined DUG Insight, IHS Kingdom, IHS Petra, ODM and SeisWare connection establishment

Connections, import and export

- [37031](#) Added Export Spatial to RMB options for Orthocontours displayed in Mapping
- [41617](#) Added filtering, output attribute definition and merge rules to Spatial Data Translator
- [24640](#) Added Import/Export Petrel gradients
- [41731](#) Added Petrel as an input data source to Fault Stick Exchange
- [42321](#) Added support for 2D SEG Y as an input source to dbMap seismic data transfer
- [42078](#) Added support for additional data sources in 3D Seismic Surface Exchange
- [45964](#) Added support for definition of X, Y and Z attributes for Excel
- [41732](#) Added support for IHS Kingdom polygon files as an input data source to the Spatial Data Translator
- [45247](#) Changed default Excel output type from XLS to XLSX
- [40174](#) Exporting 3D seismic surface to XYZ now also supports Inline-Xline-Z
- [40256](#) Paradigm Epos41 log file now written to project directory
- [42088](#) Petrosys Exchange - Read and Write grids between third-party data sources
- [46210](#) Replaced "increment" with "decimation" in Stacking Velocities Exchange
- [33987](#) Spatial Data Translator now utilises memory more efficiently

dbMap

- [39447](#) Added wells & seismic line edit lists for DUG Insight®, IHS Petra, Paradigm-Epos®, Petrel and SeisWare™
- [28939](#) dbMap seismic import now prompts for CRS
- [39684](#) Enabled selection of OpenWorks, SeisWorks and GeoFrame connection prior to listing projects
- [38549](#) Increased the maximum length of query names imported using Stored SQL Queries & Reports

dbMap - User interface

- [41550](#) Improved wording of error message displayed for SQLite error 14
- [42039](#) Removed the "Drop a Role..." button from Mapping/Admin/Database/Security/Roles... screen
- [43603](#) Updated the edit list screens menu items to comply with Petrosys user interface standards

General

- [37162](#) Added ability to graphically plot any two values from a scrolled list
- [46104](#) Dropped support for Red Hat Enterprise Linux 4
- [43242](#) Improved application startup time
- [33299](#) Spatial data may now be written to Excel

General - graphics

- [41662](#) Improved line style for unconformity planes (line style 145)

General - User interface

- [43017](#) Added "Select visible" and "Deselect visible" RMB menu options to list dialogs
- [31052](#) Additional icons added for existing features
- [45137](#) Changed input sequence for interactive rectangle definition using mouse
- [45193](#) Fixed pitch font on Linux is now more readable
- [45194](#) Fixed pitch fonts replaced with proportional fonts
- [41089](#) Improved file selectors on Windows
- [42300](#) Platform specific menu options now only visible on correct platform

Graphics/Plotting and Hardcopy

- [42041](#) Increased maximum size of raster files created using Petrosys raster drivers on 64 bit systems

Help

- [43615](#) Added table of contents to help topics
- [43338](#) Revised help documentation for creating and editing bubble maps
- [38978](#) Significant revision of "dbMap Import/Export" documentation

Import and Export

- [43668](#) Added reset option for fault names in Fault Stick exchange and modified automatic log file naming convention
- [43667](#) Added reset option for seismic line names in 3D Seismic Surface exchange and modified automatic log file naming convention
- [41616](#) Added support for direct read/write of IHS Kingdom ASCII culture files

- [37784](#) Added support for importing 2D seismic lines from OGP "Px/11" data exchange files
- [41327](#) Added support for importing multiple 2D SEG Y files
- [42521](#) Added Survey Name column to dbMap seismic import staging area
- [43669](#) Changed naming convention of log file generated by Stacking Velocities Exchange
- [42166](#) Duplicate point/value pairs in FBR files now ignored by uphole import
- [37331](#) Enabled inversion, offset and re-scaling when importing third-party grids and 3D surfaces
- [34614](#) WDF Import panel now sorts input data correctly according to data type

Mapping

- [33476](#) Improved formatting of dbMap checkshot displays
- [40589](#) Reduced ambiguity of directional survey north reference
- [37365](#) Sun shaded grid display improved to reduce noise
- [35585](#) Upgraded scrolled list used by dbMap 2D Seismic Import

Mapping/2D Seismic

- [35185](#) IHS Kingdom seismic line header panel now consistent with other seismic line header panels
- [41628](#) Queries for 2D seismic line data may now return multiple columns

Mapping/Contours

- [11917](#) Improved Contour Annotations

Mapping/Editors

- [27022](#) WDF Editor now preserves well and zone selection after reopening

Mapping/Spatial

- [41705](#) Added ability to back interpolate from grids/surfaces to spatial data sources
- [39381](#) Added filtering options to Mapping Display GIS option

Mapping/Surfaces

- [23724](#) Added Z value scaling, inversion and offset to grid and 3D seismic surface display in Mapping
- [43098](#) Performance of maps containing large grid files improved through memory caching
- [44123](#) Survey now automatically selected when displaying 3D seismic surveys from data source containing only a single survey

Mapping/Wells

- [43288](#) Added ability to view WDF checkshot data from Mapping
- [40205](#) Added spider plot view to directional survey header dialog
- [16078](#) Formation thickness can now be displayed along associated well path
- [40384](#) Prompt no longer displayed for CRS if read successfully from SeisWare project

Paradigm-Epos plugin

- [45525](#) Added support for Paradigm 14 on Linux and Windows
- [41738](#) Discontinued support for "Paradigm with EPOS 4 Data Management"

Prospects and Leads

- [44627](#) Prospect names now included when exporting spatial data from map canvas

Seismic data

- [17145](#) Added ability to directly display and contour IHS Kingdom grids
- [44466](#) Added menu option to clear current selection list in SDF module
- [40115](#) Added support for directly display and contouring of DUG Insight grids
- [42031](#) Added support for reading seismic line coordinates when importing SEG Y data to dbMap
- [43659](#) Additional fields made available for selecting 2D seismic lines by wildcard
- [40159](#) Enabled line selection and CRS fields in various text export options

Surface Modeling

- [40528](#) Double clicking a .tsk file in Windows Explorer will now execute Surface Modeling

Surface Modeling/Grid Operations

- [18143](#) Added more comprehensive statistics to GIP file grid statistics option
- [38526](#) Workflow enabled Grid Statistics Inside Polygon and Sampled Data File Statistics

Surface Modeling/Gridding

- [35588](#) Added ability to grid Times and Velocities calculated from checkshots on the fly, as well as different zone depths
- [41952](#) Expanded number of scriptable fields when gridding from WDF

Well data

- [44782](#) Interpreter now read correctly from ODM formation data where value not stored directly in the associated formation top

Bug Fixes

Petrosys release 17_6 [110 entries]

3D Viewer

- [47183](#) 3D Viewer no longer crashes when loading a 3DM with an unsupported Paradigm connection and a replacement is selected
- [46560](#) Fixed black and white color selection for point data layers

Application Launcher

- [45677](#) Petrosys Command Shell now works on KDE desktops

Client specific

- [47324](#) Checkshot survey source lookup list is now correctly populated - Origin only
- [42343](#) dbMap Well RFT panel fields now synchronised correctly with items in the list - Santos only

Configuration

- [43525](#) Command line configuration options now handled correctly
- [42127](#) Export option in the Configuration Tool no longer results in a crash

Connections, import and export

- [43910](#) Connection manager list sort order no longer reset when modifying connections
- [41677](#) Contours imported from text now have contour level written correctly
- [39556](#) Diagnostics window for Export Stacking Velocities option now closed correctly
- [42694](#) Fixed crash when importing seismic lines with line names longer than 20 characters to dbMap
- [32772](#) GeoFrame/CPS-3 faults now correctly assigned to groups when imported to a Petrosys fault file
- [39932](#) IHS Kingdom now returns latest data for a single 2D line or 3D survey if multiple of the same name exist
- [45085](#) Importing grids from text file no longer fails when header lines to skip is not specified
- [41180](#) Improved handling of mixed white space characters in text files
- [41243](#) Linux - Language and locale environment enforced to avoid text file processing issues
- [41720](#) Removed benign error when opening Stacking Velocities Exchange tool
- [45717](#) Spatial Data Translator now honors missing values in culture files
- [47964](#) Using export spatial data to create a new fault file leads to error message

dbMap

- [45616](#) Asset Item / Digital Images use file selector button
- [41902](#) Fixed computation of bottom hole locations for wells stored in PPDM 3.8 databases
- [41904](#) Fixed import of polygon data from dbMap culture

- [41786](#) Fixed instance of queries longer than 2000 characters being truncated by the SQL Editor
- [43979](#) Manual redraw no longer required to preview input seismic data when importing to dbMap
- [42685](#) Selecting Save after initiating a new selection list file no longer writes current changes to the previous file

dbMap - User interface

- [45615](#) Fixed metric/imperial toggle on New Sand Summary dialog
- [43873](#) Fixed selection option in database edit lists

General

- [41782](#) Improved error message used to indicate missing connections.xml file

General - User interface

- [41482](#) Added clearer indication of invalid field input
- [45903](#) dbMap no longer crashes when exporting to a text file from large list
- [39627](#) Eyedropper tool in the Gradient Editor now functions correctly on secondary monitors
- [43646](#) Fields associated with scrolled lists now updated correctly when list selection changed by clicking and dragging the left mouse button
- [29169](#) File selector now honors Windows Explorer view settings
- [46130](#) Fixed crash in embedded web browser
- [43255](#) Fixed initialization of table widget items when filter is enabled
- [40606](#) Fixed instance of decimal places not being used correctly in certain fields
- [46166](#) Improved automatic re-sizing of certain panels
- [40799](#) Improved performance of scrolled list filter dialog

Graphics/Plotting and Hardcopy

- [45342](#) Plotting using raster driver with banding enabled on 64 bit systems no longer causes a crash
- [41875](#) Print panel now uses the correct title bar icon

Help

- [41073](#) Fixed instances of incorrect help page being opened when using the F1 key to invoke the help

Mapping

- [43930](#) Curves created using drawing tools may now be created using the map background color
- [39807](#) File resolution dialog no longer incorrectly triggered by Orthocontours displayed from database grids
- [45798](#) Fixed crash in Mapping when opening truncated or corrupted grid
- [41511](#) Fixed instance of scale bar preview not being drawn beneath the cursor during initial placement
- [23957](#) IHS Kingdom seismic line selection files now handle spaces in line names correctly
- [44124](#) Improved layout of Grid display panel

- [38685](#) Incorrect warning message about invalid units no longer shown for RSO Borneo (ft) based map sheets
- [36873](#) Option to save backup DBM files now works consistently
- [40220](#) Polygon selection now preserved after file name change

Mapping/Bubble Maps

- [46034](#) Fixed instance of bubble maps failing to display for IHS Kingdom data source

Mapping/Coordinate Reference Systems

- [35509](#) Point Conversion now handles DMS with degree symbol and tick mark correctly

Mapping/Map Sheets

- [41737](#) Crash fixed in create map sheet using Data Extent when template map does not exist

Mapping/Spatial

- [41698](#) Added support for degrees character in text files
- [12663](#) Added support for polygons with exclusion zones
- [41752](#) Excel files containing only a single polygon now displayed as closed shapes
- [42672](#) Fixed display of GIS data sources containing features with Oracle single digit GTYPE
- [34483](#) Fixed filters applied to Esri Personal Geodatabases using String attributes in Display GIS
- [40359](#) Sample rate of spatial data displayed from text and Excel now honored after being saved to a DBM file

Mapping/Wells

- [41086](#) Fixed well data selection queries that return multiple columns
- [41760](#) Leading spaces in well annotations no longer ignored
- [44424](#) The directional survey spider plot view for WDF now has enabled buttons when viewing the well from Mapping
- [45618](#) Toggling between metric/imperial no longer disables the Save button on the Well head dialog
- [45249](#) Values posted along a well path are now correctly adjusted to True North

Paradigm-Epos plugin

- [46385](#) 3D Surveys in different CRS units than the owning project are now displayed in the correct location
- [39079](#) Correct Paradigm-Epos user now shown when selecting and displaying formation top
- [41553](#) Positional logs from Paradigm with only two points now ignored
- [44883](#) Surface Modeling tasks using Paradigm on Windows no longer fail due to files being in use

Project Selector

- [37212](#) Access to Administration options in the Project Selector now correctly restricted based on user permissions
- [41910](#) Doubling clicking project template no longer changes project name
- [41509](#) Project Selector properties now updated correctly after changing the project

Seismic data

- [45363](#) Double clicking an SDF now opens the correct file
- [43871](#) DUG Insight 3D bin grids now displayed with the correct area
- [45424](#) Rounding performed by Stacking Velocities Exchange is now consistent across operating systems

Surface Modeling

- [43402](#) Correct grid cell count now displayed in information message for all import formats
- [38151](#) Fixed issue caused by fault files created using Plate Caree no projections
- [38018](#) Improved precision of latitude/longitude coordinates reported by the Surface Modeling text log
- [38016](#) Increased precision of Latitude/Longitude coordinates displayed by Grid Geometry tab

Surface Modeling/Contouring

- [42342](#) Added support for very fine contour intervals
- [38020](#) Fixed issue caused by contour files created using Plate Caree no projections

Surface Modeling/Grid Operations

- [45527](#) Creating new fault file using Dump Fault File no longer displays an error
- [20474](#) Fixed grid coordinate conversion when Method set to Convert origin only
- [47439](#) Fixed problem with area of interest calculation used in gridding
- [40372](#) Forced selection of valid grid file before grid header details may be edited
- [38848](#) Grid coordinate conversion now functions correctly for no projection latitude/longitude grids
- [35071](#) Grid Statistics now attributes the correct gridding algorithm to grids created using Minimum Curvature or Polynomial algorithms
- [41577](#) Improved visual display when using the Regrid option
- [41489](#) Merging grids using the Blend tool now handles instances where the output CRS differs from the default CRS

Surface Modeling/Griding

- [40553](#) Added filtering support for gridding Excel and text files
- [44137](#) AOI using input data now accounts for use Total Depth coordinates when appropriate
- [39517](#) Culture groups now loaded correctly by Data Source Selection panel in Surface Modeling
- [42212](#) Fixed crash in the Sampled Data File (GIP) Editor
- [41340](#) Fixed instance of gridding failure when using Excel as an input data source
- [43487](#) Fixed instances of clipping using polygon file/by distance being applied when not enabled
- [44304](#) Grid narrative retains data source information when using Sampled Data Editor
- [46409](#) Grid/WellTie sometimes incorrectly indicated that fault polygons could be written to correction grid
- [44751](#) Interval velocity horizon order is now calculated from top and base times
- [43020](#) Keep inside faults setting now functions correctly in Well Tie/Phantom gridding
- [44860](#) Removed Use well TD from the panel for WellTie and Phantom

- [44068](#) Sampled Data Editor now shows correct input data where gridding AOI is determined by data
- [44134](#) Sampled data editor window now closed before running gridding task
- [44672](#) Select by option available when adding IESX Seismic data to gridding task now functions correctly
- [41049](#) Text no longer incorrectly states that Faults have been enabled
- [25044](#) TOP and BASE attributes can now be used when gridding from a WDF
- [46281](#) Wells/Total Depth points now used correctly when the interactive GIP editor is enabled

Surface Modeling/Kriging

- [46521](#) Timer estimation indicator no longer shows more than 60 minutes in an hour

Surface Modeling/Volumetrics

- [42104](#) Improved use of exponential notation in volumetrics reports

Well data

- [45103](#) Improved error reporting when upgrading WDF files
- [39507](#) Sorting WDF header summary table by date now functions correctly

Detailed Release Notes

Petrosys release 17_6 [199 entries]

3D Viewer

Enhancements

Added support for File Geodatabases to 3D Viewer point data visualisation 42680

Point data from File Geodatabases may now be displayed in the 3D Viewer, using the /Display/Point Data... option.

Improved quality of movies generated from animations 41044

The quality of movies generated from 3D Viewer animations has been improved. Additionally, the user interface for movie recording has also been re-worked, making it easier to specify the quality required in the output file.

3D Viewer

Bug Fixes

3D Viewer no longer crashes when loading a 3DM with an unsupported Paradigm connection and a replacement is selected 47183

Selecting a replacement connection when loading a 3DM file containing an unsupported Paradigm connection now functions correctly. Attempting to specify a replacement connection would previously result in a crash.

Fixed black and white color selection for point data layers 46560

Black and white color selection for point data layers now works correctly.

Administration/dbMap

Enhancements

Added update history to the Code List Editor in Mapping 30032

An update history is now logged by the Code list editor dialog (/Apps/Mapping/Admin/Reference Tables/General...). The date/time and user responsible for each change made to the code list are both logged.

Editing general PPDM Reference Tables now functions correctly on SQL Server connections 39123

Editing PPDM reference tables (/Apps/Mapping/Admin/Reference Tables/PPDM/General Reference./Edit...) now functions correctly when the primary database connection is set to an SQL Server database.

Improved layout of export dialog in Stored SQL Queries & Reports editor 41789

The layout of the Export panel in the Stored SQL Queries & Reports window (/Apps/Mapping/Admin/Reports/Edit...) has been improved. The query list now expands to fill the available dialog space, and the list can be scrolled both vertically and horizontally to reveal the names of very long queries.

Application Launcher

Bug Fixes

Petrosys Command Shell now works on KDE desktops 45677

The Command Shell option on Linux (File/Command Shell) will now always launch an xterm, rather than the KDE Konsole program. This prevents issues with the konsole program stripping out the Petrosys environment and hence not allowing Petrosys command line programs to run.

Client specific

Bug Fixes

Checkshot survey source lookup list is now correctly populated - Origin only 47324

The lookup list used to populate the Source field when creating a new Seismic Survey now is correctly populated.

dbMap Well RFT panel fields now synchronised correctly with items in the list - Santos only 42343

The Well Repeat Formation Tests panel, data fields are now synchronised with the current item in the list where there are duplicate depth entries. Previously, having multiple items selected would result in these data fields not being updated correctly, thus becoming out of sync.

[Configuration](#)

[Enhancements](#)

Added a configuration option to allow diagnostics to be turned on by default 33140

A new option has been added to the Configuration and Settings dialog under the General/Logging tab, allowing for the selection of a dedicated diagnostics log file. If specified, the diagnostics log file will be generated by default each time Petrosys is run.

Added support for cross platform directory references to Path Mapping and Temporary Files 42175

Both Windows and Linux directories can now be entered into the Path Mapping and Temporary Files sections of the Configuration Tool, increasing the flexibility of either option where Petrosys is in use on multiple platforms.

[Configuration](#)

[Bug Fixes](#)

Command line configuration options now handled correctly 43525

Various configuration options from the command line are now read and applied correctly.

Export option in the Configuration Tool no longer results in a crash 42127

Using the Export button in the Configuration tool no longer results in a crash.

[Configuration/Database Connections](#) [Enhancements](#)

Dispatch connection dialog now shows the Name tag from connections.xml if it exists 40077

The connection name defined in connections.xml was not being displayed on the connection details screen when connecting to a dispatch server. It is now displayed, so long as it is defined in connections.xml.

Increased maximum length of dispatch server names to 80 39797

The maximum number of characters which can be used for a dispatch server name has been increased to 80.

Streamlined DUG Insight, IHS Kingdom, IHS Petra, ODM and SeisWare connection establishment 29435

When adding a new DUG Insight, IHS Kingdom, IHS Petra, ODM or SeisWare connection, the dialog used to either open a project file or select a pre-defined project file is now bypassed if there are no pre-defined project files. This reduces the number of steps required to connect to these project files.

[Connections, import and export](#) [Enhancements](#)

Added Export Spatial to RMB options for Orthocontours displayed in Mapping 37031

Orthocontours displayed in Mapping (using the /Apps/Mapping/Display/Orthocontours... option) can now be written to spatial data formats (such as shapefiles) using the standard right mouse button option Export Spatial.

Added filtering, output attribute definition and merge rules to Spatial Data Translator 41617

A range of filtering, attribute definition and merge options have been added to the Spatial Data Translator. Filters identical to those employed by scrolled lists can now be applied to data transferred using the tool, allowing a range of parameters to be used to selectively transfer data between supported data sources. Attribute definition allows attributes in the output data source to be re-defined to accommodate the incoming data. Finally, merge rules matching those available for other data transfer options have been implemented, granting a finer degree of control over how existing data is treated in the output data source.

Added Import/Export Petrel gradients 24640

Petrel gradients can now be imported/exported as color table files (.alut) using the Petrosys Gradient Editor.

Added Petrel as an input data source to Fault Stick Exchange 41731

The Fault Stick Exchange tool has been extended to include Petrel as an input data source, enabling the reading of fault sticks directly from Petrel and writing them to any of the available output third-party applications.

Added support for 2D SEGY as an input source to dbMap seismic data transfer 42321

2D seismic lines in the SEGY format are now supported by the dbMap Seismic Import option (/Apps/Mapping/Admin/dbMap Data Transfer/Import/Seismic...).

Added support for additional data sources in 3D Seismic Surface Exchange 42078

The Petrosys Exchange series of tools has been significantly enhanced in version 17.6. Both the 3D Seismic Surface and Fault Stick Exchange tools now include the ability to share data directly between more third-party applications.

In addition to the already available input and output data sources, it is now possible to read 3D Seismic Surfaces from Petrel, SeisWare and IHS Kingdom and transfer them directly to any of the output third-party applications. With the addition of Petrel as an output data source, 3D Seismic Surfaces can now also be written directly in to Petrel from any of the input data sources.

Added support for definition of X, Y and Z attributes for Excel 45964

Attribute definition now requires the definition of X, Y and Z columns for Excel

Added support for IHS Kingdom polygon files as an input data source to the Spatial Data Translator 41732

IHS Kingdom polygon files are now supported as an input data source by the Spatial Data Translator.

Changed default Excel output type from XLS to XLSX 45247

The XLSX extension has replaced XLS as the default input and output format for the Excel file format

Exporting 3D seismic surface to XYZ now also supports Inline-Xline-Z 40174

When importing 3D Seismic surface data from third-party applications, Petrosys previously supported writing the data to a text file in X-Y-Z column based format. Petrosys now supports writing to two additional formats: Inline-Xline-Z and Inline-Xline-X-Y-Z.

Paradigm Epos41 log file now written to project directory 40256

The Paradigm connection log file is now placed in the project directory, rather than in the system temporary directory.

Petrosys Exchange - Read and Write grids between third-party data sources 42088

Version 17.6 includes the addition of Grids to the Petrosys Exchange series of tools. New functionality in this release includes the ability to read grids from Petrel, OpenWorks/SeisWorks, GeoFrame, Paradigm-Epos, DUG Insight, Petra, IHS Kingdom and Petrosys Grid files and write them to Petrel, Paradigm-Epos, DUG Insight and Petrosys Grid file.

Replaced "increment" with "decimation" in Stacking Velocities Exchange 46210

The word "increment" has been changed to "decimation" on the Stacking Velocities Exchange panel, as well as on the associated HTML log.

Spatial Data Translator now utilises memory more efficiently 33987

The Spatial Data Translator now makes for effective use of memory when transferring data, reducing the risk of failure when using large data sets, and increasing the overall robustness of the application.

Connections, import and export

Bug Fixes

Connection manager list sort order no longer reset when modifying connections 43910

The connection manager list order would reset to the default ordering when adding or modifying connections. This behaviour has now changed and the list order is maintained.

Contours imported from text now have contour level written correctly 41677

Importing contour data from text to contour files using the Spatial Data Translator now results in the contour level being written correctly to the output contour file.

Diagnostics window for Export Stacking Velocities option now closed correctly 39556

The text log window used by the Export Stacking Velocities option (/Export/Velocities...) will now only be opened when required. Previously, this window would always be open when the option was invoked, and would incorrectly remain open after the option was closed using the Cancel button.

Fixed crash when importing seismic lines with line names longer than 20 characters to dbMap 42694

A crash when importing seismic lines using the Mapping option "/Admin/dbMap Data Transfer/Import/Seismic" with line names greater than 20 characters has been fixed.

GeoFrame/CPS-3 faults now correctly assigned to groups when imported to a Petrosys fault file 32772

Imported GeoFrame/CPS-3 faults are now correctly assigned a group (which can be 'Unassigned' if a user has not selected any). Prior to this change, an invalid group could be selected, which meant the fault file would not be displayed in Mapping.

IHS Kingdom now returns latest data for a single 2D line or 3D survey if multiple of the same name exist

39932

A problem has been fixed where 2D line or 3D survey data was not being read from IHS Kingdom when data existed for multiple lines or surveys of the same name. Petrosys will now retrieve the information for the latest 2D line or 3D survey.

Importing grids from text file no longer fails when header lines to skip is not specified

45085

Grid import via text file (scan) no longer fails when header lines to skip is set to a blank value. The field will also now be set to zero by default.

Improved handling of mixed white space characters in text files

41180

Text files containing both space and tab characters can now be read correctly using the fixed-format option.

Linux - Language and locale environment enforced to avoid text file processing issues

41243

On Linux the application now enforces a locale of "C" to make sure that our text based import and export options work as expected on systems that may have a different locale. In the C locale a period is used for the decimal point, whilst in some locales such as Spanish (es_ES.UTF-8) decimal points are represented by a comma.

Removed benign error when opening Stacking Velocities Exchange tool

41720

A number of error messages which had no affect on the operation of the software will no longer be displayed by the console log in the Stacking Velocities Exchange tool. Many of the errors were of the form "*Designer: Reading properties of the type 0 is not supported yet*" and had no impact on the functionality of the tool itself.

Spatial Data Translator now honors missing values in culture files

45717

Missing data values are now written to culture files correctly by the Spatial Data Translator. Previously, missing values would be written to the output culture file as a 0.0, instead of simply leaving the corresponding field blank.

Using export spatial data to create a new fault file leads to error message

47964

Export spatial data no longer show an invalid "Cannot open fault file" when a new file name was entered.

dbMap Enhancements

Added wells & seismic line edit lists for DUG Insight®, IHS Petra, Paradigm-Epos®, Petrel and SeisWare™

39447

Added new dbMap wells and 2D seismic line edit list support for DUG Insight, IHS Petra (wells only), Paradigm-Epos, Petrel and SeisWare. The new edit lists allow well and 2D seismic lines to be listed, queried, viewed and saved into selection lists which can be used to limit data selection from these data sources in other Mapping screens.

dbMap seismic import now prompts for CRS

28939

When importing seismic data to a dbMap database, a prompt will now be displayed which may be used to specify the CRS of the input data. In previous versions the map sheet CRS was used regardless of the CRS of the input data.

Enabled selection of OpenWorks, SeisWorks and GeoFrame connection prior to listing projects

39684

When establishing a connection to OpenWorks, SeisWorks or GeoFrame, a list of currently configured connections (connections which have been set up for the given data type in connections.xml) will be displayed. The connection selected from this list will determine the projects which are made available when working with that connection (i.e. only projects from the selected connection will be made available). Previously, all projects for all available connections would be listed when establishing a connection to OpenWorks, SeisWorks or GeoFrame. This often resulted in multiple connection details needing to be specified, increasing the work required to establish a connection.

Increased the maximum length of query names imported using Stored SQL Queries & Reports

38549

The maximum name length (in characters) of queries imported from XML files into dbMap using the Stored SQL Queries & Reports option (/Apps/Mapping/Admin/Reports/Edit...) has been increased to 100 characters. Previously dbMap only allowed query names 50 characters or shorter to be imported.

dbMap Bug Fixes

Asset Item / Digital Images use file selector button

45616

Previous versions of the dbMap asset digital image management screen could be confusing when selecting an image file to add as a digital asset.

Now a normal file selector is used to pick image files.

Fixed computation of bottom hole locations for wells stored in PPDM 3.8 databases 41902

Bottom hole locations for wells stored in PPDM 3.8 databases will now be computed correctly. In previous versions, not all required information was being retrieved from the database for computations, resulting in incomplete or incorrect figures being generated.

Fixed import of polygon data from dbMap culture 41904

Importing polygon data from dbMap culture now functions correctly. This functionality was previously inoperable.

Fixed instance of queries longer than 2000 characters being truncated by the SQL Editor 41786

A bug has been fixed, which resulted in the truncation of queries longer than 2000 characters while updating the query description using the SQL Editor (/Apps/Mapping/Admin/Reports/Edit...). This has now been fixed, allowing query descriptions to be edited safely.

Manual redraw no longer required to preview input seismic data when importing to dbMap 43979

When importing 2D seismic lines into dbMap with the graphical display enabled, input seismic data will now automatically be displayed on the current map sheet. Previously, input seismic data would not be displayed until the map was redrawn.

Selecting Save after initiating a new selection list file no longer writes current changes to the previous file 42685

Selecting /File/New while editing a database selection list, then selecting /File/Save to save the new selection list will now display a prompt allowing the name and location of the new selection file to be saved. Previously, selecting /File/Save after initiating a new selection list file would save the changes to the previously selected selection list file.

[dbMap - User interface](#) [Enhancements](#)

Improved wording of error message displayed for SQLite error 14 41550

The error message displayed when attempting to write to an SQLite database which is read only (error code 14) has been improved. More details are now provided indicating exactly what the problem is, and how it may be fixed.

Removed the "Drop a Role..." button from Mapping/Admin/Database/Security/Roles... screen 42039

The "Drop a Role..." button has been removed from the Mapping/Admin/Database/Security/Roles... screen as it is a source of confusion and is potentially destructive. Dropping roles can still be performed manually using SQLPlus/SQLDeveloper or similar tools.

Updated the edit list screens menu items to comply with Petrosys user interface standards 43603

Previous edit list menu names had become out-of-date with Petrosys user interface standards, these have now been updated.

dbMap - User interface

Bug Fixes

Fixed metric/imperial toggle on New Sand Summary dialog 45615

Previously, the metric/imperial toggle button on the New Sand Summary dialog would act on data from the parent Sand Summaries dialog. This has now been fixed and the metric/imperial toggle button now correctly converts the values on the New Sand Summary dialog.

Fixed selection option in database edit lists 43873

In dbMap seismic edit lists the Select/inactive menu option triggered the same action as the Select/all inactive menu option. This has been fixed and will make only the current selection inactive rather than the entire list.

[General Enhancements](#)

Added ability to graphically plot any two values from a scrolled list 37162

It is now possible to plot any two values from a scrolled list by right clicking the list and selecting Analyse Data in Chart. This plots any two values from the list in graphical chart, which can be fully configured as required. The chart also allows a line of best fit to be drawn between the plotted values, along with the corresponding correlation coefficient (R). Charts can be written to a range of image formats, as well as PDF.

Dropped support for Red Hat Enterprise Linux 4 46104

Support for Red Hat Linux Enterprise 4 has been dropped from this release. Petrosys continues to support Red Hat Linux Enterprise 5 and higher.

Improved application startup time

43242

The time taken for the Mapping application to start has been improved. The largest improvements in startup time will be visible for installations that are on network drives.

This improvement is mostly due to optimisations in the way that certain configuration files are read.

Spatial data may now be written to Excel

33299

Spatial may now be written to an Excel file. Added functionality allows point data to be written to a new work sheet or overwrite data in an existing worksheet using either the Spatial Data Translator or the Spatial Editor.

General Bug Fixes

Improved error message used to indicate missing connections.xml file

41782

The correct error message is now displayed when the connections.xml file is missing in the current Petrosys installation. The error message previously displayed was vague, and didn't give a good indication of the issue.

General - graphics

Enhancements

Improved line style for unconformity planes (line style 145)

41662

Unconformity planes may now be represented using line style 145, which provides a much tighter wavy line than the previously available line style 134. The original, loose unconformity style is still available via line style 134.

General - User interface

Enhancements

Added "Select visible" and "Deselect visible" RMB menu options to list dialogs

43017

Two new options have been added to a number of lists throughout the software: Select Visible and Deselect Visible. When applied, either option will select or deselect all options currently visible in the list. This can be used to create selections based on the current filter. For example after applying a filter, only those items matching the filter criteria will be visible in the list. Thus the Select Visible option can be used to select those items.

Additional icons added for existing features

31052

New icons have been created for a number of existing features, giving easier access to commonly used functionality. Additionally those features have been added to the appropriate toolbars.

Changed input sequence for interactive rectangle definition using mouse

45137

The mouse gestures required to interactively define a rectangle (for example when zooming) have been changed slightly. Rectangle definition now functions by clicking and dragging (i.e. click-drag-release) to define an area, which will then be used as the rectangular area affected by the corresponding tool. Previously, the tool worked by clicking once to start defining an area of interest, then again to finalise (i.e. click-move-click).

Options affected include interactive zoom in, Mapping display layers that allowed interactive resizing and interactive map sheet creation.

Fixed pitch font on Linux is now more readable

45193

The default for the fixed pitch font has been changed to a font that is more readable on newer Linux systems. The previous default of Nimbus Mono could be very faint on some systems.

Fixed pitch fonts replaced with proportional fonts

45194

The use of fixed-pitch fonts in various places of the application have been removed where they were no longer necessary. This makes the dialogs and lists easier to read and look more consistent.

Improved file selectors on Windows

41089

Replaced the windows file picker which allows a more standard file picking experience on windows.

Platform specific menu options now only visible on correct platform

42300

In previous versions of Petrosys, menu items for third-party data sources would be shown by default, even if the data source was not supported on the current platform. This has now been changed and menu items of unsupported data sources are no longer displayed.

General - User interface

Bug Fixes

Added clearer indication of invalid field input 41482

Invalid fields are now highlighted more clearly. In addition, information about why a field may be invalid is now available from the tooltip in the corresponding field.

dbMap no longer crashes when exporting to a text file from large list 45903

A crash has been fixed which previously occurred when exporting large amounts of data from dbMap to a text file.

Eyedropper tool in the Gradient Editor now functions correctly on secondary monitors 39627

The Eye dropper tool in the Gradient Editor now functions correctly (picks the correct color) on secondary monitors.

Fields associated with scrolled lists now updated correctly when list selection changed by clicking and dragging the left mouse button 43646

Changing the item selected from a list by clicking and dragging the mouse will now update any fields associated with the selected list item. Previously, changing the selection made from a list by clicking and dragging the left mouse button would not update any of the fields associated with the list.

File selector now honors Windows Explorer view settings 29169

Windows explorer options, such as hide/show hidden folders and expose known file extensions, will now be honored by the Petrosys file selector.

Fixed crash in embedded web browser 46130

The embedded web browser no longer crashes if the parent window (the window used to display the current browser window) is closed.

Fixed initialization of table widget items when filter is enabled 43255

Table widget items are now initialized correctly when filter is enabled during start up.

Fixed instance of decimal places not being used correctly in certain fields 40606

Fixed a bug where entering a decimal place as the first character in a map distance widget would change the decimal to a zero.

Improved automatic re-sizing of certain panels 46166

Tweaks to the handling of automatic window re-sizing means that certain windows will now be automatically re-sized correctly.

Improved performance of scrolled list filter dialog 40799

Filter pop-up dialogs now become hidden when the filter bar on scrolled lists is closed. A performance issue has also been fixed, which was triggered by filter bar still being partially enabled after it was closed.

[Graphics/Plotting and Hardcopy](#) [Enhancements](#)

Increased maximum size of raster files created using Petrosys raster drivers on 64 bit systems 42041

The maximum size of raster files (TIFF, PNG, JPEG, etc.) produced using Petrosys raster plotter drivers has been significantly increased on 64 bit systems. This only applies to raster files created using the plotter drivers employed via the /File/Print... options and does not affect files creating using the /File/Export/Raster Image... option.

Graphics/Plotting and Hardcopy

Bug Fixes

Plotting using raster driver with banding enabled on 64 bit systems no longer causes a crash 45342

A crash has been fixed which could occur if the banding option was used for plotting large plots to certain raster based plotters. This crash was only present in the 64-bit version of the application.

Print panel now uses the correct title bar icon 41875

The correct icon is now used in the title bar of the Print window.

[Help Enhancements](#)

Added table of contents to help topics

43615

Help documentation now supports a table of contents, which can be used to navigate the major sections of a specific help document. This feature has not been added to all help topics, and will be progressively rolled out as documentation is updated.

Revised help documentation for creating and editing bubble maps

43338

The online help for creating and editing bubble maps (and using culture filters) has been updated to better reflect the current functionality of the software and provide a more comprehensive and easier to follow overview of this feature.

Significant revision of "dbMap Import/Export" documentation

38978

Help documentation for importing and exporting seismic data to dbMap has been significantly revised and consolidated under dbMap/Loading Data/Loading Data Using Mapping/. Importing other data types to dbMap (Culture and Well) has also been consolidated under this section, but not significantly revised.

[Help Bug Fixes](#)

Fixed instances of incorrect help page being opened when using the F1 key to invoke the help

41073

Using F1 key on menu commands now opens the correct help item. In some cases, in particular when the link included an anchor within the topic, the help viewer would open the correct help page, but would not scroll to the anchor point for the topic.

[Import and Export Enhancements](#)

Added reset option for fault names in Fault Stick exchange and modified automatic log file naming convention

43668

In the Fault Stick exchange tool fault names can now be reset to their original value, prior to the application of a prefix/suffix. This is useful where a mistake has been made in the specification of a prefix/suffix, particularly if that prefix/suffix was applied in bulk. In addition, the log file generated by the tool will now be named according to the specified input/output data sources, unless manually overridden.

Added reset option for seismic line names in 3D Seismic Surface exchange and modified automatic log file naming convention

43667

In the 3D Seismic Surface exchange tool seismic line names can now be reset to their original value, prior to the application of a prefix/suffix. This is useful where a mistake has been made in the specification of a prefix/suffix, particularly if that prefix/suffix was applied in bulk. In addition, the log file generated by the tool will now be named according to the specified input/output data sources, unless manually overridden.

Added support for direct read/write of IHS Kingdom ASCII culture files

41616

The Petrosys Spatial Data Translator can now be used to read from and write to IHS Kingdom polygon (*.plg) and culture files (*.cul).

Added support for importing 2D seismic lines from OGP "Px/11" data exchange files

37784

2D seismic lines from OGP "Px/11" files can now be imported into dbMap (Mapping/Admin/dbMap Data Transfer/Import/Seismic...) and into SDF (Launcher/Import/OGP/Seismic...).

Added support for importing multiple 2D SEGY files

41327

Multiple 2D SEGY files can now be selected and imported to and SDF using the Stacking Velocities exchange tool.

Added Survey Name column to dbMap seismic import staging area

42521

When importing 2D seismic data into dbMap using the dbMap data transfer options (Apps/Mapping/Admin/dbMap Data Transfer/Import/Seismic...) a new 'Survey Name' column has been added to the staging area's seismic line list.

Changed naming convention of log file generated by Stacking Velocities Exchange

43669

The name of the log file generated by the Stacking Velocities exchange tool will now reflect the input and output data sources of the corresponding exchange task, unless the name has been manually overridden.

Duplicate point/value pairs in FBR files now ignored by uphole import

42166

Duplicate point/value pairs (for example depth/time) are now ignored when importing upholes from FBR files. If duplicate values are encountered, the last instance of the duplicate in the file will be used. Previously, duplicate values were being read as duplicate records, resulting in multiple upholes being written to the output data source.

Enabled inversion, offset and re-scaling when importing third-party grids and 3D surfaces 37331

When importing grids from third-party data sources, it is now possible to re-scale or offset the Z values of the selected grid by a specified value. Z value inversion has also been added, allowing the sign of Z values to be reversed if required (i.e. allows negative values to be imported as positive values and vice versa).

WDF Import panel now sorts input data correctly according to data type 34614

The Well header item and Checkshot header item lists in the WDF Import panel (/Apps/Wells (WDF)/File/Import/General...) now sort items according to data type.

Mapping Enhancements

Improved formatting of dbMap checkshot displays 33476

The well information layout and plotting line styles used by dbMap checkshot displays has been improved.

Reduced ambiguity of directional survey north reference 40589

In the Wells (WDF) editor and dbMap directional survey header screen, if the North reference is set to Magnetic north, the correction field will now be pre-faced by Magnetic declination, thus reflecting the true function of the field. Previously, the field was labelled Correction to True North, which didn't fully reflect the meaning of the option, and made the purpose ambiguous when compared to other north reference types.

Sun shaded grid display improved to reduce noise 37365

The algorithm used for sun shaded grid displays has been improved for displays in which the displayed grid has a substantially finer resolution than the pixel dimensions of the image. In the past, regional scale sun shaded displays, such as of a state or country, created with high resolution digital terrain models such as the popular SRTM 90 meter data, appeared noisy due to the sampling method used. The improved sampling in 17.6 allows the use of any resolution of digital terrain model with any scale of map.

Upgraded scrolled list used by dbMap 2D Seismic Import 35585

The scrolled list used when importing 2D seismic data to dbMap has been upgraded, improving the overall presentation of the list, as well as making the functionality of the list consistent with other lists throughout the application (activity is now denoted by check-boxes).

Mapping

Bug Fixes

Curves created using drawing tools may now be created using the map background color 43930

The /Display/Drawing Tools/Curve option now allows the text drawn along the line to be drawn in the background color.

File resolution dialog no longer incorrectly triggered by Orthocontours displayed from database grids 39807

Orthocontours displayed then saved to a DBM will no longer trigger a file resolution (missing file) dialog when the DBM is re-opened. Previously, an error in the way connection details were being handled by the DBM format caused the grid used to generate orthocontours as missing.

Fixed crash in Mapping when opening truncated or corrupted grid 45798

Previously, in some cases, Mapping could crash when opening a truncated or corrupted Petrosys grid file.

Fixed instance of scale bar preview not being drawn beneath the cursor during initial placement 41511

A bug has been fixed which prevented the visual preview (outline) of the scale bar being added to the map from being drawn as it was being placed. This typically occurred on very large map sheets, making it difficult to accurately position scale bars when displayed for the first time.

IHS Kingdom seismic line selection files now handle spaces in line names correctly 23957

IHS Kingdom selection files containing seismic line names with spaces will now be used correctly when applied to data retrieved from IHS Kingdom connections.

Improved layout of Grid display panel 44124

The layout and initial sizing of the grid display panel (Apps/Mapping/Display/Grid...) has been adjusted to make more efficient use of screen real estate.

Incorrect warning message about invalid units no longer shown for RSO Borneo (ft) based map sheets

38685

A bug was introduced in version 17.3 where an incorrect warning message about incompatible units would be displayed when using a map sheet based on EPSG:29872 (Timbalau 1948 / RSO Borneo (ft)). This has now been fixed.

Option to save backup DBM files now works consistently

36873

Previous versions of Petrosys contained an option under Mapping/File/Preferences to save a backup file each time a DBM file was saved. This option did not work as intended in most circumstances and has been moved from this location into the Configuration tool instead, allowing it to be set on a project, user or site basis. NOTE: due to the previous inconsistency in the existing setting, the new option will not be automatically set and should be set manually in the Configuration tool if required.

Polygon selection now preserved after file name change

40220

The selection of polygons made within a polygon file will now be preserved if the polygon file is changed, but the names of the polygons within the file are the same. This can vastly simplify the use of large polygon files with complex selections of polygons, where the file name is subject to frequent change.

Mapping/2D Seismic

Enhancements

IHS Kingdom seismic line header panel now consistent with other seismic line header panels

35185

The IHS Kingdom seismic line header screen is now consistent with other line header screens, improving the overall presentation of line header information for IHS Kingdom data sources.

Queries for 2D seismic line data may now return multiple columns

41628

Multiple columns may now be returned by queries written for selecting 2D seismic line data.

Mapping/Bubble Maps

Bug Fixes

Fixed instance of bubble maps failing to display for IHS Kingdom data source

46034

Displaying bubble maps using an IHS Kingdom data source with the project default CRS specified as the CRS now functions correctly. Previously, the bubble maps would not be displayed and an error would be displayed.

Mapping/Contours

Enhancements

Improved Contour Annotations

11917

Contour annotations have been improved in a number of ways.

- When initially drawn, annotations will no longer be placed on sharp bends in contours. This prevents annotations from being drawn at illegible angles.
- Annotations in the same contour layer will no longer overlap when drawn.
- Manual overpost correction may now be invoked for contour labels. This allows contour annotations to be added, removed, re-drawn, re-oriented and moved along the associated contour line. Annotations can also be selected and aligned using the existing alignment options available in manual overpost correction.

Mapping/Coordinate Reference Systems

Bug Fixes

Point Conversion now handles DMS with degree symbol and tick mark correctly

35509

The Interactive Coordinate Conversions tool (/CRS/Point Conversion...) now supports input containing degree symbols. For example the input 19° 47.886'S will now be handled correctly.

Mapping/Editors

Enhancements

WDF Editor now preserves well and zone selection after reopening

27022

The WDF Editor now preserves the well and zone selection after exiting then re-entering the application. Previously, and selections made would be lost when exiting the application.

Mapping/Map Sheets

Bug Fixes

Crash fixed in create map sheet using Data Extent when template map does not exist 41737

Creating a map sheet using the Data Extent option (/Apps/Mapping/MapSheet/New/Data Extent...) where the specified map sheet template does not exist no longer results in a crash.

Mapping/Spatial

Enhancements

Added ability to back interpolate from grids/surfaces to spatial data sources 41705

Using the Spatial Editor, it is now possible to back interpolate grid values to supported spatial data sources. This is made possible using the Back Interpolate option, available from the toolbar of the Spatial Editor (/Apps/Mapping/Edit/Spatial Editor...).

Added filtering options to Mapping Display GIS option 39381

A range of filtering options can now be applied to spatial data stores accessed using the Display GIS option in Mapping (Apps/Mapping/Display/GIS...). Filtering options match those previously available in scrolled lists throughout the software. All data sources supported by the Display GIS panel are supported by the new filtering options.

Mapping/Spatial

Bug Fixes

Added support for degrees character in text files 41698

The degrees symbol is now supported in the Latitude/Longitude DMS value in a text or Excel data source (for example 123° 16' 30.47"e).

Added support for polygons with exclusion zones 12663

Polygons with internal exclusion zones (holes) may now be used in conjunction with Petrosys. Previously exclusion zones would be drawn with the map sheet background colour which attempted to simulate an exclusion zone.

Excel files containing only a single polygon now displayed as closed shapes 41752

Excel files containing only a single polygon were not being displayed as closed shapes when displayed using Display GIS. This has now been fixed.

Fixed display of GIS data sources containing features with Oracle single digit GTYPE 42672

Displaying GIS data from Oracle spatial in Mapping (Apps/Mapping/Display/GIS...) now ignores features with single digit GTYPE. In previous versions when encountered, these features could stop the entire layer from being drawn correctly.

Fixed filters applied to Esri Personal Geodatabases using String attributes in Display GIS 34483

Filters applied using String attributes to Esri Personal Geodatabases displayed in Display GIS (Apps/Mapping/Display/GIS...) now function correctly.

Sample rate of spatial data displayed from text and Excel now honored after being saved to a DBM file 40359

The sample rate used by text and Excel data displayed using Display GIS and saved to a DBM file will now be honored after re-loading the file.

Mapping/Surfaces

Enhancements

Added Z value scaling, inversion and offset to grid and 3D seismic surface display in Mapping 23724

Z values from either grids or 3D surfaces may now be re-scaled when displayed in Mapping using the options from the Z value scaling drop-down, which has been added to the display dialog for each data type. The drop-down contains two options: Invert and Custom. Invert allows an inversion to be applied to all Z values from the selected grid/surface. Custom allows a scale factor and offset value to be specified, which will be applied to the Z values read from the grid/surface when it is displayed.

Performance of maps containing large grid files improved through memory caching 43098

The redraw performance of maps that contain Petrosys grids has been improved through the use of memory caching. Provided there is enough memory, grids do not need to be re-read from disk when redrawing or zooming in or out. This increases redraw performance significantly for grids on network or slower drives.

The amount of memory set aside for caching is different for 32-bit and 64-bit platforms. On 32-bit platforms the default maximum amount of memory used is 50MB whilst on 64-bit platforms this is 10GB.

The cache memory settings are adjustable in the Configuration tool section "Advanced/General", change the values for the "Petrosys grid maximum cache size for 32-bit platform" or "Petrosys grid maximum cache size for 64-bit platform" settings.

Survey now automatically selected when displaying 3D seismic surveys from data source containing only a single survey 44123

When displaying 3D Seismic Surveys and selecting a data source with only one survey, that survey will now be automatically selected. This simplifies the display of 3D Seismic Surveys by eliminating an unnecessary step.

[Mapping/Wells](#)

[Enhancements](#)

Added ability to view WDF checkshot data from Mapping 43288

WDF checkshot data can now be viewed from Mapping by right clicking a well displayed from a WDF on the map canvas and selecting "Checkshot survey...". Doing so will open the generic well checkshot survey window for the selected well.

Added spider plot view to directional survey header dialog 40205

The directional survey header dialog for dbMap databases and other third-party data sources now has a simple spider plot view available to visualise the surveys path.

Formation thickness can now be displayed along associated well path 16078

Formation thicknesses from dbMap and third-party data sources may now be displayed along the associated well path in Petrosys Mapping. This was previously not supported for dbMap or any third-party data sources.

Prompt no longer displayed for CRS if read successfully from SeisWare project 40384

When connecting to a SeisWare project, if the project CRS can be read from the SeisWare database, then the user will no longer be prompted for the CRS.

[Mapping/Wells](#)

[Bug Fixes](#)

Fixed well data selection queries that return multiple columns 41086

Well data selection queries that return multiple columns now function correctly. This fixes an issue which prevented these queries from being used.

Leading spaces in well annotations no longer ignored 41760

Leading spaces in well annotations are no longer ignored when displayed.

The directional survey spider plot view for WDF now has enabled buttons when viewing the well from Mapping 44424

A bug has been fixed where the buttons on the directionals survey spider plot dialog for WDF wells were disabled when viewing the well information from the Mapping window.

Toggling between metric/imperial no longer disables the Save button on the Well head dialog 45618

Toggling between Metric and Imperial on the Well head dialog no longer disables the Save button when the display units are the units of the stored well.

Values posted along a well path are now correctly adjusted to True North 45249

Directional survey azimuth values were adjusted to True North in reverse, which could cause the angle of text posted along a well path to be not perpendicular to the well path. The azimuth values are now adjusted to True North correctly.

[Paradigm-Epos plugin](#)

[Enhancements](#)

Added support for Paradigm 14 on Linux and Windows 45525

Paradigm 14 (Epos 4.2) is now supported as a data source in all features that previously supported Paradigm 2011.3 (Epos 4.1) data on both Linux and Windows.

Both Paradigm 2011 (Epos 4.1) and Paradigm 2011.3 (Epos 4.1) will continue to be supported as data sources.

Discontinued support for "Paradigm with EPOS 4 Data Management" 41738

Support for importing and direct display of Paradigm with Epos 4 Data Management by Petrosys has been discontinued.

Currently supported versions of Paradigm are Paradigm 2011 (Enterprise Linux 5+), Paradigm 2011.3 (Enterprise Linux 5+, Windows 7+) and Paradigm 14 (Enterprise Linux 5+, Windows 7+).

Paradigm-Epos plugin

Bug Fixes

3D Surveys in different CRS units than the owning project are now displayed in the correct location 46385

A bug has been fixed in the Paradigm 2011 and Paradigm 2011.3 plugins, where a 3D Survey bin grid that is in a different CRS unit than the owning project would be displayed in the wrong location.

Correct Paradigm-Epos user now shown when selecting and displaying formation top 39079

The correct Epos User information is now displayed when displaying or gridding formations.

Positional logs from Paradigm with only two points now ignored 41553

Paradigm vertical positional logs which have only two points are now ignored.

Surface Modeling tasks using Paradigm on Windows no longer fail due to files being in use 44883

A bug has been fixed on Windows which caused some Surface Modeling tasks using a Paradigm connection to fail due to files being in use by the operating system.

Project Selector

Bug Fixes

Access to Administration options in the Project Selector now correctly restricted based on user permissions 37212

Access to Administration options via the Advanced menu in the Project Selector are now correctly restricted based on the rights of the current user.

Doubling clicking project template no longer changes project name 41910

Double clicking a project template while creating a new project no longer changes the name of the new project to match the name of the project template.

Project Selector properties now updated correctly after changing the project 41509

The Project Properties panel, accessible from the Project Selector, will now be updated correctly after changing projects. Previously, changing the selected project then launching the Properties panel could result in information about the incorrect project being displayed.

Prospects and Leads

Enhancements

Prospect names now included when exporting spatial data from map canvas 44627

The prospect name will now be exported when exporting prospects from the map canvas using the Export spatial data option from the RMB menu.

Seismic data

Enhancements

Added ability to directly display and contour IHS Kingdom grids 17145

Grids and surfaces from DUG Insight and IHS Kingdom may now be displayed in the Mapping application and contoured using the Surface Modeling application. Both of these operations are performed directly from the associated data source, meaning no intermediate data transfer or conversion is required.

Added menu option to clear current selection list in SDF module 44466

The Seismic (SDF) application can now be used to clear any seismic line selection files associated with the current SDF.

Added support for directly display and contouring of DUG Insight grids 40115

Grids and contour grids from DUG Insight can now be displayed and contoured directly using the Mapping and Surface Modeling applications respectively.

Added support for reading seismic line coordinates when importing SEGY data to dbMap 42031

2D line coordinates and 3D bin grids can now be imported from 2D and 3D SEGY files using the dbMap data transfer option (/Apps/Mapping/Admin/dbMap Data Transfer/Import/Seismic...).

Additional fields made available for selecting 2D seismic lines by wildcard 43659

Three additional fields have been added for filtering Seismic lines by wildcard: Line Id, Survey Id and Survey Name. Previously, this selection method was limited to one field: Line name.

Enabled line selection and CRS fields in various text export options 40159

When exporting seismic data from the SDF Editor to either UKOOA or Fixed Length formats (Apps/Seismic (SDF)/File/Export/UKOOA... and Apps/Seismic (SDF)/File/Export/Fixed length... respectively) the SDF CRS label, CRS info and line selection will now be active (i.e. not greyed out). In previous versions, these fields were disabled.

Seismic data

Bug Fixes

Double clicking an SDF now opens the correct file 45363

Double clicking an SDF in Windows Explorer now opens the correct file in the Seismic (SDF) editor. Previously, although the editor would be launched, the correct file was not always selected.

DUG Insight 3D bin grids now displayed with the correct area 43871

3D bin grids displayed from DUG Insight will now be displayed with the correct area. Previously, a bug introduced by a change in a previous version meant that 3D bin grids displayed with horizon data would appear larger than their actual area. This has now been fixed.

Rounding performed by Stacking Velocities Exchange is now consistent across operating systems 45424

When exporting stacking velocities data from SDF to text files, the rounding of shotpoints and time/velocities is now consistent under both Windows and Linux.

Surface Modeling

Enhancements

Double clicking a .tsk file in Windows Explorer will now execute Surface Modeling 40528

Petrosys Surface Modeling is now associated with the .tsk extension on Windows platforms. This means that double clicking any supported .tsk file in Windows Explorer will open the associated workflow in Surface Modeling.

Surface Modeling

Bug Fixes

Correct grid cell count now displayed in information message for all import formats 43402

The correct row and column counts are now reported in import options like Import/Landmark/Zmap/Grid. Previously the options would report the same row count as the column count. This error had no affect on the imported data.

Fixed issue caused by fault files created using Plate Caree no projections 38151

Fault files using a form of "no projection" coordinate reference system (CRS) will now have latitude/longitude coordinates stored to a reasonable precision. This fixes an issue which could occur when using these types of files.

Improved precision of latitude/longitude coordinates reported by the Surface Modeling text log 38018

Multiple gridding menu options now display latitude/longitude coordinates in the text log of Surface Modeling to a more suitable precision.

Increased precision of Latitude/Longitude coordinates displayed by Grid Geometry tab 38016

Latitude/longitude coordinates in the Geometry tab used by various gridding options are now shown to a reasonable precision. General latitude/longitude coordinates are shown with 7 decimal places and cell size type values are shown with 8 decimal places. General Easting/Northing coordinates are shown with 2 decimal places and cell size type values are shown with 3 decimal places.

Surface Modeling/Contouring

Bug Fixes

Added support for very fine contour intervals 42342

Contouring now allows for very small contour increments, allowing grids occurring over a very small data range to be modelled more effectively.

Fixed issue caused by contour files created using Plate Caree no projections 38020

Contour files using a form of "no projection" coordinate reference system (CRS) will now have latitude/longitude coordinates stored to a reasonable precision. This fixes an issue which could occur when using these types of files.

[Surface Modeling/Grid Operations](#) [Enhancements](#)

Added more comprehensive statistics to GIP file grid statistics option 18143

The /Grid/Statistics/Sampled Data File (GIP)... option in the Surface Modeling application can now be used to display advanced statistical values, along with a break down of the types of input data points stored by the file.

Workflow enabled Grid Statistics Inside Polygon and Sampled Data File Statistics 38526

Grid Statistics Inside Polygon (Apps/Surface Modeling/Grid/Statistics/Inside Polygon...) and Sampled Data File Statistics (/Apps/Surface Modeling/Grid/Statistics/Sampled Data File (GIP)...) have both been workflow enabled, allowing either of these processes to be integrated as tasks into a Surface Modeling workflow.

[Surface Modeling/Grid Operations](#) [Bug Fixes](#)

Creating new fault file using Dump Fault File no longer displays an error 45527

The Dump Fault File option (Apps/Surface Modeling/Grid/Dump Fault File...) no longer raises an error when specifying an output file that doesn't already exist. The error previously raised by this option was incorrect, and has thus been removed.

Fixed grid coordinate conversion when Method set to Convert origin only 20474

When using the /Grid/Convert Coordinates... in Surface Modeling, using the Convert origin only setting in the Method drop-down will now only convert the origin of the specified grid. Previously, each node in the specified grid was converted and back interpolated, making the behaviour identical to the Resample grid setting from the same drop-down.

Fixed problem with area of interest calculation used in gridding 47439

Grid Resampling, Blend and Merge processes (Apps/Surface Modeling/Grid/Processes/...) now calculate the area of interest correctly when CRS conversions are required.

Forced selection of valid grid file before grid header details may be edited 40372

When using the Edit Grid Header option (/Apps/Surface Modeling/Grid/Edit Grid Header...) all editing options will now be disabled until a valid grid file has been selected. This serves to simplify the usage of the panel, by enforcing the idea that a grid cannot be edited until it has been explicitly selected.

Grid coordinate conversion now functions correctly for no projection latitude/longitude grids 38848

Grid coordinate conversion (/Apps/Surface Modeling/Grid/Convert Coordinates...) can now be used to produce a correctly converted grid when the output CRS is a "no projection" type.

Grid Statistics now attributes the correct gridding algorithm to grids created using Minimum Curvature or Polynomial algorithms 35071

The Grid Statistics option (/Apps/Gridding/Grid/Statistics/Grid...) now attributes the correct algorithm to the specified grid. Previously, the option would incorrectly attribute the Minimum Curvature algorithm to grids created using the Polynomial algorithm and vice versa.

Improved visual display when using the Regrid option 41577

Running the Regrid option in Surface Modeling (/Apps/Surface Modeling/Grid/Merge/Regrid...) with a visual display enabled will now result in any existing visual displays being completely redrawn. Previously, the visual display was not always completely redrawn, necessitating a redraw before the grid was fully visible.

Merging grids using the Blend tool now handles instances where the output CRS differs from the default CRS 41489

Merging two grids using the Blend option (/Apps/Surface Modeling/Grid/Merge/Blend...) now operates more robustly where the default CRS differs from the output CRS. Previously blending two grids under these circumstances could, in some instances, result in the output grid containing incorrect Z values.

Added ability to grid Times and Velocities calculated from checkshots on the fly, as well as different zone depths 35588

It is now possible to grid well TVD and MD depth values and the usual TVD subsea values. If a well data source contains checkshot information then it is also possible to grid time (OWT and TWT) and velocity values (VAV and VINT) from that data source.

Note on scripting:

- There is a specific workflow when opening a pre-17.6.0 TSK file where scripting of a Grid/Create grid... task that has both WDF and non-WDF Well input data sources is not automatically upgraded. If you have such a TSK file and require assistance to upgrade the scripting, please contact Petrosys support.
- Pre-17.6.0 tasks that don't use scripting are not affected by this issue.

Expanded number of scriptable fields when gridding from WDF 41952

The number of fields available in workflow scripting for gridding tasks using a WDF data source has been increased.

Added filtering support for gridding Excel and text files 40553

When gridding data from text and Excel files, a custom filter may now be applied to the input data retrieved from the file.

AOI using input data now accounts for use Total Depth coordinates when appropriate 44137

Potential final TD well points are now considered when calculating the output geometry area of interest (AOI). This will occur when the output geometry is specified by "Data" and the "Use Well TD" flag is ticked on.

Culture groups now loaded correctly by Data Source Selection panel in Surface Modeling 39517

When gridding from a culture file in Surface Modeling, if a default culture file already exists in the file selection field, culture groups from the default file will now be loaded when the input data panel is initialised. Previously, groups would not be loaded if a default culture file had been selected by the panel. Default culture files are selected if the culture file has been used previously in some other part of the application (for example displayed in Mapping).

Fixed crash in the Sampled Data File (GIP) Editor 42212

The sampled data file editor (GIP editor) no longer crashes when the interval value is tiny compared to the Z range of the data. Checks in the code have been added and only a maximum of 10000 intervals are now permitted.

Fixed instance of gridding failure when using Excel as an input data source 41340

A bug has been fixed, where the Grid XY origin and Grid XY extent would fail to be populated in some cases when using Excel as an input data source, resulting in a gridding failure and thus rendering gridding inoperable.

Fixed instances of clipping using polygon file/by distance being applied when not enabled 43487

When creating grids using the methods listed below, the polygon clipping was not working correctly. It would sometimes inadvertently use a polygon for clipping when it was not turned on.

The methods this affected were:

- Both "Kriging" methods
- "Nearest Point Gridding"
- "Distance-Points"
- "Sample Density"
- "Trend Surface"

A similar problem presented itself when using distance clipping along with the kriging or kriging with external drift option. Prior to this change, it would apply distance clipping using the distance selected in the "clipping distance" field, even when the "distance clipping" selection was turned off. It now requires both "clip grid" and "Distance clipping" to be turned on, along with the method to be "clip to circular regions..." before it will clip using the clipping distance.

Grid narrative retains data source information when using Sampled Data Editor 44304

While creating a grid and using the Interactive Sampled Data Editor and Cross Validation, the grid narrative now stores the data sources used to create the current grid. This reinstates behaviour prior to 17.4sp5.

Grid/WellTie sometimes incorrectly indicated that fault polygons could be written to correction grid 46409

Previously opening a Well Tie task which used a method other than "extrapolated" would allow faults to be written to the correction grid. This has been fixed so faults can only be written to the tied grid.

Interval velocity horizon order is now calculated from top and base times 44751

Interval velocity handling has been made easier to use.

When running Surface Modeling/Velocities/Calculate from stacking..., if the user mistakenly specifies the top horizon and the base horizon the wrong way round, the order is corrected automatically, based on the TWT values. Previously, it would ignore the values and produce no interval velocity value.

Similarly, gridding interval velocities read from a SDF previously failed to read any input points if the horizons specifying the interval velocity were input in reverse order. It now checks for horizon pairs specified in any order when gridding interval velocities.

Keep inside faults setting now functions correctly in Well Tie/Phantom gridding 43020

When using the Well Tie and Phantom gridding options in Surface Modeling, the "Keep inside faults" setting under the Faults tab was not being honored correctly. This has now been fixed.

Removed Use well TD from the panel for WellTie and Phantom 44860

The Use Well TD option has been removed from Well Tie and Phantom options, as this functionality was not utilised by either option.

Sampled Data Editor now shows correct input data where gridding AOI is determined by data 44068

The sampled data editor now displays all input data when creating a grid using the data to determine the gridding area of interest. Previously, if the gridding area of interest was changed prior to running the gridding task without using the re-scan option under the Geometry tab, the sampled data editor would only show a subset of the input data (that existing in the area of interest defined by the geometry prior to using the re-scan option).

Sampled data editor window now closed before running gridding task 44134

The Sampled Data Editor is now closed prior to running the corresponding gridding task. Previously, the editor would remain open while the task was run, making it difficult to view the information reported in the main Surface Modeling window during the gridding process.

Select by option available when adding IESX Seismic data to gridding task now functions correctly 44672

When adding an IESX Seismic data source to a gridding task, the Select by option now enables/disables dependent fields correctly.

Text no longer incorrectly states that Faults have been enabled 41049

When gridding using faults, the text log printed in the console output used to always indicate that faults were being used when they had been turned off by the user. The use of faults is now reported correctly.

TOP and BASE attributes can now be used when gridding from a WDF 25044

TOP and BASE attributes may now be used when gridding from a WDF. Previously, attempting to use either attribute would result in an error saying the specified attribute does not exist.

Wells/Total Depth points now used correctly when the interactive GIP editor is enabled 46281

If enabled, the Use well TD option will now function correctly if the Interactive GIP Editor is used in the corresponding gridding task. Previously, creating a grid from well data under these conditions would result in any TD data being ignored.

Surface Modeling/Kriging

Bug Fixes

Timer estimation indicator no longer shows more than 60 minutes in an hour 46521

When kriging a big grid, the process timer incorrectly used to display more than 60 minutes in an hour. This is now fixed.

Surface Modeling/Volumetrics

Bug Fixes

Improved use of exponential notation in volumetrics reports 42104

Volumetrics standard text reports will now use fixed format decimal values (e.g. 100.00) in preference to the exponential format previously used (e.g. 1.00e+002).

Interpreter now read correctly from ODM formation data where value not stored directly in the associated formation top 44782

Interpreters associated with formation tops in ODM projects are now read correctly in wider range of cases. Specifically, where the interpreter is not stored directly in the formation tops table, but instead in the table t_interpreters, the interpreter will now be read correctly.

Note that this change may require selections used by task files created in 17.5 to be re-defined if formation tops from ODM are have been utilised.

Improved error reporting when upgrading WDF files 45103

The WDF upgrade process that is run when opening a WDF from an older version of Petrosys will now report all known types of upgrade errors. Previously certain types of errors were missed, resulting in what looked like a successful upgrade, despite the fact that some data may have been missing.

Additionally, the upgrade process may now continue past errors where possible, allowing the portion of the data successfully upgraded to be utilised.

Sorting WDF header summary table by date now functions correctly 39507

Sorting the WDF well header summary table (Apps/Wells (WDF)/.../Header summary) using any columns containing dates will now re-arrange rows correctly by date. Previously, sorting by date would re-arrange rows alphabetically.