PETROSYS SOFTWARE RELEASE NOTES VERSION 17

17.5sp4

Introducing Petrosys 17.5, which enables the automation of well data transfer using the Wells Import Wizard in conjunction with the Surface Modeling workflow framework, and allows for well data transfer to Petrel projects, also using the Wells Import Wizard.

Petrosys is the most recent iteration of the 17.5 series, and may be installed side-by-side with earlier versions of Petrosys.

Automation of Well Data Transfer Using Petrosys Workflows

The incorporation of well transfer functionality into the task list framework provided by Surface Modeling means that complex data transfer operations can now be performed at the click of a button, without the need for running through the multiple steps of the wizard, or re-specifying selection and overwrite parameters each time a data store needs to be updated.

Furthermore, data transfer can now be incorporated into larger workflows, allowing data stores to be updated prior to utilising the information in the multitude of operations available in Surface Modeling.

The addition of the Wells Import Wizard to the task list framework means the full range of automation options available within Surface Modeling can be harnessed, and that well data transfer can be effectively incorporated into larger, more complex procedures. This not only allows organisational procedures to be effectively enforced, but also vastly improves the efficiency of multi-step procedures.

Fast, Direct and Versatile Transfer of Well Data to Petrel

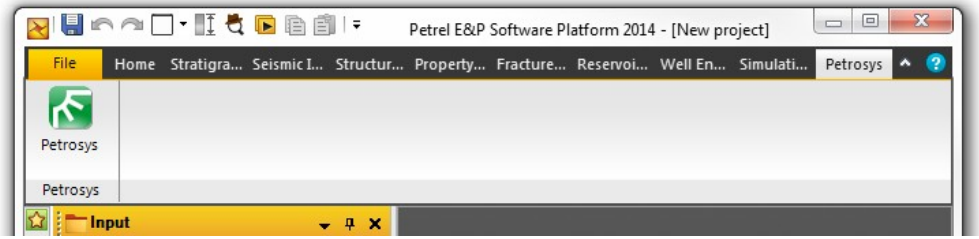
Data can now be written to Petrel using the Wells Import Wizard, opening up a broad range of new data transfer opportunities, and further improving the versatility of Petrosys as a robust data management tool. Data can be read from any of the numerous well data sources supported by Petrosys, including, 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.

Support for Petrel 2014 Added, Ceasing Support for Petrel 2010 and Petrel 2011

Petrosys is pleased to include support for Petrel 2014.1 as a data source in all Petrel enabled Petrosys applications. The Petrosys plugin is available in both the Ribbon and Classic interfaces of Petrel 2014.



The Petrosys-Petrel plugin has ceased support for Petrel 2010 and Petrel 2011. Petrosys continues to maintain full support for Petrel 2012 and Petrel 2013 alongside the addition of Petrel 2014.

Licenses updated

Petrosys 17.5 requires updated license keys over Petrosys 17.4. Petrosys support will provide an updated license file along with 17.5 installation files. Please contact your IT administrator for assistance in updating license files. Petrosys 17.5 license keys are backwards compatible so will allow users access to all earlier versions of Petrosys.

Enhancements

Petrosys release 17_5_4 [1 entries]

Connections, import and export

42580 Casing & Tubing, Cores, Perforations, Reservoir summaries and Tests can now be written to Petrel (Santos only)

Bug Fixes

Petrosys release 17_5_4 [2 entries]

Client specific

47403 dbMap Gas shows 'New' selection now has correct title - Santos only

dbMap

48355 Compute directional survey TVD correctly when azimuths are missing

Detailed Release Notes

Petrosys release 17_5_4 [3 entries]

Client specific Bug Fixes

dbMap Gas shows 'New' selection now has correct title - Santos only

47403

In previous versions the title of the new gas shows dialog was incorrectly labelled "Oil shows" - the underlying behaviour of the dialog was, however, correct. The dialog title has now been corrected to "Gas shows".

Connections, import and export Enhancements

Casing & Tubing, Cores, Perforations, Reservoir summaries and Tests can now be written to Petrel (Santos only)

42580

Building on our existing functionality to write Well headers, Formation tops and Directional surveys to Petrel, we have added the ability to transfer more data types to Petrel.

The additional data types that can be written writing to Petrel in 17.5.4:

- Casing and Tubing details
- Cores
- Fracs
- Oil shows
- Palynology
- Perforations
- Reservoir summaries
- Test data (Drill Stem tests, Repeat formation tests, DFITs)

Additional data types that can be read from Petrel and written to a master data store in 17.5.4:

- Reservoir summaries

dbMap Bug Fixes

Compute directional survey TVD correctly when azimuths are missing

48355

There was an issue which prevented TVD values being computed for a directional survey when the azimuth value was missing. This issue has been fixed and directional survey TVD values are now computed correctly when the azimuth value is missing as long as there is a valid inclination.

Enhancements

Petrosys release 17_5_3 [2 entries]

Import and Export

47742 Export to Z-MAP geographic format now writes to 8 decimal places

Web map server

44599 Enhancements to WMS server to support custom messages

Bug Fixes

Petrosys release 17_5_3 [1 entries]

3D Viewer

47583 3D Viewer now honours transparency setting with attribute grids

Detailed Release Notes

Petrosys release 17_5_3 [3 entries]

3D Viewer — Bug Fixes

3D Viewer now honours transparency setting with attribute grids

47583

Display Grid using attribute grid now has the correct transparency applied. Previously when displaying a grid and applying a gradient from an attribute grid, the displayed grid would always be opaque, irrespective of the transparency setting.

Import and Export — Enhancements

Export to Z-MAP geographic format now writes to 8 decimal places

47742

The Spatial Data Translator will now write geographic coordinates to eight decimal places when writing to a Z-MAP vertex file. Previously Z-MAP vertex files were written with six decimal places of precision.

Enhancements to WMS server to support custom messages 44599

Petrosys WMS server has been enhanced to support a number of custom message types and to perform certain custom actions based on those messages.

This feature has been developed to implement a specific customer request.

Enhancements

Petrosys release 17_5_3 [2 entries]

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Enhancements

Petrosys release 17_5_2 [1 entries]

Connections, import and export

41230 Support for Petrel 2014

Bug Fixes

Petrosys release 17_5_2 [2 entries]

Configuration/Configuration Files

45245 Windows builds now have current pnl source code

Surface Modeling/Gridding

47491 Extraction of data points with negative coordinate values now works when using Data output geometry

Detailed Release Notes

Petrosys release 17_5_2 [3 entries]

Configuration/Configuration Files — Bug Fixes

Windows builds now have current pnl source code

45245

Windows versions of Petrosys now contain current source panel code. Previously out of date panel source code may have been distributed. This bug had no effect on the function of Petrosys, but could have caused issues if the outdated source code was used to create a custom panel.

Connections, import and export — Enhancements

Support for Petrel 2014

41230

Petrosys connectivity to Schlumberger's Petrel now supports direct interaction with Petrel 2014.1.

Support for Petrel 2014.1 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
- Export Petrosys and other third party grids to Petrel

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

Surface Modeling/Gridding — Bug Fixes

Extraction of data points with negative coordinate values now works when using Data output geometry

47491

All appropriate data is now extracted from datasources which use a "Data" output geometry and the coordinate data have negative values. Previously data within the final cell boundary may not have been gridded.

Enhancements

Petrosys release 17_5_1 [3 entries]

Client specific

46307 Basic Well dialog now uses R_WELL_DATUM_TYPE lookup for KB/RT height datum field - Santos only

Connections, import and export

46610 Improved reporting of errors and warnings when writing directional survey data to Petrel

46311 Wells Import Wizard will now proceed when no formations or zones are available in the input data source

Bug Fixes

Petrosys release 17_5_1 [6 entries]

Connections, import and export

46735 GeoFrame 2012 direct connectivity now works when running Petrosys within a GeoFrame 2012 environment

45931 Time-Depth Chart values read from IHS Kingdom are now referenced to the correct datum

Mapping

46367 Well Directional Survey offsets no longer calculated when inclination or azimuth values are missing

Petrel plugin

38934 Petrosys Petrel plugin no longer generates an error message when Petrel is opened on a computer without a Petrosys installation

Surface Modeling

46599 Fixed missing formation top values when back interpolating from grid to WDF

Web map server

46395 WMS Server - Improved rendering speed and quality for maps using colorfill surfaces

Detailed Release Notes

Petrosys release 17_5_1 [9 entries]

Client specific Enhancements

Basic Well dialog now uses R_WELL_DATUM_TYPE lookup for KB/RT height datum field - Santos only 46307

The KB/RT height datum field on the Basic Well dialog has been changed to use a lookup into the R_WELL_DATUM_TYPE database table rather than having a hardcoded list of values in the panel.

Connections, import and export — Enhancements

Improved reporting of errors and warnings when writing directional survey data to Petrel 46610

When writing wells to Petrel, only a very limited set of errors and/or warnings was reported when writing directional survey data. This has now been improved, allowing more detailed warnings and errors to be reported when encountered during data loading.

Wells Import Wizard will now proceed when no formations or zones are available in the input data source 46311

It is now possible to proceed all the way through the Wells Import Wizard if formations have been specified as a data source, and there are either no formations in the input data source, or there have been no formations mapped from the input data source to the output data source. Previously under these circumstances, it was necessary to step all the way back through the wizard and disable formations as a data source before being allowed to proceed.

Connections, import and export — Bug Fixes

GeoFrame 2012 direct connectivity now works when running Petrosys within a GeoFrame 2012 environment 46735

Direct connectivity, import and data display using the GeoFrame 2012 plugin may now all be performed when starting Petrosys in a GeoFrame 2012 environment.

Time-Depth Chart values read from IHS Kingdom are now referenced to the correct datum 45931

Checkshots (Time-Depth charts) read from IHS Kingdom are now referenced to the correct datum. Time values are read relative to the SRD of the project and depths are considered to be MD unless the survey is shared, in which case the depths are considered to be TVD Subsea. It should be noted that the Time-Depth charts currently read from IHS Kingdom projects are those defined in Project Mode and not Author Preferred Mode.

There is a known condition where incorrectly loaded data may reference the incorrect datum, but did appear to be accessed correctly in previous versions of Petrosys. In this version, the checkshots will not be read, so is easily distinguished from correct data. If you encounter datain such a state, please contact Petrosys support for assistance.

Mapping — Bug Fixes

Well Directional Survey offsets no longer calculated when inclination or azimuth values are missing 46367

Offset and TVD values in well directional surveys with missing azimuth or inclination values will now no longer be calculated. Previously, both offset and TVD values were being calculated for all survey points - regardless of whether an azimuth or inclination existed for that point - resulting in errors in the resulting well path. Such a well path would be drawn incorrectly if displayed on a map.

Petrel plugin — Bug Fixes

Petrosys Petrel plugin no longer generates an error message when Petrel is opened on a computer without a Petrosys installation 38934

Petrel will no longer display an error if the Petrosys Petrel plugin has been installed and a valid Petrosys installation is not found on the same machine. Previously an error would be displayed if a user attempted to open an installation of Petrel using the Petrosys Petrel plugin but didn't themselves have Petrosys installed. This was typically a problem where multiple users had access to a centrally located installation of Petrel. Each user would need to have Petrosys installed, or the error would be overtly displayed each time Petrel was opened. This information is now conveyed using the Petrel Message Window.

Surface Modeling — Bug Fixes

Fixed missing formation top values when back interpolating from grid to WDF 46599

Back interpolation to WDF now returns values for all wells which intersect the input surface. This fixes a bug which was causing a value to only be written to the last well in a data set.

Web map server — Bug Fixes

WMS Server - Improved rendering speed and quality for maps using colorfill surfaces 46395

In the WMS server maps with colorfill grids now use the screen render method, rather than the hardcopy method. This improves both the render speed and quality of maps containing colorfill grids

Enhancements

Petrosys release 17_5 [17 entries]

Client specific

44554 Last formation Marker now uses a pseudo base of well TD when performing Reservoir Summary interval checking - Santos Only

Configuration

41561 Added supportOS to Petrosys Installer manifest

45366 License Manager option is now available from Launcher when no project is selected

44360 Licensing changes for 17.5

35118 Standard release now created for clients who do not have client specific customisations

Connections, import and export

44888 Added decimation of time/velocity pairs to Stacking Velocity Exchange

45555 Added support for new TriSurf (.ts) format produced by JewelSuite

44889 Improved information written to the HTML log file produced by Stacking Velocities Exchange

44890 Increased default number of Stacking Velocity Time/Velocity values imported per line to 1,200,000

44220 Petrel data stored under interpretation folders can now be accessed from Petrosys

44887 Shotpoint decimation used when loading stacking velocities is now the same for both Text and SEGY data formats

38894 Well headers can now be written to a Petrosys-dbMap database

42551 Well headers, Formation tops & Directional surveys can now be written to Petrel

dbMap - User interface

45045 Title bar in embedded web browser used by PLDB desktop now updated based on user action

Mapping

45546 Display of ECW images in 64-bit versions improved

Mapping/Spatial

44997 Description for imported layers from LYR files now set using the LYR description

Petrel plugin

40911 Ceased support for Petrel 2010 and 2011

Bug Fixes

Petrosys release 17_5 [8 entries]

Client specific

17955 Selected formation now correctly saved when editing formation tops - Santos Only

Configuration

45768 Corrected Configuration Tool issue setting path mappings

Connections, import and export

44967 Disabled symbols in LYR files now handled correctly by Mapping

45360 Surface Modeling no longer crashes when importing very large number TV stacking velocities

Mapping/Spatial

45641 Different file geodatabases located in the same parent directory can now be used successfully

45808 Fixed crash when opening a DBM file containing bubble maps produced from Excel data

Web map server

44867 Stability of WMS server under load improved

Well data

45240 Formation names containing single quotes now used correctly in Mapping and Surface Modeling

Detailed Release Notes

Petrosys release 17_5 [25 entries]

Client specific Enhancements

Last formation Marker now uses a pseudo base of well TD when performing Reservoir Summary interval checking - Santos Only

44554

When performing Reservoir Summary interval checking on associated well formation tops, if the last formation for the Source and System is a Marker, then the TD of the well will now be used as the formation base depth during interval checking.

Client specific Bug Fixes

Selected formation now correctly saved when editing formation tops - Santos Only

17955

The correct formation is now saved when adding or editing well formation tops. This fixes an issue where if a formation with the same formation code as other formations in multiple different provinces was selected, Petrosys would sometimes save the formation information incorrectly.

Configuration Enhancements

Added supportOS to Petrosys Installer manifest 41561

In some cases, exiting the Petrosys Installer would trigger the Windows Program Compatibility Assistant, incorrectly warning that the program may not have been installed correctly. This warning is will now no longer appear.

License Manager option is now available from Launcher when no project is selected 45366

The License Manager option is now selectable when there is no current project in the Launcher menu.

Licensing changes for 17.5 44360

A new FLEXlm license file must be installed to run version 17.5 of Petrosys. The new license file is backwards compatible with earlier versions of Petrosys.

A link to download your updated license file will be supplied with the 17.5 installer download instructions. Please contact Petrosys support for any questions around obtaining or installing the new license file.

Standard release now created for clients who do not have client specific customisations 35118

Clients who do not have a client specific customisations will now receive a standard release bundle along with their client specific license file. This means clients who do not have client specific customisations will no longer have to install an "Add-on" package.

Configuration Bug Fixes

Corrected Configuration Tool issue setting path mappings 45768

A bug that caused path mappings to not be recorded correctly has been fixed. The problem would only occur when the user had used the <tab> key to navigate the dialog.

Connections, import and export Enhancements

Added decimation of time/velocity pairs to Stacking Velocity Exchange 44888

Now time/velocity pairs decimation is supported. Similar to shot increment decimation, for each shotpoint one in every pair increment number of time/velocity pairs is transferred starting from the first time/velocity pair in this shotpoint.

Added support for new TriSurf (.ts) format produced by JewelSuite 45555

Petrosys now supports the tri-surf format output by the latest version of JewelSuite.

Improved information written to the HTML log file produced by Stacking Velocities Exchange 44889

The HTML log file produced by the Stacking Velocities Exchange tool now provides more diagnostic information about the data transfer. This includes information about any decimation applied to the incoming data, and the number of time/velocity pairs which have been transferred.

Increased default number of Stacking Velocity Time/Velocity values imported per line to 1,200,000 44890

The default maximum number of time/velocity values per line has been changed to 1,200,000 from its previous 200,000 in the Stacking Velocities exchange option.

Petrel data stored under interpretation folders can now be accessed from Petrosys 44220

Polylines, polygons, pointsets and faults stored under interpretation folders in Petrel can now be accessed from Petrosys applications. Previously, data located under interpretation folders in Petrel would not be recognised when accessed from Petrosys.

Shotpoint decimation used when loading stacking velocities is now the same for both Text and SEGY data formats 44887

Decimation using shotpoint interval (shotpoint decimation) is now performed in the same way for both Text and SEGY stacking velocities. Starting from the first shotpoint, one in every shot increment number of shotpoints will now be transferred when loading velocities from either data source.

Well headers can now be written to a Petrosys-dbMap database 38894

Petrosys' suite of well data exchange functionality has been expanded to write well header data to a Petrosys-dbMap database.

Well headers, Formation tops & Directional surveys can now be written to Petrel

42551

Petrosys' suite of well data exchange functionality has been expanded to write well data to Petrel. The data types that can be written to Petrel in 17.5.0 are:

- Well headers
- Formation tops
- Directional surveys

This builds on our existing Wells Import Wizard functionality, allowing data to be transferred from all existing input data sources - including OpenWorks, Kingdom, Paradigm Epos, Petra, ODM, GeoFrame, dbMap/PPDM and Petrosys-WDF - to Petrel.

In addition, the wells import wizard has been integrated with the Surface Modeling task list. This allows users to save Well Exchange jobs to TSK files that can be reopened and replayed.

This makes it easy for companies to synchronize master data stores of well data with project data in Petrel.

Please contact Petrosys if you are interested in writing additional data types to Petrel or writing to other data sources using the Wells Import Wizard.

Connections, import and export — Bug Fixes

Disabled symbols in LYR files now handled correctly by Mapping

44967

LYR files containing disabled symbol layers will now be displayed correctly by Petrosys Mapping. This fixes an issue where colours from disabled symbol layers would be picked up during the conversion to PSLYR, resulting in incorrect colours being displayed in Mapping.

Surface Modeling no longer crashes when importing very large number TV stacking velocities

45360

Importing stacking velocities to an SDF file where a very large number of time/velocity pairs exists for each line will no longer cause the Surface Modeling application to crash.

dbMap - User interface — Enhancements

Title bar in embedded web browser used by PLDB desktop now updated based on user action

45045

PLDB is launched from within the Petrosys desktop application using an embedded web browser. The window title bar of the embedded web browser is now updated according to the menu option which is currently in use.

Mapping Enhancements

Display of ECW images in 64-bit versions improved 45546

The display of ECW images in 64-bit versions of Petrosys has been improved have similar performance to display in 32-bit versions.

Mapping/Spatial Enhancements

Description for imported layers from LYR files now set using the LYR description 44997

Display/"Esri LYR, MXD files..." now uses the ArcMap layer name as the description of the corresponding Petrosys display layer.

Mapping/Spatial Bug Fixes

Different file geodatabases located in the same parent directory can now be used successfully 45641

In previous versions, attempting to use more than one file geodatabase located in the same directory did not work correctly - the file geodatabase that was first opened would always be used regardless. This issue has now been fixed, allowing file geodatabases to co-exist in the same directory without fault.

Fixed crash when opening a DBM file containing bubble maps produced from Excel data 45808

A crash has been fixed which could occur if changes were made to the underlying Excel file used to display a bubble map. Specifically, displaying a bubble map from an Excel file, saving the map to a DBM file, changing the number of columns in the Excel file then re-loading the DBM file would trigger the crash. This has now been fixed.

Petrel plugin — Enhancements

Ceased support for Petrel 2010 and 2011 40911

Petrel 2010 and 2011 are no longer supported. Petrosys continues to maintain support for Petrel 2012 and Petrel 2013.

Web map server — Bug Fixes

Stability of WMS server under load improved 44867

The Petrosys WMS server is now more stable under heavy load conditions. Previously the WMS server could crash when the maximum number of sessions was exceeded.

Well data — Bug Fixes

Formation names containing single quotes now used correctly in Mapping and Surface Modeling 45240

Formation names containing single quotes will now be displayed correctly by Petrosys Mapping, and retrieved correctly if used as a data source in Surface Modeling. Previously, circumstances existed under which formation names containing single quotes would not be used correctly.