PETROSYS SOFTWARE RELEASE NOTES VERSION 17

17.1sp1
December 2011

Building on the 17.0 release, 17.1 focuses on improving Petrosys connectivity with better access to multiple PPDM data stores, extension of EPOS connectivity to well data, ESRI file geodatabase support, and numerous incremental changes to spatial and geoscience applications access.
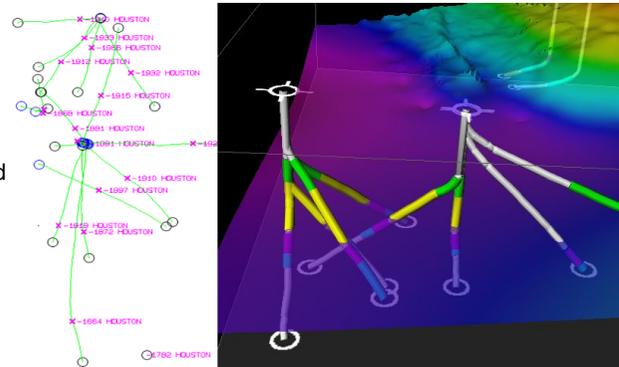
EPOS4 Well, Grid, Culture Connectivity

The Paradigm plugin, released with seismic connectivity in 17.0, has been extended in 17.1 to allow Petrosys access to well, grid and culture data in EPOS4.

Use Paradigm Wells

Paradigm-EPOS wells can now be used throughout Petrosys. Well data, including header information, markers, marker attributes and directional surveys, can be used within Mapping, 3D Viewer and Grid, Contour and Volumetrics. Workflows that are now available include:

- direct display of wells, directional surveys and markers, along with annotations, including use of Paradigm-EPOS selection lists and well DBs
- investigation of the well header to obtain details of individual wells
- direct gridding of wells, including the use of directional surveys, depths, well markers and attributes
- import of wells, surveys and markers to Petrosys WDFs for offline storage via the Well Import Wizard

Get Grids

Petrosys can now access grids stored within Paradigm-EPOS. Grids can be imported, displayed, in 2D or 3D, and used in various surface modeling operations, including grid creation and contouring.

In conjunction with the existing ability to write Petrosys grids into EPOS, this provides the Petrosys / Paradigm user with the ability to create workflows that leverage the best of both applications.

Accessible Culture

Culture data stored within Paradigm-EPOS is accessible as a spatial data type for mapping using the Petrosys Display/GIS option, and for translation of EPOS culture into other formats via the Spatial Data Translator.

With this extended data access a user can, for example, export Paradigm culture, well directional surveys, OpenWorks seismic lines, Petrosys dbMap culture and data from ArcGIS to a single kml file for display in Google Earth.

Better Access to Multiple PPDM Data Stores

The ability to edit well data and access formation tops and directional surveys when using multiple PPDM data stores has been significantly improved through the extension of functionality associated with 'secondary connections' in dbMap.

Esri File Geodatabase Supported

Version 17.1 introduces support for Esri File Geodatabases. At this stage this functionality is available on Windows. File Geodatabases are accessible in both import and export contexts and are accessible throughout Petrosys where spatial data can be used, including:

- as an import or export data source in the Spatial Data Translator
- for display via Display/GIS
- as a gridding input in Surface Modeling

ArcSDE 10sp3 Support

Petrosys has added support on Linux and Windows for the recently released ArcSDE 10sp3. Connecting to ArcSDE 10sp3 servers is identical to earlier versions of ArcSDE ensuring there is no additional learning curve to using your latest SDE data within Petrosys.

Additional Culture Exchange with Petrel

Petrosys has added functionality to export spatial objects to various Petrel Culture data types. For example, a shapefile can be used as input to the Spatial Data Translator and exported as polygons; or a Petrosys contour file can be exported to Petrel as a collection of Petrel contours.

Additional Petrel culture data types can now be used as input to Petrosys functions. Petrosys can now display point data, complementing the existing support for Petrel polylines. Petrosys Surface Modeling now has Petrel culture data as an input source, allowing seamless gridding of Petrel point and polyline data.

Well Gridding Enhancements

The well data input to the surface modeling has been overhauled to improve consistency across all well data sources. This has given some well sources additional functionality, including:

- more prevalent well selection methods
- improved access functions for well data to grid
- well formation rules for Petrosys dbMap and all thirdparty data sources
- consistency between the operations and interface available in 2D and 3D mapping and gridding

Note: When an existing task file is opened in v17.1 it will be automatically upgraded to use the new features. Once saved, this task file will no longer be able to be used by earlier versions of Petrosys.

Well Selections from Petra and Petrel Imports

Well selection files (.wsl) can now be saved by the Well Import Wizard when importing wells from Petra and Petrel. The well selection file created can then be used to filter wells when direct connecting to the original input data source for use in 2D and 3D mapping and surface modelling.

Spatial Display Performance Improvements

Mapping performance enhancements in 17.1 include a dramatic improvement in the speed of Display/GIS from dbMap culture data sources, and speed improvements in opening huge Petrosys polygon files.

More Powerful DbMap Runtime Query Parameters

The power of runtime parameters, which allow pre-defined database queries to include interactive prompts, has been extended through having the choices in lookup prompts targeted on the basis of previous responses and through improved use of wildcards.

EPSG Database Upgraded to 7.9

Petrosys has upgraded the version of the EPSG database from 7.6 to the current release 7.9. For details on changes between these databases, please see the OGP Geomatics homepage at http://www.epsg.org.

Existing SQLite clients will have their database upgraded automatically during installation. For dbMap clients Petrosys provides the required upgrade scripts as a part of the standard install - please contact your database administrator to perform the upgrade.

Drag and Drop Folders and Files

Version 17.1 adds drag and drop of files and folders from your favourite file manager into various places on Windows and Linux. A folder with a Petrosys project can now be dropped on the launcher to change to that project, or into the project selector to add the project to the project list. Files can be dropped into any file selection to pick that file without having to navigate to them independently from the file picker.

Enhancements

Petrosys release 17_1_1 [0 entries]

Bug Fixes

Petrosys release 17_1_1 [1 entries]

Mapping/Spatial

32951   Mapping no longer crashes when using shapefiles with Point or Multi-Point types

Detailed Release Notes

Petrosys release 17_1_1 [1 entries]

Mapping/Spatial   Bug Fixes

Mapping no longer crashes when using shapefiles with Point or Multi-Point types   32951

A bug was introduced in 17.1 where using /Display/AnyData with Point or MultiPoint spatial data sources could cause Mapping to crash. Further, if Mapping did not crash the display could be corrupted. If the map was then saved, upon reopening Mapping could crash or the display corrupted.

A workaround for a corrupted display was available - opening the layer via Display/Modify and OKing the layer would correct the layer.

This bug is now fixed such that invalid data is no longer accessed, preventing crashing and displaying the spatial data as expected.

Enhancements

Petrosys release 17_1 [61 entries]

Administration/dbMap

27025   Admin/Security - No longer displays Oracle system users in the user lists

17624   Admin/Security - Now allows any DBA to grant/revoke all non-system object privileges

15675   Administration Security dialogs are now SQC configurable

Client specific

27935   Display layers containing Santos Drilling Opportunities can now be overpost corrected

31672   Santos - Added confidence rating to the Sand Summary dialog

29539   Santos - Formation tops from 3rd party data sources can now be imported into a Santos dbMap database

30975   Santos - Increased the length of the REMARK column for Sand Summary and Formation Tops

31362   Santos - Perforations dialog improved

Configuration

32620   Custom install script enhanced to better handle limited access administrator users

32019   Single error notification of inaccessible configuration files

Connections, import and export

26383   Added Paradigm EPOS culture as a spatial data source

26517   Added support for Well, Grid and Culture data from Paradigm EPOS projects

30746   Interpreter column now visible when selecting OpenWorks grids

29711   Password manager panel layout improved

25124   Petrel & Petra data selection now has the ability to use a well selection file

15082   Query name is now displayed on the runtime paramaters screen

28078   SeisWorks R5000 projects are now filtered by OpenWorks project

18934   Support added for Esri File Geodatabases

28950   Turning on diagnostics for a Petra link is now easier

29031   Turning on diagnostics for Landmark and GeoFrame links is now easier

dbMap

29740   dbMap culture group administration now allows a remark to be stored with each group

dbMap - User interface

25169   Runtime Parameter lookup queries can now be filtered using Runtime Parameter values

29768   Runtime Parameter lookup queries now allow the use of runtime parameters

15054   Runtime parameters now translate * and ? to % and _

ESRI plugin

31922   Support added for ArcSDE 10 service pack 3

General

28765   Change project no longer prompts if change is to current project

General - User interface

29340   Dialogs can span multiple screens

30575   Drag and drop of files and directories to file selectors, Petrosys Launcher and Project Selector

30225   Toolbar icon file picker now adds a bookmark shortcut to Petrosys misc/icons

Help

28185   Help documentation updated

Import and Export

30274   Wells Import Wizard now allows for the automatic assignment of a formation base if the corresponding formation name contains the word "base"

22104   Wells Import Wizard now displays a summary dialogue upon completion

Mapping

31067   Shortcut key for zooming in on map

32536   Toolbar positions are now restored after quitting and restarting

Mapping/2D Seismic

25806   2D seismic line header information is now available from Petrel, Paradigm & SeisWare

Mapping/Coordinate Reference Systems

30722   CRS EPSG database upgraded to version 7.9

Mapping/Images

29860   OSGeo WMS server added as a default server

Mapping/Other

31000   /Display/Polygon - Performance improved for polygon files with a large number of polygons

30621   /Display/Text - Support added for keyword substitution

Mapping/Spatial

31038   Performance vastly improved when using dbmap culture as a data source in Display/GIS

Mapping/Wells

21518   Added the ability to run external scripts from the well header dialog

29037   Default size of well symbol selector dialog improved

26007   Directional survey information for wells from a secondary connection is now supported in dbMap

26808   Display/Wells/dbMap - Well Header screen now allows editing from a secondary connections

28357   Formation top information for wells from a secondary connection is now supported in dbMap

23840   Improved consistency in terminology relating to well related thicknesses

26399   Well header screen now available for Paradigm-EPOS

Petrel plugin

24934   Petrel culture/polygon/point data handling improvements

Project Selector

31475   Cancelling copy now removes partially copied project

29416   Group combobox now ordered alphanumerically

29150   New project parent directory immediately updates UI

31944   Project Selector administration dialog layout improved

29322   Project selector list speed improved

32097   Speed of group administration dialog improved

Surface Modeling

29259   Fault/Extract Z values from seismic panel layout improved

Surface Modeling/Gridding

30950   Gridding from well data improved across all data types

26397   Support added for Paradigm well data in gridding

28264   Support added for SeisWare well data in gridding

Web map server

32055   Authentication is no longer required for cross domain policy files

Well data

30408   dbMap Well production screens and charts now support secondary connections

25040   Display/Wells now shows the CRS of the well data source

Bug Fixes

Petrosys release 17_1 [111 entries]

3D Viewer

32264   Display/Well - formation name now displayed correctly

Configuration

31425   Advanced/Reset button now clears all applied and unapplied changes
32531   Error message when site configuration file is not readable clarified
31639   Reset all settings no longer re-imports from 16.x settings
30553   Setting removed from ps_site_settings.xml when changing a value to match default
32534   Spurious error messages no longer output when running configuration tool

Connections, import and export

32497   Can now connect to a Paradigm project with CRS that does not exist
30299   Connecting to an OpenWorks project without a datum translation no longer results in a crash
28638   GeoFrame wells now use the correct depth datum value for Display, Gridding & Well Import Wizard
29178   Import IESX direct log window behaviour improved
30607   OpenWorks R5000 2D lines with a different CRS to that of the OpenWorks project are now displayed correctly
31274   Petrel grid export now allows for the selection of different units in the "ELEVATION_DEPTH" and "ELEVATION_TIME" domains
30321   Petrel model grids are now found when used in pre 16.5.1 dbm and task files
24030   SMT import ASCII culture now CRS convert correctly
30564   Well number values are now read for SMT wells
30545   Wells/Run External Script restricts by data source

dbMap

32093   Business Unit permissions screen no longer crashes if the database GLOBAL_NAME is different than expected (Santos only)
30617   Display of very large 3D seismic surfaces from SeisWorks no longer results in a crash
29209   Editing dbMap seismic water depths no longer results in a crash
31755   StatX now shows the full Geographical CRS name instead of the EPSG code

dbMap - User interface

32457   Displaying auto-generated runtime parameter dialogs no longer results in a dialog panel parsing error

General

32391   Command shell now supports older KDE versions

32174   Editing CRS projection and using it as project default no longer crashes

General - User interface

32303   Fixed handling of empty value in combo boxes
31612   Information and logging windows appear on top of parent window
29103   Text fields that display file contents now stay scrolled to the top

Graphics/Plotting and Hardcopy

32876   Printing to Windows printer drivers is now more robust
31712   Windows PDF printer driver now works with custom page sizes

Help

27372   Links to html help topics now work

Import and Export

32393   Spatial export of 2D seismic data correctly sets horizon name
30990   Wells Import Wizard log file now always contains information

Mapping

32184   /View/Toolbars/Scale and Legends toolbar is now renamed to match the new Map Elements menu option
32530   Copy and paste of Display/Grid/Colorfill layers has been made more robust
32894   Correct polygon selection when two layers use same polygon file
29359   Display/3D Seismic Bin Grid - improved layout of dialog
32478   Display/GIS numeric annotation works as expected when a date field is added first
32727   Editing dbMap Culture group colour properties no longer gives an incorrect error
32889   Fill style translucency no longer affects pattern color
32529   Fixed random crashing of Display/Map Elements/Legend
32312   Gradient source type is reselected correctly when opening grid display layers from v16 mapfiles
31987   Loading a dbm file containing overpost corrections with no mapsheet set no longer crashes
32597   Mapping no longer crashes on exit when Display/Wells or Display/Map File dialogs are displayed
31988   Missing file errors are no longer shown for inactive Display/Polygons layers
32522   Overpost correction mode can no longer exit while using area selection
32398   Undocked windows always appears onscreen
32542   Undoing deletion of colour bar no longer causes a crash
31039   Upholes are now displayed correctly after changing mapsheet
32587   User toolbar configuration is saved when launcher quits

Mapping/2D Seismic

28558   2D seismic data display handles unsorted interpretation segments
16318   2D seismic line header dialog now supports a secondary connection
31838   Bulk shifts are now correctly applied to misties when displaying 2D seismic data from an SDF
32671   Display/2D Seismic layers are drawn correctly when missing SDFs are resolved

Mapping/Bubble Maps

28414   Dbm files containing multiple bubble map layers are now drawn correctly when the redraw button is pressed

Mapping/Coordinate Reference Systems

28610   CRS Editor stores decimal values exactly as entered by the user

31717   CRS matching improved for shapefiles containing RSO based projections

28402   CRS now handled correctly while editing dbMap seismic line coordinates as Easting Northing

26726   Improvements to well symbol and drawing tools stored coordinates

Mapping/Editors

32701   CFP Editor - Refresh and drawing issues fixed

31509   CFP Editor no longer crashes after undoing contour creation

32738   Editing a grid layer in mapping no longer hides all other Display/Grid/Values layers

32550   Undo and redo of Mapping changes is disallowed while overpost correcting text

Mapping/Images

31135   ArcSDE rasters loaded with an offset are now displayed in the correct position

24432   Selection of any supported CRS now available when displaying raster from WMS servers

Mapping/Map Sheets

31548   Display/Map Elements/Other Mapsheet Ref Grid now has a mapsheet selector

Mapping/Other

31989   Modifying faults layer with missing SMT file will now bring up the modify dialog

32306   Undo is now always disabled when in georeferencing mode

Mapping/Spatial

30866   Display/Spatial no longer crashes while working with large shape files

32790   Query attributes shows correct attributes for Petrosys polygon files

32789   Zooming in and then out on ArcSDE layers no longer results in nothing being drawn

Mapping/Wells

31729   Annotation queries returning well locations now post in the correct location when a mismatch occurs between the project default CRS and the CRS of the well database

26337   Compute bottom hole option on well header coordinates dialog now configurable for different data models

31805   Display/Wells no longer shows overpost corrected text and original text simultaneously

30231   Generic Well header dialog now handles data from multiple sources which is displayed simultaneously

27529   Inoperative Selection-list option removed from Display/Wells OpenWorks and GeoFrame in Mapping and 3D Viewer

31833   Wells selection using a form is now restored correctly after reopening a DBM file

Paradigm-EPOS plugin

30028   Attempting to read interpretation data from large Paradigm 3D surveys should no longer result in a crash

32208   Querying a Paradigm-EPOS survey while connected to an associated project now returns the correct survey CRS

29463   Selecting grid horizons in the Paradigm Grid Export dialog no longer allows reconnection to a project for which user permission has been revoked

Project Selector

29429   Appropriate buttons are now enabled when an invalid project is selected

29271   Can no longer assign properties to invalid projects

29499   Copy project to an existing directory no longer allowed

28298   Deleting current project now deselects

31489   Full Lockdown user project selector no longer redraws during project listing

32592   GroupLockdown users defined via * can now use Groups

32319   Invalid projects now cleared from templates list

32584   Newly added "empty projects" now appear in the project list immediately

29377   Rename and copy of path mapped projects now works

29500   Selecting a group then unselecting maintains Parent Location path

31301   User and Group administration dialog layout more flexible

Seismic data

18261   Display and Import of 3D seismic surfaces and grids from GeoFrame returns data in consistent units

29831   SDF Seismic - Reports/Line Length no longer crashes when no map sheet file or name is selected

28653   Velocities/Depth Converter now lets you select SDF and SLS files in dialogs that use them

Surface Modeling

29240   Interactive panel resized

32430   Spatial Data Translator logs information output to diagnostics window

Surface Modeling/Grid Operations

31551   Grid/Process/Arithmetic now has a mapsheet selector if AOI is defined by a mapsheet

Surface Modeling/Gridding

15858   Back interpolate to WDF - Thickness TVD now finds correct intersections

30620   Back interpolation to SDF now correctly preserves fault settings

30723   Back interpolation to WDF works when attribute is used

25300   Correct panel is now displayed when gridding from dbMap Formation Tops

23807   Grid data scan now ignores missing well coordinates

24116   Gridding formations ignored wells with no directional survey or bottom hole location for PPDM 3.7/3.8 datasources

30611   Gridding from an SDF and selecting VAV as the input data type now disables the second horizon name

28731   Gridding well data using a query now uses the surface location if a NULL value is returned by the query

Surface Modeling/Volumetrics

28236   Grid-based-slice volumetrics / Thickness method - Individual slice volume and area reporting has been made more consistent

Web map server

32647   All map layer types now rendered in the expected order

32648   Configuration panel will not locked up on finish

32345   User validation now works when authentication enabled

32885   WMS Server - Colors are now correct

32352   WMS Server now prevents users from connecting when they enter the wrong username/password

Well data

30754   Database information now correctly used to retrieve a wells Final Total Depth across different data models

32842   Fixed crash in well selection using expression panel

Detailed Release Notes

Petrosys release 17_1 [172 entries]

3D Viewer   Bug Fixes

Display/Well - formation name now displayed correctly   32264

Display/Wells formation annotation posts formation "name". Previously in version 17 it would incorrectly post "author".

Administration/dbMap   Enhancements

Admin/Security - No longer displays Oracle system users in the user lists   27025

Petrosys no longer displays Oracle system users in the Admin/Security user lists.

Admin/Security - Now allows any DBA to grant/revoke all non-system object privileges   17624

Petrosys no longer limits grant/revoke privileges to Petrosys roles.

Administration Security dialogs are now SQC configurable   15675

The Administration Security dialogs have been updated to allow configuration through SQC files.

Client specific   Enhancements

Display layers containing Santos Drilling Opportunities can now be overpost corrected
27935

It is now possible to use overpost correction on display layers containing data from the SANTOS specific option Display/Prospects & Leads/Drilling opportunities.

Santos - Added confidence rating to the Sand Summary dialog
31672

The Sand Summary dialog now displays and allows the editing of a Confidence Rating.

Santos - Formation tops from 3rd party data sources can now be imported into a Santos dbMap database
29539

The Wells Import Wizard has been updated to allow the importing of formation tops into a Santos specific dbMap database.

Santos - Increased the length of the REMARK column for Sand Summary and Formation Tops
30975

The remarks field for the Formation Tops and Sand Summary dialogs now allows for 240 characters, where as previously it was limited to 50 and 60 respectively.

Santos - Perforations dialog improved
31362

The Perforations dialog now includes the perforation status code. In addition, Shots per foot, Formations and Sands information has been moved from the display panel into the scrolled list, enabling a simplified view of data.

Configuration   Enhancements

Custom install script enhanced to better handle limited access administrator users
32620

The custom install script, which can be used to assist the rollout of Petrosys on Windows, has been enhanced to support systems where the PC administrator does not have access to the network administrative install point. It also handles cases where the custom install script has been renamed, for example, to support rolling out of different versions.

Single error notification of inaccessible configuration files
32019

Previously, when configuration files were inaccessible (e.g. if file permissions did not allow reading) the user would receive multiple error messages warning of the condition. This has now been fixed so the user receives a single notification of the error.

Configuration   Bug Fixes

Advanced/Reset button now clears all applied and unapplied changes
31425

Resetting configuration settings now clears any unapplied changes. Previously it was possible for unapplied changes made prior to the reset to be applied.

Error message when site configuration file is not readable clarified
32531

Improved error message when config system cant access a file

Reset all settings no longer re-imports from 16.x settings
31639

Previously, resetting all configuration settings would cause any 16.x settings to be imported and upgraded into 17 again. This has now been corrected, so 16.x settings will only be imported once.

Setting removed from ps_site_settings.xml when changing a value to match default
30553

Site settings are now not automatically reverted if they match the defaults

Spurious error messages no longer output when running configuration tool

32534

Previously, on Linux only, QSharedMemory error messages would be output to the console when running Configuration and Settings. These error messages had no affect on the performance of the software, however were distracting.

Connections, import and export Enhancements

Added Paradigm EPOS culture as a spatial data source

26383

Petrosys 17.1 introduces support for Paradigm-EPOS culture data as a spatial data source to the version 17 stream.

Functionality available in 17.1:

- ➢ Direct display of culture, polygon and boundary sets using the Display/Spatial function in mapping.
- ➢ Direct import of Paradigm culture, polygon and boundary sets to supported formats using the Spatial Data Translator - available in either Gridding and Contouring, or from the Import and Export options in the Petrosys Launcher.

Some Paradigm data is not stored within the EPOS framework. This data is not available through the EPOS development kit and is therefore not accessible to Petrosys.

For further information on connectivity with Paradigm please contact Petrosys Support.

This functionality has been previously released in 16.10.

Added support for Well, Grid and Culture data from Paradigm EPOS projects

26517

Petrosys can now access Well, Grid & Culture data from Paradigm EPOS projects.

The new functionality includes:

Wells

- ➢ Direct display of well header, well markers and directional surveys
- ➢ Direct gridding of well header depths, well markers and well marker attributes
- ➢ Direct import of well header, well markers and directional surveys to Petrosys WDF files.

Direct display, gridding and import includes support for filtering data using Well Selection lists created within Paradigm.

Grids

- ➢ Direct display of grids
- ➢ Direct contouring of grids
- ➢ Direct import of grids to Petrosys grid files.

The ability to write Grids to Paradigm-EPOS was added in Petrosys version 16.9.

Culture

- ➢ Direct display
- ➢ Direct import to Petrosys CUL, ESRI Shapefile or KML using the Spatial Data Translator

Some Paradigm data is not stored within the EPOS framework. This data is not available through the EPOS development kit and is not accessible to Petrosys. For further information on connectivity with Paradigm please contact Petrosys Support.

Interpreter column now visible when selecting OpenWorks grids
30746

When selecting an OpenWorks grid for display or import (e.g. via /Display/Grid/Colorfill with OpenWorks selected as the data source) a column has now been added to show the interpreter for the grid. Other columns have also been renamed to better match what is seen in the OpenWorks application.

Password manager panel layout improved
29711

The layout of the password manager dialogs has been improved so resizing allocates space more intelligently.

Petrel & Petra data selection now has the ability to use a well selection file
25124

Petrosys now allows the ability to use a well selection file for data selection when displaying, gridding and/or importing well data from Petrel and Petra. To create a well selection file for either data source, use the Wells Import Wizard to list the wells, select/unselect wells as required, then use the RMB menu to save the well selection file.

Query name is now displayed on the runtime paramaters screen
15082

When a user is prompted to enter values for a query that includes runtime parameters, the query name is now displayed in the window title. This can help give context to users entering values.

SeisWorks R5000 projects are now filtered by OpenWorks project
28078

When a user is asked to select a new SeisWorks R5000 project, they are now asked to select one or more OpenWorks projects first to filter the list of SeisWorks projects returned. This considerably increases the speed of reading a list of SeisWorks projects for sites with a large number of OpenWorks projects.

Support added for Esri File Geodatabases
18934

Petrosys v17 now includes support for Esri File Geodatabases for the Windows platform only. File Geodatabases are spatially aware databases that can be used to store vector data similar to how a shapefile does. File Geodatabases allow storage of any number of "feature classes", each of which is roughly equivalent to a shapefile in that they each store a different shape type in a different CRS.

Esri File Geodatabases may be used in the following contexts within Petrosys:

- ➢ Mapping - /Display/GIS - display of feature classes
- ➢ Mapping- Right Mouse Button/Export spatial - writing feature classes
- ➢ Spatial data translator - reading and writing feature classes
- ➢ Surface Modeling - Grid/Create Grid - support for gridding feature classes as a spatial source of data

Notes on supported usage:

- ➢ Support for both reading and writing feature classes (including limited support for feature classes within a dataset)
- ➢ No support for layer types other than feature class
- ➢ No support on Linux at present
- ➢ No support for blob or raster fields
- ➢ CRS support is limited to a subset of EPSG CRSs supported by the Esri File Geodatabase API (custom CRSs cannot be used)

Turning on diagnostics for a Petra link is now easier
28950

Previously, to turn on advanced diagnostics logging for a Petra link, a user needed to edit an SQC file and copy it into a specific directory. Advanced diagnostics can now be turned on using File/Preferences/Diagnostics BEFORE connecting to a Petra project.

Turning on diagnostics for Landmark and GeoFrame links is now easier
29031

Previously, to turn on advanced diagnostics logging for the Landmark & GeoFrame links, a user needed to set an environment variable in an xterm before launching Petrosys from that same xterm.

Advanced diagnostics can now be turned on using File/Preferences/Diagnostics BEFORE connecting to an OpenWorks, SeisWorks, GeoFrame or IESX project.

Connections, import and export   Bug Fixes

Can now connect to a Paradigm project with CRS that does not exist
32497

It is now possible to connect to a Paradigm project if it has a CRS name assigned that does not exist in Paradigm. This can occur if a project from an external vendor/client has been restored in Paradigm. Previously you would get an error that the connection was lost, and would not be able to connect to the project. Now you are prompted to select a CRS to use with the project.

Connecting to an OpenWorks project without a datum translation no longer results in a crash
30299

When connecting to an OpenWorks project that has a datum which has not been translated to a Petrosys one, the application no longer crashes. You now get an error describing the problem.

GeoFrame wells now use the correct depth datum value for Display, Gridding & Well Import Wizard
28638

When reading GeoFrame wells using Display/Wells, Grid/Create grid or File/Import/Wells, the depth datum (KB) used for computing subsea reference depths was incorrect for some wells. This occurred for wells in GeoFrame where the "Kelly_Bushing_Reference" attribute was different to the "Working Datum" seen on the well header. The "Working Datum" value from the GeoFrame well header is now read for all options.

This was not a problem when importing wells using the File/Import/Geoquest/GeoFrame-wdf option.

Import IESX direct log window behaviour improved
29178

Previously the Import IESX log window would appear on top of the import windows and could not be dismissed. It has been changed so the dialog can now be closed.

OpenWorks R5000 2D lines with a different CRS to that of the OpenWorks project are now displayed correctly
30607

Displaying 2D seismic data from OpenWorks or SeisWorks R5000 projects now shows lines that have a different CRS to that of the OpenWorks project. Previously these lines did not appear because Petrosys was checking the bounding box corner points of the 2D line, assuming they were Easting/Northing coordinates derived from the OpenWorks project CRS. This is not always the case, and it is even possible for the bounding box coordinates to be Latitude/Longitude values.

Petrel grid export now allows for the selection of different units in the "ELEVATION_DEPTH" and "ELEVATION_TIME" domains
31274

When running the /Export/Grids option from the Petrel plugin (Tools/Petrosys -> Import/Export) it is now possible to select the domain data units to convert from. If you select domain "ELEVATION_TIME", you can select either milliseconds or seconds, and for the domain "ELEVATION_DEPTH", you can select either feet or metres.

Petrel model grids are now found when used in pre 16.5.1 dbm and task files
30321

If you have a .dbm file created prior to 16.5.1 which contains a /Display/Grid/* item that uses Petrel model grids, it can now be opened and the grid will be displayed correctly. Previously, the Petrel model grid would not be found, and nothing would appear on the map.

Similarly, any .tsk files created prior to 16.5.1 that contain Petrel grids will now work correctly.

SMT import ASCII culture now CRS convert correctly
24030

A bug where Import/SMT/Import ASCII culture file was incorrectly reading EN coordinates as LL values has been fixed. The end result polygon file therefore had wrong coordinates and would not display in the correct location.

Well number values are now read for SMT wells
30564

Previously, Petrosys was reading Well name values from SMT but not Well number values. We now read Well name and Well number values and they are available in direct display, direct import to Petrosys WDF files and on the SMT Well header screen.

Wells/Run External Script restricts by data source
30545

The Run external script option available from the Right-Mouse-Button menu when you select a well on the map was returning a list of all external scripts. It now correctly limits to only scripts applicable to the selected well's datasource.

dbMap Enhancements

dbMap culture group administration now allows a remark to be stored with each group
29740

A remark can now be stored with each Petrosys Culture group in a dbMap database. This is useful for storing meta data about a culture group.

dbMap Bug Fixes

Business Unit permissions screen no longer crashes if the database GLOBAL_NAME is different than expected (Santos only)
32093

The Business Unit Permissions screen crashed if the GLOBAL_NAME of the Oracle database did not match the naming convention previously used for this field. This has been resolved so that the GLOBAL_NAME is no longer used.

Display of very large 3D seismic surfaces from SeisWorks no longer results in a crash
30617

When attempting to read and display a grid from SeisWorks that is too large to display using the available memory, Petrosys mapping now gives a warning that there is insufficient memory available to display the grid. It is advisable, as stated in that warning, to restart Petrosys mapping when this occurs.

Editing dbMap seismic water depths no longer results in a crash
29209

The stability of the /Edit/Seismic/Lines/dbMap/Edit/Water depths option has been improved so that it no longer crashes intermittently.

StatX now shows the full Geographical CRS name instead of the EPSG code
31755

The Petrosys StatX software now displays the full Geographical CRS name in the uphole selection status text, left-hand summary display and as part of the exported statistics report. Previously, only the EPSG code for the relevant CRS was given.

dbMap - User interface   Enhancements

Runtime Parameter lookup queries can now be filtered using Runtime Parameter values
25169

Petrosys now allows runtime parameter lookup queries to be filtered based on other runtime parameter values.

Runtime Parameter lookup queries now allow the use of runtime parameters
29768

Petrosys runtime parameter lookup queries can now contain other runtime parameters. However, whatever runtime parameter is used in the lookup query must be present in the runtime parameter query used in the runtime parameter lookup query.

Runtime parameters now translate * and ? to % and _
15054

Petrosys runtime parameters now correctly translate the wildcard characters * and ? to the corresponding SQL wildcards % and _.

dbMap - User interface   Bug Fixes

Displaying auto-generated runtime parameter dialogs no longer results in a dialog panel parsing error
32457

A problem has been fixed where in some cases when trying to use runtime parameters, Petrosys would display a dialog panel parsing error.

ESRI plugin   Enhancements

Support added for ArcSDE 10 service pack 3

Petrosys is now compatible with ArcSDE 10.0 service pack 3 servers on all platforms other than Solaris, where support remains limited to ArcSDE 9.3.

General Enhancements

Change project no longer prompts if change is to current project

In the situation where a project change (via the Project Selector) would cause an attached tool (e.g. Mapping) to change into the same project, the user is no longer prompted to acknowledge the project change.

This situation could occur if a project change request was cancelled by the user in the attached tool and then subsequently a second project change back to the original project initiated.

General Bug Fixes

Command shell now supports older KDE versions

In some cases the command shell (from Application Launcher/File/Command Shell... on Linux only) would not appear on some older versions of KDE. This has now been fixed so the command shell can be called on all versions of KDE.

Editing CRS projection and using it as project default no longer crashes

An issue where the CRS database could be used before it had loaded and then leading to a crash has been fixed.

General - User interface   Enhancements

Dialogs can span multiple screens   29340

Certain windows, such as mapping, are now allowed to span multiple windows but are restricted to the virtual desktop.

Drag and drop of files and directories to file selectors, Petrosys Launcher and Project Selector   30575

Drag and drop of folders and files have been added to a number of places in Petrosys.

Project directories can be dragged from a File Manager to the Petrosys Launcher to change to that project. Project directories can also be dragged to the Project Selector to add the project to the project list.

Files and directories can be dragged file and directory selector widgets to select the file or directory.

This feature is supported on Windows and Linux under all popular window managers.

Toolbar icon file picker now adds a bookmark shortcut to Petrosys misc/icons   30225

The toolbar icon file selector now adds a bookmark shortcut to Petrosys misc/icons. This provides easier navigation to the Petrosys icons directory to pick Petrosys icon files.

General - User interface   Bug Fixes

Fixed handling of empty value in combo boxes   32303

Now empty value in combo boxes is treated the same way it was in v16.

Information and logging windows appear on top of parent window   31612

A number of information and log windows have been changed so they will appear on top of their parent windows. In previous versions it was possible for the child window to appear underneath the parent window.

Text fields that display file contents now stay scrolled to the top   29103

Previously, in version 17, text fields that display file contents would scroll to the bottom of the input. This would make it difficult to use in situations like previewing files to define import formats.

Graphics/Plotting and Hardcopy   Bug Fixes

Printing to Windows printer drivers is now more robust   32876

In some situations printing to a Windows printer driver could fail with either a blank page or a few marks on the page, this is now fixed. This could also happen when selecting to output to a file rather than direct to the device.

Windows PDF printer driver now works with custom page sizes   31712

When printing to a Windows printer that is a PDF driver the custom paper size now works, depending on the vendor of the PDF driver. As a work around if a PDF driver doesn't handle custom paper sizes with Petrosys perform the following:

➢ Control Panel > View devices and printers > Print server properties
➢ Check 'Create a new form', enter a form name and enter appropriate dimensions
➢ Click the 'Save Form' button and hit OK
➢ This will now be available in the 'Printer Setup' dialog as a paper size

Help   Enhancements

Help documentation updated
28185

Various help topics have been created and updated to better reflect the current software. Changes include:

- the Petrosys Launcher now has a help topic to provide guidance on correct usage
- use of Petrel culture import and export features
- use of Esri File Geodatabases documented
- version 17 Getting Started Guide improved

Help   Bug Fixes

Links to html help topics now work
27372

Linking to html topics now works correctly in help. Previously html help topic links would not be displayed in the online help.

Import and Export   Enhancements

Wells Import Wizard now allows for the automatic assignment of a formation base if the corresponding formation name contains the word "base"
30274

A check box is now provided on the Wells Import Wizard formation/zone mapping step dialog to allow the user to enable or disable the auto matching of top/base assignment. This is enabled by default.

Wells Import Wizard now displays a summary dialogue upon completion
22104

The Wells Import Wizard now displays a summary dialog at the end of the import showing the number of wells processed, the number of well headers added/updated. It also displays similar information for formation tops, zones and directional surveys.

Import and Export   Bug Fixes

Spatial export of 2D seismic data correctly sets horizon name
32393

When a 2D seismic data layer is displaying horizon data and is exported via the RMB/Export Spatial data option, an attribute is created in the output data containing the horizon data values. In previous versions, this attribute was incorrectly named - it is now set to a combination of the horizon name and data type.

Wells Import Wizard log file now always contains information **30990**

The Wells Import Wizard now always writes information to the log file. Under certain conditions the log file was being written but contained no information.

Mapping   Enhancements

Shortcut key for zooming in on map
31067

Users can now activate Zoom-in mode by pressing 'z'.

Toolbar positions are now restored after quitting and restarting
32536

The user placement of toolbars in Mapping is now restored between Mapping sessions. Previously, each time Mapping was started the toolbars would be placed in their default locations.

Mapping   Bug Fixes

/View/Toolbars/Scale and Legends toolbar is now renamed to match the new Map Elements menu option
32184

The toolbar name "Scale and Legends" has been changed to match the change done to the corresponding menu option Display/Map Elements. The toolbar is now named "Map Elements Toolbar".

Copy and paste of Display/Grid/Colorfill layers has been made more robust
32530

Copying and pasting of Display/Grid/Colorfill layers previously caused a crash in certain circumstances - particularly for layers in groups.

Correct polygon selection when two layers use same polygon file
32894

In Mapping, when the same polygon file is displayed in multiple layers with different polygon selections, the selection will be correctly retained the layer is opened for modification. Displaying the same polygon file twice is a good way to get different display styles for different polygons in the same file.

Previously the selection of one layer would be used to set the selection of a subsequently opened layer.

Display/3D Seismic Bin Grid - improved layout of dialog
29359

The Display/3D Seismic Bin Grid dialog has had the layout improved so that the overall size has been decreased without losing context.

Display/GIS numeric annotation works as expected when a date field is added first
32478

In previous versions, if a date type field was the first field in the list of annotations in Display/GIS (previously Display/Spatial), subsequent numeric fields would be drawn as blank.

Editing dbMap Culture group colour properties no longer gives an incorrect error
32727

In previous 17 versions, the "Admin/Culture Data Groups..." panel would not allow changes to be saved due to an incorrect error regarding pattern fill size.

Fill style translucency no longer affects pattern color
32889

In earlier v17 versions, setting a translucency for a fill style would incorrectly be applied to the pattern color. Translucency is now only applied to the background color as expected.

Fixed random crashing of Display/Map Elements/Legend
32529

Display/Map Elements/Legend has been fixed and is not crashing now.

Gradient source type is reselected correctly when opening grid display layers from v16 mapfiles
32312

Display/Grid/Colorfill layers loaded from a dbm file created using v16 or earlier, with "clip to mapsheet" unticked could incorrectly show "clip to mapsheet" as ticked when the panel was opened in v17 versions of Petrosys.

Loading a dbm file containing overpost corrections with no mapsheet set no longer crashes
31987

In previous v17 versions of Petrosys, if a dbm was loaded that contained overpost corrections and no mapsheet was currently selected (for example, after starting in a new project) then Mapping would crash.

Mapping no longer crashes on exit when Display/Wells or Display/Map File dialogs are displayed
32597

In previous 17 versions, Mapping would crash when the program was quit while the Display/Wells or Display/Map File dialogs were displayed. This crash had no effect on user data as the crash occurred after prompting to save the current map and during the process termination sequence.

Missing file errors are no longer shown for inactive Display/Polygons layers
31988

In previous v17 versions of Petrosys, if a Display/Polygon layer referenced a polygon file that did not exist, an error would incorrectly be shown each time the map was drawn.

Overpost correction mode can no longer exit while using area selection
32522

In previous 17.0 versions it was possible to exit the overpost correction mode when the area select tool was active. This could then lead to Mapping crashing. This has been corrected to conform to the 16 behaviour, where it was not possible to exit overpost correction mode while the select tool was active.

Undocked windows always appears onscreen
32398

Previously it was possible for undocked windows (e.g. Mapping/Display/Modify window) to appear off screen. This could happen if the resolution or display configuration changed between Petrosys sessions (e.g. changing from a multi-screen docking station to laptop screen).

This has now be fixed so windows will always appear in the visible area of the display.

Undoing deletion of colour bar no longer causes a crash
32542

In previous versions of Petrosys, undoing the deletion of a Display/Colorbar layer could cause a crash in some circumstances.

Upholes are now displayed correctly after changing mapsheet
31039

If a map contains a layer displaying upholes, the mapping window now refreshes correctly if the mapsheet is changed to one covering a different area. Previously, no upholes or a subset of the upholes would appear on the new mapsheet.

User toolbar configuration is saved when launcher quits
32587

A bug where Mapping user toolbar configuration was incorrectly removed when launcher quits has been fixed.

Mapping/2D Seismic   Enhancements

2D seismic line header information is now available from Petrel, Paradigm & SeisWare
25806

Petrosys now has the ability to display 2D seismic line header information for data from Petel, Paradigm & SeisWare.

Mapping/2D Seismic   Bug Fixes

2D seismic data display handles unsorted interpretation segments
28558

In previous versions, the Display/2D Seismic option did not draw 2D seismic data or ribbon maps correctly for interpretation segments that were not sorted. This was observed as missing data or ribbon segments.

2D seismic line header dialog now supports a secondary connection
16318

The displaying of 2D seismic line header information from a secondary dbMap connection now queries the correct database.

Bulk shifts are now correctly applied to misties when displaying 2D seismic data from an SDF
31838

The misties tab on the Display/2D Seismic option (applicable only when displaying data from an SDF) has an option to include bulk shift data. In previous versions, this option did not have any effect. It now correctly incorporates bulk shift data into the mistie display.

Display/2D Seismic layers are drawn correctly when missing SDFs are resolved
32671

In previous v17 versions of Petrosys, missing SDFs could be resolved when Display/2D Seismic layers were loaded, but the layers would still not get drawn on the map.

Mapping/Bubble Maps   Bug Fixes

Dbm files containing multiple bubble map layers are now drawn correctly when the redraw button is pressed
28414

Fixed a bug where a dbm file containing multiple bubble map layers was not drawn correctly when the redraw button was pressed.

Mapping/Coordinate Reference Systems Enhancements

CRS EPSG database upgraded to version 7.9
30722

The EPSG CRS data available within Petrosys has been upgraded from version 7.6 to version 7.9. Please refer to http://www.epsg.org for specific details of changes between these versions.

Mapping/Coordinate Reference Systems   Bug Fixes

CRS Editor stores decimal values exactly as entered by the user
28610

In previous versions, entering certain numbers for projection parameters in the Admin/CRS/Projected CRS Editor could result in an approximate number being stored and displayed. For example, a number ending with .7 may have been stored as .6999999. Such numbers are now stored as entered.

CRS matching improved for shapefiles containing RSO based projections
31717

In previous versions, shapefiles containing a Rectified Skew Orthomorphic based CRS would be matched to a custom CRS when read. In particular, this bug affected Timbalai 1948 /RSO Borneo (ft) (EPSG:29872) and Timbalai 1948 / RSO Borneo (m) (EPSG 29873).

CRS now handled correctly while editing dbMap seismic line coordinates as Easting Northing
28402

In previous versions, when seismic lines stored as geographic coordinates were edited as Easting-Northing, the coordinates were not correctly converted to the correct projected CRS. Now, the correct conversion to and from the mapsheet projected CRS is performed while editing.

Improvements to well symbol and drawing tools stored coordinates
26726

The coordinate values for the various Display/Drawing Tools layers are stored and saved into dbm files in a more robust manner that allows their position to be maintained when displaying on different mapsheets or opening in different projects.

Mapping/Editors — Bug Fixes

CFP Editor - Refresh and drawing issues fixed   32701

The Contour, Fault and Polygon editor has a number of issues with elements not being drawn correctly fixed. This lead to the impression that the contour, fault or polygon had been lost when it was not being drawn on the screen. The majority of the issues were only present on Linux.

CFP Editor no longer crashes after undoing contour creation   31509

In previous versions, selecting and deselecting a contour to extend in the contour, faults and polygon editor could cause a crash if the map happened to be redrawn.

Editing a grid layer in mapping no longer hides all other Display/Grid/Values layers   32738

When a grid is edited, Display/Grid/Value layers are no longer hidden, unless they are displaying from the same grid being edited.

Undo and redo of Mapping changes is disallowed while overpost correcting text   32550

This prevents a potential crash due to Mapping display layers changing while being overpost corrected. As part of this change, panning has also been disabled while area select is active in overpost correction mode as this could lead to the software entering a hung state from which it was not possible to exit overpost correction mode.

Mapping/Images — Enhancements

OSGeo WMS server added as a default server   29860

The OSGeo WMS server (http://vmap0.tiles.osgeo.org/wms/vmap0) has been added as a WMS server to the default list of servers. This helps users get started with the WMS display option by providing some sample imagery.

The NASA JPL WMS server has been removed from the default WMS server list as it no longer provides a full WMS compliant service.

Mapping/Images — Bug Fixes

ArcSDE rasters loaded with an offset are now displayed in the correct position   31135

In previous versions, when Display/Picture/Raster was used to display ArcSDE raster images that had been loaded with an offset, the offset was not considered when positioning the image, resulting in the image being displayed in an incorrect location. The offset is now honored when the image is displayed.

Selection of any supported CRS now available when displaying raster from WMS servers   24432

The Display/Picture/Raster Image WMS datasource now allows selection of an arbitrary CRS from the supported list provided by a WMS server. In previous versions, the CRS was limited to those using WGS84 (if available) to work-around limitations in third-party WMS servers, which are no longer relevant.

Mapping/Map Sheets — Bug Fixes

Display/Map Elements/Other Mapsheet Ref Grid now has a mapsheet selector   31548

A bug where Mapping Display/Map Elements/Other Mapsheet Reference Grid was missing a mapsheet selector for the user to select a mapsheet has been fixed.

Mapping/Other — Enhancements

/Display/Polygon - Performance improved for polygon files with a large number of polygons
31000

The responsiveness of the /Display/Polygon panel has been significantly improved when it deals with large polygon files.

/Display/Text - Support added for keyword substitution
30621

The /Display/Text option now supports automatic keyword substitution. This allows the use of keywords like <<MAPFILE.FILENAME>> to be placed in the text and they will be dynamically substituted on each redraw. The full set of keywords is available by clicking on Help and searching for the "RUNTIME TEXT SUBSTITUTION" topic.

Mapping/Other — Bug Fixes

Modifying faults layer with missing SMT file will now bring up the modify dialog
31989

Previously, if a SMT Fault layer had a missing data source, then, when attempting to open the layer for modification the user was presented with four error messages and the dialog failed to open. This is now fixed in 17.1.

Undo is now always disabled when in georeferencing mode
32306

Previously undo could still be enabled in some situations when in georeferencing mode and, if clicked, could lead to a crash. The undo button is now disabled while in georeferencing mode.

Mapping/Spatial — Enhancements

Performance vastly improved when using dbmap culture as a data source in Display/GIS
31038

The performance of dbMap culture data displayed via Display/GIS has been vastly improved (of the order of 10 times) by optimizing the spatial query used to extract the displayed data.

Mapping/Spatial — Bug Fixes

Display/Spatial no longer crashes while working with large shape files
30866

Display/Spatial is now more robust while handling large shape files. Previously, a crash could occur while it tried to allocate the required memory.

Query attributes shows correct attributes for Petrosys polygon files
32790

In previous v17 versions, when Display/GIS was used to display a Petrosys polygon file, the RMB/Query Attributes panel incorrectly included multiple copies of the polygon name attribute, where it now includes a single name attribute only.

Zooming in and then out on ArcSDE layers no longer results in nothing being drawn
32789

Display/GIS now handles zooming of ESRI SDE data on the map more robustly. In previous version, SDE data might disappear after several zooming in and out.

Mapping/Wells   Enhancements

Added the ability to run external scripts from the well header dialog
21518

Added the ability to run external scripts to the well header dialog. This functionality was previously only available by right clicking a well displayed on a map and selecting the Run External Script option from the popup menu. This option is now available in the well header dialog.

Default size of well symbol selector dialog improved
29037

Previously the default size of the well symbol selector may not display all columns of the available well symbols. This has been changed so all well symbols columns are shown.

Directional survey information for wells from a secondary connection is now supported in dbMap
26007

Directional survey information for wells from a secondary connection can now be displayed using either Display/Wells/dbMap or Edit/Wells/dbMap.

Display/Wells/dbMap - Well Header screen now allows editing from a secondary connections
26808

Petrosys now allows the editing of well header data from a secondary dbMap database connection.

Formation top information for wells from a secondary connection is now supported in dbMap
28357

Formation top information for wells from a secondary connection can now be displayed using either Display/Wells/dbMap or Edit/Wells/dbMap.

Improved consistency in terminology relating to well related thicknesses
23840

There is now a more unified and consistent approach to terminology regarding well related thicknesses throughout the software.

In relation to formations and zones, the term "Isopach" has been replaced with "Thickness".

Also, when gridding well formations or zone thicknesses, the term TVD (True Vertical Depth) is now used instead of TVT (True Vertical Thickness). The exception to this is for clients with custom TVT & TST calculation support in dbMap, using dipping bed information. For these clients, both TVD and TVT thicknesses are now available when gridding dbMap well data. All other well data sources only support gridding TVD thicknesses.

Well header screen now available for Paradigm-EPOS
26399

Petrosys now has the ability to display well header information for Paradigm.

Mapping/Wells   Bug Fixes

Annotation queries returning well locations now post in the correct location when a mismatch occurs between the project default CRS and the CRS of the well database
31729

While displaying wells directly from a database, and using an annotation query that returns the posting location, the text now appears in the correct location when the project default CRS is different to that of the wells.

Compute bottom hole option on well header coordinates dialog now configurable for different data models
26337

The compute bottom-hole location option in the well header coordinates dialog previously made use of a query that could not handle different data models. The option has now been modified so it can now be configured to handle a variety of different data models.

Display/Wells no longer shows overpost corrected text and original text simultaneously
31805

In previous versions, selecting a well on the map that has overpost corrected text would result in the original text also being displayed.

Generic Well header dialog now handles data from multiple sources which is displayed simultaneously
30231

A crash has been fixed which occurred while displaying well header information from multiple data sources at the same time. Handling of multiple data sources by the generic well header dialog has also been improved. Changing the selection should now update the dialogue correctly, where previously it would not update and could cause a crash on exiting the dialog.

Inoperative Selection-list option removed from Display/Wells OpenWorks and GeoFrame in Mapping and 3D Viewer
27529

The Selection - list option has been removed from the filtering options on the dialogs relating to the display of wells from GeoFrame and OpenWorks in mapping and 3D viewer. There was no functionality implemented for these options, so they have been removed.

Wells selection using a form is now restored correctly after reopening a DBM file
31833

Well selection defined by a form was previously not being saved correctly to a DBM file. These values are now stored within a DBM file, and should be restored correctly every time the map is loaded.

Paradigm-EPOS plugin   Bug Fixes

Attempting to read interpretation data from large Paradigm 3D surveys should no longer result in a crash
30028

A warning is now displayed when 3D seismic interpretation data from Paradigm-EPOS cannot be displayed using the available memory. As stated in this warning message, Petrosys mapping should be restarted, as the attempt to display the data has likely resulted in memory corruption.

Querying a Paradigm-EPOS survey while connected to an associated project now returns the correct survey CRS
32208

Where the CRS of a Paradigm-EPOS survey differs from the CRS of the project to which it is assigned, Petrosys now reads the CRS of the survey, rather than the CRS of the project. Previously, when a survey was retrieved from a project, the CRS associated with the survey would be that of the project. This is not always correct, as the CRS a survey can be different from the project of which it is a part. This should no longer occur. In all cases, while reading from a Paradigm project, the CRS of the survey within the project will be honored.

Selecting grid horizons in the Paradigm Grid Export dialog no longer allows reconnection to a project for which user permission has been revoked
29463

Fixed a crash which occurred when attempting to query grids through an invalid connection. Now, when reconnecting to a project, the user permission for that project is checked in case it has changed. If the user no longer has the appropriate permissions, the application will present a dialog asking for a replacement connection. This prevents the 'Select grid' button from being activated when there is not a valid connection, which in turn prevents a crash which occurred when a query was attempted through an invalid connection.

Petrel plugin   Enhancements

Petrel culture/polygon/point data handling improvements
24934

The Petrosys plugin for Petrel has been improved to include the ability to

- ➢ display of Petrel point data in Display/GIS
- ➢ import/export of Petrel point data
- ➢ gridding of Petrel data
- ➢ export spatial data to Petrel via Spatial data translator

Project Selector   Enhancements

Cancelling copy now removes partially copied project   31475

If a project copy operation is cancelled, the partially copied project will now be deleted from the file system. Previously cancelling a project copy would result in a part-copied project remaining on the file system and in the project list.

In addition a number of error conditions are now detected and reported to the user.

Group combobox now ordered alphanumerically   29416

Groups and tags are now sorted alphanumerically in project selector comboboxes. Previously they were unsorted, making it difficult to find the required group or tag in a long list.

New project parent directory immediately updates UI   29150

Entering a path in the new project dialog verifies the path as you type and enables the OK button if the path and the other project parameters are valid. Also, if the path matches the group path of an existing group, the group will be automatically selected, unless a group has already been chosen.

Project Selector administration dialog layout improved   31944

The group, user and tags administration dialogs have been merged into a single tabbed administration dialog. This gives a simpler interface to all the administration functions of the project selector.

Project selector list speed improved   29322

A small optimisation to path mapping in the project selector has improved the speed of populating the project list.

Speed of group administration dialog improved   32097

Fixed an issue where the group administration dialog would take a long time to appear.

Project Selector   Bug Fixes

Appropriate buttons are now enabled when an invalid project is selected   29429

Previously it was possible for actions such as Remove to be disabled when an invalid project was selected. The project selector now enables appropriate buttons when an invalid project is selected, either as a single selection or as a part of a multi-selection.

Can no longer assign properties to invalid projects   29271

The properties dialog can now no longer be accessed on invalid projects. Previously it was possible for the user interface to show that properties could be modified on invalid projects, but those changes would have not been applied.

Copy project to an existing directory no longer allowed   29499

To prevent corruption of projects it is no longer possible to copy a project to a project name that already exists (as a directory). To copy a project you must provide a path that doesn't already exist. If it is desired to replace an existing project with a copy, first delete the existing project and then make the copy.

Deleting current project now deselects   28298

Deleting the current project sets the Petrosys Launcher to a state where no project is set, prompting the user to select a project before allowing them to launch any other applications. Previously the deleted project would still be set as the current project, causing unpredictable behaviour.

Full Lockdown user project selector no longer redraws during project listing   31489

Previously Full Lockdown users may have seen the Project Selector interface being redrawn while the list was being populated. This has been fixed so the project selector is drawn only once.

GroupLockdown users defined via * can now use Groups   32592

A group with user * correctly gives all non-listed users access to the group. Previously non-listed users (who are represented by the * user) would not see any groups.

Invalid projects now cleared from templates list   32319

Template projects list now will only include valid template projects. Previously it was possible for an invalid project to appear in the list of templates if it had been assigned to the Templates group.

Newly added "empty projects" now appear in the project list immediately   32584

Previously, when an empty project was created via new, the project would not appear in the project list immediately. Refreshing the list would cause the project to appear, however this was inconvenient. This has been fixed, so all new projects will appear in the list immediately after creation.

Rename and copy of path mapped projects now works [29377]

Renaming or copying a path mapped project is now possible. Previously the mapped path was not available for renaming or copying operations.

Selecting a group then unselecting maintains Parent Location path [29500]

New and Copy dialogs retain and restore the path set when the group is set to None. Previously a group change would clear the Parent Location path.

User and Group administration dialog layout more flexible [31301]

A splitter has been added to the user and group administration screens to allow for longer paths and customisable layout.

Seismic data   Bug Fixes

Display and Import of 3D seismic surfaces and grids from GeoFrame returns data in consistent units [18261]

Time data for 3D seismic surfaces and grids will now be consistently displayed or imported in ms. This behavior can be overridden by setting the PS_USE_STORAGE_SYSTEM_TIME_UNITS environment variable. If this environment variable is set then the time data is returned in the GeoFrame storage units for the surface or grid.

For non-Time data, surfaces and grids will be consistently returned in the storage system units for that measurement.

In previous versions direct displayed surfaces and grids would always be returned in storage system unit for that measurement and imported grids would be storage in display system units.

SDF Seismic - Reports/Line Length no longer crashes when no map sheet file or name is selected [29831]

When running Reports/ Line length from within Seismic SDF, if no map sheet file or name was selected, the program would either produce an error or exit or both. This has now been fixed and the behaviour is to allow for no map sheet to be selected, which results in no AOI clipping in the report.

Velocities/Depth Converter now lets you select SDF and SLS files in dialogs that use them [28653]

The File/Select option in the Velocities/Depth Converter has been removed. The SDF and SLS selectors are now included in dialogs that use them.

Surface Modeling   Enhancements

Fault/Extract Z values from seismic panel layout improved [29259]

The layout of the Faults/Extracting Z values from seismic dialog has been improved to make it easier to use.

Surface Modeling   Bug Fixes

Interactive panel resized [29240]

The default width of interactive parameters dialog has been reduced. Previously it would appear as an unnecessarily wide panel.

Spatial Data Translator logs information output to diagnostics window [32430]

Spatial data translator log output in Surface Modeling now outputs to log window. Previously the log information would be output to the console window, if it was available.

Surface Modeling/Grid Operations   Bug Fixes

Grid/Process/Arithmetic now has a mapsheet selector if AOI is defined by a mapsheet [31551]

Previously the Grid/Process/Arithmetic Output Geometry tab did not display a mapsheet selector when the area of interest was set to Mapsheet. It was only possible to select a mapsheet from the default mapsheet as selected by Mapping.

This has been corrected so a mapsheet selector is available, so any mapsheet can be selected to define the area of interest.

Surface Modeling/Gridding   Enhancements

Gridding from well data improved across all data types   30950

The user interface and the supporting code for well data sources are now consistent across all types of well data. All types of well data are now supported by gridding.

Also, a more comprehensive set of operations may now be performed to gather appropriate well data for gridding. Data may now be gathered from well header depths, formation tops and from user-defined custom queries, set up to extract data for gridding.

Workflows from 16.9.3 and before which contain a gridding task from a well data source will be upgraded after they are saved in 17.1. Once a task file is saved in 17.1, it can no longer be used in older versions.

Formation selection using formation rules is now the same as that which is found in the Well Display option in dbMap. This selection method is available for Petrosys dbMap & third party well data sources.

Well data selection is also available in the Create Grid, Well Tie and Phantom options in gridding.

Support added for Paradigm well data in gridding   26397

Paradigm-EPOS wells are now supported as a data source in gridding.

Support added for SeisWare well data in gridding   28264

SeisWare wells are now supported as a data source in gridding.

Surface Modeling/Gridding   Bug Fixes

Back interpolate to WDF - Thickness TVD now finds correct intersections   15858

Intersections are now found when using Thickness TVD grids to back interpolate to WDF files. Note that the terminology has changed and that "Thickness TVD" corresponds to the "Isopach TVT" option for earlier versions of software.

Back interpolation to SDF now correctly preserves fault settings   30620

While creating a back interpolation to SDF task, fault file settings are now correctly displayed in the dialog. Fault information is also now embedded in the dialog, where previously it was only available after clicking an icon.

Back interpolation to WDF works when attribute is used   30723

A problem with back interpolation to WDF using an attribute has been fixed. Previously it could crash intermittently.

Correct panel is now displayed when gridding from dbMap Formation Tops   25300

Selecting the data type "Wells" and the data source "dbMap formation tops" in the Data Source Selection dialog in gridding now results in the correct panel being displayed.

Grid data scan now ignores missing well coordinates   23807

When scanning data in the Geometry tab, the code now correctly handles well selection files and any missing values. This results in correct calculation of the grid origin and extents once the scan is complete.

Gridding formations ignored wells with no directional survey or bottom hole location for PPDM 3.7/3.8 datasources   24116

Gridding from PPDM3.7 well data sources will only use data stored in the bottom hole (BH) column if it is supposed to. Most sites should use the surface value.

Gridding from an SDF and selecting VAV as the input data type now disables the second horizon name   30611

Gridding from an SDF using VAV as the data type will now cause the selection box for the second horizon to become blanked out.

Gridding well data using a query now uses the surface location if a NULL value is returned by the query   28731

Creating a grid using input data from a well query that returns the posting location now uses the surface location of the well if a NULL value is retrieved by the query. Previously, it was possible for the location of a different well to be used if no coordinates were returned by the query.

Surface Modeling/Volumetrics   Bug Fixes

Grid-based-slice volumetrics / Thickness method - Individual slice volume and area reporting has been made more consistent   28236

When running the thickness grid slice volumetrics, there used to be inconsistencies in the areas reported. The xml report has been modified so that areas reported are consistent with the console report.

Also the volume reported in each individual slice used to show the total volume beneath the incremental area used in the slice. This has been changed to make it display the total volume for the pseudo-horizontal thickness slice. This makes reporting of areas and volumes consistent with the old grid-based volumetrics method, as well as with the slice volumetrics reporting used for tops and top/base methods.

Web map server   Enhancements

Authentication is no longer required for cross domain policy files
32055

Web browsers reading cross domain policy files (e.g. crossdomain.xml) from the Petrosys WMS server no longer need to authenticate when authentication is enabled. They will be asked to authenticate when accessing maps, map content listings or lists of available services.

Web map server   Bug Fixes

All map layer types now rendered in the expected order
32647

In previous versions of v17, the WMS server served dbm layers in reversed order and did not display certain layer types - 2D seismic from SDF in particular.

Configuration panel will not locked up on finish
32648

The WMS configuration wizard accessible from the option "/File/Export/Publish map to WMS" in Mapping will now allow you to create the process without locking you out of the main screen on completion.

User validation now works when authentication enabled
32345

In the Petrosys WMS server validating users was not working if authentication was turned on.

WMS Server - Colors are now correct
32885

In version 17.0, the red and blue components of RGB colour definitions were swapped. This would cause the colours rendered for a image returned by the WMS server to be incorrect. This has now been fixed so the colour definition is now correct.

WMS Server now prevents users from connecting when they enter the wrong username/password
32352

Fixed bug in WMS service allowing users to connect with wrong username/password.

Well data   Enhancements

dbMap Well production screens and charts now support secondary connections   **30408**

Well production data and charts can now be generated using secondary data connections rather than just the primary connection. The data for these reports will be obtained from the connections the associated well was read from.

Display/Wells now shows the CRS of the well data source   **25040**

The Well Display dialog in both Mapping and 3D viewer now shows the CRS for all well data sources with a single CRS. Data sources with CRSs (for example, where a separate CRS exists for each well or for individual wells within the data source) the CRS is not shown.

Well data   Bug Fixes

Database information now correctly used to retrieve a wells Final Total Depth across different data models   **30754**

The correct well depth database columns are now correctly used to retrieve a wells Final Total Depth across different data models, resulting in improvements while displaying wells, gridding and making directional survey calculations. Previously, different data models were using incorrect database information.

Fixed crash in well selection using expression panel   **32842**

"Remove" button does not cause a crash any more.