



PETROSYS SOFTWARE RELEASE NOTES

Version 16.10

November 2011

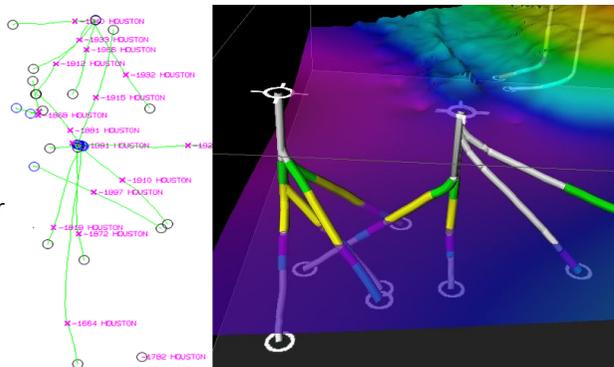
Further Paradigm-EPOS4 Developments

The Paradigm-EPOS4 plugin released in 16.9 has been further enhanced in 16.10. In addition to all previous functionality more data types are available.

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 modelling operations, including grid creation and contouring.

This complements the functionality delivered in Petrosys 16.9 where grids could be exported from Petrosys to Paradigm-EPOS, enabling easy roundtripping of data ensuring you can always use Petrosys on your Paradigm-EPOS data.

Accessible Culture

Culture data stored within Paradigm-EPOS is accessible as a spatial data type. This allows the direct display of Paradigm culture data within 2D mapping and gives a simple method of translating Paradigm culture data into many other formats via the Spatial Data Translator.

For example, export Paradigm culture and wells (including directional surveys) along with OpenWorks seismic lines and Petrosys dbMap culture and data from ArcSDE all to the same kml file for display in Google Earth.

Well Gridding Enhancements

The well interface of Grid, Contours and Volumetrics has been overhauled to make the interface consistent 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

When an existing task file is opened in v16.10 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 For Petra and Petrel

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.

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 is not providing the required upgrade scripts as a part of the standard install - if you are a dbMap client and wish to be upgraded to EPSG 7.9 then please contact Petrosys support for assistance.

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.

Enhancements

Petrosys release 16_10 [39 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

- [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

Connections, import and export

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- [26517](#) Added support for Well, Grid and Culture data from Paradigm EPOS projects
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- [25124](#) Petrel & Petra data selection now has the ability to use a well selection file
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- [31038](#) Performance vastly improved when using dbmap culture as a data source in Display/GIS

Mapping/2D Seismic

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Mapping/Coordinate Reference Systems

- [30722](#) CRS EPSG database upgraded to version 7.9

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- [29860](#) OSGeo WMS server added as a default server

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- [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

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

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Connections, import and export

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- [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
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Import and Export

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Mapping

- [31039](#) Upholes are now displayed correctly after changing mapsheet

Mapping/2D Seismic

- [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

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

- [28402](#) CRS now handled correctly while editing dbMap seismic line coordinates as Easting Northing

Mapping/Editors

- [31509](#) CFP Editor no longer crashes after undoing contour creation

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/Spatial

- [30866](#) Display/Spatial no longer crashes while working with large shape files

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
- [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

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- [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

Seismic data

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

Surface Modeling/Gridding

- [30620](#) Back interpolation to SDF now correctly preserves fault settings
- [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

[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

Detailed Release Notes

Petrosys release 16_10 [78 entries]

[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.

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.

Added Paradigm EPOS culture as a spatial data source

26383

Petrosys 16.10 introduces support for Paradigm-EPOS culture data as a spatial data source.

Functionality available in 16.10:

- 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.

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.

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 parameters 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.

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

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.

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.

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.

[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.

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.

Support added for ArcSDE 10 service pack 3

31922

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](#)

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 _.

[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](#)

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

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.

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

Bug Fixes

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.

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 Petrel, Paradigm & SeisWare.

Mapping/2D Seismic

Bug Fixes

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.

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 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.

Mapping/Editors

Bug Fixes

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.

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/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.

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.

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.

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.

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.

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.

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 is 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 16.10. Once a task file is saved in 16.10, 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 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.

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

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.