

SOFTWARE RELEASE NOTES

Version 2024.2.4

PETROSYS PRO



Connectivity



Mapping & Visualisation



Surface Modeling

Petrosys PRO 2024.2.4 further enhances connectivity with improvements to Petrel integration, improved OSDU support on Linux and support for the latest version of ArcGIS Pro. Direct gridding of seismic from the PRO display canvases in Mapping and 3D Viewer is also now possible, giving simpler workflows for re-gridding of data.

Licensing updates:

- PRO 2024.1 requires a new license file to be installed for all clients.
- PRO 2024.1 include an upgraded RepriseLM version, which includes security updates. Users with an on-premises license server are recommended to upgrade. Please note that the upgraded version now requires login credentials for the associated web server. A default login is created during installation, please login immediately after installation to change the login credentials.

Supported Environment updates of note:

- Linux platforms RHEL8 and RHEL9 are supported. RHEL7 is now deprecated and available by request only.
- Windows 10 is the minimum supported version for Windows.

For more information on how to put these features into practice please contact support at support@petrosys.com.au and learn more from our webinars, video and portal resources.

Petrel integration keeps getting better

Several improvements to the Petrel direct connections feature have been made, allowing for simpler workflows and easier movement of data between Petrel and Petrosys PRO. Examples include maintaining Petrel symbology and styles for Petrel data displayed in PRO and automatically setting the AOI for dragged layers, while also resolving some irksome bugs. One of our goals is to make a single drag-and-drop from Petrel to Petrosys PRO appear with all the same layers and styles – let us know if you have any suggestions for what to target next.

Direct gridding of seismic data

It is now possible to grid a seismic surface directly from Mapping and 3D Viewer canvases, in the same way as for displayed grids. Faults and clipping polygons can be included in the gridding process, with the resulting grid added directly to the display list.

Perceptually equal gradient now the default

The default gradient used by Petrosys PRO is now the perceptually equal Viridis gradient. This gradient has been designed to be perceptually uniform in both colour and black-and-white, which improves accessibility and use-cases for produced images. For more information on perceptually equal gradients, see our blog post [Using Colour to Communicate](#).

Create a velocity model from grids

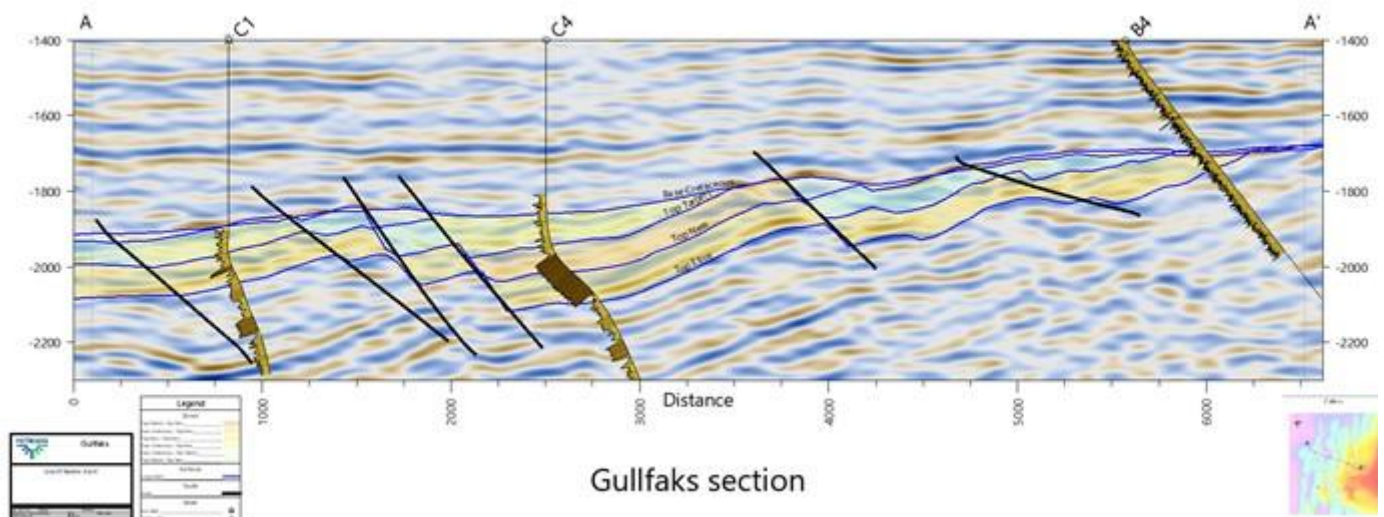
Petrosys PRO can now create a velocity model from a list of horizon and velocity grids. The generated velocity model can be saved as a SEG-Y, VDS or ZGY file.

Output grids to third party data sources

Petrosys PRO now allows grids to be directly created in third party grid sources. This alleviates the need for an extra step for grid exchange between applications and allows for easier workflow automation with built-in Petrosys PRO scripting tools.

Seismic volume display in X-Section

Seismic volumes can now be displayed within the X-Section canvas, released in Petrosys PRO 2023. Support volume sources include SEG-Y, VDS, ZGY with direct connectivity to Petrel added.



Notes for Upgraders and Installers of Applications

Upgraders from Petrosys PRO 2023 or earlier should be aware of the following changes:

- Petrosys PRO supports Red Hat Enterprise Linux 8 and 9 (RHEL8, RHEL9) and equivalents (CentOS, AlmaLinux, RockyLinux, Oracle Linux). Red Hat Enterprise Linux 7 is now deprecated and only available by request.
- Petrosys PRO 2024.1 requires a new license file for every client. Please obtain your license file by logging on to the Petrosys Client Portal or contacting Petrosys Support.

For a full list of supported environments, please see the Petrosys PRO [Supported Environments webpage](#).

Detailed Release Notes Summary PRO 2024.2.4

Enhancements

Configuration - Licensing

[85903](#) Reprise License Manager upgraded to version 17.0BL1

Connections, Import and Export - OpenWorks

[85869](#) Reading OpenWorks faults, contours, clipping polygons more efficient

Mapping - Wells

[85367](#) Updated well log template editor dependencies

Spatial Editor

[74232](#) Displayed OpenWorks and Petrel faults can be edited in spatial editor

[47510](#) Spatial editor back interpolation to polygons of grid statistical values

Surface Modeling - General

[85983](#) SEG Y CRS conversion create new output file

Surface Modeling - Workflows/Scripting

[78719](#) Added scripting of GIS filters

Detailed Release Notes Summary PRO 2024.2.4

Bug Fixes

Application - General

- [85369](#) libcurl upgraded to 8.14.1
- [85815](#) Security improvements to WMS server
- [85987](#) SQLite upgraded to version 3.50.1

Connections, Import and Export

- [85902](#) Exchange/Wells - Formation matching uses selected type

Connections, Import and Export - SEGY

- [85764](#) Exchange/SEGY Import - 3D Survey option

Mapping - General

- [72965](#) Dragging layers to be top in a group works as expected
- [84806](#) Bubble Map correctly restores data for renamed Petrel projects
- [86027](#) Well connections are restored for bubble map layers when opening dbm layers

Petrosys Release PRO 2024.2.4

Detailed Release Notes

Application - General

Bug Fixes

libcurl upgraded to 8.14.1

85369

The version of libcurl used by Petrosys PRO has been upgraded to libcurl 8.14.1.

Security improvements to WMS server

85815

Security improvements have been applied to the Petrosys PRO WMS server.

SQLite upgraded to version 3.50.1

85987

The SQLite database used within PRO has been upgraded to version 3.50.1.

Configuration - Licensing

Enhancements

Reprise License Manager upgraded to version 17.0BL1

85903

The Reprise License Manager has been upgraded to version v17.0BL1. Fixes a few rare issues, no new features.

CVEs fixed in this release: CVE-2021-37498, CVE-2021-37499, CVE-2021-44153

For more information refer to the Reprise Software website: <https://reprisesoftware.com/docs/whats-new.html>

Connections, Import and Export

Bug Fixes

Exchange/Wells - Formation matching uses selected type

85902

Wells Exchange now correctly takes into account System (Type) for formation matching.

Connections, Import and Export - OpenWorks Enhancements

Reading OpenWorks faults, contours, clipping polygons more efficient

85869

Reading OpenWorks faults, contours, and clipping polygons in Surface Modeling and Spatial Data Translator no longer requires a devkit connection, so may be more efficient.

Connections, Import and Export - SEGY

Bug Fixes

Exchange/SEGY Import - 3D Survey option

85764

On the seismic import screen, the 3D Seismic Survey tab is now always visible as long as it is supported by the current selected data source type.

Dragging layers to be top in a group works as expected 72965

In previous versions, interactively dragging a layer to be the first in a group did not move the layer. This has been fixed.

Bubble Map correctly restores data for renamed Petrel projects 84806

Bubble map layers that are created using a Petrel connection now correctly maintain that connection when the Petrel project is renamed.

Well connections are restored for bubble map layers when opening dbm layers 86027

In previous versions, bubble map layers based on well connections saved in a dbm file would not always be drawn correctly immediately after the dbm was opened.

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

Updated well log template editor dependencies 85367

Updated well log template editor dependencies: Backbone.js to 1.6.0, jQuery.js to 3.7.1, Underscore.js to 1.13.7

[Spatial Editor](#) [Enhancements](#)

Displayed OpenWorks and Petrel faults can be edited in spatial editor 74232

Displayed OpenWorks and Petrel faults in mapping can be edited in spatial editor via RMB/Edit.

Spatial editor back interpolation to polygons of grid statistical values 47510

Added back interpolation of grid (statistical) values inside given polygons as polygon attributes.

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

SEGY CRS conversion create new output file 85983

Formerly, using SEGY CRS conversion located inside of Surface Modeling would update the input SEGY file with the new designated CRS. Now, this SEGY CRS conversion creates a new SEGY file instead.

[Surface Modeling - Workflows/Scripting](#) [Enhancements](#)

Added scripting of GIS filters 78719

GIS filters can now be scripted as a part of a workflow.

Notes for Upgraders and Installers of Applications

Upgraders from Petrosys PRO 2023 or earlier should be aware of the following changes:

- Petrosys PRO supports Red Hat Enterprise Linux 8 and 9 (RHEL8, RHEL9) and equivalents (CentOS, AlmaLinux, RockyLinux, Oracle Linux). Red Hat Enterprise Linux 7 is now deprecated and only available by request.
- Petrosys PRO 2024.1 requires a new license file for every client. Please obtain your license file by logging on to the Petrosys Client Portal or contacting Petrosys Support.

For a full list of supported environments, please see the Petrosys PRO [Supported Environments webpage](#).

Detailed Release Notes Summary PRO 2024.2.3

Enhancements

Surface Modeling - Exchange

[85402](#) SEGY file CRS transformation tool added

Detailed Release Notes Summary PRO 2024.2.3

Bug Fixes

Connections, Import and Export

[85338](#) Exchange: Fixed issues writing some well log curve data to OSDU

Petrosys Release PRO 2024.2.3

Detailed Release Notes

Connections, Import and Export

Bug Fixes

Exchange: Fixed issues writing some well log curve data to OSDU

85338

Well log curves could not be written to OSDU if input the well's UWI had invalid filename characters. This issue has now been fixed.

[Surface Modeling - Exchange](#)

[Enhancements](#)

SEG Y file CRS transformation tool added

85402

Coordinates in SEG Y files can now be converted to a different projected CRS.

This option can be accessed via Surface Modeling/File/Exchange/CRS Conversion/SEG Y File CRS Conversion.

Petrosys Release PRO 2024.2.2

Detailed Release Notes

[Configuration - Licensing](#)

[Enhancements](#)

RepriseLM license manager upgraded to version 16.1BL1 84917

The Reprise License Manager has been upgraded to version v16.1BL1. Fixes a few rare issues, no new features.

CVEs fixed in this release: CVE-2018-15573, CVE-2018-5716

For more information refer to the RepriseLM website: <https://reprisesoftware.com/docs/whats-new.html>

[Configuration - Licensing](#)

[Bug Fixes](#)

RepriseLM - Linux installer - Default location of debug log file changed, fixed password lifetime 85231

The installation of the Reprise License Manager on Linux now sets a better path for the debug log file. Previously it was set to /var/log which by default is not writable. It is now set to the installation directory, /opt/petrosys_license_server/petrosyslm.log

This also fixes an issue where the web administration interface user passwords were not saved correctly, leading to the inability to login using any changed password.

[Connections, Import and Export](#)

[Bug Fixes](#)

Writing well logs to dbMap do not require both Windows and Linux paths to be specified all the time 84785

In previous versions, both Linux and Windows paths needed to be specified in order to import well log curves to Petrosys dbMap successfully.

Now, only the path for the current running platform (either Windows or Linux) needs to be specified in order to import well log curves to Petrosys dbMap.

dbMap well log exchange - no duplicated units failure any more 85186

In previous versions, duplicated units of measure may have caused exchanging well logs to Petrosys dbMap to fail. This issue has now been resolved.

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

[Bug Fixes](#)

Fixed Petrel connection being lost after the Reference Project Tool has been used 85244

In previous versions, the connection to Petrel could be lost after Petrel's Reference Project Tool was used. This has now been fixed, and the Petrel connection is maintained.

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

SEGY performance improvement

85227

SEGY file reading performance has been improved by caching its scanning results.

3D SEGY - handle irregular inline/xline increments

85214

3D SEGY files with irregular inline or crossline increments are now supported.

3D SEGY - ignore blank traces

85215

Blank traces in 3D SEGY files are now ignored, which makes it possible to extract a valid 3D survey from the file without the impact of blank traces.

[dbMap - Administration](#)

[Bug Fixes](#)

dbMap SQL query import from XML no longer loses whitespace

49979

If you had edited or imported stored SQL queries using Admin/Reports/Edit in dbMap that had more than 2000 characters, any white-space immediately after the 2000th character was stripped off, which sometimes resulted in creating invalid queries. This has been fixed.

[dbMap - Client](#)

[Enhancements](#)

Exchange/Wells - Added ability to match dbMap wells by Government ID

85048

Exchange Wells now has the option to match wells by Government ID when reading from or writing to dbMap databases.

[dbMap - Client](#)

[Bug Fixes](#)

Exchange wells - Matching by well alias now works for dbMap PPDM 3.9 clients

85210

For dbMap PPDM3.9 clients, the Exchange/Wells options to match wells by "Well Name or Well Alias [output] matches Well Name [input]" or "Well Name or Well Alias (dashes match underscores)" have been fixed.

[Spatial Data Translator](#)

[Enhancements](#)

Spatial Data Translator CSV output support

84660

CSV file is now supported in Spatial Data Translator output data sources.

[Surface Modeling - Contouring](#)

[Bug Fixes](#)

Automatic contour file naming in Contouring options now allows custom change to contour file name

85175

Contouring by cell now allows users to select a custom contour file name that is not matching the input grid file name.

Gridding performance improvements

84718

Added some performance improvements benefiting larger grids.

[Surface Modeling - Gridding](#)

[Bug Fixes](#)

Grid/Create Grid - localized re-gridding now works ⁸⁵¹⁶³

From version PRO 2024.2, localized re-gridding had worked improperly. This functionality has been restored to its proper behaviour.

Shape file attribute name containing spaces now supported

84887

In Surface Modeling, when creating a grid using GIS as input, single attribute variable names that contain spaces are now supported.

Detailed Release Notes Summary PRO 2024.2.1

Enhancements

Application - General

[81215](#) "Well Symbol Generator" and "File Format Converter" utility programs re-added to the Tools menu

Application - User Interface

[84949](#) General arrow icons for up/down/left/right changed colour to reduce confusion with Petrel blue arrows

Connections, Import and Export

[85072](#) Added support for OSDU R3 M22

[84977](#) Removed support for OpenWorks R5000.10.0 to R5000.10.6

Connections, Import and Export - OpenWorks

[44724](#) Export gradient to Landmark clx file

dbMap - Client

[84985](#) dbMap - Seismic Import - Lower case characters and regex in seismic line renaming are now supported

Mapping - General

[85002](#) Added layer gridding option to mapping canvas RMB menu

Surface Modeling - Exchange

[84836](#) Wells Exchange filters well logs based on well selection

Surface Modeling - General

[84890](#) Add Grid Arithmetic template for TRI (Terrain Ruggedness Index)

Surface Modeling - Gridding

[84913](#) Grid/Create Grid UI panel uses in-place output grid and CRS selection

Detailed Release Notes Summary PRO 2024.2.1

Bug Fixes

Connections, Import and Export

[84882](#) DEM import handles import of geographic DEMs correctly

[77897](#) PLDB polygon import shows polygon list correctly

Connections, Import and Export - SEG Y

[84988](#) Functionality has been restored for 3D SEG Y that do not have rectangular inline/crossline data

Mapping - General

[84129](#) Map template scale field no longer allows invalid values

[84683](#) Display/Web service image shows byte and percentage progress correctly

[84684](#) Display/Web Service Image: save password to password manager option works

Spatial Editor

[84903](#) Spatial Editor grid save improvements

Surface Modeling - Gridding

[85059](#) Gridding input datasources now use a license for Petrosys-dbMap sources correctly

Wells (WDF) Editor

[85109](#) Permissions of newly created WDF files now honour umask on Linux

Petrosys Release PRO 2024.2.1

Detailed Release Notes

Application - General

Enhancements

"Well Symbol Generator" and "File Format Converter" utility programs re-added to the Tools menu

81215

The utility programs "Well Symbol Generator" and "File Format Converter" have been re-added to the Tools menu in the Launcher.

Well Symbol Generator is an interactive tool to build custom well symbols.

File Format Converter is an interactive tool to do certain types of text file conversions involving card formats.

Note: On Windows these utilities require the installation of the Strawberry Perl program from <https://strawberryperl.com/> to function.

Application - User Interface

Enhancements

General arrow icons for up/down/left/right changed colour to reduce confusion with Petrel blue arrows

84949

The blue arrow icons used for indicating movement of list items have been changed to green to reduce confusion with the Petrel and OpenWorks blue arrow drop site icons.

Connections, Import and Export

Enhancements

Added support for OSDU R3 M22

85072

Updated OSDU connectivity to include support for OSDU R3 M22

Removed support for OpenWorks R5000.10.0 to R5000.10.6

84977

Support for all OpenWorks versions R5000.10.6 and earlier has been removed.

Support continues for OpenWorks version R5000.10.7.

Connections, Import and Export

Bug Fixes

DEM import handles import of geographic DEMs correctly

84882

In Petrosys PRO 2024.1, a bug was introduced where geographic DEMs were imported to an incorrect CRS which meant they were not displayed correctly. This has been corrected, but it should be noted that grids created by importing geographic DEMs in PRO version 2024.2.1 will not be able to be opened in earlier versions of PRO.

PLDB polygon import shows polygon list correctly

77897

The PRO Pldb polygon import option now correctly shows the list of available polygons when the dialog is opened for a second time. In previous PRO versions, the list of polygons would be empty until a different source file was selected.

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

Export gradient to Landmark clx file

44724

Added the gradient editor option "/File/Export/Landmark DSG (*.clx)..." that can be used to export the gradient to a Landmark clx format, which in turn can then be imported into DSG using the "Color Bar/Load.." option.

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

[Bug Fixes](#)

Functionality has been restored for 3D SEGY that do not have rectangular inline/crossline data

84988

In PRO version 2024.1, a bug was introduced which had affected the support of 3D SEGY files that lack rectangular inline/crossline data. This functionality has been restored.

[dbMap - Client](#)

[Enhancements](#)

dbMap - Seismic Import - Lower case characters and regex in seismic line renaming are now supported

84985

In the Mapping options "Admin/dbMap Data Transfer/Import/Seismic..." and "/Lists/Seismic/", lower case characters and regex in the seismic line renaming option are now supported.

Setting the "Use Regex" checkbox allows standard modern regular expressions to be used to rename the seismic lines.

Use standard regular expression syntax in in the "Replace" field and in the "with" field the string to replace the matched text with. Using no regex patterns will do a simple sub-string replace.

Common regex patterns:

- Dot (.) matches any single character
- Plus (+) matches one or more characters
- Star (*) matches zero or more of the preceding character
- Question mark (?) matches zero or one of the preceding character
- Caret (^) matches the beginning of the string
- Dollar (\$) matches the end of the string
- Parenthesis () matches a group of characters. Use \$n to copy the n-th group into the replaced string

Examples:

1. Translate "ABC-Field1-123" to "ABC-Field2-123" using a "Replace" string of "Field1" and a "with" string of "Field2"
2. Translate any string between the dashes in lines of the form "ABC-Field1-123" to "ABC-Field2-123" using a "Replace" string of "-.*-" and a "with" string of "-Field2-"

[Mapping - General](#)

[Enhancements](#)

Added layer gridding option to mapping canvas RMB menu

85002

In Petrosys Mapping, Layer gridding options has been added to the Display List RMB menu for certain layers.

Map template scale field no longer allows invalid values 84129

The Map Template scale field ensures the entered value is valid. In previous PRO versions there were some specific invalid values which could be entered which would subsequently cause the software to crash when drawing map border annotation.

Display/Web service image shows byte and percentage progress correctly 84683

When downloading an image or data from a web service, the download size or percentage is shown correctly in the status bar. This fixes a bug introduced in PRO 2024.1 where these were not shown correctly.

Display/Web Service Image: save password to password manager option works 84684

When using the Basic authentication method to connect to a web service, there is an option to save the username and password to the Password Manager. In previous versions of PRO this information was not saved correctly.

Spatial Editor grid save improvements 84903

Two small improvements have been made to saving grids from the Spatial Editor:

- The editor will exit correctly after using the Save-As option to save a modified grid when closing the editor
- The Save and Save-As icons are enabled when any grid layer is selected in the layer tree. Previously the top level surface layer had to be selected for these options to be available

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

Wells Exchange filters well logs based on well selection 84836

Well logs are filtered/selected based on well selection to improve performance.

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

Add Grid Arithmetic template for TRI (Terrain Ruggedness Index) 84890

In Surface Modeling, TRI (Terrain Ruggedness Index) has been added into Grid Arithmetic templates.

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

Grid/Create Grid UI panel uses in-place output grid and CRS selection 84913

In the Surface Modeling Grid/Create Grid menu, the output grid and its associated CRS now use the in-place grid selector.

Gridding input datasources now use a license for Petrosys-dbMap sources correctly

85059

When Gridding input data sources from Petrosys-dbMap for "Seismic" and "Wells" inputs, the datdbMap license is now utilized correctly.

Permissions of newly created WDF files now honour umask on Linux

85109

The creation of new WDF files on Linux now honours the parent shell's umask value. Previously the WDF file would be created with 644 permission regardless of the umask.

Detailed Release Notes Summary PRO 2024.2

Enhancements

3D Viewer - General

[84442](#) Increased the maximum number of clip planes

Application - ArcGIS Pro Add-In

[84589](#) Petrosys ArcGIS Pro Add-In not longer supports retired ArcGIS Pro versions 2.6, 2.7, 2.8

[84371](#) Support added for ArcGIS Pro 3.3

Configuration - Licensing

[84329](#) Clarified Reprise License Manager installer web port configuration

Connections, Import and Export

[81345](#) Removed need for matching units when writing well logs to dbMap

[80629](#) OSDU connectivity on Linux

Connections, Import and Export - Paradigm-Epos

[83789](#) Added ability to select well logs by WireSet

[84802](#) Added support for running Paradigm 19 connector on Red Hat Enterprise Linux 8

Connections, Import and Export - Petrel

[84475](#) Honour Petrel GIS layer colour & symbology

[84480](#) Set or update AOI when data dropped

[76864](#) Maintain surface styles

[62271](#) 2D Interpretation now displayed when drag and dropped

Coordinate Reference Systems

[84523](#) Import CRS directly from a Well Known Text

dbMap - Client

[84097](#) Active Directory Single Sign On is now supported when connecting to dbMap Oracle databases

[84254](#) Exchange Wells - dbMap - UWI is now generated for new wells (Santos only)

Mapping - General

[84515](#) Default gradient changed to perceptually equal Viridis gradient

[84634](#) Increased length most recently used menu text display

[84637](#) Added clipping feature to layer gridding

[84582](#) Added 'Export Grid' RMB option to display list

Mapping - Seismic

[84562](#) Added ability to grid seismic data layers from display canvases

Surface Modeling - General

[84512](#) Create velocity model from a list of grids

Surface Modeling - Gridding

[84786](#) Added narrative text option to Grid/Create grid

[76486](#) Selecting clipping polygons from Excel works even if no polygon names are defined in Excel spreadsheet

[84603](#) Added support for writing to any supported third party grid datasource

Surface Modeling - Volumetrics

[84814](#) Probabilistic Resource Calculator (PRC) option removed from Surface Modeling

Detailed Release Notes Summary PRO 2024.2

Bug Fixes

Connections, Import and Export

[84799](#) Importing single well log curve set results in one LAS file

Connections, Import and Export - Paradigm-Epos

[84755](#) Paradigm-EPOS well log missing value now handled

Connections, Import and Export - Petrel

[84701](#) dbMap to Petrel correct well base depths written for Casings, Liners and Tubing

[84421](#) Exchange Wells - dbMap to Petrel - Correct inside diameters now written for Casings, Liners and Tubing

[78863](#) Exchange checkshot surveys to Petrel sets SRD

dbMap - Client

[79727](#) dbMap PPDM3.8 Wells - Legacy Geological province option removed from well list

Mapping - General

[84742](#) Petrosys polygons containing non-English characters in polygon names display correctly

Surface Modeling - Volumetrics

[84730](#) Volumetrics using non-English characters for polygon names provides correct results

Well Curves

[84789](#) Log curve set filter now working

Petrosys Release PRO 2024.2

Detailed Release Notes

[3D Viewer - General](#) [Enhancements](#)

Increased the maximum number of clip planes 84442

The maximum number of clipping planes in 3D Viewer has been increased from 8 to 100.

[Application - ArcGIS Pro Add-In](#) [Enhancements](#)

Petrosys ArcGIS Pro Add-In not longer supports retired ArcGIS Pro versions 2.6, 2.7, 2.8 84589

These ArcGIS Pro versions have been retired by Esri and are no longer supported by Petrosys.

Support added for ArcGIS Pro 3.3 84371

The Petrosys ArcGIS Pro Add-In now supported ArcGIS Pro version 3.3.

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

Clarified Reprise License Manager installer web port configuration 84329

The Reprise License Manager Windows Installer screen now has some extra text and checks to help set the correct web port to avoid confusion with the main Reprise server port.

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

Removed need for matching units when writing well logs to dbMap 81345

When using Exchange/Wells to write well logs into dbMap it is now no longer necessary to match any of the original log units to existing units in the dbMap database. The individual log curves are now written with the original source unit names as the reported mnemonic units, and the Curve OUOM value is no longer populated.

OSDU connectivity on Linux 80629

OSDU connectivity is now supported on all platforms. Previously OSDU connections were supported for Windows and RHEL8.

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

Importing single well log curve set results in one LAS file 84799

In well exchange multiple depth well log curves in one well log group can be merged before writing to destination data source if depth difference is within a given tolerance.

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

Added ability to select well logs by WireSet

83789

In Well Log Curve exchange one or more curve sets can be selected to constrain the exchanged log curves from input data source.

When input is Paradigm only active well log curves are exchanged.

Added support for running Paradigm 19 connector on Red Hat Enterprise Linux 8

84802

The Linux Paradigm connector for Paradigm 19 can now run Red Hat Enterprise Linux 8 or compatible servers. Previously it was only allowed to be run on RHEL7 servers.

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

Paradigm-EPOS well log missing value now handled

84755

In previous version during well log exchange from Paradigm to dbMap a Paradigm well log missing value may cause a failure with error of "value larger than specified precision allowed." This has now been fixed.

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

Honour Petrel GIS layer colour & symbology

84475

When drag and drop GIS data from Petrel to Petrosys PRO Mapping the style is now retained.

Set or update AOI when data dropped

84480

When drag and drop Petrel Map Window to Petrosys PRO Mapping the AOI of Map Window is updated into Petrosys Mapping's Map Extent.

Drag and drop other objects rather than Petrel Map Window does not update PRO Mapping's Map Extent.

Maintain surface styles

76864

When drag and drop regular surfaces from Petrel to Petrosys PRO Mapping the majority of Petrel styling is now retained.

2D Interpretation now displayed when drag and dropped

62271

Petrel 2D seismic interpretation can now be drag and dropped over to Petrosys PRO Mapping correctly.

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

[Bug Fixes](#)

dbMap to Petrel correct well base depths written for Casings, Liners and Tubing

84701

Exchange/Wells now uses the Driller shoe depth to populate base depths for when writing Casing, Liner and Tubing data from dbMap to Petrel.

Exchange Wells - dbMap to Petrel - Correct inside diameters now written for Casings, Liners and Tubing

84421

Exchange/Wells has been fixed to write the correct inside diameter values from dbMap to Petrel for Casings, Liners and Tubing. Previously it was writing the outside diameter as the inside value.

Exchange checkshot surveys to Petrel sets SRD 78863

When writing well Checkshot data to Petrel now the original SRD and replacement velocity are written into Petrel.

[Coordinate Reference Systems](#) [Enhancements](#)

Import CRS directly from a Well Known Text 84523

The Mapping/Admin/CRS/Import CRS Wkt... option has been added which allows a CRS well known text (WKT) to be checked to see if it matches an existing CRS and if not to be imported into the site CRS database.

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

Active Directory Single Sign On is now supported when connecting to dbMap Oracle databases 84097

Petrosys PRO now supports Single Sign On when connecting to dbMap Oracle databases and dbMap/Web for clients using On-Premises Active Directory.

Exchange Wells - dbMap - UWI is now generated for new wells (Santos only) 84254

For Santos only, Exchange/Wells has been configured to generate the UWI for new wells when importing dbMap, as opposed to using the well name or the UWI of the input data source.

[dbMap - Client](#) [Bug Fixes](#)

dbMap PPDM3.8 Wells - Legacy Geological province option removed from well list 79727

The option to display the GEOLOGICAL_PROVINCE column in the dbMap Well list has been removed for PPDM3.8 clients, as this was a legacy column that is no longer used.

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

Default gradient changed to perceptually equal Viridis gradient 84515

The default Petrosys gradient has been based on the RGB color wheel. This gradient is no longer preferred for visualization of data as some colors are perceived as more important than others.

In PRO 2024.2:

- New perceptually equal color gradients have been added (Inferno, Magma, Plasma, Viridis)
- The default gradient has been changed to Viridis
- A configuration option (under General/Gradient) has been added allowing the default gradient to be modified
- The existing "Petrosys default" gradients have been renamed to "Petrosys rainbow"

Increased length most recently used menu text display 84634

The /File/Recent menu list file names length is now configurable, up to 256 characters. The default values has been increased to 120 characters.

Added clipping feature to layer gridding 84637

Added ability to to use distance clipping or clipping polygons to clip layer gridding output grids.

Added 'Export Grid' RMB option to display list

84582

'Export Grid' menu option is now available in Mapping display.

Mapping - General

Bug Fixes

Petrosys polygons containing non-English characters in polygon names display correctly

84742

Petrosys polygons with non-English characters in polygon names display correctly

Mapping - Seismic

Enhancements

Added ability to grid seismic data layers from display canvases

84562

Added ability to grid seismic layers directly from Mapping and 3D Viewer by RMB on the layer in the display list.

Surface Modeling - General

Enhancements

Create velocity model from a list of grids

84512

A velocity model can be created from a series of horizon grids and velocity grids.

The number of velocity grids must be the same as the number of horizon grids, except for the case of interval velocity where the number of velocity grids must be one less than the number of horizon grids.

The AOI of the velocity model can be specified using a 3D survey, or one of the horizon or velocity grids or manually.

The horizon grids need to be in the ordered from top to base, and no horizon may overlap.

The generated velocity model can be output to SEG Y, ZGY or VDS format.

Surface Modeling - Gridding

Enhancements

Added narrative text option to Grid/Create grid

84786

The option for narrative text has been added to gridding tasks (Standard gridding, WellTie, Phantom, Grid/Process/Arithmetic, Layer Gridding). This narrative text will be appended to the output grid narrative.

Selecting clipping polygons from Excel works even if no polygon names are defined in Excel spreadsheet

76486

Selecting Excel clipping polygons in standard gridding, layer gridding, grid editor works for polygons without polygon names in excel spreadsheet. Generic polygon names like polygon_1, polygon_2, ... will be created.

Added support for writing to any supported third party grid datasource

84603

Now in Surface Modeling Grid/Create Grid the output grid can be any supported third party grid data source.

Surface Modeling - Volumetrics

Enhancements

Probabilistic Resource Calculator (PRC) option removed from Surface Modeling

84814

The Probabilistic Resource Calculator (PRC) option has been removed from Surface Modeling.

This was done due to the ongoing security implications of maintaining a cloud based server that processes the data.

Please contact Petrosys support if you have a need to use this option in future.

Surface Modeling - Volumetrics

Bug Fixes

Volumetrics using non-English characters for polygon names provides correct results

84730

Volumetrics calculate correct results when using volumetrics with Petrosys polygons and the polygon names contain non-English characters.

Well Curves

Bug Fixes

Log curve set filter now working

84789

An issue with the well log curve selection and filtering screen in the Well Exchange wizard has been fixed.

Detailed Release Notes Summary PRO 2024.1.1

Enhancements

Connections, Import and Export

[84462](#) Improved OSDU connectivity

Mapping - General

[84408](#) Added history metadata to dbm crawler report

[84423](#) Crawler has new option to preserve file access dates

Detailed Release Notes Summary PRO 2024.1.1

Bug Fixes

Application - General

[84601](#) Excel file format lost after file being edited

[84600](#) Fixed failure to re-read Excel file

Connections, Import and Export

[84679](#) Display/WMS has improved support for the basic authentication method

Connections, Import and Export - Petrel

[84654](#) Fixed bottom hole location issues writing implicit well trajectory to Petrel

Cross Section - General

[84663](#) Fixed crash when display strata layer with zones assigned

Mapping - General

[84404](#) Mapping file change history metadata is saved correctly

Surface Modeling - Contouring

[84531](#) Import/Petrosys/ASCII Contours - Fixed issue with imported contours being corrupted

Surface Modeling - Workflows/Scripting

Allow user to remove last linked grid process arithmetic task from depth convert tasks

Petrosys Release PRO 2024.1.1

Detailed Release Notes

Application - General

Bug Fixes

Excel file format lost after file being edited

84601

In previous versions Excel file may become not readable after the file being edited if in its format the column name start line or data start line is not the default. This has now been fixed.

Fixed failure to re-read Excel file

84600

A bug has been fixed in reading Excel file which kept popping up errors even when the Excel file is not currently opened by Excel Application.

Connections, Import and Export

Enhancements

Improved OSDU connectivity

84462

Several improvements to OSDU connectivity, including:

- Authentication URL retained between sessions
- Additional user feedback for connection issues
- Handle writing wells with missing UWI values

Connections, Import and Export

Bug Fixes

Display/WMS has improved support for the basic authentication method

84679

Display/WMS (and other web service options) have improved support for the basic web authentication method. In previous PRO versions, basic authentication worked as expected with most servers, but did not work with some specific server configurations.

Connections, Import and Export - Petrel

Bug Fixes

Fixed bottom hole location issues writing implicit well trajectory to Petrel

84654

When writing only well headers to Petrel, an implicit two-point trajectory is created based on the source well's top and bottom hole locations. A bug was introduced in PRO 2024.1 which could result in the bottom hole location being incorrect. That bug has now been fixed.

Fixed crash when display strata layer with zones assigned

84663

A crash in strata display has been fixed.

Mapping - General

Enhancements

Added history metadata to dbm crawler report

84408

Crawler report now contains change history metadata (creation date/user, modified date/user) for each analysed .dbm file.

Crawler has new option to preserve file access dates

84423

A crawler new option to preserve file access times has been added. This enhancement is designed to help maintaining accurate records of when files are accessed.

However, this new option may not function correctly when interacting with different file systems. For example:

- Windows application may be unable to preserve access times on Linux partitions or network mounts
- Linux application may be unable to preserve access times on Windows partitions or network mounts

Mapping - General

Bug Fixes

Mapping file change history metadata is saved correctly

84404

Change history metadata (creation date and user, modify date and user) are correctly saved to .dbm file.

Surface Modeling - Contouring

Bug Fixes

Import/Petrosys/ASCII Contours - Fixed issue with imported contours being corrupted

84531

The option to import contours from a Petrosys format ASCII file has been fixed.

Surface Modeling - Workflows/Scripting

Bug Fixes

Allow user to remove last linked grid process arithmetic task from depth convert tasks

79366

Added ability to remove last linked grid process arithmetic task (that is no longer needed and could be a cause of errors) from previously associated depth conversion workflow tasks.

Detailed Release Notes Summary PRO 2024.1

Enhancements

Application - General

- [84395](#) Red Hat Enterprise Linux 7 support deprecated
- [81303](#) Red Hat Enterprise Linux 9 supported
- [83362](#) Removed IHS Info Hub support
- [82752](#) Updated Curl library to version 8.6.0

Configuration - Licensing

- [81798](#) RepriseLM license manager upgraded to version 16.0BL1
- [84045](#) New license file required to run Petrosys PRO 2024.1

Connections, Import and Export

- [83949](#) PRO Exchange integration with Geoactive IP (GAX)
- [81273](#) Added support for writing well data (ingestion) to OSDU

Connections, Import and Export - Oracle

- [84104](#) Oracle Client - Updated to latest version of 21c [21.13]

Connections, Import and Export - Petrel

- [83944](#) Allow duplicate output curve names for exchange to Petrel
- [84057](#) Petrel 2024.1 supported
- [84275](#) Added "Water depth" well header attribute for exchange from PPDM38 to Petrel (Santos only)

Coordinate Reference Systems

- [82733](#) GDAL upgraded to version 3.6.3

Cross Section - General

- [82362](#) Display 3D seismic volume
- [84154](#) Section from 2D seismic line
- [82805](#) Cross section allows section to be reversed when displaying a well path section
- [83088](#) Added RMB menu to Section Plan
- [82525](#) Cross Section supports text substitution for section specific properties

Mapping - GIS, Spatial and Culture

- [84177](#) Oracle spatial - Show the layer owner in the description

Surface Modeling - Exchange

- [84189](#) SEGY file CRS transformation tool added

Surface Modeling - General

- [84229](#) Grid/Statistics/Inside Polygon can now output to shapefile

Surface Modeling - Gridding

- [83867](#) Export/Petrosys/Grid to XYZ allows setting coordinate field width and decimal places

Surface Modeling - Workflows/Scripting

- [84291](#) Added interactive scripting for looping over files
- [84186](#) Added interactive scripting query parameters selector for gridding from well query
- [84242](#) Grid/Statistics/Inside Polygon allows scripting of polygon selection

Detailed Release Notes Summary PRO 2024.1

Bug Fixes

Application - General

[83803](#) Autosave file now has complete file content

[83848](#) String to number performance improvement

Application - User Interface

[83749](#) List filters with extremely large number of terms now handled

Connections, Import and Export - OpenWorks

[84318](#) Added support for connecting to OpenWorks 10.7.6

Connections, Import and Export - Petrel

[77626](#) Display/GIS correctly restores data for renamed Petrel projects

[84299](#) Additional Petrosys project permissions checks before launching PRO from Petrel

[84293](#) Reading well headers from Petrel now allows a user attribute named "Depth"

[84183](#) Well bottom hole offset used when writing well headers to Petrel

[84401](#) Fixed Petrel borehole trajectory not being saved when master trajectory is updated

Cross Section - General

[83400](#) Mapping Display/Line of Section handles blank hinge point labels correctly

dbMap - Client

[84241](#) Bubble map from dbMap database template query now works with data selection options (PPDM3.8 clients only)

Spatial Editor

[77885](#) Spatial Editor correctly handles editing hidden raster image layers

Surface Modeling - Contouring

[84123](#) Fixed buffer overrun error

Surface Modeling - Workflows/Scripting

[84106](#) Improvements for GIS layers when all items selected

Petrosys Release PRO 2024.1

Detailed Release Notes

[Application - General](#)

[Enhancements](#)

Red Hat Enterprise Linux 7 support deprecated 84395

Red Hat will end maintenance support for the Red Hat Enterprise Linux 7 operating system on 30th June 2024. In line with this schedule, Petrosys PRO 2024.1 now deprecates support for the EL7 platform, and the installer will not be generally available. For clients who are yet to update to EL8 or newer, please contact Petrosys support for assistance.

Red Hat Enterprise Linux 9 supported 81303

Petrosys PRO is now supported on Red Hat Enterprise Linux 9 or equivalent.

Please install the RHEL8 install package on the EL9 platform.

Removed IHS Info Hub support 83362

Removed IHS Info Hub data source and relevant options.

Updated Curl library to version 8.6.0 82752

Upgraded an internal library, Curl, from version 7.76 to 8.60 to address several CVE's in the older version. CVE's addressed: CVE-2022-43552, CVE-2023-23916, CVE-2023-23915, CVE-2023-23914, CVE-2022-43551.

[Application - General](#)

[Bug Fixes](#)

Autosave file now has complete file content 83803

In previous versions .autosave files may have truncated XML content. This has now been fixed.

String to number performance improvement 83848

Improved performance converting string numbers to numbers. This will mainly benefit the File-Text functionality across the application where ASCII column representing numbers are scanned and/or imported.

[Application - User Interface](#)

[Bug Fixes](#)

List filters with extremely large number of terms now handled 83749

List filters with large numbers of filter terms now perform much better. For example, filters containing tens of thousands of search terms are handled in seconds, while previously, large filters could take minutes to process, or may crash.

[Configuration - Licensing](#)

[Enhancements](#)

RepriseLM license manager upgraded to version 16.0BL1 81798

The RepriseLM license manager has been upgraded to version 16.0BL1.

The web interface now uses HTTPS and requires user logins for access. If this is the first time using version 16.0 or greater, a default login with the username admin with password admin is created. Please login immediately to the web interface where you will be prompted to change the admin password.

See: <https://reprisesoftware.com/docs/admin/rlm-web-server.html> for more details.

New license file required to run Petrosys PRO 2024.1 ⁸⁴⁰⁴⁵

To use Petrosys PRO 2024.1, a new license file is required. Acquire your license file by logging in to the Petrosys Client Portal or reaching out to Petrosys Support.

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

PRO Exchange integration with Geoactive IP (GAX) ⁸³⁹⁴⁹

Added well exchange functionality between Geoactive IP and OSDU. For further details please contact Geoactive sales and support at <https://www.geoactive.com/chat-with-us>.

Added support for writing well data (ingestion) to OSDU ⁸¹²⁷³

OSDU connectivity has been extended to support ingestion of well data. Well headers, directional surveys, formation tops and well log curves can now be written to OSDU via the Wells Exchange Wizard.

Connections, Import and Export - OpenWorksBug Fixes

Added support for connecting to OpenWorks 10.7.6 ⁸⁴³¹⁸

Added Petrosys plugin support for OpenWorks 10.7.6

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

Oracle Client - Updated to latest version of 21c [21.13] ⁸⁴¹⁰⁴

The internal client library Petrosys PRO uses to communicate to Oracle servers had been updated to the latest version 21.13.

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

Allow duplicate output curve names for exchange to Petrel ⁸³⁹⁴⁴

Allowing duplicate output curve names in order to reconcile multiple similar curve mnemonics to a single mnemonic.

Petrel 2024.1 supported ⁸⁴⁰⁵⁷

Petrosys connectivity to Schlumberger's Petrel now supports direct interaction with Petrel 2024.1.

Support for Petrel 2024.1 includes the ability to:

- Drag and drop data from Petrel into Petrosys PRO
- Import Model grid horizons and 3D seismic interpretation horizons to a Petrosys grid file
- Import faults from Model grids to a Petrosys fault file
- Import 2D and 3D seismic navigation and horizon interpretation data to a Petrosys SDF
- Directly display Structural framework horizons, Model grid horizons, Input surface grids and 3D seismic interpretation horizons in Mapping
- Directly contour Structural framework horizons, Model grid horizon data and Input surface grids in Surface Modeling
- Directly grid 2D and 3D seismic horizon interpretation data in Surface Modeling
- Directly display, grid and import well data.
- Directly display 2D seismic navigation and horizon interpretation in Mapping

- Directly display 3D seismic bin grids in Mapping
- Directly display Structural Model fault surfaces in 3DViewer
- Directly display fault sticks in 3DViewer
- Export Petrosys and other third party grids to Petrel

Petrosys PRO continues to maintain support for connections to Petrel 2017.1 through 2023.x.

Added "Water depth" well header attribute for exchange from PPDM38 to Petrel (Santos only)

84275

A custom "Water depth" well header attribute is now written to Petrel for wells exchanged from PPDM38. (Santos only)

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

[Bug Fixes](#)

Display/GIS correctly restores data for renamed Petrel projects

77626

Display/GIS reopens Petrel data layers saved in .dbm files using the current Petrel project, even if the Petrel project has been renamed from when it was originally created.

Additional Petrosys project permissions checks before launching PRO from Petrel

84299

When launching PRO from Petrel, user file permissions are re-checked before automatically selecting the last linked PRO project.

Reading well headers from Petrel now allows a user attribute named "Depth"

84293

In previous versions of PRO, reading well headers from Petrel would fail if the Petrel wells included a user attribute named "Depth" as this conflicted with the default Petrel attribute of the same name. This issue has now been fixed and the user-defined attribute will be loaded as Depth (2).

Well bottom hole offset used when writing well headers to Petrel

84183

When writing well headers to Petrel, the bottom hole offset is now used when writing the two-point directional survey.

Fixed Petrel borehole trajectory not being saved when master trajectory is updated

84401

In previous versions, in some instances, despite the borehole trajectory data being updated in Petrel, the data is lost again when the Petrel project is saved. A workaround for this issue has now been implemented.

[Coordinate Reference Systems](#)

[Enhancements](#)

GDAL upgraded to version 3.6.3

82733

The third party library GDAL which is used for some raster and vector handling has been updated to version 3.6.3.

[Cross Section - General](#)

[Enhancements](#)

Display 3D seismic volume

82362

3D seismic volume data can now be displayed in Cross Section. Supported data source are Petrel, SEG Y file, ZGY file or VDS file.

Section from 2D seismic line

84154

It is now supported to define a section using a 2D seismic line.

Cross section allows section to be reversed when displaying a well path section

82805

The direction of view for a cross section based on a well path is now able to be reversed using the "Reverse Line" button.

Added RMB menu to Section Plan

83088

A right mouse button (RMB) menu has been added to the Section Plan view. The RMB menu includes zoom in, zoom out, reset to full view and update the plan from the current section data options.

Cross Section supports text substitution for section specific properties

82525

Text property substitution is supported in the PRO Cross Section application in several contexts (text, title block, excel, layout properties). Each of these contexts supports displaying section dimensions (top, base, length and width).

Cross Section - General

Bug Fixes

Mapping Display/Line of Section handles blank hinge point labels correctly

83400

In previous versions, displaying a line of section in Mapping with hinge point labels set to "None" would result in background fill incorrectly displayed at each hinge point.

dbMap - Client

Bug Fixes

Bubble map from dbMap database template query now works with data selection options (PPDM3.8 clients only)

84241

Mapping/Display/Bubble Map from Petrosys-dbMap now successfully applies the data selection filter when chosen. Previously no data appeared on the map when any of the Selection file, User-defined or Using-form option was used. This only affected dbMap PPDM3.8 clients.

Mapping - GIS, Spatial and Culture Enhancements

Oracle spatial - Show the layer owner in the description

84177

Display/GIS from an Oracle spatial data source now shows the schema name in the feature description, to differentiate when there are multiple objects of same name belonging to different schemas.

Spatial Editor

Bug Fixes

Spatial Editor correctly handles editing hidden raster image layers

77885

In previous versions, trying to edit a raster layer that had never been made visible in the current session would cause a crash.

Fixed buffer overrun error

84123

A buffer overrun error has been fixed in contouring.

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

SEGY file CRS transformation tool added

84189

Coordinates in SEGY files can now be converted to a different projected CRS.

This option can be accessed via the menu 'Surface Modeling/File/Exchange/CRS Conversion/SEGY File CRS Conversion...';

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

Grid/Statistics/Inside Polygon can now output to shapefile

84229

The grid statistics inside polygons can now be reported to output shapefile with grid statistics values stored as attributes.

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

Export/Petrosys/Grid to XYZ allows setting coordinate field width and decimal places

83867

The Export/Petrosys/Grid to XYZ allows the user to set the XY coordinate field width and the number of decimal places.

[Surface Modeling - Workflows/Scripting](#) [Enhancements](#)

Added interactive scripting for looping over files

84291

Workflow looping over files can be set for interactive scripting. This allows the set of files to be looped over to be selected and modified each time the workflow is executed.

Added interactive scripting query parameters selector for gridding from well query

84186

Added interactive scripting for query parameters when gridding from well query.

Grid/Statistics/Inside Polygon allows scripting of polygon selection

84242

Polygon selection can now be scripted.

Improvements for GIS layers when all items selected

84106

When GIS layers with polygons/faults are saved to .dbm file with all items selected, an all items indicator will be saved to the .dbm. This change will help with Surface Modeling workflows when a GIS layer is scripted and the item names are not known and may differ from the original GIS layer.