

SOFTWARE RELEASE NOTES

Version 2021.2.3

PETROSYS PRO



Connectivity



Mapping & Visualisation



Surface Modeling

Petrosys PRO 2021.2.3 takes 3D visualization to the next level with a new generation 3D Viewer module.

Building on the strong collection of innovative and improved features in the PRO 2020 series across Connectivity, Mapping and Surface Modeling, Petrosys PRO 2021.2.3 delivers the latest functionality whilst the enhanced development of existing features continues to add value to provide our clients software investment.

Next Level Connectivity

The key highlight of Petrosys PRO 2021.1 is the ArcGIS Pro Add-In with advanced connectivity enabling the direct display of subsurface data directly from E&P software.

OSDU™ Wells connectivity is available as of PRO 2021.2.2 for Windows for AWS hosted instances.

Licensing updates:

- PRO 2021.2+ requires a new license file to be installed for clients with 3D Viewer licenses.
- PRO 2021.1 requires a new license file to be installed for all clients

Supported Environment updates of note:

- Linux platforms RHEL7 and RHEL8 are supported, RHEL6 is no longer supported.

Read on for more details on these options with more to follow in the 2021 stream. 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.

OSDU™ Wells Connector



A new OSDU™ connector supports reading well headers, directional surveys, formation tops and well logs from OSDU R3. The well data can be displayed in Mapping and the 3D Viewer and exchanged to all supported output data sources.

This release includes support for AWS hosted OSDU instances accessed from Petrosys PRO on Windows only.

For assistance in configuring the OSDU connection, please contact [Petrosys Support](#).

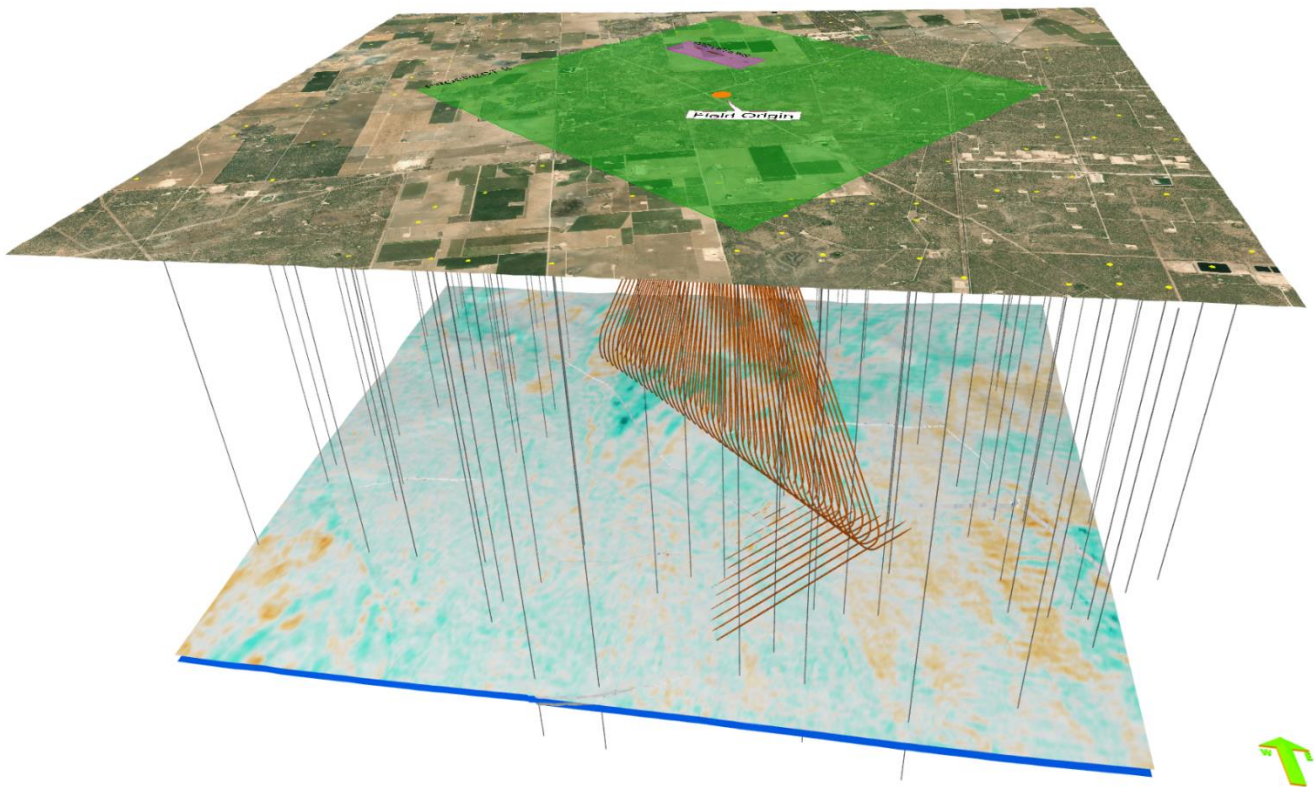
** OSDU connector access will be added to Petrosys Linux platforms in a future software release along with addressing early access feedback.*

Dramatically Faster 3D Viewer Is Now Connected to the Map View

A complete rebuild of the 3D Viewer around a new graphics engine, along with multi-threading to utilize more of the cores of modern processors, has delivered dramatic speed improvements to the 3D Viewer and paves the way for a greater variety of more productive workflows

Performance that lets you explore more of your data to find better outcomes

The time to load huge grids has been reduced by a factor of up to ten, and the speed of rotating and zooming them in the 3D view has become much better. Our new graphics pipeline gives our development team a lot more control over how things are rendered, so that we can respond more effectively when a user comes up with a high value 3D visualization challenge.

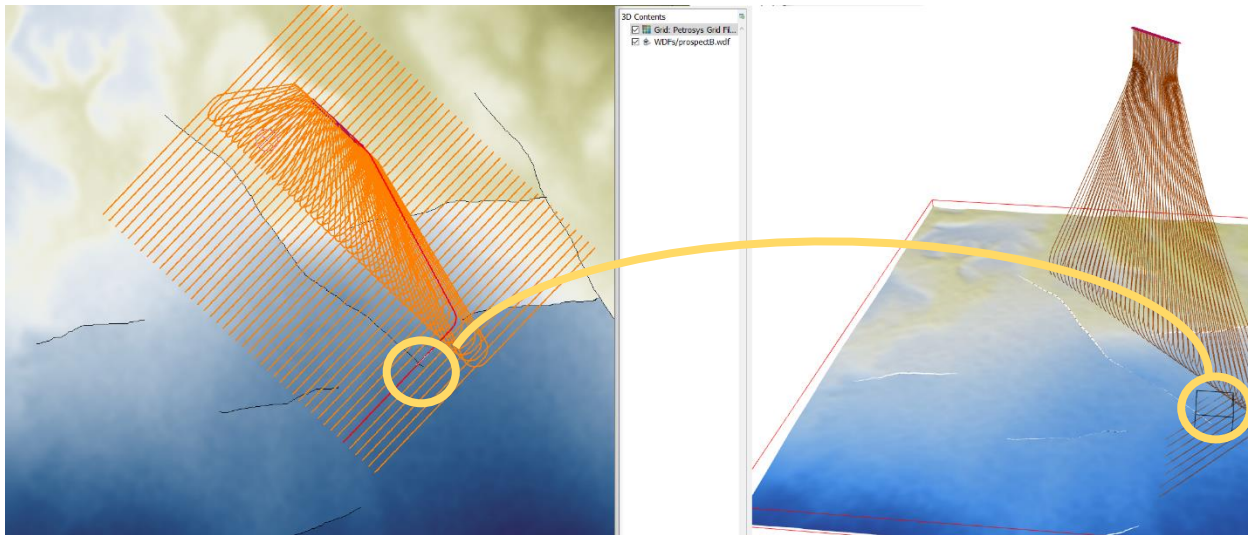


The Petrosys 3D Viewer now lets you integrate structural surfaces with seismic attributes, drilling programs, and land data to optimize your field development, whilst being able to switch back to map views to meet regulatory requirements and tie in with other business objectives

Integration of the map and 3D user experiences

The Petrosys map canvas and 3D view are now connected: you can start the 3D Viewer from the File/View Map Contents in 3D and the 3D Viewer will start up showing the grids and well data from your map.

This lets you pick wells on the 3D view and drill down into the related data from the map view or track the 3D location of mapped features. Spatial relationships such as the intercepts of horizontal wells with preferred landing zones become quantitatively visible once shown in a three-dimensional space. Individual wellbores in complex legacy offshore fields become more readily identifiable.



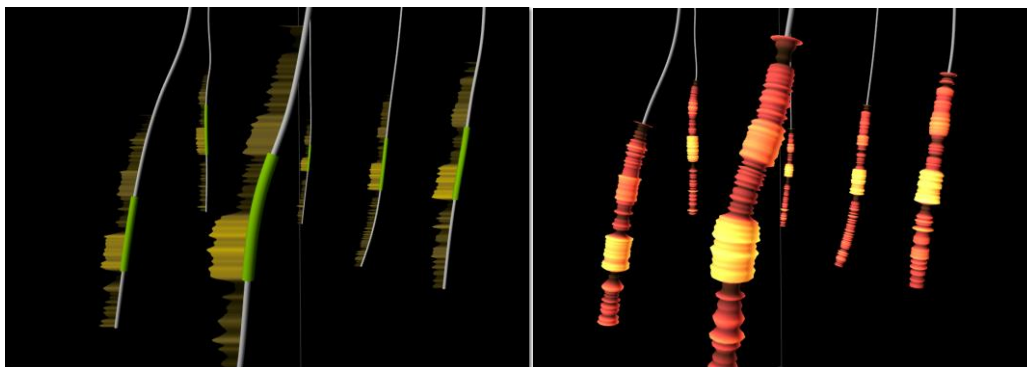
Having positioned a drilling program in a map view, switching to a 3D canvas lets you explore issues such as the intercept of proposed horizontal drilling programs with target landing zones

Drag and drop connectivity from Petrel® and DecisionSpace® into the Petrosys 3D canvas

Seismic interpretation, well bores, tops and other subsurface knowledge can now be visually integrated by simply dragging and dropping them from these major interpretation platforms into the Petrosys 3D workspace. Data from multiple platforms can be integrated with analytical outcomes and geospatial inputs to create 3D visualizations that help find and quantify opportunities and risks in subsurface development projects.

Add digital well logs to your 3D exploration

The powerful well log rendering developed by Petrosys for use in the dbMap/web and PRO log signature mapping is now finding its way into the 3D view: the new 3D view includes the display of well log curve data along well paths as a wellbore scaling graphic, or as a sawtooth log attached to the wellbore.



A more contemporary user experience

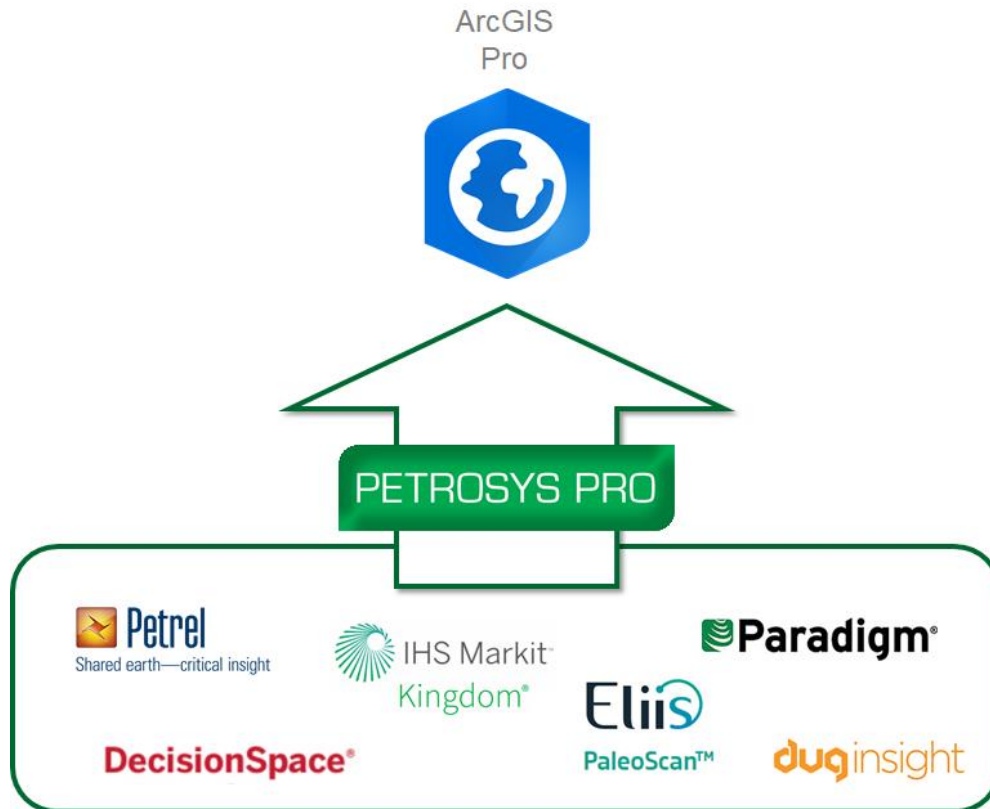
A ribbon-based user interface has been introduced to supersede the icons with a more contemporary look and feel. The management of display layers has been upgraded to include many of the features of map layering, such as the popular use of combining layers into groups.

The start of something bigger

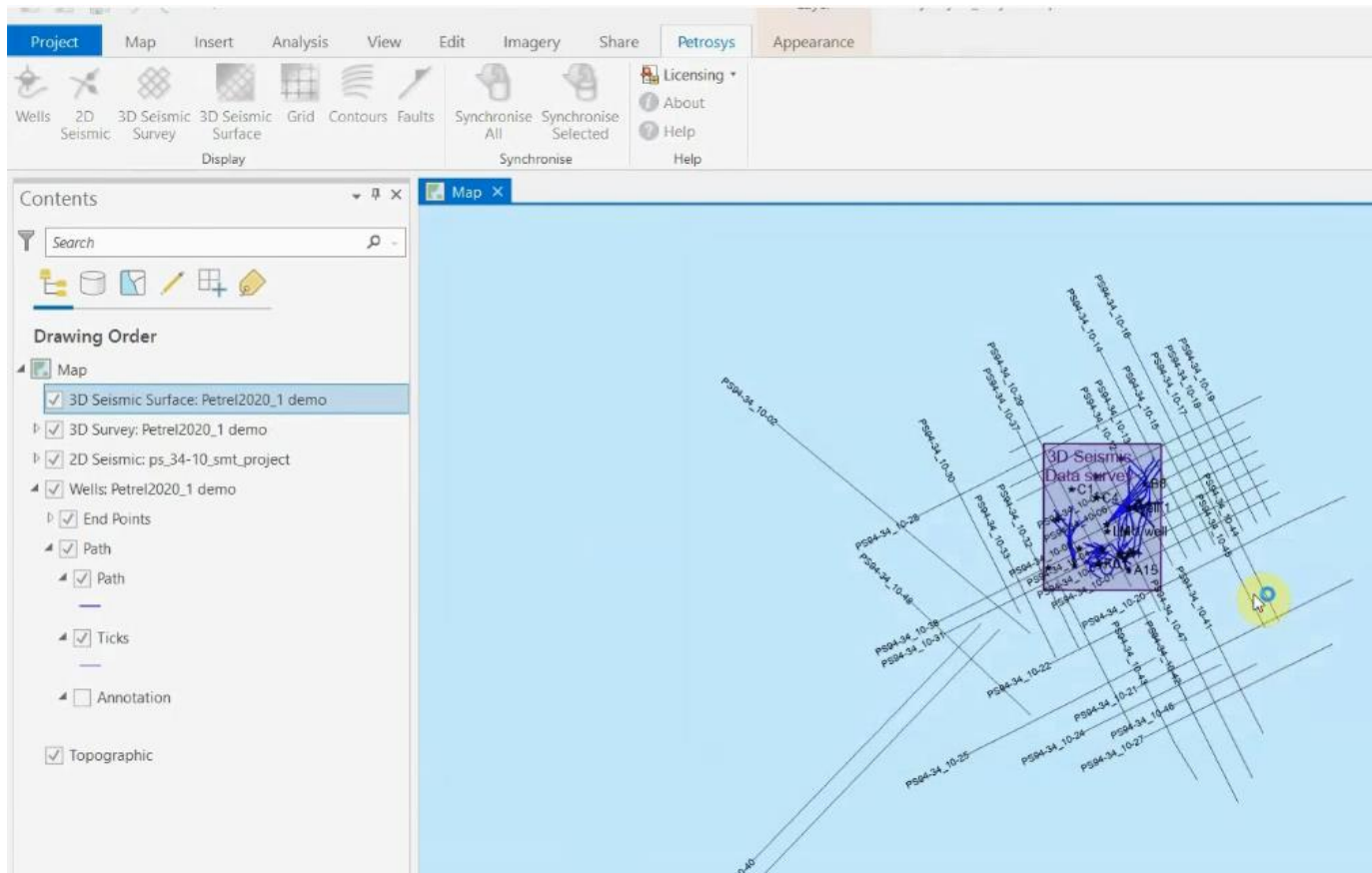
The 2021.2 3D visualization tool is the first step in the migration of Petrosys PRO to the next generation in its ongoing evolution as a premier subsurface knowledge tool. Look out for ongoing developments as we improve the integration of visualization canvases and connectivity of data sources!

ArcGIS Pro Add-In

The new Petrosys add-in allows users to directly display subsurface data inside ArcGIS Pro from their chosen E&P source.



- Display wells, well paths, seismic navigation and surfaces, grids, contours, fault polygons directly within in ArcGIS Pro.
- Connect to subsurface and interpretation data from multiple sources.
- All data source vendors supported in Petrosys PRO are supported in ArcGIS Pro; Petrel, DecisionSpace, Paradigm, IHS Kingdom, SeisWare, etc.



- Control the display style and publish to Portal as part of ArcGIS Pro workflow.
- Use data in different or customised Coordinate Reference Systems.
- Query object names and other attributes.
- Contours are dynamically computed from the selected surfaces and grids. The Faults and contours are displayed along with the grid to generate a geologically accurate relationship.
- Synchronise, update, and finalise your map. Use the synchronisation buttons to update the display when changes have been made within your interpretation system.
- ArcGIS Pro versions 2.5 to 2.8 are supported.

Notes for Upgraders and Installers of Applications

Upgraders from Petrosys PRO 2020 should be aware of the following changes:

- Support for Red Hat Enterprise Linux 6 (RHEL6) has been ceased.
- Petrosys PRO supports Red Hat Enterprise Linux 7 and 8 (RHEL7 and RHEL8) and equivalents (CentOS, Oracle Linux).
- Petrosys PRO 2021.1 requires a new license file for every client. In addition, PRO 2021.2 requires a new license file for clients with existing 3DViewer license. 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 2021.2.3

Bug Fixes

Application - General

[80752](#) Help on Linux now displays on all systems

Connections, Import and Export - OpenWorks

[80703](#) OpenWorks: Grids with non integral cell sizes are read correctly

Connections, Import and Export - Petrel

[80740](#) Petrel 3D seismic horizons from irregular interpretation collection structures now supported

Mapping - GIS, Spatial and Culture

[80707](#) Display GIS - Web Feature Service (WFS): attributes of type decimal are now supported

Petrosys Release PRO 2021.2.3

Detailed Release Notes

Application - General

Bug Fixes

Help on Linux now displays on all systems

80752

The Help viewer on Linux systems now reliably works. Previously it would only work if a certain non-standard system package (libglvnd-devel) was installed.

Connections, Import and Export - OpenWorksBug Fixes

OpenWorks: Grids with non integral cell sizes are read correctly

80703

Openworks grids with cell sizes that are fractional (non integral) would be read incorrectly leading to the grid not being located precisely correct.

Connections, Import and Export - Petrel

Bug Fixes

Petrel 3D seismic horizons from irregular interpretation collection structures now supported

80740

In previous versions, no 3D seismic surfaces would be loaded from Petrel projects containing a standard Collection within a Seismic Interpretation Collection. This has now been fixed.

Mapping - GIS, Spatial and Culture

Bug Fixes

Display GIS - Web Feature Service (WFS): attributes of type decimal are now supported

80707

In the Mapping 'Display GIS' option, when using the 'Web Feature Service' (WFS) attributes of type decimal were being ignored. They are now supported.

Detailed Release Notes Summary PRO 2021.2.2

Enhancements

Connections, Import and Export

[80628](#) Added support for reading well data from OSDU

Mapping - General

[39276](#) Legend - Added support for discrete color intervals

Mapping - GIS, Spatial and Culture

[45516](#) Display GIS allows polygons to optionally be drawn in the same order as thematic mapping rules

[41666](#) Support added for reading OGP P6/11 perimeter polygons in Display/GIS

[80466](#) GIS generic SQL query supports line and polygon display

Mapping - Seismic

[12931](#) Display seismic has more options for posting location

Surface Modeling - General

[80523](#) Grid/Processes/Outlining polygons - Append option added

Surface Modeling - Workflows/Scripting

[26184](#) Added scripting functions generating random numbers based on given distribution

Detailed Release Notes Summary PRO 2021.2.2

Bug Fixes

3D Viewer - General

[80534](#) All fault trace lines are now displayed in 3D Viewer

3D Viewer - Visualization

[80503](#) Grids with embedded fault trace lines are now displayed correctly in 3D Viewer

Connections, Import and Export

[80513](#) Exchange/Wells - dbMap to Petrel - well symbol is now updated

Connections, Import and Export - Oracle

[80497](#) GIS generic SQL query works correctly after multiple runs

Connections, Import and Export - Petrel

[80580](#) Exchange well casings from PPDM38 to Petrel now using correct depth column (Santos only)

Surface Modeling - Exchange

[80599](#) Fixed crash in grid scanning when file has no lines

Petrosys Release PRO 2021.2.2

Detailed Release Notes

3D Viewer - General

Bug Fixes

All fault trace lines are now displayed in 3D Viewer⁸⁰⁵³⁴

In previous versions embedded fault trace lines in Petrosys grids might be ignored during triangulation. This has now been fixed.

3D Viewer - Visualization

Bug Fixes

Grids with embedded fault trace lines are now displayed correctly in 3D Viewer⁸⁰⁵⁰³

In previous versions there is bug that Petrosys grids with embedded fault trace lines are not triangulated properly. This has now been fixed.

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

Added support for reading well data from OSDU ⁸⁰⁶²⁸

A new OSDU connector supports reading well headers, directional surveys, formation tops and well logs from OSDU R3.

The well data can be displayed in Mapping and 3D Viewer and exchanged to all supported output data sources.

This release includes support for AWS-hosted OSDU instances accessed from Petrosys PRO on Windows only.

To configure the OSDU connection please contact support@petrosys.com.au.

** OSDU connector access will be added to Petrosys Linux platforms in a future software release along with addressing early access feedback.*

Connections, Import and Export

Bug Fixes

Exchange/Wells - dbMap to Petrel - well symbol is now updated ⁸⁰⁵¹³

Well exchange task user data cache now can be cleared properly.

Connections, Import and Export - Oracle

Bug Fixes

GIS generic SQL query works correctly after multiple runs ⁸⁰⁴⁹⁷

Petrosys PRO includes support for GIS point data from SQL queries run against Oracle databases. Previous versions of PRO did not manage database cursors correctly, which limited the number of times SQL queries could be run.

Exchange well casings from PPDM38 to Petrel now using correct depth column (Santos only) 80580

Well casing base depths are now loaded from the PS_SHOE_DEPTH_DRILLER column of the WELL_TUBULAR table.

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

Legend - Added support for discrete color intervals 39276

Legend now supports display of discrete color intervals of a gradient.

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

Display GIS allows polygons to optionally be drawn in the same order as thematic mapping rules 45516

The Display/GIS option draws polygons in the same order they are read from the source. The Display/GIS Thematic Expression option now includes a checkbox to draw shapes from the source in the same order as the thematic rules are defined. This is potentially useful in cases where smaller shapes are hidden by subsequently drawn larger shapes.

Support added for reading OGP P6/11 perimeter polygons in Display/GIS 41666

OGP P6/11 perimeter polygons can now be displayed through Display/GIS.

GIS generic SQL query supports line and polygon display 80466

The GIS generic SQL query data source has been enhanced to support line and polygon types in addition to point types. Individual polygons and lines must be differentiated by a "segment id" column, and the SQL query should include an "order by" clause to ensure vertex order is correct.

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

Display seismic has more options for posting location 12931

In Display Seismic line name posting, the orientation can now be either automatically determined or set to a fixed angle.

Fixed crash in grid scanning when file has no lines 80599

A crash in Surface Modeling has been fixed in the Importing XYZ ASCII to Grid file option, when the file is empty.

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

Grid/Processes/Outlining polygons - Append option added 80523

Added 'Append' option to Grid/Processes/Outlining polygons to allow creation of one single output polygon file.

Surface Modeling - Workflows/Scripting Enhancements

Added scripting functions generating random numbers based on given distribution

26184

Added random number generators for normal, log normal, student, fisher and chi squared distributions.

Detailed Release Notes Summary PRO 2021.2.1

Enhancements

3D Viewer - General

[80299](#) 3DViewer Display/Point Data adds decimal points to scaling factor

[80287](#) Qt3d - Display list - add 'Update All'

Surface Modeling - Gridding

[80200](#) Gridding spatial data - support non-numeric attributes in data selection filter

Surface Modeling - Workflows/Scripting

[80202](#) Spatial data - Data selection filter string is scriptable

Detailed Release Notes Summary PRO 2021.2.1

Bug Fixes

3D Viewer - General

[80325](#) Improved font rendering of 3D text

Application - General

[80399](#) Windows Installer now deploys Microsoft Foundation Classes DLLs

Application - Launcher

[80291](#) Windows - Pinning launcher to taskbar now creates correct shortcut

[80345](#) Project selector - Now works for case insensitive names in groups configuration interface

Surface Modeling - General

[80401](#) Tools/Draw Map creates raster plot with given raster size correctly

Surface Modeling - Volumetrics

[80346](#) PRO does not hang any more when opening Volumetrics

Petrosys Release PRO 2021.2.1

Detailed Release Notes

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

3DViewer Display/Point Data adds decimal points to scaling factor 80299

Display/Point Data allows to enter up to 6 decimal points for the point data scale factor.

Qt3d - Display list - add 'Update All' 80287

Added Update All option to display list RMB functionality which makes updating all layers easier.

[3D Viewer - General](#)

[Bug Fixes](#)

Improved font rendering of 3D text 80325

In the 3D Viewer the rendering of text for such items as well annotation, formation name and value has been improved.

[Application - General](#)

[Bug Fixes](#)

Windows Installer now deploys Microsoft Foundation Classes DLLs 80399

The Petrosys PRO Windows Installer now deploys the Microsoft Foundation Classes DLLs required for Petrosys PRO to run. These DLLs include mfc140u.dll.

In Petrosys PRO 2021.2 these DLLs were not deployed, so on a PC that did not have the MFC DLLs already installed Petrosys PRO would fail to start.

[Application - Launcher](#)

[Bug Fixes](#)

Windows - Pinning launcher to taskbar now creates correct shortcut

80291

On Windows only in PRO 2021.2, pinning the Launcher to the taskbar would create a taskbar shortcut that would fail to run due to the incorrect 'start in' folder being set. This now works correctly.

Project selector - Now works for case insensitive names in groups configuration interface 80345

The Project Selector administration configuration interface now fully supports case insensitive user names. In version 2021.1 partial support was added for case insensitive names, however this caused some problems if the username was not matching, due to case, in the groups configuration and could have lead to no projects being shown.

Tools/Draw Map creates raster plot with given raster size correctly ⁸⁰⁴⁰¹

In Tools/Draw Map when creating a raster plot it is now correctly uses the specified raster size.

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

Gridding spatial data - support non-numeric attributes in data selection filter ⁸⁰²⁰⁰

Surface Modeling gridding's input GIS data selection filter now supports non-numeric attributes.

PRO does not hang any more when opening Volumetrics ⁸⁰³⁴⁶

In the previous version Surface Modeling Volumetrics, the panel could hang after running Lowest Closest Contours. This has now been fixed.

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

Spatial data - Data selection filter string is scriptable ⁸⁰²⁰²

The field 'GisFilter' can now be scripted in the spatial data sources for gridding tasks.

Detailed Release Notes Summary PRO 2021.2

Enhancements

3D Viewer - General

[78286](#) Next generation 3D Viewer

Application - ArcGIS Pro Add-In

[79022](#) Added drag and drop of Petrosys grids

Coordinate Reference Systems

[80082](#) Improved Transverse Mercator projection methods

dbMap - Administration

[79395](#) Batch functionality to spatialize well paths no longer requires any PRO licenses

Mapping - GIS, Spatial and Culture

[37322](#) Display/GIS supports display of Petrosys GIP files

[46648](#) Custom SQL queries able to be used as spatial data sources

Surface Modeling - Workflows/Scripting

[80202](#) Spatial data - Data selection filter string is scriptable

Detailed Release Notes Summary PRO 2021.2

Bug Fixes

Application - ArcGIS Pro Add-In

[79201](#) ArcGIS Pro add-in dialogs now stay on top of ArcGIS Pro window

Connections, Import and Export

[80247](#) Fixed crash in Seismic Import to SDF when loading horizons

Connections, Import and Export - Petrel

[25037](#) Petrel domain templates with overridden units are now loaded correctly

dbMap - Client

[80294](#) dbMap PPDM3.8 - Wells now use Loggers TD or Drillers TD if Final TD is not populated

[80298](#) Wells Exchange: dbMap PPDM3.8 to Petrel extrapolates directional survey to TD of well (Santos only)

Mapping - Editors

[77850](#) Spatial Editor handles drag and drop files correctly

Mapping - GIS, Spatial and Culture

[80234](#) Display/GIS no longer errors for Oracle date columns used as a filter

[79901](#) Display/GIS: Fixed crash when using a filter expression

Surface Modeling - Contouring

[79998](#) Lowest Closing Contour task hang fixed

Petrosys Release PRO 2021.2

Detailed Release Notes

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

Next generation 3D Viewer

78286

New Features:

- Improved performance of grids and wells.
- Display of well log curves.
- Drag and drop of files onto 3D Canvas as well as from Petrel and DecisionSpace.
- One button creation of 3D viewer from mapping with all supported mapping data brought into the 3D view.
- Shared cursor between 3D and Mapping. Object highlighting in all views when selected in one of the views.
- Improved layer management (grouping, etc.).
- Improved control over Z units.
- Modern ribbon UI.
- Improved user experience due to extensive use of multi-threading so the UI stays responsive.

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

Added drag and drop of Petrosys grids

79022

Drag and drop of Petrosys grid files from either the ArcGIS Pro catalog or Windows Explorer is now supported in the ArcGIS Pro add-in. Multiple grids can be selected and dropped in the one action.

When grids are dropped a contour increment is automatically determined. This can be changed by editing the layer properties.

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

[Bug Fixes](#)

ArcGIS Pro add-in dialogs now stay on top of ArcGIS Pro window

79201

Previously, Petrosys ArcGIS Pro add-in dialogs could go underneath the ArcGIS Pro window. Now they will always stay on top and behave in a modal manner.

[Connections, Import and Export](#)

[Bug Fixes](#)

Fixed crash in Seismic Import to SDF when loading horizons

80247

Seismic Import to SDF no longer crashes when loading the list of horizons from a data source which has returned no data types.

Petrel domain templates with overridden units are now loaded correctly

25037

Previously, if a Petrel template used customized units, the default units for that template were still being read. This has now been fixed.

Improved Transverse Mercator projection methods⁸⁰⁰⁸²

There are several ways that the Transverse Mercator projection method can be implemented in practice. Petrosys PRO includes support for creating custom CRSs using two new methods which are significantly more accurate than the default EPSG method:

- Transverse Mercator (Complex)
- Transverse Mercator (Exact)

In addition, a configuration option is available (Advanced/Crs/Transverse Mercator variant) which allows the behaviour of the default Transverse Mercator projection to be changed. Care should be exercised when using this option (e.g. enabling for a specific project) as the reprojection behaviour is different between the different methods.

Batch functionality to spatialize well paths no longer requires any PRO licenses

79395

The batch process used to update well path geometries from their directional surveys no longer requires any Petrosys PRO license, allowing the well paths to be generated for dbMap/Web clients.

dbMap PPDM3.8 - Wells now use Loggers TD or Drillers TD if Final TD is not populated

80294

dbMap PPDM3.8 wells now make use of the Loggers TD or Drillers TD if the Final TD value is not populated on the well header. This affects options where the Final TD is used, such as computing the BH location of the well. Previously no value was computed if the Final TD was not populated.

Wells Exchange: dbMap PPDM3.8 to Petrel extrapolates directional survey to TD of well (Santos only)

80298

Exchange/Wells from dbMap PPDM3.8 to Petrel now extrapolates the last point in the directional survey based on the TD of the well (Santos only)

Spatial Editor handles drag and drop files correctly⁷⁷⁸⁵⁰

In previous versions, drag and drop of a file onto the spatial editor layer list with no layers selected would result in a crash.

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

Display/GIS supports display of Petrosys GIP files 37322

The Display/GIS option in Mapping allows GIP data to be displayed - with all the standard display and annotation options available.

Custom SQL queries able to be used as spatial data sources 46648

Custom SQL queries are able to be used as a GIS data source, to access data from custom SQL queries from Petrosys-dbMap Oracle databases. The SQL query data is available in the following contexts:

- Mapping/Display/GIS
- Spatial data translator (input)
- 3D Viewer/Display/Point data
- Surface Modeling/Grid/Create Grid (input data source)

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

[Bug Fixes](#)

Display/GIS no longer errors for Oracle date columns used as a filter

80234

In PRO 2021.1 a bug was introduced that broke Display/GIS filtering using date fields from Oracle data sources. This has now been fixed.

Display/GIS: Fixed crash when using a filter expression 79901

A crash that could occur whilst using filter expressions in the /Display/GIS mapping option has been fixed

[Surface Modeling - Contouring](#)

[Bug Fixes](#)

Lowest Closing Contour task hang fixed 79998

A hanging issue with specific input to the lowest closing contour algorithm has been fixed.

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

Spatial data - Data selection filter string is scriptable80202

The field 'GisFilter' can now be scripted in the spatial data sources for gridding tasks.

Detailed Release Notes Summary PRO 2021.1.3

Enhancements

Connections, Import and Export - Esri

[79799](#) ArcGIS Web Services: Portal authentication from multiple servers added

Connections, Import and Export - Petrel

[80153](#) Wells exchange: Additional palynology attributes written from PPDM to Petrel (Santos only)

[80152](#) Wells exchange: Additional well header attributes written from PPDM to Petrel (Santos only)

[80151](#) Wells exchange: Updated Petrel formation grouping from PPDM to match old dbMap data model (Santos only)

Surface Modeling - Gridding

[79941](#) Boundary Gridding - Significantly improved performance

Detailed Release Notes Summary PRO 2021.1.3

Bug Fixes

Configuration - Licensing

[80119](#) Licensing error message points to correct menu option for showing license usage

Connections, Import and Export - Esri

[79771](#) Improvements to portal authentication help

Connections, Import and Export - Oracle

[70254](#) Connecting to Oracle - Passwords containing "@" are now supported

Connections, Import and Export - Petrel

[79791](#) Fixed last point missing after exchange of checkshot surveys to Petrel

[79935](#) Exchange - Wells - performance improvement for Palynology data from dbMap PPDM3.8 to Petrel

[80021](#) Santos PPDM - Updated RFT & DST to support exchanging same data as other PPDM clients

[80123](#) Wells exchange: Fixed some formations tops not transferred from PPDM dbMap

dbMap - Client

[79863](#) dbMap PPDM3.8 - Wells - Directional survey dialog improvements

[80068](#) Embedded browser popup windows can now be displayed on top of other browser windows

Petrosys Release PRO 2021.1.3

Detailed Release Notes

Configuration - Licensing

Bug Fixes

Licensing error message points to correct menu option for showing license usage

80119

The error message displayed when no licenses are available now shows the correct menu option for showing the current license usage.

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

ArcGIS Web Services: Portal authentication from multiple servers added

79799

The portal authentication configuration for ArcGIS Web Services now allows multiple servers to be configured.

This is done by inserting an XML fragment into the "Client ID for Petrosys PRO ArcGIS portal registration" configuration field. Contact Petrosys support for help to setup this XML fragment.

The schema of the XML is:

```
<Items>
<Item>
<Key>Server URL 1</Key>
<Value>Client ID 1</Value>
</Item>
<Item>
<Key>Server URL 2</Key>
<Value>Client ID 2</Value>
</Item>
</Items>
```

Connections, Import and Export - Esri

Bug Fixes

Improvements to portal authentication help

79771

More detail has been added to the ArcGIS portal authentication help topic, including adding a zipfile and instructions on how to fill in the portal.

Connections, Import and Export - Oracle

Bug Fixes

Connecting to Oracle - Passwords containing "@" are now supported

70254

Previously connections to Oracle could not have a username that included '@'. This has been changed so that character is now supported for passwords.

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

Wells exchange: Additional palynology attributes written from PPDM to Petrel (Santos only)

80153

Palynology logs exchanged from the Santos PPDM data model now use the input base depth and include additional attributes.

Wells exchange: Additional well header attributes written from PPDM to Petrel (Santos only)

80152

Well headers exchanged from the Santos PPDM data model now include additional well header attributes.

Wells exchange: Updated Petrel formation grouping from PPDM to match old dbMap data model (Santos only)

80151

Formation tops exchanged from Santos PPDM to Petrel are now grouped in Marker collections matching the old Santos data model.

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

[Bug Fixes](#)

Fixed last point missing after exchange of checkshot surveys to Petrel

79791

Writing checkshot surveys to Petrel now includes the last point.

Exchange - Wells - performance improvement for Palynology data from dbMap PPDM3.8 to Petrel

79935

Performance has been improved when using Exchange/Wells to load Palynology data from a dbMap PPDM3.8 database into Petrel. It can be up to 8 times faster depending on how much data is being exchanged.

Santos PPDM - Updated RFT & DST to support exchanging same data as other PPDM clients

80021

SANTOS Only.

For Petrel Exchange, updated RFT & DST to support exchanging the same data as other PPDM clients

Wells exchange: Fixed some formations tops not transferred from PPDM dbMap

80123

The matching rules used for the transfer of formation tops from PPDM data sources could result in some formation tops not being exchanged. This has now been fixed.

[dbMap - Client](#)

[Bug Fixes](#)

dbMap PPDM3.8 - Wells - Directional survey dialog improvements

79863

For dbMap PPDM3.8 clients, the following issues have been resolved for the Well Directional survey dialogs

- The "Copy to" button on the Directional survey header dialog now works. Previously you would get an error about a missing panel definition.
- Field sizes on the Directional survey points dialog have been increased so that values can now be seen and edited.
- Buttons on the Directional survey header and points dialogs have been moved to the bottom of the panel to be consistent with other dialogs.

Embedded browser popup windows can now be displayed on top of other browser windows

80068

In previous versions on Linux, popup windows displayed by the embedded browser may have been displayed underneath the embedded browser window and may not have been able to be raised in front of the original embedded browser window. This has now been fixed, so popup windows can be moved either in-front or behind other browser windows.

Surface Modeling - Gridding Enhancements

Boundary Gridding - Significantly improved performance 79941

The performance of the boundary gridding method has been significantly improved. Previously there could have been a long pause, sometimes up to 10 minutes, before the gridding process started as a pre-calculation phase was done. This computation is now 10 to 30 times faster.

Detailed Release Notes Summary PRO 2021.1.2

Enhancements

Connections, Import and Export - Esri

[78609](#) Added ArcGIS portal authentication to ArcGIS Web Services

Detailed Release Notes Summary PRO 2021.1.2

Bug Fixes

Application - User Interface

[79441](#) Improved handling of decimals correctly in locales/regions where the decimal place is not a period character

Connections, Import and Export - Oracle

[79412](#) PPDM38 - Matches formation selections on formation ID rather than on formation name.

Mapping - GIS, Spatial and Culture

[79667](#) /Display/Prospects - Polygon maximum size limit of 10,000 points removed

Surface Modeling - Volumetrics

[73917](#) Volumetrics - Petrel polygons can now be used

Petrosys Release PRO 2021.1.2

Detailed Release Notes

Application - User Interface

Bug Fixes

Improved handling of decimals correctly in locales/regions where the decimal place is not a period character

79441

Handling of data fields that expect decimal point values has been improved to work consistently in regions where the decimal point is not the period (.) character, such as Switzerland. Previously in some fields, like annotation distances, it was not possible to enter a decimal value either using a period or a comma. We now support the period character in all these fields for the decimal value.

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

Added ArcGIS portal authentication to ArcGIS Web Services

78609

Authentication to an ArcGIS server that is federated with an ArcGIS Enterprise portal is now supported for ArcGIS web services connections.

During authentication the ArcGIS server is queried for the portal it is federated with and then the user is prompted for their credentials by the ArcGIS portal login page within a secure browser. OAuth2 authentication then follows after successful login.

All received tokens are revoked at the end of the session.

To allow Petrosys PRO to use portal authentication, an Esri portal administrator must register Petrosys PRO as a client application. See the help documentation for details, or contact Petrosys support for assistance.

Connections, Import and Export - Oracle

Bug Fixes

PPDM38 - Matches formation selections on formation ID rather than on formation name.

79412

When a formation selection is loaded, the selected formations are now matched based on the formation ID rather than the formation name. This allows renamed formations to correctly match when map and surface modelling files are opened.

Mapping - GIS, Spatial and Culture

Bug Fixes

/Display/Prospects - Polygon maximum size limit of 10,000 points removed

79667

For the display of PLDB Polygons in Mapping, a hard limit of 10,000 points per polygon has been removed. There is now no practical limit to the number of points per polygon allowed.

Volumetrics - Petrel polygons can now be used 73917

Petrel polygons can now be used in volumetrics calculations.

Detailed Release Notes Summary PRO 2021.1.1

Enhancements

Connections, Import and Export - Esri

[78948](#) Petrosys Arc GIS Pro Add-In supports ArcGIS Pro 2.8

Mapping - GIS, Spatial and Culture

[79333](#) Performance of the Display/GIS dialog has been improved for sources with a large number of feature classes

Detailed Release Notes Summary PRO 2021.1.1

Bug Fixes

Application - ArcGIS Pro Add-In

[79044](#) Better support multiple versions of Petrosys PRO installed

Configuration - Licensing

[79397](#) RepriseLM - Fixed crash when timezone not valid for license

Connections, Import and Export - Paradigm-Epos

[79343](#) A Paradigm connection failure on certain Windows systems has been fixed

Mapping - GIS, Spatial and Culture

[79275](#) Display/GIS no longer issues incorrect error message for CRSs with custom authority names

Surface Modeling - Contouring

[79056](#) Contouring application stability improved

Surface Modeling - Exchange

[79284](#) No duplicated log curve mnemonics appear in log curve list

Petrosys Release PRO 2021.1.1

Detailed Release Notes

Application - ArcGIS Pro Add-In

Bug Fixes

Better support multiple versions of Petrosys PRO installed

79044

The Petrosys ArcGIS Pro Add-In has been refactored so more of the components that are supplied by the Petrosys PRO install are loaded from the PRO install location. This better supports situations where more than one Petrosys PRO version is installed, especially in uninstall scenarios.

Configuration - Licensing

Bug Fixes

RepriseLM - Fixed crash when timezone not valid for license

79397

A crash has been fixed when a timezone error occurred with RepriseLM licensing set.

Connections, Import and Export - Esri Enhancements

Petrosys Arc GIS Pro Add-In supports ArcGIS Pro 2.8⁷⁸⁹⁴⁸

Petrosys PRO 2021.1.1 adds support for ArcGIS PRO 2.8.

Connections, Import and Export - Paradigm-EposBug Fixes

A Paradigm connection failure on certain Windows systems has been fixed

79343

On some Windows systems the Paradigm connection would fail to start with a DLL error. This has now been fixed.

Mapping - GIS, Spatial and Culture Enhancements

Performance of the Display/GIS dialog has been improved for sources with a large number of feature classes

79333

The performance of the /Display/GIS.. dialog has been improved for data sources that have a large number (thousands) of feature classes.

Mapping - GIS, Spatial and Culture

Bug Fixes

Display/GIS no longer issues incorrect error message for CRSs with custom authority names

79275

Petrosys PRO 2020.1 introduced a problem where an incorrect error message was shown from Display/GIS when attempting to use a CRS with an authority code specified that was other than "EPSG".

Surface Modeling - Contouring

Bug Fixes

Contouring application stability improved

79056

A rare crash during contouring of grids has been fixed.

Surface Modeling - Exchange

Bug Fixes

No duplicated log curve mnemonics appear in log curve list

79284

In previous versions in Well Log exchange there could be duplicated well log curve mnemonics appearing in the step of selecting log curves. This has now been fixed.

Detailed Release Notes Summary PRO 2021.1

Enhancements

Application - ArcGIS Pro Add-In

[69870](#) Display Petrosys and 3rd party Geoscience data in ArcGIS Pro

Application - General

[76650](#) Red Hat Enterprise Linux 6 no longer supported

Application - Printing and Publication

[42040](#) Export/PDF option in Mapping now has append mode

Configuration - Licensing

[78964](#) New license file required to run Petrosys PRO 2021.1

Connections, Import and Export - Interactive Correlations (IC)

[79204](#) Renamed 'ODM' to 'IC' throughout application

Connections, Import and Export - Petrel

[78993](#) Petrel 2015 no longer supported

[78248](#) Petrel 2021.1 supported

Mapping - GIS, Spatial and Culture

[79130](#) Import of Generic Mapping Tool's CPT colour gradients supported

Project Management - Project Selector

[78265](#) Project selector usernames now use case-insensitive matching

Surface Modeling - Gridding

[79115](#) Option 'model sticks surfaces' was added for fault sticks gridding

[78376](#) Sample density gridding method performance has been improved significantly

Surface Modeling - Workflows/Scripting

[78604](#) Improvements to workflow scripting

Detailed Release Notes Summary PRO 2021.1

Bug Fixes

Application - Printing and Publication

[79100](#) Export to PDF - International characters supported in filename and path

Application - User Interface

[78547](#) Embedded browser will always display on screen

[78622](#) Crash when closing dialog immediately after display resolved

[78347](#) Embedded browser on Remote Desktop to displays with 16 bit colour depth now supported

Connections, Import and Export - Esri

[79058](#) SDE: Fixed connection issue when running Mapping for a second time, without stored username and password

Connections, Import and Export - GeoFrame

[79126](#) Added support for GeoFrame wells with depth units of inches and 0.1 inches

Connections, Import and Export - OpenWorks

[78934](#) Added support for OpenWorks R5000.10.7

Connections, Import and Export - Petrel

[78153](#) Well header information is now displayed correctly for Petrel wells when using data cache

Coordinate Reference Systems

[79004](#) CRS selectors fixed in CRS/Point conversion and Excel/Text display

dbMap - Client

[78977](#) Performance improvements for dbMap PPDM3.8 2D Seismic line coordinates

Mapping - General

[78976](#) Cancel button on progress note in status bar now works

Mapping - GIS, Spatial and Culture

[78686](#) Display/GIS - Filter now allows attribute names with embedded spaces

Mapping - Grids, Surfaces and Sampled Data Files

[77973](#) Sampling for histogram generation is now faster when few grid nodes

Mapping - Wells

[78846](#) Well log signature from Petrel now shows correct units when unit overridden in Petrel template

Surface Modeling - Gridding

[79021](#) Reading of Petrel fault sticks surfaces with no data improved

[77271](#) New option to detect more fault sticks in fault sticks gridding

Petrosys Release PRO 2021.1

Detailed Release Notes

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

Display Petrosys and 3rd party Geoscience data in ArcGIS Pro 69870

The new Petrosys Add-In allows users to directly display subsurface data inside ArcGIS Pro from their chosen E&P source.

Features:

- Display wells, well paths, seismic navigation and surfaces, grids, contours, fault polygons directly within in ArcGIS Pro.
- Connect to subsurface and interpretation data from multiple sources.
- All data source vendors supported in Petrosys PRO are supported in ArcGIS Pro; Petrel, DecisionSpace, Paradigm, IHS Kingdom, SeisWare, etc
- Control the display style and publish to Portal as part of ArcGIS Pro workflow.
- Use data in different or customised Coordinate Reference Systems.
- Query object names and other attributes.
- Contours are dynamically computed from the selected surfaces and grids. The Faults and contours are displayed along with the grid to generate a geologically accurate relationship.
- Synchronise, update, and finalise your map. Use the synchronisation buttons to update the display when changes have been made within your interpretation system.

The Add-In will automatically be installed if a compatible version of Esri ArcGIS Pro is installed on the same system when Petrosys PRO 2021.1 is installed.

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

Red Hat Enterprise Linux 6 no longer supported 76650

PRO 2021.1 no longer support RedHat Enterprise Linux 6. The supported platforms are RedHat Enterprise Linux 7 and RedHat Enterprise Linux 8.

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

Export/PDF option in Mapping now has append mode 42040

The /Export/PDF option in Mapping now allows appending to an existing PDF file.

[Application - Printing and Publication](#) [Bug Fixes](#)

Export to PDF - International characters supported in filename and path

79100

On Windows, PDF export from Mapping now supports international characters in the folder path and the filename itself. Previously you would see error xp:312.

Embedded browser will always display on screen 78547

In some cases, the embedded browser could be displayed either partially or completely off screen. This has now been fixed.

Crash when closing dialog immediately after display resolved 78622

A crash that could occur when closing a dialog immediately after it was displayed has been fixed.

Embedded browser on Remote Desktop to displays with 16 bit colour depth now supported 78347

Previously, if the embedded browser was used when connected via Remote Desktop to a host with 16 bit colour depth, the embedded browser would display a black window rather than expected content. This has now been resolved.

[Configuration - Licensing](#) [Enhancements](#)**New license file required to run Petrosys PRO 2021.1** 78964

Petrosys PRO 2021 requires a new license file. Please obtain your license file by logging on to the Petrosys Client Portal or contacting Petrosys Support.

SDE: Fixed connection issue when running Mapping for a second time, without stored username and password 79058

An issue with connecting to SDE when running Mapping a second time and using the new "PsSde" connection method with username/password saving disabled has been fixed.

[Connections, Import and Export - GeoFrame Bug Fixes](#)**Added support for GeoFrame wells with depth units of inches and 0.1 inches** 79126

Wells with depth units of inches or 0.1 inches are now supported and values are converted to feet for display.

[Connections, Import and Export - Interactive Correlations \(IC\) Enhancements](#)**Renamed 'ODM' to 'IC' throughout application** 79204

Due to the Oilfield Data Manager being renamed Interactive Correlations, references to ODM have been changed to IC in Petrosys PRO.

Connections, Import and Export - OpenWorksBug Fixes

Added support for OpenWorks R5000.10.7

78934

Connections to OpenWorks R5000.10.7 are now supported.

Connections, Import and Export - Petrel Enhancements

Petrel 2015 no longer supported

78993

Petrel 2015 is no longer supported in Petrosys PRO 2021.1+.

Support for Petrel 2016 through Petrel 2021 remains.

Petrel 2021.1 supported

78248

Petrosys connectivity to Schlumberger's Petrel now supports direct interaction with Petrel 2021.1.

Support for Petrel 2021.1 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 2016.1 through 2020.x.

Connections, Import and Export - Petrel Bug Fixes

Well header information is now displayed correctly for Petrel wells when using data cache

78153

When data caching was turned on, Petrel well header data would not be displayed in the Mapping Well header dialog. This has now been fixed.

Coordinate Reference Systems Bug Fixes

CRS selectors fixed in CRS/Point conversion and Excel/Text display

79004

The CRS selectors in the "CRS/Point Conversion.." tool and in /Display/GIS for certain sources was broken on 2020.2.3. The CRS selection list had only the 'Unknown' and 'Local Lon-Lat' datums. This has now been fixed.

Performance improvements for dbMap PPDM3.8 2D Seismic line coordinates 78977

The performance of reading 2D seismic line coordinates from dbMap databases for PPDM3.8 clients has been significantly improved. For example, Display/2D seismic lines is now up to 6 times faster, depending on how many lines are displayed.

Cancel button on progress note in status bar now works 78976

There was a bug in previous version where some redraws in Mapping could not be cancelled by clicking on the stop icon in the status bar. This has now been fixed.

Mapping - GIS, Spatial and Culture Enhancements

Import of Generic Mapping Tool's CPT colour gradients supported 79130

Color palette files (*.cpt) from Generic Mapping Tools are now supported for import from the Gradient Editor in Mapping via the /File/Import/Generic Mapping Tools (GMT) Color Palette Table (*.cpt)... menu option.

A selection of cpt files are available from <http://soliton.vm.bytemark.co.uk/pub/cpt-city/views/totp-cpt.html>

Display/GIS - Filter now allows attribute names with embedded spaces

78686

The /Display/GIS option now allows filtering of attribute names that have embedded spaces. Previously you would get a "SQL Expression Parsing Error"

Mapping - Grids, Surfaces and Sampled Data Files Bug Fixes

Sampling for histogram generation is now faster when few grid nodes

77973

Display Grid with sparse data now is fast in generating histogram data for colour equalization.

Well log signature from Petrel now shows correct units when unit overridden in Petrel template 78846

When displaying well log signature maps from Petrel and the Petrel log curve template has a user-overridden display unit, that unit is now used to display log curves in Mapping.

[Project Management - Project Selector Enhancements](#)

Project selector usernames now use case-insensitive matching 78265

Usernames entered in the Project Selector administration users list are now matched against system usernames using case-insensitive matching. This simplifies systems where usernames have been created using inconsistent casing rules.

Note: on systems where usernames are case sensitive (e.g. Linux) it is possible for two distinct users to match a single entry, however, in practice, such situations are considered unlikely.

[Surface Modeling - Gridding Enhancements](#)

Option 'model sticks surfaces' was added for fault sticks gridding 79115

A new option 'Model sticks surfaces' has been added to re-generate vertically aligned fault sticks which are then used in fault sticks gridding.

Sample density gridding method performance has been improved significantly 78376

Sample density gridding method performance has been significantly improved.

[Surface Modeling - Gridding](#)

[Bug Fixes](#)

Reading of Petrel fault sticks surfaces with no data improved 79021

Petrel fault stick surfaces with no data are handled correctly without any extreme delays to running workflows.

New option to detect more fault sticks in fault sticks gridding 77271

A new option 'Search fault contacts in every gridding pass' has been added to capture more fault stick contacts with the grid surface during fault sticks gridding.

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

Improvements to workflow scripting 78604

Some improvement in scripting:

- Allow at most three contour increments to be scripted for layer Display/Grid (Contours) in Tools/DrawMap.
- Allow scripting of the 'Equalize' checkbox' in colour gradient in Tools/DrawMap.
- Added ability to use search/replace across multiple scripted parameters in a task on scripting parameters panel.
- Added Tools/Clear-History to clear current text log area to allow easier identification of start of next run.

Detailed Release Notes Summary PRO 2020.2.4

Enhancements

Surface Modeling - Gridding

[79115](#) Option 'model sticks surfaces' was added for fault sticks gridding

Detailed Release Notes Summary PRO 2020.2.4

Bug Fixes

Connections, Import and Export

[79218](#) CRS conversion issue fixed in exchanging Fault sticks from Petrel to OpenWorks

Connections, Import and Export - OpenWorks

[78934](#) Added support for OpenWorks R5000.10.7

Connections, Import and Export - Petrel

[78153](#) Well header information is now displayed correctly for Petrel wells when using data cache

Coordinate Reference Systems

[79004](#) CRS selectors fixed in CRS/Point conversion and Excel/Text display

Mapping - General

[78976](#) Cancel button on progress indicator in status bar now works

Surface Modeling - Gridding

[77271](#) New option to detect more fault sticks in fault sticks gridding

Petrosys Release PRO 2020.2.4

Detailed Release Notes

Connections, Import and Export

Bug Fixes

CRS conversion issue fixed in exchanging Fault sticks from Petrel to OpenWorks

79218

A CRS conversion issue has been fixed that can occur when exchanging Fault sticks from Petrel to OpenWorks

Connections, Import and Export - OpenWorks Bug Fixes

Added support for OpenWorks R5000.10.7

78934

Connections to OpenWorks R5000.10.7 are now supported.

Connections, Import and Export - Petrel

Bug Fixes

Well header information is now displayed correctly for Petrel wells when using data cache

78153

When data caching was turned on, Petrel well header data would not be displayed in the Mapping Well header dialog. This has now been fixed.

Coordinate Reference Systems

Bug Fixes

CRS selectors fixed in CRS/Point conversion and Excel/Text display

79004

The CRS selectors in the "CRS/Point Conversion.." tool and in /Display/GIS for certain sources were broken in PRO 2020.2.3. The CRS selection list had only the 'Unknown' and 'Local Lon-Lat' datums. This has now been fixed.

Mapping - General

Bug Fixes

Cancel button on progress indicator in status bar now works

78976

There was a bug in previous versions where some redraws in Mapping could not be cancelled by clicking on the stop icon in the status bar. This has now been fixed.

Surface Modeling - Gridding

Enhancements

Option 'model sticks surfaces' was added for fault sticks gridding

79115

A new option 'Model sticks surfaces' has been added to re-generate vertically aligned fault sticks which are then used in fault sticks gridding.

New option to detect more fault sticks in fault sticks gridding ⁷⁷²⁷¹

A new option 'Search fault contacts in every gridding pass' has been added to capture more fault stick contacts with the grid surface during fault sticks gridding.