PETROSYS SOFTWARE RELEASE NOTES — **VERSION 17**

17.0sp4
November 2011

Introduction

Petrosys 17 is a major release that establishes a new foundation for the Petrosys application family. Petrosys 17.0sp4 is a patch release enhancing the features of the 17.0 release. No project data upgrade or migration is required to run Petrosys 17.

It provides a significant leap forward in terms of look and feel. The menu, panel and icon structure has been re-engineered to improve consistency, have a more modern look, and to improve user interaction. Existing users will quickly be comfortable that the application suite retains its familiar and trusted Petrosys interaction, while new users will find it easier to get started.

Petrosys 17 is a step change in the application foundation and architecture, built using Nokia's 'Qt' technology for user interfaces, enabling greater compatibility on Windows and Linux. This foundation provides Petrosys an exciting new platform for introducing even more enhancements, improvements and integration rapidly into our software family over the 17 release stream.

Index of highlights:

The release contains a number of project administration enhancements, a new look and feel along with a significant range of quality and stability improvements, in summary:

- A new application look and feel, simpler application launcher, combined with enhanced project selection and administration functions make mapping and modeling with Petrosys significantly easier.

- The introduction of application toolbars, improved icons and window controls, provide users with a more ergonomic and intuitive experience.

- Mapping boasts hierarchies, grouping, drag and drop reordering and better meta-data. Users can understand and organize rich content more quickly.

- Petrosys graphics have jumped ahead again; find improved use of fonts, graphical effects, panning and zooming, PDF generation, print and image creation controls.

- Use of color is easier with significant improvements to the use and editing of gradients.

- Site configuration has been streamlined into a single configuration tool, specifically to help administrators configure site-wide options, while also allowing users the flexibility to tailor the software to their preferences.

- Petrosys application integration retains its mature connectivity function, which can be more easily shared between Petrosys software tools.

See what others can't

Petrosys consolidates the knowledge, brainpower and energy of your entire EP team onto one dynamic canvas. With Petrosys you can see opportunities that only become obvious when information from multiple applications, disciplines and data sets are combined.

**Explore with confidence.**

Learn more about what's new

You will find a wonderful array of improvements summarized in these notes and we are just getting started! Welcome to Petrosys 17.

To learn more watch or download the **what's new in Petrosys 17 webinar** or contact support@petrosys.com.au with any questions.

A range of Petrosys video resources are available on our website to download or watch:

http://www.petrosys.com.au/downloads
http://www.petrosys.com.au/webinars

# Simplified application launcher - get started quicker
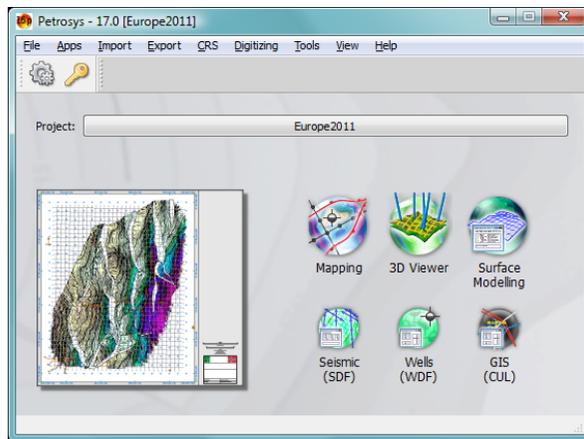
17 introduces a simpler and cleaner application launcher. The core tools in Petrosys; Mapping, 3D Viewer, Surface Modeling and data managers take prominence. While a series of menu options provide access to other applications, import/export, administrative functions and tools.

The application launcher is integrated with a new project selector. Petrosys will always start in the last project you used – meaning less clicks to get into your most recent project.

A project thumbnail image can be associated with each project and is displayed on the front menu and in the project selector to graphically represent that project. This is set from the View menu in Mapping and 3D Viewer.

Do you use a particular Import/Export option frequently? Take advantage of the ability to configure the main menu, by dragging and dropping a regularly used menu item to your toolbar for ready access.
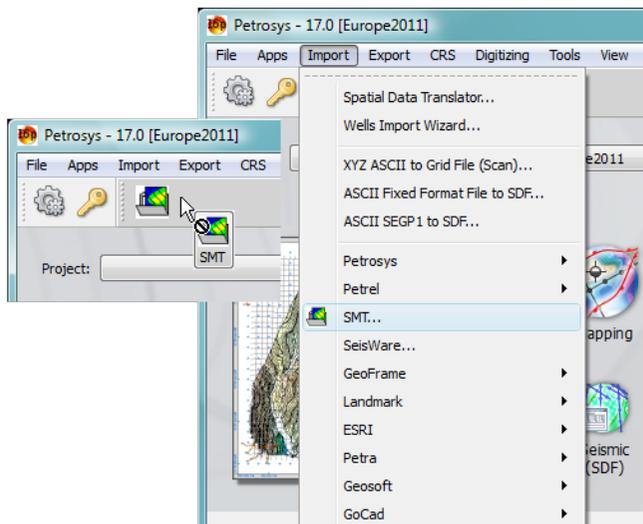
A background session manager has been implemented to improve the integration and communication between the Mapping, Surface Modeling and 3D Viewer applications. They all respond to project wide CRS changes and switching of the current project.

New project selector
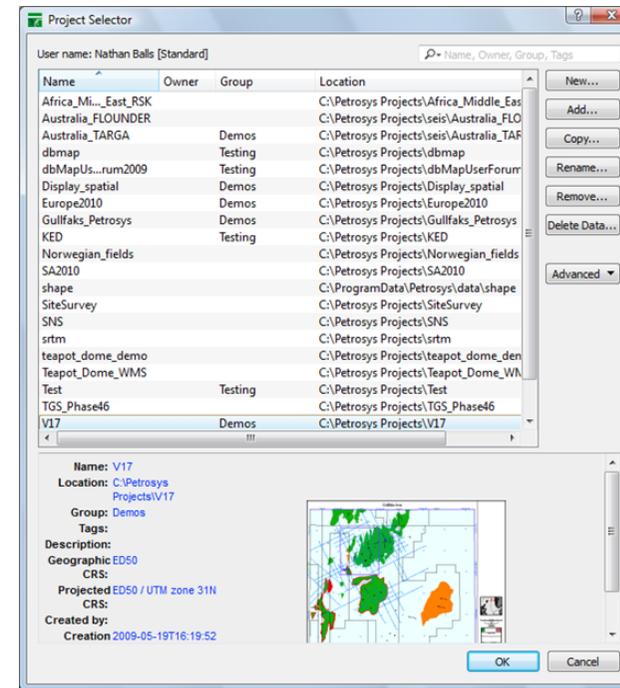
There is a re-engineered project selector, which is accessible from the main application launcher. This provides richer filtering and searching of projects and brings the ability to group projects - supporting assignment of users to teams or groups of projects.

Sites with large project lists will appreciate the new option being significantly faster due to multi-threaded scanning of project directories.

The new project selector also provides facility for increased project meta-data capture. Petrosys automatically records some project meta-data, which can be seen when you click on a project. Users have the ability to add custom tags, to allow broader and site specific meta-data capture. This enhances the ability of an organisation to more effectively manage and record key project attributes.

Administrators will enjoy the control provided, which can be configured to restrict users to a certain group of projects and creation of projects to specified directories on disk.

Creating new projects is easier and more controlable, with either blank projects or a new project template method available. Using a project template to create a new project allows site standards and commonly used configuration files to be automatically applied to the new project, increasing consistency. For example this is helpful in application of project sub-directory naming standards or inclusion of configuration and shared files.

Mapping provides hierarchical display and grouping

Mapping display boasts hierarchies, grouping, drag and drop reordering and better meta-data accessibility to bring users greater control and understanding of content.

The map layer display manager can now be docked and un-docked from the mapping window. As a user you have control over its location - left, right, above the map or not visible at all.
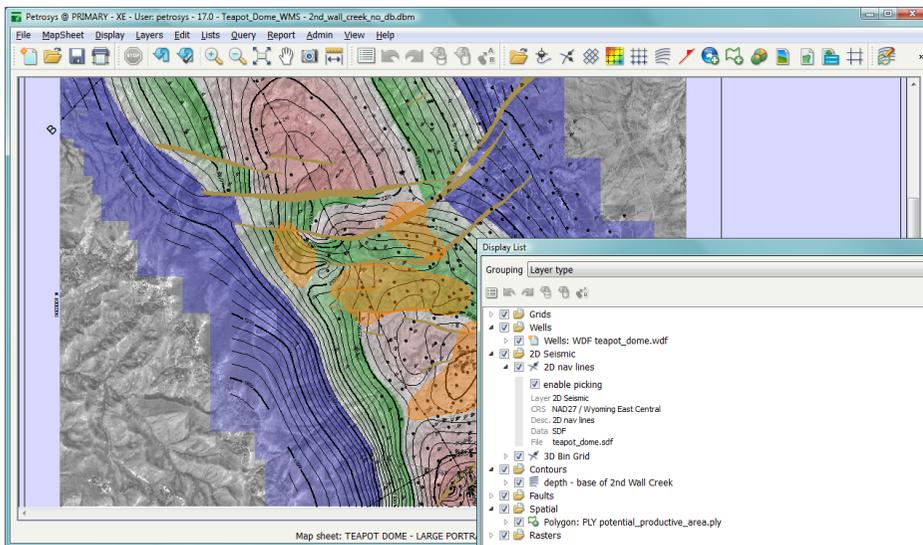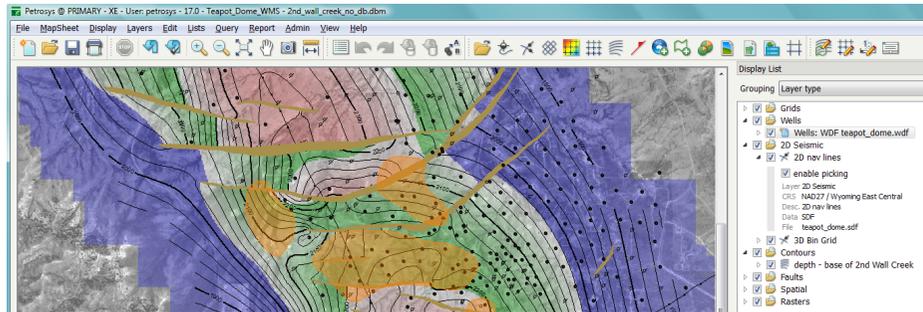

The new control provides direct access to display attributes. For example, you can see which gradient is used via graphical depiction in the list or which contour file has been selected for display. The ability to select a layer and drag and drop to control the display ordering will be a very welcome and popular feature.

The display manager automatically allows map layers to be grouped. Being able to see your map contents by display order, data source, layer type (e.g. Wells, Seismic, …) and co-ordinate reference system makes it easier to sort, understand, find and control map layer content.

The user can create their own groups. For those mappers with very long lists of display layers in maps you will find this invaluable for grouping all of your text attributes or to organise related layers - such as the grid, contour, fault and text attributes associated to the same surface together. Groups can be re-ordered in the display list and can be turned on and off from display.

Access to commonly used map layer or group control features (such as delete, undo, copy) is possible from your right-mouse button or the "Layers" menu.
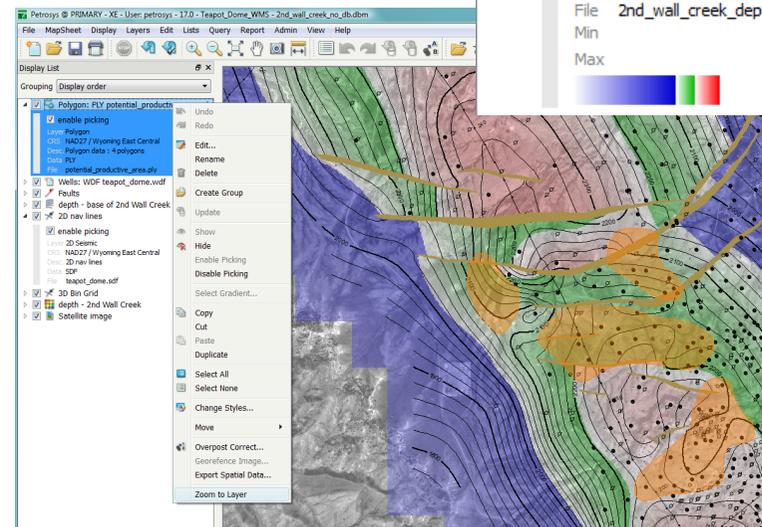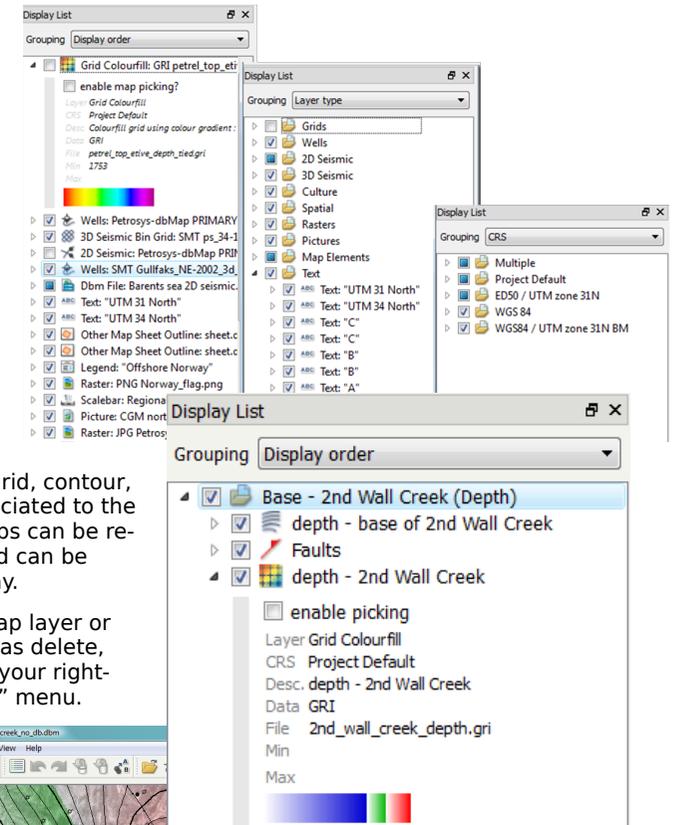

More easily zoom to the currently highlighted layer, for example the collection of potential production polygons, from the new "Zoom to layer option".

Filtering of reports and lists equals faster answers

The petroleum industry continues to work with large reports and lists of exploration and production information. To make understanding information easier in reports, queries and lists of data users can now easily change column order by dragging columns of data to change information prominence. Lists and reports can be filtered by right clicking on the column header or clicking the "filter" tool icon in the top right corner to facilitate finding and focusing on specific results.

Embedded searching jumps you to desired results quickly, the highlight will jump to the matched text. Access this function by directly typing into the list or by using the more powerful search/filter available from the list tool (top right icon) or by the right mouse button.

This is available in every list, e.g. long lists of Landmark, Petrel, SMT and GeoFrame projects, large collections of map-sheets and reports/queries which return large sets of well, seismic, surface, lease and GIS data.
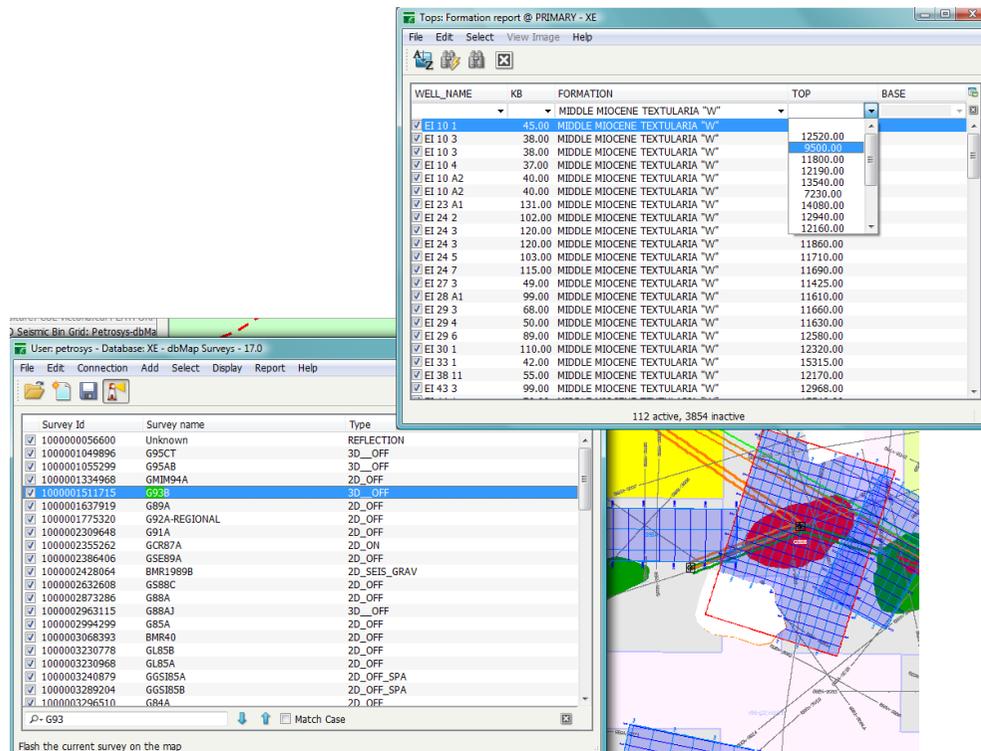
Improved control of color gradients

A new gradient control and selector has been implemented. This visually shows the gradient in the list and in many interface dialogues for quick reference. The new selector adds support for "dynamic" and "fixed" application of the gradient color range to data being displayed. The advantage of a fixed range is to show the same color for the same z-value irrespective of the data used. An example where this would be useful is showing changes in a pressure grid over time. All gradients created in previous versions are dynamic, reflecting past behavior. The gradient selector provides sorting and filtering, in addition to visual display of the gradient to help users quickly find the right colors. The gradient selector has increased accessibility, you can now edit, create, delete or rename anywhere that you can select a gradient.
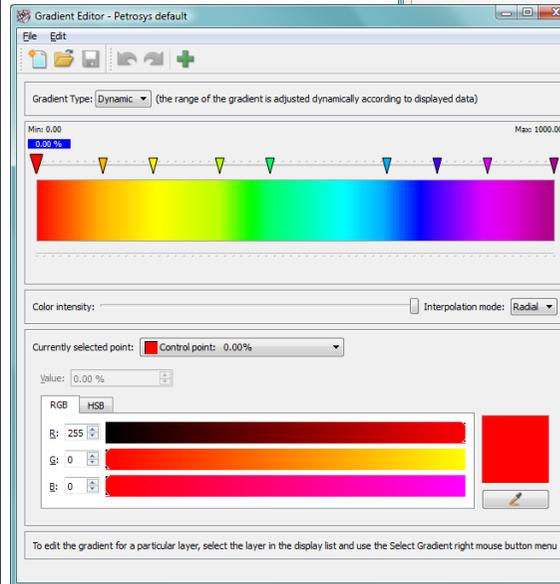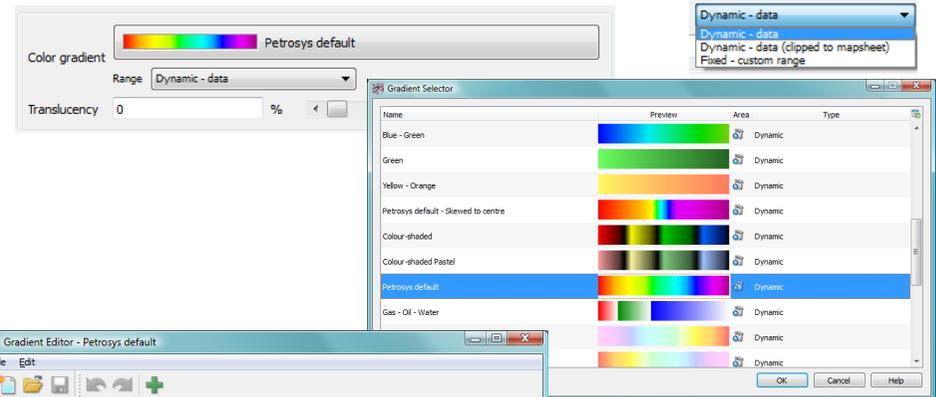
The editor has been enhanced to support two types of gradients. "Dynamic" gradients adjust the color distribution on the fly to the data being displayed. "Fixed" gradients apply colors to user specified data values independently of the data being used.

The editor is also more interactive and easier to use. Creation and understanding of color ranges, spikes and discrete colors is more obvious through the handy "plus" icon function. Changing the color of points after they have been added is possible. An eye dropper is available to allow users to pick any color off the map. More dynamic on screen dialogue for selecting colors and applying to data ranges is provided.

The editor can be left open in standalone mode and is not linked to any layer.

Toolbars and better menus. More at your fingers tips.

17 introduces a family of mapping toolbars. These logically group together a range of map making, editing and control functionality.

The user can control which toolbars are visible and customise which features are available in the toolbar. You can drag and drop toolbars around your mapping window or let them float over your desktop. This helps you to arrange your working environment to suit your mapping needs. The size of icons can be controled and optionally text can be used next to icons to help you get acquainted with the options.
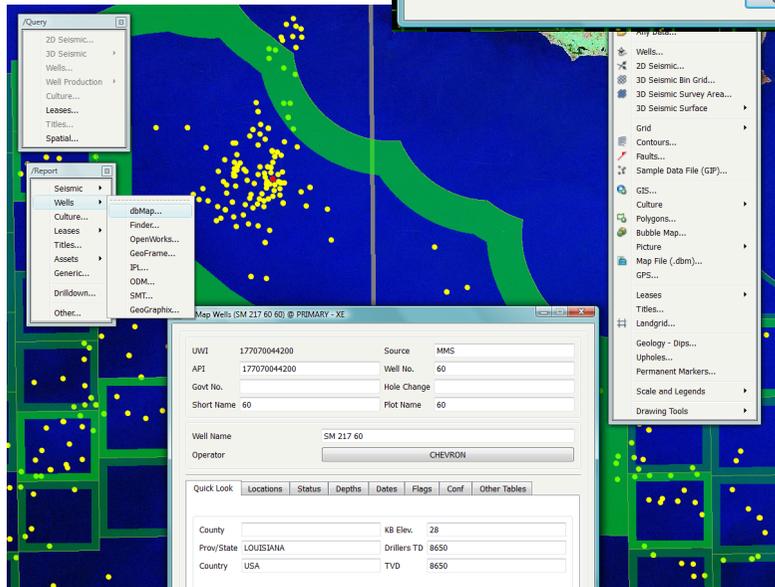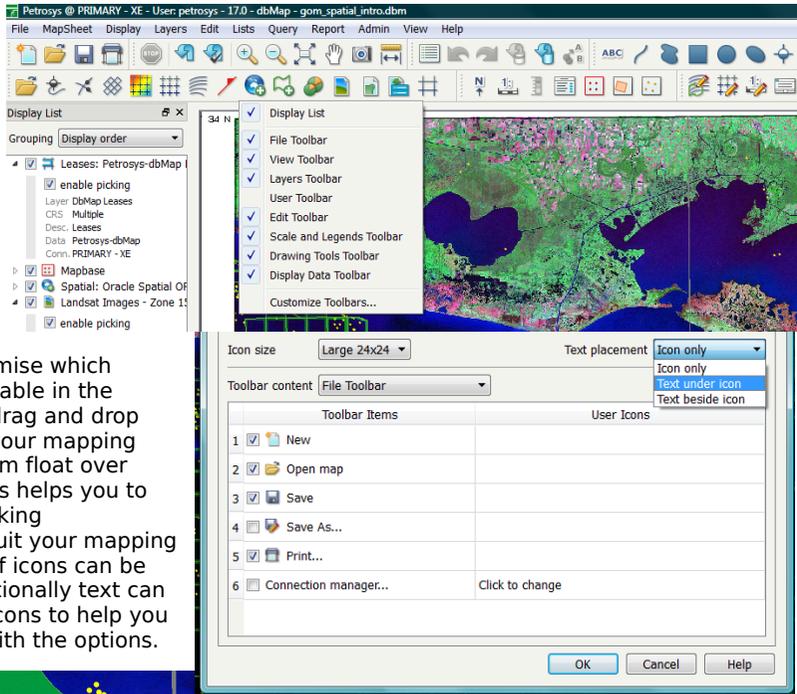
Intuitive re-ordering of the menus and mapping options will help users to more effectively work with a deep range of functionality.

Additionally all of the Petrosys menus are "tear-offs", allowing you to keep menu items handy for regular use.

Map zoom and pan is better.

Use the mouse wheel to zoom in and out and the middle mouse button (or shift left button) at any time to pan more easily across all display canvases.

When zooming in and out and panning you get graphical effects that give you a better idea where you are on the map in real-time and what you will see when the redraw is completed.

Higher quality fonts, better multi-language & PDF

Better PDF integration is supported natively in the application on both the Windows and Linux platforms. Access this function under the /File/Export/PDF option to rapidly create great looking PDFs.

High quality fonts are now available across all supported platforms. We now support full true-type fonts on Linux (screen only), using 'hinting' to make them look good at all sizes. The replacement font engine can now better handle Asian and multi-language fonts such as MSMincho.

A new file selector is also available to users on Linux providing improvements and ease of use in working with file based information. A bookmarking feature has been added for Linux users to keep frequently accessed directories close to hand.

Interface dialogues are all resizable & contain resizable text control

Use ctrl+ and ctrl- in any application interface to rescale dialogs to more readily use space or see text.

Long serving Petrosys users will be pleased to note that all Petrosys dialog now resize to help you see more information more easily.
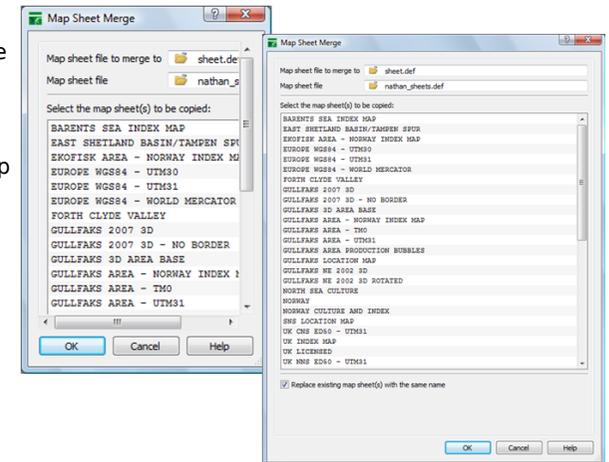
Surface modeling provides broader 3rd party faults use

The use of faults from third-party systems such as Paradigm, OpenWorks, Petrel and SMT has been extended. These are now available in other surface modeling operations such as /Grid/Process/Arithmetic.

In addition importing faults into Petrosys has become simpler; there is no need to associate faults to SDF horizons.

Grid work flows are more dynamic

It is now possible to interactively make multiple selections of horizons, faults, polygon and other items when utilising dynamic modeling work flows. In addition third-party seismic horizons can be selected, along with fault group names and polygon names. Each of these interactive fields will appear as a button and, when pressed, will raise the appropriate list selection dialog when the workflow is run.

This benefit is that the power of dynamic workflows can tap into more user inputs and a wider range of data sources at run-time of the modeling process, to help tasks become more consistently applied and routinely shared by users across the organisation.
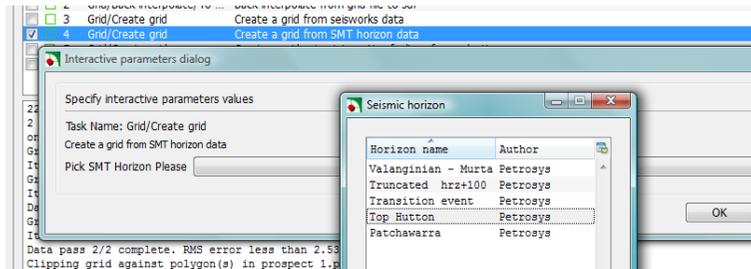
Above: A depth conversion work flow allows the user to quickly and easily change the SMT Kingdom and SeisWorks surfaces and re-run the task. Below: The user can interactive select prospect polygons that control the area of modeling more easily.
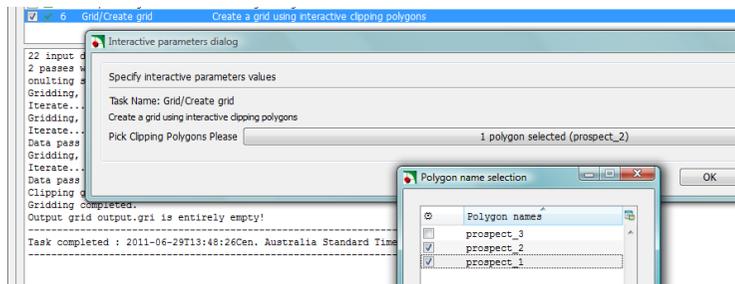

3D Viewer – posting of zones and sands diversifies

3D Viewer now offers posting of colored disks at well zone top or base. Posting at downhole, true vertical and subsea depth are supported. Concentric or stacked posting will occur when two tops post at the same depth or very close to each other. Also, directional survey display now offers rendering of a clipped path between two selected zones/tops. Combined with other well posting options this provides a richer ability to focus on specific zones, sands and surface intercepts.

Open Inventor upgrades will also provide improvements for performance and memory usage benefits in the Petrosys 3D Viewer.
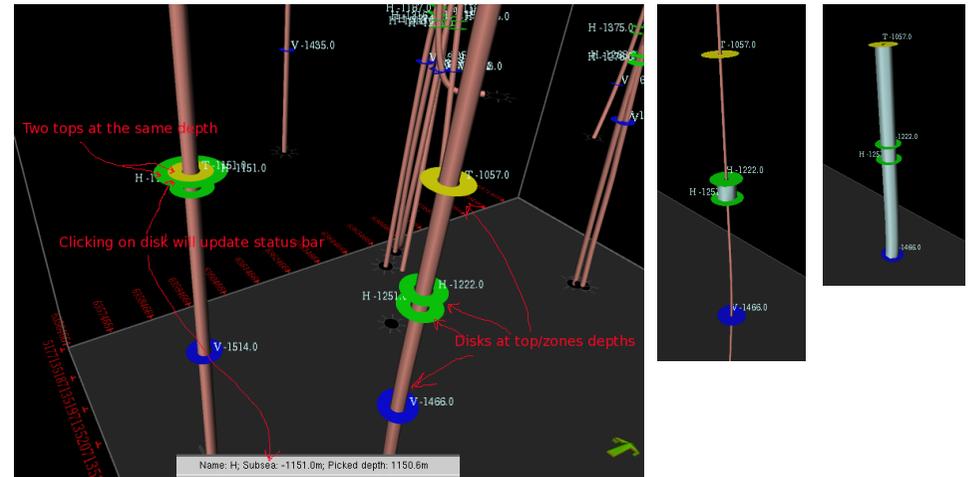
Point conversion utility provides better CRS handling

The point conversion tool has been enhanced to allow the user to choose the coordinate type (Projected or Geographic) by selecting the type from the drop-down list and a CRS for both the input and output coordinate points. Geographic coordinates can be specified in degrees, minutes, seconds format, or decimal degree format. The option is accessible from /main menu/tools/point conversion.

Petrel 2011.1 connectivity

With the release of Petrel 2011.1, Petrosys has updated the Petrosys-Petrel direct connection to give continued access to your data.

ArcSDE 10sp1 and SMT 8.6 Support

Petrosys now supports ArcSDE 10sp1, making Petrosys compatible with the latest versions of the Arc software suite. In addition, support for SMT 8.6 is now also available.

Click here to check-out the full detail on supported third-party application versions.

Configuration tools are streamlined

Maintain/Configuration has been replaced with an all-in-one configuration tool that now allows project, user and site configuration in a single streamlined dialog.

The dialog allows control of appearance and style of the application for all platforms at site, project and user level. Mapping preferences, printer and plotter configuration, dynamic path mapping are all controled via this tool.

This makes it much easier to configure the application and provides system administrators with tuning control. Administrators can more easily test changes at a user or project level before applying to the site level. For full detail please refer to online help.
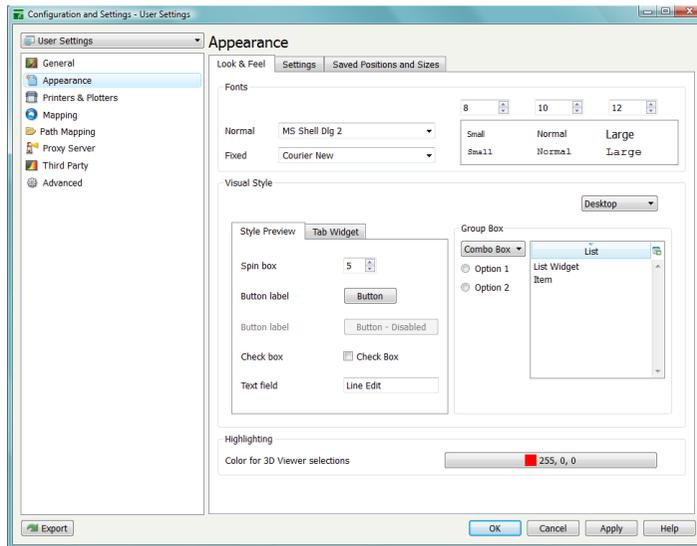
Improved help viewer

Nicer looking pages rendered more cleanly and with better quality enable better printing, reading and bookmarking facilities. Tabbed browsing allows multiple help topics to be open at once, making it easier to jump between information, while an advanced search option has been implemented to help you find the right answer.

Tips for installation of v17

Petrosys 17 is a major release however there are no major database or file format changes. This means that there are no major updates or upgrades to the Petrosys project or file data, so installation is simply a straight-forward application install on Windows and Linux desktop. Please refer to the installation notes for more detail on how to run the application installer.

System environment & license updates

Enterprise Linux 4 and above (EL4+) and Window XP SP2 and above are the minimum operating system requirements for v17.0. Petrosys continues to support Enterprise Linux 5, Enterprise Linux 6, Windows Vista and Windows 7 operating systems. Solaris is no longer supported.

To run v17, new FLEXlm license keys need to be installed for license management, please contact Petrosys support for further details. The FLEXlm vendor daemon remains at v11.4, the same version utilised in Petrosys v16.

Click here to check-out the full detail on supported environments.

You can run v17 & v16 side-by-side.

It is possible to run Petrosys 16 and Petrosys 17 software at the same time. Naturally new functionality made available in 17 cannot be accessed in the 16 stream.

At this stage there are no known backward compatibility issues from v17.0 to v16.9. Tips for running v16 and v17 side by side:

1. If you use the new map layer grouping feature in v17 and save this map to a .dbm, that map will work in V16 but the groups will open as 'deactivated layers'. If you then save that file in V16 and go back to V17 the grouping will be lost but all other layers and attributes will be preserved.

2. There is a new configuration infrastructure in v17. Any changes made to configuration whilst running in v17 will not be propagated back to the V16 environment. This allows you to set-up and test changes to configuration in v17 without effecting your v16 Petrosys environment.

3. There are no major database or file format changes in v17.0. This allows the v16 and v17 Petrosys applications to work with the same file, database and third-party direct connectivity information.

Bug Fixes

Petrosys release 17_0_4 [6 entries]

Connections, import and export

32473   ESRI plugin now starts

General - User interface

32533   Scrolled list filter combobox maximum entries now honour configuration setting
32309   Windows File Dialog - Stability improved

Mapping

32484   Display/Picture/Raster Image Processing no longer causes Mapping to crash
32516   Display/Raster: image processing now accessible while creating a layer
29468   Mapping - Display wells stability improved

Detailed Release Notes

Petrosys release 17_0_4 [6 entries]

Connections, import and export   Bug Fixes

ESRI plugin now starts   32473

In 17.0sp3 a bug was introduced that prevented the Petrosys-ESRI ArcGIS Plugin from starting. This has been corrected so now the plugin will start and function correctly.

General - User interface   Bug Fixes

Scrolled list filter combobox maximum entries now honour configuration setting   32533

In 17.0sp3 a bug was introduced where the maximum number of entries in the scroll list filter combobox was always set to 15. This has been corrected so it will use the "Filter Combobox Maximum" value from the Configuration and Settings tool.

Windows File Dialog - Stability improved   32309

The file selection dialog on Windows could crash in some rare, random situations. This has been addressed.

Mapping   Bug Fixes

Display/Picture/Raster Image Processing no longer causes Mapping to crash   32484

In 17.0sp3 it was possible to crash Mapping if the Image Processing option was used on a Display/Picture/Raster layer. This has been corrected so the software no longer crashes and image processing can be performed as expected.

Display/Raster: image processing now accessible while creating a layer

32516

In 17.0sp2, image processing in display raster did not work until the image has been displayed on the map. This is now fixed in 17.0sp4.

Mapping - Display wells stability improved

29468

The stability of the /Display/Wells option when using WDF files has been improved. Previously the program could crash if the option was rapidly opened or closed multiple times.

Enhancements

Petrosys release 17_0_3 [9 entries]

General

31971   Start time of applications improved

General - User interface

31697   "What's this" feature is enabled for all dialogs
30887   Default icon for tools changed to Petrosys icon
31693   Scrolled lists have default context menu in place

Mapping

32181   Additional text file extensions added to bubble map ASCII file selector
31959   Edit/Scalebar font size is now more readable

Project Selector

31450   Project Selector behaviour with read-only $ps_local improved
29592   Project templates available for various world regions
31980   Remember last project selector filter now remembers across sessions

Bug Fixes

Petrosys release 17_0_3 [37 entries]

3D Viewer

32247 3D Viewer handles running out of memory to render a dbm file at ultra resolution

Administration/dbMap

28915 Panel lists now honour the FIXED font

Configuration

31864 Configuration file accesses made more robust

30414 Configuration tool now starts when user does not have write permissions to $ps_local

14334 Configuration tool works correctly when configuration files are read-only

dbMap - User interface

32038 dbMap data screens scrolled list layout improved

31714 Display/Polygon widget activity improved

30119 Help button now starts the Help Viewer in the CRS editor

32275 Interactive mouse-button panning no longer causes mapping to hang

General

32246 Application no longer crashes after warning of Sentinel licensing dongle error

27736 Degrees and plusminus symbols are now drawn for non-Simplex fonts on Linux

31542 Editing of system gradients is now disallowed

32089 Point Conversion tool CRS selector now defaults to currently selected value

31412 Point Conversion tool initialised to correct CRS

General - User interface

32271 Default colour for colour selector button is now set correctly

32041 Duplicate buttons no longer created on some dialogs

32268 File selector dialog saves bookmarks if Cancel is clicked (Linux)

29518 Filter dropdown lists now update from previous filters

30086 List fields in dialogs are resized properly

29678 List filter combo box entries are now sorted alphanumerically

31705 OK button is correctly disabled if nothing is selected in mandatory multi select list field

30494 Scrolled list items no longer display new line symbol by default

Mapping

32294 CFP Editor - Stability improvements

32339 dbmap Culture query results dialog is displayed consistently

31703 Display/Culture OK button is enabled appropriately

31860 Display/Grid/Colourfill layers using clip to mapsheet are drawn correctly

32086 Display/wells no longer crashes upon editing selection list

31333 Duplicate elements in gradient selector range combobox removed

31870 Line style selector button allows "No draw" option

31549 MapSheet/New/Township Range now uses default landgrid when requested

31843 Switching between data source types improved

32214 Undo/redo disabled while in georeferencing mode

32197 Undo/Redo of 2D seismic layer creation works as expected

32359 Well Symbol layers display in correct position after details are modified

Project Selector

31979 Removed prompt to add current project if not in filtered list

Surface Modeling

31657 /File/Import/XYZ ASCII to Grid File fixed

Well data

29529 WDF Editor - Removed incorrect prompts to unlock data file after import operation

Detailed Release Notes

Petrosys release 17_0_3 [46 entries]

3D Viewer   Bug Fixes

3D Viewer handles running out of memory to render a dbm file at ultra resolution
32247

In previous versions, 3D viewer crashed when not enough memory could be allocated to draw a dbm file (typically at the Ultra setting).

Administration/dbMap   Bug Fixes

Panel lists now honour the FIXED font
28915

dbMap/Admin panels now have proper font set in scrolled lists. Previously the FIXED font tag was rendered using a proportional font, which, in some cases, caused lists to be misaligned and hard to use.

Configuration   Bug Fixes

Configuration file accesses made more robust
31864

Accesses to the configuration files for user, project and site have been made more robust, in particular when multiple processes are accessing the files and during exit.

Configuration tool now starts when user does not have write permissions to $ps_local
30414

Configuration tool will now launch correctly when $ps_local has no write permission. Previously the Configuration tool would not appear if the user could not write to the $ps_local directory.

Configuration tool works correctly when configuration files are read-only
14334

An error message is displayed when read-only configuration files are edited through the configuration tool.

dbMap - User interface   Bug Fixes

dbMap data screens scrolled list layout improved
32038

dbMap scrolled list now have better column sizing. Previously, in some situations, some columns in a scrolled list would have very small widths causing their content to not be visible without resizing the column.

Display/Polygon widget activity improved
31714

The user interface for Display/Polygon has been fixed so Label frequency and Label distance are now made inactive when they are not applicable. Previously they were active in all situations.

Help button now starts the Help Viewer in the CRS editor
30119

A bug where dbMap Admin/CRS dialogs' help button did not start the help viewer has been fixed.

Interactive mouse-button panning no longer causes mapping to hang
32275

In previous versions of 17, interactive panning using mouse buttons (i.e. dragging using the middle mouse button, or holding shift and dragging using the left mouse button) could occasionally cause the Mapping menus to become disabled. A similar hung state could occur if the shift key was pressed while zooming.

General Enhancements

Start time of applications improved
31971

The start time of most applications has been improved, mostly when the project directory is on a network drive. In some cases the improvement can be up to 25%.

General Bug Fixes

Application no longer crashes after warning of Sentinel licensing dongle error
32246

Previously the software could crash when error messages relating to Sentinel dongle licenses where displayed to the user.

Degrees and plusminus symbols are now drawn for non-Simplex fonts on Linux
27736

On Linux when using non-simplex fonts for drawing the map annotation and using the degrees, minutes, seconds notation the degrees symbol now displays correctly.

Editing of system gradients is now disallowed
31542

In previous versions of 17, gradients located in the "system" area could be edited and saved. These gradients are shipped by Petrosys and any edits made would be lost when the next version of Petrosys was installed.

Users should create "site" or "project" gradients if they wish to create custom gradient styles.

Point Conversion tool CRS selector now defaults to currently selected value
32089

A bug in the Point Conversion tool where the output CRS selector would not initialise to the current output CRS has been fixed.

Point Conversion tool initialised to correct CRS
31412

Previously the Point Conversion tool would incorrectly display the input CRS on the output CRS selector. The output CRS selector now displays the correct output CRS on the selector button, ensuring that the correct coordinate conversion is performed.

General - User interface Enhancements

"What's this" feature is enabled for all dialogs
31697

"What's this" feature is enabled for all dialogs now, allowing context sensitive help to be more easily accessed.

Default icon for tools changed to Petrosys icon
30887

The default window title icon for all Petrosys applications without an assigned icon is now the same icon as the Application Launcher (i.e. the Petrosys logo icon). Previously the Mapping application icon was used as the default.

Scrolled lists have default context menu in place
31693

All scrolled list now have default context menu. The default entries allow searching, filtering, sorting and column selection to be done via the context menu (or right mouse button). In many cases a scrolled list will have additional context menu items available, depending upon the dialog that it appears in.

General - User interface Bug Fixes

Default colour for colour selector button is now set correctly
32271

Default values for color selector buttons now are set correctly from panel settings. Previously color selector buttons may not have restored correctly.

Duplicate buttons no longer created on some dialogs
32041

In some instances it was possible for a button to appear on a panel button box multiple times. This has been corrected so a single button will appear.

File selector dialog saves bookmarks if Cancel is clicked (Linux)
32268

File selector dialog now saves bookmarks even if Cancel is clicked. Previously the bookmarks were only saved when a file was selected and OK clicked.

NB: this feature is only available on Linux.

Filter dropdown lists now update from previous filters
29518

List filtering combo box are now populated dyanamically, so, after applying a filter on one column, the selections available in other columns is updated with the restricted subset for that column.

To clear a filter, select the blank entry (or delete the text). Once the filter is cleared all filter options (up to the filter limit) will be available in the dropdown.

List fields in dialogs are resized properly

30086

Improved resize policies for list fields in dialogs. Previously lists could cause unnecessary grey space in dialogs or unexpected resize behaviour.

List filter combo box entries are now sorted alphanumerically

29678

List filtering combo box entries are now sorted alphanumerically, which is considered more natural. Previously items were sorted in a case sensitive alphabetical order.

OK button is correctly disabled if nothing is selected in mandatory multi select list field

31705

Multi select list fields return correct number of items selected, which causes the activity controls on some dialogs to be correctly updated.

Scrolled list items no longer display new line symbol by default

30494

Scrolled list items no longer display new line symbol by default. Previously this could cause rows of different sizes to be displayed in a scrolled list.

Mapping   Enhancements

Additional text file extensions added to bubble map ASCII file selector

32181

Filters for *.txt, *.csv and *.prn, and a combined filter with all text file extensions have been added to the ASCII file datasource file selector for Display/Bubble Map. This makes it easier to pick text files with these extensions.

Edit/Scalebar font size is now more readable

31959

The font size used to list the scalebars in the Mapping option /Edit/Scalebars has been increased to make the list more readable.

Mapping   Bug Fixes

CFP Editor - Stability improvements

32294

The Contour,Fault and Polygon editor (CFP) in Mapping has been improved to make it more stable.

dbmap Culture query results dialog is displayed consistently

32339

In previous versions of 17, displaying queries from dbMap culture (i.e. displaying via Display/GIS, picking on the map, invoking the right-mouse-button "Query culture" menu option and selecting a query) worked intermittently - the query results dialog would sometimes display and sometimes not.

Display/Culture OK button is enabled appropriately

31703

In previous versions, the OK button on the Display/Culture dialog could sometimes be incorrectly disabled (when culture file and groups were both selected) and incorrectly enabled (when no culture groups were selected).

Display/Grid/Colourfill layers using clip to mapsheet are drawn correctly

31860

In previous versions of 17, colorfill grid layers in dbms created in versions of Petrosys prior to 17 would be incorrectly drawn as if "clip to mapsheet" was disabled.

Display/wells no longer crashes upon editing selection list

32086

A crash when closing the Display/Wells selection editor has been fixed. Previously the selection list editor could crash on exit.

Duplicate elements in gradient selector range combobox removed
31333

Fixed Gradient selector range combobox doubling up on values. Previously the combobox would occasionally contain all entries twice.

Line style selector button allows "No draw" option
31870

Line style selector button allows 'No draw' option. Previously it was not possible to turn off the drawing of line styles, so, for example, drawing of grids with embedded faults always had faults drawn. No draw allows the faults to not be drawn.

MapSheet/New/Township Range now uses default landgrid when requested
31549

A bug where dbMap Mapsheet/New/Township Range... was incorrectly showing a missing landgrid file error even after the user has chosen to use the default landgrid file has been fixed.

Switching between data source types improved
31843

A bug in Display/Raster were the dialog would incorrectly flag an error "WMS is in a disconnected state" when the datasource is changed from WMS to ArcSDE has been fixed. Once the datasource is changed to ArcSDE, the display layer should be treated as an ArcSDE layer.

Undo/redo disabled while in georeferencing mode
32214

While in georeferencing mode in Mapping, the undo and redo buttons are now made inactive. This is not the case in version 17.0sp1 and 17.0sp2.

Undo/Redo of 2D seismic layer creation works as expected
32197

In previous versions of 17, when a new 2D seismic layer is added and then this is undone and redone, an invalid layer was incorrectly created that did not display correctly and had to be deleted.

Well Symbol layers display in correct position after details are modified
32359

In previous 17 versions of Petrosys, Display/Drawing-Tools/Well Symbol would not allow symbols to be placed with negative easting or northing values. This restriction has now been removed.

Project Selector   Enhancements

Project Selector behaviour with read-only $ps_local improved
31450

The behaviour of the Project Selector administration dialogs has been improved when the site configuration ($ps_local) directory, or the administration configuration files, are read-only. Previously users could receive confusing error messages or incorrectly see the user interface update when the change was not applied to the system.

Project templates available for various world regions
29592

Project templates can be used as a starting point for creating a new Petrosys project. Petrosys now includes default project templates for a range of geographical regions around the world.

Remember last project selector filter now remembers across sessions
31980

Project selector can now remember the list filter across sessions. In previous versions the filter was only remembered during the current session.

Project Selector   Bug Fixes

Removed prompt to add current project if not in filtered list
31979

Previously, if the project selector was opened with a filter already applied the user could be prompted to add their current project to the project list even if it was already stored in the projects.plf. This has been corrected so the user will only be prompted when their current project does not appear anywhere in the list.

Surface Modeling   Bug Fixes

/File/Import/XYZ ASCII to Grid File fixed
31657

The option to import ASCII grid files to a Petrosys grid was inadvertantly broken in 17.0. An error message reporting incomplete panel parameter specification was incorrectly shown when OK'ing the parameters. This no longer happens and the option now functions correctly.

WDF Editor - Removed incorrect prompts to unlock data file after import operation   **29529**

An extraneous, but benign, error about the WDF file being locked after an import operation or after reopening the same WDF has been fixed.

Enhancements

Petrosys release 17_0_2 [2 entries]

Mapping

31484   MapSheet/Import-Export option defaults target map sheet to sheet.def

Project Selector

31605   Project selector threading improved

Bug Fixes

Petrosys release 17_0_2 [12 entries]

Configuration

30664   Linux versions support the "Desktop" theme correctly
31642   User configuration backup files are created correctly (Linux only)

Mapping

29039   Admin/Reports/Edit layout improved
31328   Display/Picture options dialogs have an improved appearance
31422   Mapping display list no longer creates layers with duplicate layer ids
31786   Mapping no longer crashes on exit while dbMap/List panels are shown
31763   Performance problem creating WDF well layers fixed
31709   Seismic line style editor works as expected when a default style is used
31829   The Display/Wells compute bottom hole option is no longer enabled by default

Project Selector

31432   Project Selector no longer allows multiple New Project dialogs to appear

Detailed Release Notes

Petrosys release 17_0_2 [14 entries]

Configuration   Bug Fixes

Linux versions support the "Desktop" theme correctly   30664

The Configuration/Appearance/Visual Style option now supports use of the "Desktop" setting on Linux. This setting uses desktop defaults when displaying Petrosys windows and dialogs.

User configuration backup files are created correctly (Linux only)   31642

In earlier 17 versions the automatic backup files made when a user configuration setting is changed were not being created correctly on Linux. Now backups are saved to the ~/.petrosys/backups directory.

Mapping   Enhancements

MapSheet/Import-Export option defaults target map sheet to sheet.def   31484

The MapSheet/Import-Export option (MapSheet/Import|Export in earlier 17 versions) now defaults the target map sheet to sheet.def as this is the most commonly used map sheet file name.

Mapping   Bug Fixes

Admin/Reports/Edit layout improved   29039

Admin/Reports/Edit.. panel has been fixed so the text on push buttons is not truncated.

Display/Picture options dialogs have an improved appearance   31328

The dialogs displayed for the Display/Picture/Raster and Display/Picture/CGM options have been improved visually.

Mapping display list no longer creates layers with duplicate layer ids   31422

In earlier versions of 17, layers with duplicate id numbers could be generated when new layers were created after loading maps from a dbm with certain sequences of layer ids. If layers with duplicate layers are present in a map, unexpected behaviour can occur.

Mapping no longer crashes on exit while dbMap/List panels are shown   31786

A crash of Mapping while /List panels were displayed has been fixed. Previously Mapping would crash while exiting Mapping when you had a List dialog displayed.

Performance problem creating WDF well layers fixed   31763

In version 17.0, Display/Wells layers using a large WDF file could take a significantly longer to display than earlier 16 versions. This occurred for new layers and layers loaded from a dbm file.

Seismic line style editor works as expected when a default style is used
31709

In version 17.0.1, the seismic line style editor could hang in some circumstances when style preference parameters had not been set.

The Display/Wells compute bottom hole option is no longer enabled by default
31829

In earlier versions of 17, the Display/Wells "Compute bottom hole" option was enabled by default. This has been changed to be disabled by default which is consistent with version 16 behaviour.

Project Selector   Enhancements

Project selector threading improved
31605

The threaded behaviour of the Petrosys Project Selector has been improved, both in terms of stability and performance.

Project Selector   Bug Fixes

Project Selector no longer allows multiple New Project dialogs to appear
31432

In previous versions the project selector dialog allowed multiple New Project dialogs to be invoked. This could cause processing problems as the project list was populated.

Enhancements

Petrosys release 17_0_1 [31 entries]

Application Launcher

31173	Application Launcher /Tools/Point Conversion moved to /CRS/Point Conversion
30801	Application Launcher includes support for selecting the dbMap primary database
29321	Application Launcher recent projects shows projects with mapped path names
28055	Launcher shows a visual indication that an application is starting

Configuration

30392	Configuration and settings now uses standard file selector
30552	Configuration change metadata includes computer name

Connections, import and export

30806	New connections are automatically added to all running tools

General - User interface

30514	Improvements to combo box field alignment on various panels

Help

28182	Help documentation updated
30690	Help style upgrades for V17
30584	Petrosys help improved to show application specific help where applicable

Mapping

28629	Display/Drawing tools/Text file filter has been improved
31036	Display/GIS - dbMap Culture display performance improved
30937	Display/Polygon selection list includes an option to invert current selection
31363	Display/Scale and Legends menu item renamed Map Elements
30943	Double clicking expands display list groups
30356	Gradient editor displays absolute value when entering control points
30896	Mapping display list allows layers to be deleted using Delete hotkey

Project Selector

31467	"Local Projects" group available as a default
29154	Creating new projects from a template in the project selector copies project metadata
29347	Project selector add project directory selector starts in the current project
30982	Project selector allows loading of project list to be cancelled
27254	Project selector automatically selects new users and groups after creation
29380	Project selector better supports group lockdown users adding projects
29565	Project selector copy project now shows progress
31297	Project selector ensures that all newly created projects have a default CRS
30504	Project selector import groups dialog is clearer

30983	Project Selector New and Copy dialogs simplified
29252	Project selector shows invalid projects as grey text
31204	Project selector start-up time and responsiveness has been improved

Surface Modeling

21986	Surface Modeling now has keyboard shortcuts for common operations

Bug Fixes

Petrosys release 17_0_1 [101 entries]

3D Viewer

29816 3D Viewer uses zoom/in out scale factor from configuration

Administration/dbMap

31165 Admin/Reports/Templates stability improved

Client specific

31512 Santos Prospects & Leads List - Add/Using form now works

Configuration

31315 Improved handling of read-only site configuration directory and files
31595 Linux installer creates default SQLite Primary database and connections.xml if required
31169 Password manager `enforce per-user password` is now a site-only configuration setting
31201 Version 16 user configuration settings are upgraded correctly
31102 Warning given first time Advanced settings is accessed

Configuration/Database Connections

31243 Application Launcher sets Oracle environment correctly (Linux only)

Connections, import and export

31556 ESRI and Petrel plugins use the version 17 current project
30697 ESRI plugin starts easier when run the first time from ArcMap
31526 Export/GeoFrame/Horizon, Card 6 & Card 7 - 2D / 3D now supported
31110 KML export correctly handles very large shapes
30784 OpenWorks and GeoFrame well import wizard defaults to correct data source
29219 Petra link supported for all versions of Petra
29164 Removing connections from the connection manger works as expected

dbMap - User interface

28695 dbMap edit screens prompt to save changes at appropriate times

General

29332 Pasting of Mapping display list layers maintains the relative layer ordering
31081 Project CRS database is correctly reloaded when project is changed
30221 Running Petrosys on Linux no longer automatically create a panels.pnd file

General - graphics

31387 Fill Style Selector - Pattern sizes restore exactly
31158 Pattern filled objects render better when the pattern size is very small

General - User interface

30597 Application, Help and icons for project and site values updated
30864 Cancelling some dialogs using the `X` button works as expected
30483 Editable lists now respond to Enter (carriage return) character
29560 Editable scrolled list no longer requires double click to start in-cell editing
29460 Editable scrolled lists allow navigation through the list
31123 Geographic CRS selector allows selection of a CRS by double-clicking
31119 Minimised dialogs are subsequently shown at the correct size
31143 Numeric text entry fields no longer incorrectly autocorrect while values are being entered
31111 Panel field activity is not being correctly set for certain fields
30789 Scrolled list filtering works as expected when first column is hidden

GIS Editor

29987 Culture editor only allows editing of culture files with a CRS assigned

Graphics/Plotting and Hardcopy

30880 Line sizes are scaled correctly when printing on Windows

Help

29314 Help viewer Home button takes you to "Welcome to Petrosys" page

Mapping

31299 Colorbar is also deleted when associated layer is removed
30633 Default parameters are used when creating new color bars
29393 Display List RMB show and hide works as expected for automatic groups
29399 Display list RMB/Select Gradient option is disabled for monochrome sunshaded grid layers
29167 Display list RMB/Zoom to layer works consistently for all grid display layers
31508 Display/3D Seismic/Bin Grid font selectors allow selection of colour and size
31186 Display/Color Bar is hidden when corresponding layer is hidden
23669 Display/Contour "Set all" option works as expected
29114 Display/Curve layer is no longer created when interactive placement is cancelled
30985 Landmark gradient import allows Fixed gradients to be created
31340 Mapping displays very small text correctly
30780 Mapping redraws correctly when nothing is drawn
31360 Paradigm fault selector in Display/Faults can no longer be opened multiple times
30830 Printing to zoomed area no longer causes a change in location after printing
31181 Temporary cache files used for Mapping layer drawing are cleaned up
31084 Text for certain layers is not shown correctly in overpost correction mode
31406 User defined title blocks correctly support color selector fields
30832 View/Last View handles mouse pan operations
31385 Zooming to full view no longer clears the zoom history

Mapping/2D Seismic

30948 Custom gradient range works as expected for 2D seismic ribbon map display
30184 Display/2D Seismic SDF horizon selector automatically selects previously selected horizon

Mapping/Bubble Maps

31383   Bubble Map color gradient selector works as expected
31378   Bubble map fill styles loaded correctly
31157   Second bubble map variable style set correctly

Mapping/Editors

30481   Edit/SDF/Create line creates a new display list layer when required
30473   Edit/SDF/CreateLine file selection improved

Mapping/Images

30811   ArcSDE raster display no longer hangs during zooming, panning or resize
31026   ArcSDE rasters loaded with an offset are displayed in the correct position
31191   Display/Picture/CGM PIC is not drawn when automatic redraw is disabled
31096   Modification of Display/Picture/Raster WMS display layers works as expected
30605   Modifying the background color in a Display/Picture/Raster layer works as expected

Mapping/Map Sheets

31180   Cancellation of mapsheet creation with no mapsheet selected works as expected
29046   Map sheet creation - line styles are not copied correctly from current map sheet
30803   MapSheet/Open always shows mapsheets from currently selected file
30068   Mapsheet/Point conversion preserves output data precision when writing points to file
31125   MapSheet/Point conversion writes correctly formatted coordinates to file
30057   Township range mapsheets can be correctly created by selecting on the map

Mapping/Spatial

30371   Scroll bar enabled for read-only text field

Mapping/Wells

27958   Minor improvements to the well symbol selector dialog
31060   Well Symbol - Colour 0 or 1 are now visible in dialog button preview

Project Selector

29383   "Only Show Valid Projects" option removed for restricted users
29386   Copying a project in the project selector correctly sets the group
30693   Default CRS must be set when creating a project
31087   Project selector correctly displays information for the most recently added project when selected
31290   Project selector correctly handles deleting groups straight after adding groups
29014   Project Selector improvements for speed and stability
27265   Project selector tag administration buttons are disabled when appropriate
27665   Selecting and renaming projects in the project selector converts project path to absolute path

Seismic data

29513   Copying and then deleting a line in the SDF editor works as expected
31066   Seismic (SDF) Project Summary behaviour improved

30310   Seismic (SDF) Selected coordinates and profiles are now restored
29884   Seismic Line Editor /Edit/Delete/Segment is drawn correctly

Surface Modeling

30702   /Tools/DrawMap mapsheet selection from dbm has been corrected
30400   GIP editor allows editing of the current gradient
29352   Input Data/Well Tops, base formation text updated when necessary
31287   Surface Modeling Grid/Create ASCII Point Data is always correctly initialised

Surface Modeling/Grid Operations

30876   Arithmetic selects all faults by default
30566   Surface Modeling File/Merge task file with loops now work as expected

Surface Modeling/Gridding

21128   Faults import panels - Create new group displayed incorrect error messages for non-unique group names
29705   Grid and Contour back interpolation to seismic SDF correctly loads fault file settings
30383   Grid/Create Grid mapsheet selector on the geometry tab now displays correct list of mapsheets
30987   Grid/Create Grid used to crash when using faults from a shapefile with "Clipping distance" enabled
29742   Grid/Create output fields have been regrouped for scripting

Well data

30179   Wells (WDF) Editor/Project Information Layout - changes not saved when leaving tab
30989   Wells (WDF) Spreadsheet add option, column type value is remembered after each add operation
30710   Wells (WDF) spurious error message removed

Detailed Release Notes

Petrosys release 17_0_1 [132 entries]

3D Viewer   Bug Fixes

3D Viewer uses zoom/in out scale factor from configuration   **29816**

The mouse zoom in/out functionality is using the zoom factor set up in the launcher configuration panel.

Administration/dbMap   Bug Fixes

Admin/Reports/Templates stability improved   **31165**

A crash could occur when using the Admin/Reports/Templates function. This has been fixed.

Application Launcher   Enhancements

Application Launcher /Tools/Point Conversion moved to /CRS/Point Conversion   **31173**

The "Point Conversion" tool has been moved from under the Tools top level menu on the application launcher to under the CRS top level menu as this is the more logical location for this tool. The "Point Conversion" tool allows you to type in any coordinate, either east/north or geographic, and convert it using any of the CRS conversions available to Petrosys.

Point Conversion is also available from the Mapping tool under the Mapsheet menu.

Application Launcher includes support for selecting the dbMap primary database   **30801**

For sites that use a dbMap primary database, the application launcher now has an option to select the dbMap database to run Petrosys with.

This includes the option "None", which allows users to run Petrosys without logging into the primary dbMap Oracle database. This is generally useful for users who access Petrosys but do not have access to the database, or to avoid consuming Oracle licenses. The "None" option is enabled by default, but can be removed by changing the "Allow SQLite primary database selection" configuration setting under Advanced/General site settings in the configuration tool.

It also includes the ability to show multiple dbMap databases to select from, if a site has more than one available. To enable this functionality, the connections.xml file just needs to contain entries for each of the desired dbMap databases with the "Primary" tag set to "yes".

Application Launcher recent projects shows projects with mapped path names   **29321**

The project selector uses the standard Petrosys path mapping to allow Windows paths to be used on Linux and vice versa. In version 17.0, the Application Launcher recent projects list did show projects that required path mapping to resolve the path to the project.

Launcher shows a visual indication that an application is starting   **28055**

When an application is invoked from the launcher the option is disabled and a message is shown until the application has started. This prevents accidentally starting multiple instances of the same application.

Client specific   Bug Fixes

Santos Prospects & Leads List - Add/Using form now works   31512

The Add/Using form functionality in the Prospects & Leads list was not working in v17.0 but has been fixed in v17.0.1. This is functionality specific to Santos Australia.

Configuration   Enhancements

Configuration and settings now uses standard file selector   30392

File selector widget now used in configuration tool in appropriate locations

Configuration change metadata includes computer name   30552

When configuration settings are changed, history of the user making the change and the computer they were using is recorded. In version 17.0 the computer name was recorded correctly on Linux but not on Windows.

Configuration   Bug Fixes

Improved handling of read-only site configuration directory and files   31315

The handling of global site configuration files (such as the list of projects and site configuration settings) has been improved to more robustly handle both read-only files and writeable files in a read-only directory.

Linux installer creates default SQLite Primary database and connections.xml if required   31595

On Linux install, Petrosys will now install a default connections.xml and SQLite primary database, if no connections.xml or psyslite.sdb currently exists in $ps_local. This will allow sites that are tradition Interactive Mapping users to use Petrosys v17 with no further configuration required.

For sites that have an existing connections.xml their current configuration will not be affected.

Password manager `enforce per-user password` is now a site-only configuration setting   31169

The Petrosys password manager includes an option to force all users to validate using a personal password prior to allowing access to stored passwords. In version 17.0 this option could be overridden by users, but now may only be set at the site level.

Version 16 user configuration settings are upgraded correctly   31201

In version 17.0, user configuration settings such as proxy server configuration were not correctly upgraded to the new version 17 configuration tool.

Warning given first time Advanced settings is accessed 31102

The first time the Advanced settings section of the Configuration and Settings application is accessed the user is warned of the potential for issues when modifying these settings. They should only be used by Advanced users or under the instruction of Petrosys support.

Configuration/Database Connections — Bug Fixes

Application Launcher sets Oracle environment correctly (Linux only) 31243

The Petrosys Application Launcher now sets up the correct Oracle environment when running on Linux.

Without the correct environment set, it would prevent connections to an Oracle database such as dbMap, OpenWorks or GeoFrame, and potentially cause the application to crash.

Connections, import and export — Enhancements

New connections are automatically added to all running tools 30806

When a new connection is established in one of the main three tools (Mapping, Surface Modeling, 3D Viewer) the connection information is propagated to all other tools running in the same session. A new disconnected connection is created in each tool - which makes it easily available for use when required. This is particularly handy for any data sources that take significant time to create and set-up a new connection (e.g. OpenWorks).

Connections, import and export — Bug Fixes

ESRI and Petrel plugins use the version 17 current project 31556

In version 17.0, the Petrosys ESRI plugin and Petrel plugin defaulted to the project most recently used in version 16.

ESRI plugin starts easier when run the first time from ArcMap 30697

Petrosys ArcPlugin will start from Windows temporary directory if Arc project temporary directory does not exist. In the previous version, ArcPlugin would display an error.

Export/GeoFrame/Horizon, Card 6 & Card 7 - 2D / 3D now supported 31526

In version 17.0, the Export/GeoFrame Horizon Card6, Export/GeoFrame Horizon, Card7 2D/3D did not work as they did not bring up a dialog when selected.

KML export correctly handles very large shapes 31110

In previous versions, including very large polygons or lines as part of an export to KML format could result in the software crashing.

OpenWorks and GeoFrame well import wizard defaults to correct data source 30784

In version 17.0, the Import/GeoFrame/Wells to WDF and Import/Landmark/OpenWorks/Wells to WDF options did not automatically select GeoFrame and OpenWorks as the input data source.

Petra link supported for all versions of Petra

29219

In version 17.0, the Petrosys Petra link did not work correctly with recent versions of Petra due to some internal conflicts between the two software packages.

Removing connections from the connection manger works as expected

29164

In version 17.0, removing connections from the connection manager did not always work if multiple tools were run simultaneously (deleted connections would reappear the next time a tool was started).

dbMap - User interface   Bug Fixes

dbMap edit screens prompt to save changes at appropriate times

28695

In version 17.0, certain dbMap edit screen would prompt to save changes at inappropriate times, such as the edit dialog losing focus.

General Bug Fixes

Pasting of Mapping display list layers maintains the relative layer ordering

29332

In version 17.0, copying Mapping display list layers could result in the order of layers being reversed in some scenarios.

Project CRS database is correctly reloaded when project is changed

31081

In version 17.0, changing the currently selected project did not refresh project based CRS information from the new project path.

Running Petrosys on Linux no longer automatically create a panels.pnd file

30221

In previous versions, running Petrosys via the petrosys, pseis or pseis_db command on Linux would always create a panels.pnd file in the directory in which it was run. This was unnecessary and no longer happens.

General - graphics   Bug Fixes

Fill Style Selector - Pattern sizes restore exactly

31387

Setting certain pattern sizes could have resulted in that size not being restored exactly. For example using a pattern size of 19mm might be displayed as 18mm on the next use of the fill style selector panel. Non-integer pattern sizes like 16.5 are now supported too.

Pattern filled objects render better when the pattern size is very small

31158

Pattern filled objects looked like they were drawn with the pattern color when the pattern size was very small. This was due to the pattern dominating the fill and giving the illusion the color was wrong. Now the pattern has a limit on how small it will draw so as to reduce or eliminate this effect.

General - User interface   Enhancements

Improvements to combo box field alignment on various panels
30514

The positioning of combo boxes with respect to their corresponding label has been improved. In version 17.0, these could be shown separated by a large distance.

General - User interface   Bug Fixes

Application, Help and icons for project and site values updated
30597

Icons for the application, help and site, project and user settings have been improved. The new icons are more visually distinctive and more representative of the features they support.

Cancelling some dialogs using the `X` button works as expected
30864

Closing dialogs using the X button could the software to crash in version 17.0 when the mouse was focused in certain fields (for example, a text entry field).

Editable lists now respond to Enter (carriage return) character
30483

Editable lists allow usage of Enter key to browse to the next editable item. This enables faster data entry.

Editable scrolled list no longer requires double click to start in-cell editing
29560

Editable scrolled lists have been improved to allow in-cell editing immediately after item is activated.

Editable scrolled lists allow navigation through the list
29460

Editable lists allow usage of Enter key to browse to the next editable item.

Geographic CRS selector allows selection of a CRS by double-clicking
31123

In previous versions this worked for selecting a projected CRS, but not a geographic CRS.

Minimised dialogs are subsequently shown at the correct size
31119

In version 17.0, minimising and then restoring could cause dialogs to be displayed at a very small size.

Numeric text entry fields no longer incorrectly autocorrect while values are being entered
31143

In version 17.0, certain numeric text entry fields would always enforce a value greater than zero and incorrectly automatically change values in the middle of the data being entered.

Panel field activity is not being correctly set for certain fields
31111

Panel field activity is being set correctly in according to field activity rules.

Scrolled list filtering works as expected when first column is hidden
30789

The generic filtering ability introduced into Petrosys in 17.0 did not work as expected for scrolled lists where the first column is hidden, an example being the ArcSDE layer selector in Display/Picture/Raster.

GIS Editor   Bug Fixes

Culture editor only allows editing of culture files with a CRS assigned
29987

In previous versions, the Culture editor incorrectly allowed editing of culture files with no CRS assigned. This could potentially result in incorrect coordinate conversions taking place.

Graphics/Plotting and Hardcopy   Bug Fixes

Line sizes are scaled correctly when printing on Windows
30880

In version 17.0, line widths could be incorrectly scaled down resulting in thin and hard-to-see lines when printing a large map to a smaller sized printer output (for example an A3 map on an A4 plotter).

Help Enhancements

Help documentation updated
28182

The help documentation has been updated to better reflect the new behaviour of version 17. The focus of the help updates has been on documenting new features or where behaviour has changed substantially from earlier versions, so there places where the help is not completely in line with current 17 behaviour. Petrosys will continue to improve the help in future releases.

Help style upgrades for V17
30690

The styling of the help has been improved with a rationalisation of the 'Menu Option' entries and introduction of a 'Next> ' link at the end of topics that have a natural follow on topic, such as in the getting started sections.

Petrosys help improved to show application specific help where applicable
30584

The Help/Petrosys Help link in each application now shows an application specific help topic where available. In previous versions, the default "Welcome to Petrosys" help was always shown.

Help Bug Fixes

Help viewer Home button takes you to "Welcome to Petrosys" page
29314

Help home button now uses full URL so returns to the "Welcome to Petrosys" page. In the previous version it would attempt to return to a non-existent file.

Mapping Enhancements

Display/Drawing tools/Text file filter has been improved
28629

Text display allows selection of a file from which to source the text to be displayed. The file selection now includes *.prn and *.txt filters which matches the text output formats from other parts of the software.

Display/GIS - dbMap Culture display performance improved
31036

Performance of dbMap culture data display via Display/GIS has been vastly improved (of the order of 10 times) by optimisation of the spatial query used to extract the data to display.

Display/Polygon selection list includes an option to invert current selection
30937

The Display/Polygon option allows the list of polygons currently selected for display to be inverted via the RMB / Invert Selection option.

Display/Scale and Legends menu item renamed Map Elements
31363

The Display/Scale and Legends sub-menu has been renamed Map Elements to more accurately reflect its contents.

Double clicking expands display list groups
30943

Mapping display list groups are now expanded (or collapsed) when double-clicked.

Gradient editor displays absolute value when entering control points
30356

The gradient editor allows entry of control points in relative terms (i.e. percentage value). In several scenarios it is useful to enter an absolute value. The editor does not allow direct entry of absolute values (the resolution of absolute values is limited by the gradient storage format meaning that the exact values entered may not be saved), but does now display the corresponding absolute value when a relative value is set (though both dragging or direct entry).

Mapping display list allows layers to be deleted using Delete hotkey
30896

When one or more display layers are selected in the Mapping display list, the Delete key may be used to delete them, so long as the main map or the display list has focus.

Mapping

Bug Fixes

Colorbar is also deleted when associated layer is removed
31299

When a layer with an associated color bar is deleted, the color bar is also deleted. In version 17.0, this did not occur which could result in the program crashing.

Default parameters are used when creating new color bars
30633

In version 17.0, the Display/Colorbar option would only recognise parameters that were explicitly modified - any settings left at their defaults would not be saved or used.

Display List RMB show and hide works as expected for automatic groups
29393

In version 17.0, the Mapping display list RMB options: show, hide, enable picking and disable picking were not enabled for automatic groups in the display list (i.e. when grouping was set to something other than "Display Order").

Display list RMB/Select Gradient option is disabled for monochrome sunshaded grid layers
29399

In version 17.0, this menu option was incorrectly enabled (there is no gradient used for monochrome sunshaded display).

Display list RMB/Zoom to layer works consistently for all grid display layers
29167

In version 17.0, the Mapping display list RMB/Zoom to layer option was incorrectly disabled for Display/Grid layers unless certain parameters had been set.

Display/3D Seismic/Bin Grid font selectors allow selection of colour and size
31508

In version 17.0, the font selector buttons in the 3D bin grid display did not allow the size or colour of the selected font to be set.

Display/Color Bar is hidden when corresponding layer is hidden
31186

Colorbars are now automatically hidden when the display layer they reference is hidden. This is as per the v16 stream of Petrosys, but did not work in 17.0.

Display/Contour "Set all" option works as expected
23669

The Display/Contours option includes a button to set aspects of the style for all the contour display lines in a single action. In previous versions this did not work consistently.

Display/Curve layer is no longer created when interactive placement is cancelled
29114

In version 17.0, a Display/Curve layer was incorrectly added when interactive placement was cancelled.

Landmark gradient import allows Fixed gradients to be created
30985

In version 17.0, the gradient editor allowed a Landmark gradient to be imported (File/Import from Landmark from within the gradient editor) as a fixed style gradient, but did not save the resulting gradient as fixed.

Mapping displays very small text correctly
31340

In version 17.0, under certain circumstances, very small text would not be drawn in Mapping.

Mapping redraws correctly when nothing is drawn
30780

In version 17.0, the current map would not be redrawn under certain scenarios that resulted in a blank map being drawn, for example disabling the "Draw map base by default" option under File/Preferences/Mapping.

Paradigm fault selector in Display/Faults can no longer be opened multiple times
31360

The Paradigm fault selector in the Mapping Display/Faults option does not display instantaneously. In previous versions the fault selector button was still enabled, leading users to think that it had not worked and to press the button again, causing multiple fault selectors to appear. This has been modified to only allow one fault selector to be opened at a time.

Printing to zoomed area no longer causes a change in location after printing
30830

In version 17.0, printing a zoomed area in Mapping could result in a change to the current zoom and position after the printing completed.

Temporary cache files used for Mapping layer drawing are cleaned up 31181

Certain Mapping display layers create a temporary cache file to improve drawing performance. In version 17.0, these temporary files were not deleted when no longer needed.

Text for certain layers is not shown correctly in overpost correction mode 31084

In version 17.0, text disappeared after a redraw in overpost correction mode for certain display layers such as wells and seismic.

User defined title blocks correctly support color selector fields 31406

In version 17.0, colour selectors did not work correctly in title block panels.

View/Last View handles mouse pan operations 30832

Middle mouse pan now works correctly with View > Last Pan.

Zooming to full view no longer clears the zoom history 31385

In version 17.0, zooming out in Mapping to the full view cleared previous zoom history, meaning the previous and next zoom buttons did not work as expected.

Mapping/2D Seismic   Bug Fixes

Custom gradient range works as expected for 2D seismic ribbon map display 30948

In version 17.0, setting a custom range for the gradient used to display a ribbon map in the Display/2D seismic option did not have any effect and changes made while editing the ribbon gradient in the gradient editor could not be applied.

Display/2D Seismic SDF horizon selector automatically selects previously selected horizon 30184

In version 17.0, the selected SDF horizon in a 2D seismic display layer was not automatically selected when the horizon selector button was clicked.

Mapping/Bubble Maps   Bug Fixes

Bubble Map color gradient selector works as expected 31383

In version 17.0, the gradient selector under the Color Gradient fill style option in Display/Bubble Map did not allow a gradient to be selected.

Bubble map fill styles loaded correctly 31378

The selection and saving/loading of the fill styles for the individual variables that make up the pie elements in the bubble chart now work as expected. Previously the colours could be lost and invalid pattern number error raised.

Second bubble map variable style set correctly 31157

Display/Bubble Map now handles no-fill solid style correctly. In previous versions it was filled with black colour.

Mapping/Editors   Bug Fixes

Edit/SDF/Create line creates a new display list layer when required 30481

The Edit/SDF/Create line option allows creation of a new seismic line in an SDF file. Any lines created via this method are automatically displayed in a display list layer on the current map. In version 17.0, this did not work correctly.

Edit/SDF/CreateLine file selection improved 30473

The Mapping/Edit/SDF/CreateLine option has been enhanced to ask for the SDF to save the new line into, after the line has been created. This dialog also includes an option to allow a new SDF to be created.

Mapping/Images   Bug Fixes

ArcSDE raster display no longer hangs during zooming, panning or resize 30811

In previous versions, interactive zooming using the mouse wheel, map panning or resizing the Mapping window could cause the software to hang when raster images were displayed from ArcSDE.

ArcSDE rasters loaded with an offset are displayed in the correct position
31026

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

Display/Picture/CGM PIC is not drawn when automatic redraw is disabled
31191

In version 17.0 CGM/PIC layers could be incorrectly drawn in some circumstances when automatic redraw is disabled.

Modification of Display/Picture/Raster WMS display layers works as expected
31096

In version 17.0, WMS display layers were not redrawn after being modified in any way.

Modifying the background color in a Display/Picture/Raster layer works as expected
30605

In version 17.0, changing the background colour did not have any effect.

Mapping/Map Sheets   Bug Fixes

Cancellation of mapsheet creation with no mapsheet selected works as expected
31180

In version 17.0, this scenario caused the software to crash.

Map sheet creation - line styles are not copied correctly from current map sheet
29046

Line styles are copied correctly when new map sheet is created.

MapSheet/Open always shows mapsheets from currently selected file
30803

In version 17.0, certain scenarios could result in MapSheet/Open showing mapsheets from a different mapsheet file than the one listed in the dialog.

Mapsheet/Point conversion preserves output data precision when writing points to file
30068

In previous versions, the point conversion tool always wrote coordinate data to file with no decimal points.

MapSheet/Point conversion writes correctly formatted coordinates to file
31125

In version 17.0, a bug was introduced into point conversion where coordinates written to file could were incorrectly formatted. From version 17.0.1, the output from this option matches what is displayed on screen (in terms of number of decimal points and geographic format).

Township range mapsheets can be correctly created by selecting on the map
30057

The Mapping MapSheet/New/Pick On Map/Township Range option did not work correctly in version 17.0 and did not allow map sheets to be created.

Mapping/Spatial   Bug Fixes

Scroll bar enabled for read-only text field
30371

In Display/GIS panel the scrollbar of "Feature class description" text box has been enabled so as to allow scrolling through the feature descriptions.

Mapping/Wells   Bug Fixes

Minor improvements to the well symbol selector dialog
27958

The well symbol selection dialog has been improved to resize sensibly, show preview correctly (including symbols containing a filled shape) and no longer allow filtering and searching in the list of symbols.

Well Symbol - Colour 0 or 1 are now visible in dialog button preview
31060

The well symbol preview graphic as drawn on the well symbol select button in dialogs will now always draw as something visible when choosing the background color 0

"Local Projects" group available as a default   31467

Petrosys provides an automatically enabled group called "Local Projects". On Windows the default path for storing Petrosys projects is used (currently C:\ProgramData\Petrosys\data on Windows Vista). On Linux the user's home directory is used as the default path for Local Projects.

If no group management is performed, the Local Projects group will be available to all users. Once some group management is performed (e.g. by creating a new group), the Local Projects group can be managed like all other groups.

Creating new projects from a template in the project selector copies project metadata   29154

When new projects are created by copying from a template, the project metadata from the template is now copied to the newly created project, including the project default CRS, if set.

A project template without a CRS defined will require the user to select a project CRS before they are able to create the new project.

Project selector add project directory selector starts in the current project   29347

In version 17.0, the Linux project selector defaulted to the current project directory, however Windows would start at the top of the folder hierarchy.

Project selector allows loading of project list to be cancelled   30982

When the project selector starts, the list of available projects is read. The population of the project list can now be halted by pressing the Stop button or the Escape key. This can be useful when the desired project is already visible, or case where a new project is to be added.

Project selector automatically selects new users and groups after creation   27254

The automatic selection of the newly created user makes it easier to make modifications immediately after the initial creation.

Project selector better supports group lockdown users adding projects   29380

The project selector allows group lockdown mode users to add new projects. In some cases, this may result in a project being added by a user that will not be visible in the project list (e.g. when the project is assigned to a group that the user does not have access to). In this situation a warning is now displayed.

When a project is added that is not assigned to a group and is not already in the project list, group lockdown users can now choose a group to assign to it from their list of groups.

Project selector copy project now shows progress   29565

Copying a project now shows the progress of the copy as it proceeds, rather than suspending the user interface.

Project selector ensures that all newly created projects have a default CRS   31297

When the project selector is used to create a new project, a default CRS must always be selected. This applies when the project is directly created or when created from a template and the template does not have a default CRS set.

Project selector import groups dialog is clearer   30504

In the project selector, if a project is selected that has an unknown group assigned to it, setting properties on the group (RMB/Properties) prompts whether the unknown group should be imported. The buttons on this prompt have been changed to make the alternatives clearer.

Project Selector New and Copy dialogs simplified   30983

The dialogs for creating and copying projects have been clarified to more clearly indicate the path that will be used for the project. The name of the project and the parent directory path are clearly labelled and the combined project location (which is the parent directory followed by the project name) is also displayed on the panel.

Project selector shows invalid projects as grey text   29252

In version 17.0.1, the project selector shows invalid projects (which are projects where no valid path was discovered) in light grey text for easy identification.

Project selector start-up time and responsiveness has been improved   31204

In version 17.0, the project selector could take a significant time to start up and populate the list of available projects in some circumstances (particular for lockdown mode users who see a restricted set of projects). The start-up time and project list population performance have both been improved.

Project Selector — Bug Fixes

"Only Show Valid Projects" option removed for restricted users
29383

The "Only Show Valid Project" option has been removed for both group and full lockdown users. This option had no affect for those users, so makes the interface simpler.

Copying a project in the project selector correctly sets the group
29386

When a new project is created by copying an existing project, the group for the new project is set to the selected group.

Default CRS must be set when creating a project
30693

CRS must now be set when creating a new project. This forces users to consider the most appropriate CRS for their region of interest when creating the project, preventing location errors in the future.

Project selector correctly displays information for the most recently added project when selected
31087

In version 17.0, selecting the most recently added project did not always read information immediately when selected.

Project selector correctly handles deleting groups straight after adding groups
31290

In version 17.0, this scenario could occasionally cause the software to crash.

Project Selector improvements for speed and stability
29014

The project selector has been reworked with improved multi-threading for improved stability and performance.

Project selector tag administration buttons are disabled when appropriate
27265

In version 17.0, the tag administration modify and delete buttons were incorrectly enabled when no tags were selected.

Selecting and renaming projects in the project selector converts project path to absolute path
27665

Project paths are now converted to an absolute path. In version 17.0, relative paths (including ..) were left as part of the project path, which caused problems when the projects were later attempted to be used.

Seismic data — Bug Fixes

Copying and then deleting a line in the SDF editor works as expected
29513

In version 17.0, deleting a seismic line (Line/Delete in the line editor) after creating it by copying another line (Line/Copy in the line editor) could cause data to be read incorrectly from the SDF, making it appear as if the SDF was corrupted.

Seismic (SDF) Project Summary behaviour improved
31066

Seismic (SDF) Project Summary list has filter and search modes on by default. In addition, an incorrect error message when trying to scroll the list has been fixed.

Seismic (SDF) Selected coordinates and profiles are now restored
30310

Previously selected coordinates and profiles are correctly restored now. In 17.0 the previously selected coordinates and profiles were not selected upon re-entry into the controls.

Seismic Line Editor /Edit/Delete/Segment is drawn correctly
29884

Version 17.0 contained drawing problems that made this option very hard to use successfully.

Surface Modeling   Enhancements

Surface Modeling now has keyboard shortcuts for common operations
21986

Can now use a number of keyboard shortcuts in the Surface Modeling application.

- ➢ ctrl-c to copy and ctrl-v to paste a task in the task list.
- ➢ ctrl-n (new), ctrl-o (open) and ctrl-s (save) on task files.
- ➢ ctrl-z (undo), ctrl-y (redo), ctrl-a (select all visible tasks) and Del (delete selected task).

Surface Modeling   Bug Fixes

/Tools/DrawMap mapsheet selection from dbm has been corrected
30702

A minor bug in Surface Modeling- Tools/DrawMap mapsheet selection has been fixed. The "use mapsheet from dbm" toggle now correctly sets the mapsheet selection from the mapsheet stored with the dbm.

GIP editor allows editing of the current gradient
30400

In version 17.0, editing the current gradient in the GIP editor (Surface Modeling/Grid/Sampled Data/Edit) caused the software to hang.

Input Data/Well Tops, base formation text updated when necessary
29352

The gridding Input Data panel for dbMap well tops hides the 'Base formation' label when it is not required.

Surface Modeling Grid/Create ASCII Point Data is always correctly initialised
31287

In version 17.0, ASCII Point data gridding source worked correctly when invoked via the 'Add' button, but not via pressing the icon tool button.

Surface Modeling/Grid Operations   Bug Fixes

Arithmetic selects all faults by default
30876

Grid/Process/Arithmetic panel correctly highlights faults data in use. By default all available faults are selected.

Surface Modeling File/Merge task file with loops now work as expected
30566

Looping workflow tasks work correctly upon /File/Merge. Previously a flow control command syntax error was emitted.

Surface Modeling/Gridding   Bug Fixes

Faults import panels - Create new group displayed incorrect error messages for non-unique group names
21128

Faults import panels used to give an incorrect warning saying "fault group already exists" when attempting to create a new fault group without a unique name and a unique posting name. The warnings have been improved to identify non-unique input names or posting names specified by the user.

Grid and Contour back interpolation to seismic SDF correctly loads fault file settings
29705

When raising a back interpolation to seismic SDF task, any fault file settings are now correctly displayed in the dialog.

Grid/Create Grid mapsheet selector on the geometry tab now displays correct list of mapsheets
30383

Situations where the mapsheet selector on the geometry tab was trying to load mapsheets from a non-existent or wrong mapsheet file have been rectified. In particular, sheet.def was assumed as the default name even when an alternate mapsheet file was selected.

Grid/Create Grid used to crash when using faults from a shapefile with "Clipping distance" enabled
30987

Grid/Create Grid no longer crashes when using faults from a shapefile with "Clipping distance" enabled.

Grid/Create output fields have been regrouped for scripting 29742

The scripting variables SampledDataFileName and SampledDataFileAction were listed in the wrong group. They now reside in the Output data group.

Well data   Bug Fixes

Wells (WDF) Editor/Project Information Layout - changes not saved when leaving tab 30179

Changes in Project information layout are saved correctly now.

Wells (WDF) Spreadsheet add option, column type value is remembered after each add operation 30989

When creating custom spreadsheets in the Wells (WDF) editor the program will now remember the type of the last column added. This makes it faster to add a series of similar columns to the spreadsheets.

Wells (WDF) spurious error message removed 30710

Error message shown when clear button is clicked in Select wells using expression form has been fixed.

Enhancements

Petrosys release 17_0 [80 entries]

3D Viewer

21342   3D Viewer posting at zone top/base
28360   Change `Picked` depth to `Selected` depth in 3D Viewer
28786   Display/Grid and Display/Surface panels in 3D Viewer are more compact
30598   Minimum OpenGL graphic drivers updated to version 2.0
30017   Removed obsolete VRML output option

Configuration

26451   New Configuration Tool (located at Petrosys Main Menu - /Tools/Configuration...)
27063   Path mapping settings can be configured for all users at a site

Configuration/License Keys

27342   Licensing changes for v17.0

Connections, import and export

21604   Petrel now has one option to start Petrosys main menu

dbMap

22367   Admin/Reports/Edit - Ability to view more meta-data about a query
28506   Admin/Reports/Edit - Added `Last update` column to list of queries
28232   Admin/Reports/Edit screen height has been reduced

dbMap - User interface

26619   Mapping File/Open options have been consolidated into a single option

General

20351   3D seismic horizon menu options are now named consistently
21651   All error message text can be copied to the system clipboard
26355   Default Linux font changed to Arial-like font
22283   Enhanced file selection button and dialog
26006   File names containing `.` are saved with the correct extension
22010   Help viewer improved and consistent across platforms
20467   Multiple projects can be deleted from the project selector in a single step
18773   Pop-up messages with a large amount of text are shown with a scroll bar
16464   Print settings on Windows are managed by the Windows print system
18689   Project selector find projects functionality improved
24832   Support for Solaris 8, Red Hat Linux 3 and Windows 2000 ceased
21535   Tool - Project selector
23513   TrueType Collection fonts supported

General - graphics

30196   Palette editor preferences - Defaults make chart more useful for PDF export

General - User interface

26448   File/Select option to select global files has been removed
26449   Help/About dialog includes additional software information
25260   Improved customisation of title block border
26609   Improved toolbar customisation in Mapping and Launcher
11868   Multi-line text fields include RMB options to load from file and save to file
14575   Multiple selection lists report the number of selected item in the list header
21584   New Petrosys look and feel
24258   New Petrosys main menu interface
26457   Seismic functions moved into the Seismic (SDF) tool (formerly project manager)
16038   Standardised filtering, searching, sorting and column customisation for lists

Graphics/Plotting and Hardcopy

27137   /View/Plot and /View/Print merged into one option and moved to /File/Print
29256   Raster plotter list available in File/Print has been simplified

Import and Export

10120   Fault file surface import no longer requires an SDF to specify fault surface names

Mapping

23378   Display/Data allows modification of Petrosys culture display parameters
27307   Display/Polygon selection list can be sorted, searched and filtered
14869   Enhanced mapping display list, including hierarchical layer grouping
28788   Improved drawing performance of plan view data in Sampled Data Editor
17142   Improved selection of mapping layer when display a colour bar
21429   Mapping display layer dialogs are more consistent
22015   Mapping layer cut-and-paste works between different instances of Mapping
22140   Significant improvements to color gradients
29323   Zoom to data displayed in Mapping
26624   Zooming and panning interactive improvements

Mapping/2D Seismic

26638   SDF horizon selector supports stratigraphic sorting
28065   Shotpoint symbols are drawn using the line thickness for 2D seismic lines drawn as tracklines

Mapping/Contours

26673   Contour values shown for picked contour lines include decimal places

Mapping/Coordinate Reference Systems

10232   Point conversion tool allows conversion between arbitrary CRSs

Mapping/Editors

18608   Display/Polygon includes option to start the CFP editor

Mapping/Map Sheets

27778   CGM title block supports map sheet title as a text keyword

18226   Map sheet selector includes map sheet CRS information
30045   Support for copying of map sheets to/from arbitrary map sheet def files

Mapping/Surfaces

28838   Colour fill grid display - add an offset for contour increment values

Surface Modeling

27589   /Grid/Load fault file supports third-party faults
27030   Add PGC looping over list of text strings
26459   Interactive scripting has been enabled for fault surfaces and groups, polygon
         names and seismic horizon selection
27770   Interactively scripted CRS fields use the CRS selector
28172   New textSubstring() function added to scripting
24068   Scripting now has multi-select lists for polygon and fault group name selection
24697   Seismic horizons using third-party connections now script enabled

Surface Modeling/Contouring

27160   Minor performance improvement when adding a new contour during contouring

Surface Modeling/Grid Operations

26297   /Grid/Processes/Arithmetic now supports third-party faults

Surface Modeling/Gridding

26971   Grid/Create - visual display - now uses a "cross" icon to close window rather than
         a "trash-can".
28902   Improvements when working with a large number of input sample points (more
         than 2 billion or 2^31)

Surface Modeling/Volumetrics

18680   Contour-based volumetrics is no longer supported
17750   Volumetrics upgrade - grid horizontal grid units are now set by the input grid and
         US-Feet support has been added

Bug Fixes

Petrosys release 17_0 [60 entries]

Connections, import and export

25940   3D Seismic surface direct display from SeisWorks - Initial selection of a survey and horizon does not display the Surface CRS.

dbMap

28987   Display/Bin Grid - Runtime parameter lookups are run against data connection

General

21282   Copying projects supports copying hidden files and folders

24602   Correct error message now displayed when unable to find projects.plf due to wrong LocalDir setting

20018   Petrosys windows are not shown behind windows of other applications

20080   Project selector handles failed operations more robustly

24831   Windows file selector starts in correct directory when selecting files in subdirectories

General - User interface

25834   Clicking quickly on well symbol selector is more robust

17898   Lists with large number of selected items are no longer slow to load

25600   Numeric fields no longer allow unprintable characters to be entered

Graphics/Plotting and Hardcopy

17132   Graphics operations no longer raise mt:11 "Error in matrix code - matrix3:: inverse:singular matrix" error

Import and Export

29635   /File/Import/GoCad/TSurf File now works when only importing the triangles and vertices

28854   /File/Import/Zmap/Faults occasionally used to crash

22969   Display layers remain pickable after exporting spatial data

23436   File/Import/Fixed format - Selecting columns by highlighting data can give wrong result under windows

Mapping

26972   /Display/Text is drawn correctly after being interactively placed when automatic redraw disabled

28625   Actions to move layers within the display list are behave consistently for both methods of list ordering

26361   Changing map sheet will mark the current dbm as requiring a save

27542   Display/Fault handles faults with no coordinates correctly

26675   Display/Faults draws pattern fill with transparent background as expected

28238   Encrypt password option supports encryption of passwords containing non-alphanumeric characters

25660   Mapping layer modify panels are disabled while the map is being redrawn

26434   Modifying layers while loading a new dbm file is not permitted

26432   Quitting mapping with display layer dialogs no longer causes intermittent crashes

19707   Undo/Redo of a display layer while the dialog is open works as expected

16010   Unwanted text substitution on Windows file names in title blocks resolved

Mapping/Bubble Maps

24376   Alternative posting name supported for WDF bubble maps

29657   Bubble Map ASCII file handles single space delimiter correctly

Mapping/Images

19348   Display/Picture no longer incorrectly loses path name

20042   Transparent PNG raster images supported

Mapping/Map Sheets

18993   MapSheet/Open - Info always shows correct east north coordinates

Mapping/Other

19362   Removed incorrect error in Display/Text option when displaying text from a file

Mapping/Spatial

27908   Display/Culture/Tobin layer can only be created with a valid file selected

24083   Display/GIS attribute querying no longer requires a manual redraw

24993   Display/GIS thematic mapping scan returns all values within map sheet

Mapping/Surfaces

27788   Paradigm Mapping and 3D Viewer 3D surface Data type is set correctly when horizon changes

Mapping/Wells

29036   Well symbol selector button shows correct background colour

Surface Modeling

28089   /Fault/Extract Z Values From Seismic - scripted parameter names are consistently named

21948   /File/Import/ESRI/ArcSDE Grid now shows a warning when the coordinates are lat/lon

27599   /File/Import/GeoFrame Grid and 3D Surface only allows selection of valid grids and surfaces

19699   /Grid/Back interpolate to WDF generates correct values when grid and WDF depth units do not match

26314   /Grid/Create Grid - error reporting for invalid data sources has been improved

28913   /Grid/Create/Grid - improved clipping polygon error message

24447   /Grid/Processes/Mean Inside Polygon now runs when XML report file is blank

27217   /Grid/Statistics/Inside Polygon produces no ASCII statistics when XML output file is blank

27123   /Grid/WellTie no longer warned about non-existent polygon file when not using
          polygon method
24014   /Workflow/Task parameters - SDF and SDF horizon selectors can now be run
          interactively
26732   Gridding IESX prompts for connection when required
23168   Improved error handling for Petrosys fault data
28032   Scripting faults- Fault surface list is not populated when scripted
27058   Scripting of WDF attributes now functional

Surface Modeling/Contouring

28175   Contour compress option used to crash when the input contour file had more
          than 10,000 points

Surface Modeling/Grid Operations

28474   /Grid/Convert/ConvertCoords was clipping polygons incorrectly

Surface Modeling/Gridding

27007   /Grid/Back Interpolate to WDF produces correct results when grid CRS has non-
          metre units
26999   /Grid/Create/Grid - Culture data source - formula entry now retains focus on each
          keystroke
26480   Faults are now treated as opaque barriers for all passes when gridding

Surface Modeling/Kriging

28626   Get misleading error when the KED external grid not specified

Surface Modeling/Volumetrics

25153   Slice volumetrics Top&Base now displays grid statistics

Well data

18290   WDF editor - spreadsheet data sometimes disappeared

Detailed Release Notes

Petrosys release 17_0 [140 entries]

3D Viewer posting at zone top/base

21342

3D Viewer now offers posting of colored disks at well zone/top. The Downhole, True Vertical and Subsea are supported. Also, path rendering now offers rendering of clipped path between two selected zones/tops.

Change `Picked` depth to `Selected` depth in 3D Viewer

28360

Changed 'Picked' depth to 'Selected' depth as this was causing a confusion.

Display/Grid and Display/Surface panels in 3D Viewer are more compact

28786

Display/Grid and Display/3D Seismic Surface panels have been redesigned using dialog tabs to occupy less screen space.

Minimum OpenGL graphic drivers updated to version 2.0

30598

3D Viewer relies on the OpenGL library for display. If the OpenGL drivers are older than the minimum of 2.0 then the display will sometimes not show all objects and may not move smoothly. By updating your specific video card drivers, the OpenGL drivers will also be updated. After upgrading, all 3D Viewer objects will be seen and will move in a smooth manner.

Testing by Petrosys has found that OpenGL drivers V1.X are unstable but that OpenGL drivers V2.X and V3.X work well on all supported platforms.

Removed obsolete VRML output option

30017

Removed the option to save a scene in the obsolete VRML format. Raster image capture is retained.

Configuration Enhancements

New Configuration Tool (located at Petrosys Main Menu - /Tools/Configuration...)
26451

A new configuration tool has been implemented for Petrosys Version 17.0. To run it, click on the "Tools/Configuration" option on the main Petrosys menu. Features and highlights of this include:

➢ Configuration preferences can now be set and overridden per "User", "Project" or "Site"

➢ Appearance settings now allow users to change fonts and window manager visual styles easily

➢ Path mappings allow seamless use of Petrosys on different platforms accessing the same projects on a network

➢ Customised window sizes and toolbars can be easily reset back to the default Petrosys settings

➢ The history of the most recent change to a configuration setting is stored and can be used when diagnosing configuration problems

See the on-line help for further details on the options available.

Path mapping settings can be configured for all users at a site
27063

Path mapping settings allow Unix paths to be mapped to corresponding Windows paths (and vice-versa) to allow Petrosys projects to be used across both platforms. In previous versions, this had to be set up on a per-user basis, but the version 17 configuration tool includes support for site-wide path mapping.

Configuration/License Keys Enhancements

Licensing changes for v17.0
27342

Petrosys 17.0 requires an updated license file to operate. The type and name of each license code remains the same, only the version number is incremented. The updated license file will be able to be used with version 17 and version 16.

Connections, import and export   Enhancements

Petrel now has one option to start Petrosys main menu   21604

There is now a single icon within Petrel to launch Petrosys. This allows you to run Mapping, Surface Modeling, 3D visualization and Import options using data directly from Petrel.

Connections, import and export   Bug Fixes

3D Seismic surface direct display from SeisWorks - Initial selection of a survey and horizon does not display the Surface CRS.   25940

On the 3D Seismic surface direct display screen the CRS of the surface is now displayed when using a SeisWorks connection as soon as a survey and horizon are selected.

dbMap   Enhancements

Admin/Reports/Edit - Ability to view more meta-data about a query   22367

On the Admin/Reports/Edit screen there is now more meta-data visible on the screen. On the Properties tab you can see:

- ➢ Query owner
- ➢ Query Unique Identifier (Uid)
- ➢ When the query was created and by whom
- ➢ When the query was last changed and by whom

Admin/Reports/Edit - Added `Last update` column to list of queries   28506

On the Admin/Reports/Edit screen the date that queries were last changed is now a column in the query list. This makes it easy to quickly sort the list to find queries that have recently changed.

Admin/Reports/Edit screen height has been reduced   28232

The height of the Admin/Reports/Edit screen has been reduced to allow for easier use on laptop screens.

dbMap   Bug Fixes

Display/Bin Grid - Runtime parameter lookups are run against data connection   28987

Display of bin grids did not properly support runtime parameter data selection queries that run lookup queries. Lookup queries are now correctly executed against the same database that the bin grids are being extracted from.

dbMap - User interface   Enhancements

Mapping File/Open options have been consolidated into a single option
²⁶⁶¹⁹

The two file opening options available in previous versions ("File/Open" and "File/Open detailed") have been merged so that there is now only one option "File/Open", which automatically loads the palette, the corresponding map sheet and display layer activity from the dbm file.

General Enhancements

3D seismic horizon menu options are now named consistently
²⁰³⁵¹

The menu options relating to 3D seismic horizons have been made more consistent.

➢ In mapping, the old Display/3D seismic/3D surface option has been renamed to Display/3D Seismic/Horizon

➢ In 3D Viewer, the Display/Surface menus is now called Display/3D Seismic Horizon

➢ Likewise in Surface Modeling, for the Petrel,GeoFrame File/Import options

All error message text can be copied to the system clipboard ²¹⁶⁵¹

Copying the text reported in an error message can be useful for support to diagnose problems. In previous Unix versions, not all of the text in error messages could be easily copied as text.

Default Linux font changed to Arial-like font
²⁶³⁵⁵

Improvements to font rendering on Linux have allowed the default font to be changed to the Arial-like Liberation Sans font. This font is metric-compatible with Arial so paging and layout is preserved, however, some glyphs are slightly different. It is a standard font delivered on supported Linux systems.

In previous versions the default font was set to the Simplex Petrosys internal font.

Enhanced file selection button and dialog
²²²⁸³

The file selection button used throughout Petrosys software has been expanded into a combination of a button and a text box. The button functions in the same way as the file selector button in previous version, including RMB to clear the selected file. The text box allows file names to be entered via direct entry, including file name completion which appears after a brief delay after the file name is directly edited. Changes made to a file name by direct typing are processed when the file selector loses focus, so pressing the TAB or Enter keys, or selecting another field on a dialog with the mouse will cause this to occur.

The file selection dialog has been completely modernised on Linux to include a number of useful features such as file name completion, detailed view (including modification time and file type), improved filtering, bookmarks and the ability to create folders and rename folders and files inline.

File names containing `.` are saved with the correct extension

26006

File names containing a '.' character, but not having the expected suffix now get the expected suffix added automatically (ending up with multiple '.' characters in the name). This is consistent with behaviour of other applications, but did not occur on Windows in previous versions.

Help viewer improved and consistent across platforms

22010

The same help viewer is used on Windows and Linux and also has some enhanced features, including showing multiple help topics in different tabs, bookmarking help topics of interest and the ability to dynamically increase or decrease the size of text. Printing under Linux has been improved as well.

Multiple projects can be deleted from the project selector in a single step

20467

The project selector allows multiple projects to be selected and hence removed from the current project list in a single step. In previous versions, projects had to be removed one by one.

Pop-up messages with a large amount of text are shown with a scroll bar

18773

Some error and warning messages can include a large number of lines of text, typically when reporting errors passed on from third party applications. Long error messages now include a scroll bar if required, where previous versions did not.

Print settings on Windows are managed by the Windows print system

16464

In previous versions, print settings selected within Petrosys (when running on Windows) were managed by Petrosys. This could lead to problems such as print settings being explicitly set for one print being reset on subsequent prints.

Project selector find projects functionality improved

18689

The project selector includes an Advanced/Find Projects option to automatically scan folders to add any Petrosys projects found to the project selector. A limited version of this was available in previous versions, but only on Unix. The new option is available on Windows and Linux and is improved to allow multiple search directories and individual selection of which of the discovered projects to add.

Support for Solaris 8, Red Hat Linux 3 and Windows 2000 ceased

24832

Version 17.0 is not supported on any Solaris operating system, Windows 2000 or RedHat Enterprise Linux 3. Enterprise Linux 4,5 and 6 are supported. For full information on the support environments please see the supported environments page on Petrosys website: .

Tool - Project selector

21535

Version 17 includes an improved project selector that makes it easier to find and select projects and to perform administrative tasks. The Project Selector works out-of-the-box against your existing version 16 project list.

New functionality includes:

➢ Projects can be assigned to groups. This allows you to easily manage and restrict access to projects based on business team, geological basin or other grouping schemes.

➢ Tags can be assigned to projects. Tags are optional labels you can apply to projects to make them easier to find or highlight a project's status.

➢ Meta-data is now visible when selecting projects. This makes it easier to identify projects and the type of data that they contain.

➢ Project templates allow you to include default files and settings when you create a new project.

➢ Improved file system path translations (Path mapping) make it easier to share your list of projects across multiple computers so you can have a central ps_local configuration directory used on both Windows and Linux.

➢ Easier to add more information to your projects such as a project description.

Existing administrative tools have been improved with a better user interface including 'Find projects'.

Detailed information on using the Project Selector is available in the online help topic 'PROJECT MANAGEMENT - PROJECT SELECTOR'.

TrueType Collection fonts supported

23513

A TrueType Collection (TTC) font is a method for delivering multiple fonts within the same file, which is of particular benefit when there are common glyphs between the fonts contained within. Petrosys contains full support for this font format on both Windows and Linux.

General Bug Fixes

Copying projects supports copying hidden files and folders

21282

In previous versions, copying projects that contained hidden files or folders would cause and error, resulting in the project not being copied.

Correct error message now displayed when unable to find projects.plf due to wrong LocalDir setting
24602

When the configuration is incorrect due to a missing or wrong LocalDir registry setting the software will now give a more useful error message to make it easier to track down the problem.

Petrosys windows are not shown behind windows of other applications
20018

In previous versions, pop-up windows from Petrosys could be shown behind windows from other applications in certain situations.

Project selector handles failed operations more robustly
20080

In previous versions, project selector operations such as renaming, adding and deleting projects did not give useful error messages when they could not be successfully completed.

Windows file selector starts in correct directory when selecting files in subdirectories
24831

In previous versions, the file selector (on Windows 7) would start in the same sub-directory as the last selected file, including when opening the selector on a different file located in a different sub-directory.

General - graphics   Enhancements

Palette editor preferences - Defaults make chart more useful for PDF export
30196

The palette editor sample chart window now uses default sizes tuned to smaller page sizes more suitable to exporting to PDF.

General - User interface   Enhancements

File/Select option to select global files has been removed   26448

In version 17, the "File/Select" option has been removed from the Launcher, Mapping, Workflows and the Culture Editor. This option allowed setting of global files (SDF, map sheet and others) in previous versions. All options and dialogs that require information from the old "File/Select" option have been upgraded to allow direct selection of the appropriate file.

Help/About dialog includes additional software information   26449

In version 17.0, the /Help/About option dialog has been changed to include a new tab showing software specific information (available under FILE/Maintain/Software Info in previous versions).

Improved customisation of title block border   25260

The Standard Title Block border has been changed to use the standard line style selector for the title block border style, which enables a line style and absolute size to be set.

Improved toolbar customisation in Mapping and Launcher   26609

The capability to customise toolbars has been greatly enhanced in version 17.0 for Mapping and the Launcher. The toolbar menu can be accessed by right mouse clicking on any toolbar (or the toolbar area), or using the "View/Toolbars" menu. The toolbar menu allows individual toolbars to be shown or hidden and also provides access to the "Customize Toolbars..." sub-menu option which allows individual icons within default toolbars to be shown or hidden and global icon size and type to be set.

In addition, a user customisable toolbar called "My Shortcuts" has been added. This toolbar supports addition of custom icons by dragging and dropping menu items or other toolbar icons directly onto the toolbar, allowing commonly used functionality to be customised on an individual user basis. This includes support for dragging functionality between the Launcher and Mapping, which allows, for example, 3D Viewer and Surface Modeling to be added as shortcuts to Mapping.

Multi-line text fields include RMB options to load from file and save to file   11868

In previous versions, multi-line text entry fields (such as MAPPING/Display/Text) included a RMB option (on Unix only) to edit the text in a separate window. This is now available on Windows also, along with two new options:

- ➢ Insert from file: update text from a selected file
- ➢ Save to file: writes current text to a selected file

Multiple selection lists report the number of selected item in the list header   14575

Standard single column list boxes include a header line. For multi-selection lists, the header displays the number of items selected and the total number of items in the list.

New Petrosys look and feel   21584

Version 17 has made numerous improvements to the user interface. These include:

- ➢ Front Menu The front menu has been completely redesigned. The six most common applications now have large icons to get you started quickly. The rest of the options are available in the drop down menus.Options that are available in the the the menus can be dragged to the custom toolbar for easier access.The preferred startup command under linux is now 'petrosys' . This replaces pseis, pseis_db and xdbmap commands. The old commands are still available to be used.The project selector is now integrated into the front menu. You do not need to select a project before the menu starts.Changing the current project from the front menu will cause any open Mapping, 3D Viewer or Surface Modelling window to also change to that project.Project thumbnail - The front menu has an area where a small project specific picture (thumbnail) can be displayed. This allows for easier recognition of what the project represents. This picture can be set by using the option "/View/Copy View to Project Thumbnail" in the Mapping and 3D Viewer applications.
- ➢ Icons and ToolbarsToolbars can be dragged to more positions on the screen and the position is remembered so that next time you come into the application the toolbar is where it was before.Icons can be large and small and be optionally labelled. Use the right mouse button on the toolbar and select 'Customize Toolbar' to access the controls for the icon size and labelling.The icons visible in the toolbars can also controlled by the customize option
- ➢ GraphicsPrinting direct to PDF is now available on all platforms via the /File/Export/PDF option. Transparency in PDFs is supported./View/Copy to clipboard supported on linux, does not copy whitespace around edge of map, has a hotkey (Ctrl-I)
- ➢ Dialog ImprovementsDialog size and positioning improvments on the initial display so that the OK and Cancel buttons are always shownPanel sizes are remembered and restored on all platforms and are resolution independentText edit controls universally support standard editing keys and shortcuts - delete, Ctrl-z undo, Ctrl-y redo (on Linux), Ctrl-a select all. Panels now respond better to resizing allowing some contents of the panel to expand to the new size.Ctrl+ and Ctrl- to dynamically increase and decrease font size for a panelFile selection field has been changed to allow direct entry via typing or selection via the normal file selector by clicking on the little folder icon. When typing the filename directly the available filenames will be dynamically displayed and can be auto-completed.Syntax highlighting for SQL editing fields.
- ➢ Import/Export menus centralized. Most of the import/export functionality is now under the Import and Export menus of the main menu. This is now the first place to look for your import/export option.
- ➢ Menus are now able to be torn off in both Windows and Linux environments.
- ➢ Better support for hotkeys, e.g. F5 for redraw, arrow keys for pan, Ctrl-O to open map file.

- ➢ Better font support on Linux. Native fonts installed on Linux are now used. When using maps between Windows and Linux fonts are automatically matched to the most appropriate font available on that platform, preserving the layout. This may mean that when editing a layers on different platforms different fonts will be available for selection, but Petrosys will honour the layout as accurately as possible.

New Petrosys main menu interface   24258

The Petrosys suite of applications has been restructured to modify the way the application first starts after it is run. The main menu screen has been redesigned to show only the major tools as icons and make all other tools available in standard drop-down menus.

Another major change from previous versions is that the current project is selected directly from the main menu (rather than before the main menu was shown as occurred previously). This makes changing between projects more intuitive, and in some cases may improve start-up time, due to not needing to read and initialise potentially large lists of projects. In addition, the last accessed project is automatically selected, making for an easier workflow when continuing work on the same project.

Seismic functions moved into the Seismic (SDF) tool (formerly project manager)   26457

Functionality that was available under the "SEISMIC/Functions" menu (from the main menu) has been moved into the Seismic (SDF) tool (which has itself been renamed from "Project Manager") under the File menu.

Standardised filtering, searching, sorting and column customisation for lists   16038

Single-column and multi-column list boxes throughout the Petrosys applications have been enhanced to support sorting, searching and filtering - in previous versions this was available for certain lists only. Columns in multi-column lists are also configurable in terms of position and visibility.

Lists include a "Context Options" icon in the top-right corner (above the scroll bar) which displays a drop down menu allowing the standard functionality to be invoked and configured. The functionality can also be invoked from RMB pop-up menu options and keyboard shortcuts (Ctrl-F for search and Ctrl-K for filter).

When filtering is enabled, the filter bar will be shown above the list contents which allows strings to be entered for any of columns. Filtering is sub-string based allowing * wildcard matching at any position in the name. When searching is enabled, the search bar will be shown below the list contents. Search allows for case-sensitive and case-insensitive searching. The filter bar and search bar are both closed using the [x] icon on their respective right hand sides.

Typing a character directly into a multi-column list also searches for the character in all displayed columns and selects any rows containing for the character typed. This also works when typing multiple characters, as long as the characters are typed relatively quickly (in previous versions this was available on Unix versions but only when searching for a single character).

General - User interface   Bug Fixes

Clicking quickly on well symbol selector is more robust   25834

The well symbol selection list is now more robust and less likely to crash when clicked on quickly in succession.

Lists with large number of selected items are no longer slow to load   17898

In previous versions, some panels that contain lists allowing multiple selection could be extremely slow to display with a large number of entries in the list box (for example Display/Polygons).

Numeric fields no longer allow unprintable characters to be entered   25600

In previous versions, control characters could sometimes be entered inadvertently (particular when using the numpad).

Graphics/Plotting and Hardcopy   Enhancements

/View/Plot and /View/Print merged into one option and moved to /File/Print
27137

The functionality provided by the /View/Plot and /View/Print dialogs has been moved to /File/Print and combined into a single interface.

Raster plotter list available in File/Print has been simplified
29256

The list of available raster outputs in the File/Print option has been simplified by removing obsolete options and moving the most commonly used options to the top of the list. Help topics related to hardcopy, PDF generation and raster output have also been upgraded.

Graphics/Plotting and Hardcopy   Bug Fixes

Graphics operations no longer raise mt:11 "Error in matrix code - matrix3:: inverse:singular matrix" error
17132

Various graphics operations can give a "mt:11 inverse error". These mostly come from coordinates that end up way off the map or the size is zero due to bad input data or some other out of range coordinate info. As this error is benign it has been silenced.

Import and Export   Enhancements

Fault file surface import no longer requires an SDF to specify fault surface names
10120

A new fault surface selector has been implemented which allows import of fault surfaces to Petrosys fault files without needing to refer to an SDF for its horizon names. The new selector allows users to select an existing surface from a fault file, to enter new surface names as free text or to read them from other fault files or SDF horizons.

This selector has been implemented in the following options:

➢ Spatial data translator

➢ CFP editor

➢ Surface Modeling/Grid/Dump Fault FileSurface Modeling/File/Import/Charisma/FaultsSurface Modeling/File/Import/Oil Field Manager/FaultsSurface Modeling/File/Import/GoCad/TSurfSurface Modeling/File/Import/Landmark/Zmap/FaultsSurface Modeling/File/Import/Landmark/ASCII FaultsSurface Modeling/File/Import/GeoFrame/FaultsSurface Modeling/File/Import/GeoFrame/CPS3/FaultsSurface Modeling/File/Import/Sattleger/FaultsSurface Modeling/File/Import/Petrel/Faults & PolygonsMain Menu/Import/SMT/Import Fault PolygonsMain Menu/Import/Landmark/SeisWorks Direct LinkMain Menu/Import/GeoFrame/IESX direct linkMain Menu/ Import/MFD

Import and Export   Bug Fixes

/File/Import/GoCad/TSurf File now works when only importing the triangles and vertices
29635

/File/Import/GoCad/TSurf now works if only triangles and vertices are imported within Surface Modeling. Prior to this change, if users did not select to import the faults, the import would fail.

/File/Import/Zmap/Faults occasionally used to crash
28854

/File/Import/Zmap/Faults... would crash if a fault had more than 10000 points in it. This has been fixed. For faults with more than 10000 points, the fault is split into two separate faults.

Display layers remain pickable after exporting spatial data
22969

In previous versions, exporting vector data from a Mapping display layer using the RMB / Export Spatial data would result in the layer being unable to be picked on the map until the map was redrawn.

File/Import/Fixed format - Selecting columns by highlighting data can give wrong result under windows
23436

File/Import/Fixed format could sometimes give the wrong start and end columns when selecting data in the preview list on Windows. This now works correctly on all platforms.

Display/Data allows modification of Petrosys culture display parameters
23378

In previous versions the display layer dialog would not be shown when Petrosys culture files were added to a map via Display/Data or drag-and-drop.

Display/Polygon selection list can be sorted, searched and filtered
27307

The polygon selection list in the Display/Polygon dialog is now able to be sorted alphanumerically by polygon name (the default ordering is the order the polygons appear within a ply file). In addition, the polygon selection list also has standard searching and filtering capability.

Enhanced mapping display list, including hierarchical layer grouping
14869

The Mapping layer display list has been given a major overhaul in terms of appearance and functionality.

In previous versions, the display list was shown in a separate pop-up window. This mode of operation is still available in version 17.0, but the display list can now also be docked in the main mapping window (the default location when version 17.0 is first started). The display list specific menu and icons in previous versions have been integrated into the main mapping window. This allows some useful functionality (such as undo/redo and update layer caches) to be directly invoked.

The major piece of functionality that has been added is the ability to group layers in a hierarchy. Groups can be created using the Layers/Create Group menu (and corresponding icon on the Layers toolbar) or the "Create Group" option in the display list right mouse button context menu. New groups are created as empty groups at the top of the hierarchy and once created can be populated by drag-and-drop of layers or other groups (drag-and-drop is also supported to reorder standard display layers). Any desired grouping methodology can be used - whatever makes sense for the particular data being displayed and map being created.

The information shown for a particular display layer has been improved. The default layer description includes the layer type, file name / database connection and display method being used, which makes it easier to identify layers at a glance. The visibility of layers is controlled using the checkbox associated with each layer. Showing or hiding a group affects the visibility of all children of the group, which is a handy method for controlling content when constructing maps, and making variations of a particular map. Descriptions for layers can be edited directly in the display list (using RMB option or F2 shortcut).

The expanded view for a display layer includes the same information as the default description, as well as some layer specific information such as gradient being used, or the selected horizons (e.g. for 2D Seismic display). Layer pickability is now controlled by a checkbox that is available in the expanded layer view (or alternatively using display list right mouse button context menu options).

The display list has several ways to show display layers (controlled using the drop-down at the top of the window), which provide alternative methods to find or show/hide particular layers or understand the contents of a particular dbm file.

Improved drawing performance of plan view data in Sampled Data Editor
28788

The Sampled Data Editor (GIP Editor) now displays large data set much quicker. In-house testing at Petrosys has shown a 10-50 times improvements.

Improved selection of mapping layer when display a colour bar
17142

The Display/Scale And Legends/Colourbar option requires selection of a mapping layer with a gradient that colour bar will represent. Selection of the mapping layer has been made easier by showing more information about the possible map layers in the selection dialog.

Mapping display layer dialogs are more consistent
21429

In previous versions (starting from version 16.0) changes have been made to the various layer types available in Mapping to make their behaviour both more interactive and more consistent. Version 17.0 completes these changes by addressing the remaining layer types. In general all layers are pickable, double-clicking a layer on a map opens the display dialog for that layer, all layers have apply buttons that work in a consistent manner and right mouse button context menus have been enhanced where applicable.

Some specific changes of interest:

➢ The picking for Display/Culture layers has been standardised. In previous versions, a pop-up menu was not available when culture data was picked on a map
➢ Undo/Redo has been added for changes to interactive items (e.g. repositioning and resizing of moveable layers)
➢ CFP Editor can be invoked from the right mouse button context menu for Display/Polygons

Mapping layer cut-and-paste works between different instances of Mapping
22015

Mapping display layers are now copied using the system clipboard (on both Windows and Linux) and can be pasted into other Mapping windows.

Significant improvements to color gradients
22140

The use of colour gradients within Petrosys has been enhanced in version 17.0 in a number of ways, in terms of editing, selection and application.

A "fixed" gradient type has been added, which uses embedded minimum and maximum values, rather than adjusting to the dynamic range of displayed data. The advantage of a fixed range is to show the same colour for the same Z-value irrespective of the data used. An example where this would be useful is showing changes in a pressure grid over time. When a gradient is actually used, the type can be overridden to be a "custom" fixed gradient, which allows a fixed minimum and maximum to be directly specified. All gradients created in previous versions are dynamic, as this reflects how all gradients behaved in previous versions. Gradients set to "fixed" in version 17 will behave as dynamic gradients if used in version 16.

The gradient editor has had a major interface overhaul to improve functionality and make editing gradients easier. The Mapping Edit/Gradient option now invokes a standalone editor which can be left open but is not linked to any layer. The display list right mouse button context menu option "Select gradient" can be used to select and edit the gradient for a particular layer.

A major change has been made to allow editing of colours once points have been created. This means that the methodology for creating points has changed from previous versions: instead of first selecting a colour and then creating a point, a point is first created and then the colour set for that point. In addition, a point is always selected in the editor - the current point is shown with highlighted text. The value for control points is now shown as a percentage which reflects the gradient file structure (ranges and spikes are still shown as absolute values). Undo/redo has been improved to allow each individual change to the gradient to be reversed (or redone).

There are a number of ways to create points:

➢ The create new point dialog (which can be invoked via icon, menu, and right mouse button context menu options) allows manual specification of Z-value and colour. This is the only means to create spike or range points
➢ The "Create Point At Current Position" right mouse button context menu option, which creates a new point at the location of the mouse cursor
➢ The "Insert Before Selected" and "Insert After Selected" right mouse button context menu option, which create a new points either before or after the selected point.
➢ Selecting either the first or last knee points in the gradient editor and dragging will create a new point
➢ Drag-and-drop from the colour rectangle

Colour editing is performed with sliders which give a preview of how the overall colour will be changed when individual RGB or HSB components are modified. An eyedropper tool has been added that allows the colour for a control point to be sampled from anywhere on the screen (click, drag and release to use this tool).

Gradient selection has also been improved - both the selection button and selector include a preview of the currently selected gradient. The selector list includes options to edit, rename and delete gradients which means gradient editing can be invoked from any selector.

Zoom to data displayed in Mapping

The Mapping display list includes a RMB option "Zoom To Layer" that sets the current zoom level to the extent of the selected layer (assuming the layer has been drawn at least once). This can be useful when trying to locate where a data or annotation layer is located that is not immediately visible.

Zooming and panning interactive improvements

26624

Mapping now supports zooming and panning using the mouse. While zooming and panning, a low resolution preview of the map will be displayed (although in some rare circumstances this is not available) allowing the current view to be more easily positioned.

The mouse wheel controls the current zoom level. This can be customised in several ways (see CONFIG/Appearance/Settings):

> ➤ Whether rotating mouse wheel upwards zooms in (the default) or out
> ➤ The percentage to change the current view by when zooming in or out
> ➤ Whether zoom should be centered on the current mouse position or the center of the screen

Panning can be invoked (when zoomed in) by dragging with the middle mouse button held or holding the Shift key and dragging with the left mouse button held.

Mapping   Bug Fixes

/Display/Text is drawn correctly after being interactively placed when automatic redraw disabled

26972

In previous versions text displayed using Display/Drawing Tools/Text would be erased after being interactively placed if automatic redraw has been disabled

Actions to move layers within the display list are behave consistently for both methods of list ordering

28625

The mapping display list allows layers to be ordered with the first-drawn layer at the top of the list or the last-drawn at the top of the list. Options and buttons that move layers within the list now behave consistently with their appearance and text, regardless of the list ordering used.

Changing map sheet will mark the current dbm as requiring a save

26361

When dbm files are saved, the corresponding map sheet used to display the dbm is also saved. If the current map sheet is changed and the current dbm closed in some way (File/New, File/Open, quitting mapping) a prompt will be displayed asking whether the dbm should be saved prior to closing.

Display/Fault handles faults with no coordinates correctly

27542

In previous versions, the Display/Fault would crash in most circumstances if used to display a fault that does not have any points.

Display/Faults draws pattern fill with transparent background as expected

26675

In previous versions when Display/Fault was set-up to draw using a pattern fill with a transparent background, the background was drawn as black instead of transparent.

Encrypt password option supports encryption of passwords containing non-alphanumeric characters

28238

The encryption method used in the Mapping/File/Maintain/Encrypt Password option has been improved to handle passwords with non alpha-numeric characters more robustly. In previous versions, passwords with underscores and other characters could cause the encryption to fail, resulting in decryption not yielding the original password in clear text correctly.

Mapping layer modify panels are disabled while the map is being redrawn

25660

If a map is in the process of being drawn, modifying a layer can cause the program to crash. Mapping layer panels are now made inactive while a redraw is occurring to prevent inadvertent modification.

Modifying layers while loading a new dbm file is not permitted

26434

In previous versions it was possible to modify existing display layers while a new dbm was being loaded. This would usually lead to the software crashing so is now no longer possible.

Quitting mapping with display layer dialogs no longer causes intermittent crashes

26432

In previous versions, quitting mapping while dialogs where open could cause the software to crash under some circumstances.

Undo/Redo of a display layer while the dialog is open works as expected

19707

In previous versions, attempting to undo or redo changes to a layer while the modify dialog for that layer was open would likely cause a crash when the modify layer was closed.

Unwanted text substitution on Windows file names in title blocks resolved

The ability to use the backslash character followed by a certain set of defined characters to create non-ASCII characters in text fields has been removed. It has been removed as it is the cause of lots of accidental character substitutions when Windows path names are placed in text elements on the map.

Mapping/2D Seismic   Enhancements

SDF horizon selector supports stratigraphic sorting

In versions prior to 16.8, the SDF horizon selector (in Display/2D Seismic) showed horizons in stratigraphic order. In version 16.8, the sorting was changed to alphabetical. A new column, "Stratigraphic order", has now been added to the seismic horizon selector list, to allow the pre 16.8 sorting to be used if desired.

Shotpoint symbols are drawn using the line thickness for 2D seismic lines drawn as tracklines

The circle symbols used for the trackline style are now drawn using the same thickness as the line. This gives a more uniform look to the seismic line.

Mapping/Bubble Maps   Bug Fixes

Alternative posting name supported for WDF bubble maps

Display/Bubble Map now posts the Alternative Posting Name correctly when WDF is used as a data source, whereas in previous versions a blank string would be displayed.

Bubble Map ASCII file handles single space delimiter correctly

In previous versions, the Preview button in Display/Bubble Map did not work when Data source was set to "Ascii file" and Column delimiter was set to "Single Space".

Mapping/Contours   Enhancements

Contour values shown for picked contour lines include decimal places
26673

Display/Contours allows the number of decimal places to be used when annotating contours to be set. Picking displayed contours on a map reports the contour value, but in previous versions, would never show any decimal places, even when values with decimal places were being shown.

Mapping/Coordinate Reference Systems Enhancements

Point conversion tool allows conversion between arbitrary CRSs
10232

In version 17.0, the point conversion tool has been changed to allow the user to choose the coordinate type (Projected or Geographic) and a CRS for both the input and output coordinate points.

Mapping/Editors   Enhancements

Display/Polygon includes option to start the CFP editor
18608

The CFP editor can be invoked on a polygon file being displayed via Display/Polygon by picking a displayed polygon on the map and invoking the right mouse button context menu option "Edit polygons ...".

Mapping/Images   Bug Fixes

Display/Picture no longer incorrectly loses path name
19348

Display/Picture/CGM always shows CGM file type and file name correctly when the layer is loaded from a dbm file. In previous versions, the CGM file could be shown as a script under some circumstances.

Transparent PNG raster images supported
20042

32 bit alpha-channel PNG files are now shown correctly (including transparency) via Display/Picture/Raster.

Mapping/Map Sheets   Enhancements

CGM title block supports map sheet title as a text keyword
27778

You can now use the key <<MAP.TITLE>> in CGM title blocks to display the title of the current map sheet.

Map sheet selector includes map sheet CRS information
18226

The /MapSheet/Open option now allows Projected CRS, Geographic CRS, Spheroid, Projection Type, Reference Latitude, Central Meridian and Units columns to be optionally displayed. These columns will only be populated for map sheets that have been upgraded to version 16. The Datum, Projection and Zone columns have been removed, as these were based on pre-CRS information.

Support for copying of map sheets to/from arbitrary map sheet def files
30045

Previously, the Mapping/MapSheet/Merge option could be used to import map sheets into the current map sheet def file. This option has been renamed Import|Export and enhanced to allow copying of map sheets from one map sheet def file to a different def file.

Mapping/Map Sheets   Bug Fixes

MapSheet/Open - Info always shows correct east north coordinates
18993

The Info button in the MapSheet/Open dialog could show garbled EN coordinates on occasion.

Mapping/Other   Bug Fixes

Removed incorrect error in Display/Text option when displaying text from a file
19362

The /Display/Text option now will not give an error about a blank file name the first time you select the checkbox to display the text from a file.

Mapping/Spatial   Bug Fixes

Display/Culture/Tobin layer can only be created with a valid file selected
27908

In previous versions Tobin culture could be displayed with no file or an invalid file selected.

Display/GIS attribute querying no longer requires a manual redraw
24083

In previous versions, when spatial data was displayed and the RMB Query Attribute menu invoked to interactively query drawn shapes, a manual redraw would be required (for certain data) prior to querying working.

Display/GIS thematic mapping scan returns all values within map sheet
24993

In previous versions, thematic scan did not correctly account for differences in CRS between the GIS data and map sheet, which could result in some or all values not being included.

Mapping/Surfaces   Enhancements

Colour fill grid display - add an offset for contour increment values
28838

The grid colorfill display option has been enhanced to allow users to specify an increment offset to use in addition to specifying the contour level increment when changing colours in the color gradient display. This offset means that users can make the grid display change color bands at values that are different to multiples of the contour increment.

Mapping/Surfaces   Bug Fixes

Paradigm Mapping and 3D Viewer 3D surface Data type is set correctly when horizon changes
27788

Data type is set correctly for Paradigm 3D surfaces in Mapping and 3D Viewer when horizon changes. In previous versions the data type of the horizon was not updated when changing horizons.

Mapping/Wells   Bug Fixes

Well symbol selector button shows correct background colour
29036

The well symbol selector button now makes sure that it draws the well symbol in a visible color.

Surface Modeling Enhancements

/Grid/Load fault file supports third-party faults
27589

Third-party faults can now be used as input to /Grid/Load fault file.

Add PGC looping over list of text strings
27030

Looping over list of arbitrary text strings has been added.

Interactive scripting has been enabled for fault surfaces and groups, polygon names and seismic horizon selection
26459

It is now possible to interactively script horizons from any seismic data source, fault group names and polygon names. Each of these interactive fields will appear as a button and when pressed will raise the appropriate list selection dialog.

A multi-selection list is used for fault group names and polygon names.

The appropriate seismic data source specific list selection dialog is used for horizon selection.

Interactively scripted CRS fields use the CRS selector
27770

When interactively scripting a CRS field you now see the normal CRS selector button. Pressing this button activates the usual CRS selection dialog.

New textSubstring() function added to scripting
28172

New textSubstring() function has been added to the scripting engine.

Scripting now has multi-select lists for polygon and fault group name selection
24068

When interactively scripting polygons names or Petrosys fault group names, a button is added to the scripting input dialog. This button then activates a multi-selection dialog from which the desired polygon names or fault group names may be selected.

Seismic horizons using third-party connections now script enabled
24697

Interactively scripting third-party data source horizon fields now places a button on the scripting input dialog. This button then activates the appropriate horizon selection dialog for the data source being used.

Surface Modeling Bug Fixes

/Fault/Extract Z Values From Seismic - scripted parameter names are consistently named
28089

Two of the scripted parameters had misleading names for fault data. "PolygonSurface" is now "FaultSurfaceName" and "PolygonList" is now "FaultGroupNames".

/File/Import/ESRI/ArcSDE Grid now shows a warning when the coordinates are lat/lon
21948

A warning is displayed if trying to import an ArcSDE grid which has lat/lon coordinates.

/File/Import/GeoFrame Grid and 3D Surface only allows selection of valid grids and surfaces
27599

GeoFrame 3D Surfaces correctly validated as surfaces only (previously validated as grids as well).

NB: Clients need to make sure they are running the same version of dispatch server and Petrosys.

/Grid/Back interpolate to WDF generates correct values when grid and WDF depth units do not match
19699

Back interpolation calculations now correctly take account for when the depth units of the WDF and the grid differ. The generated intersection points are consistent.

/Grid/Create Grid - error reporting for invalid data sources has been improved
26314

Grid/Create Grid prompts the user to ask whether to continue gridding if the current data source does not contain any gridding data and there is another data source available to use. Prior to this change, this prompt was presented to users even if there was no other data source to grid. Now, the task will fail automatically without prompting if only one data source is present and this data source does not have any data to grid.

/Grid/Create/Grid - improved clipping polygon error message
28913

A warning is now displayed when selected clipping polygon names stored in a task file do not match those of the polygon file itself. This is treated as a task error and the workflow is aborted. This can occur if the polygon file is updated after a task workflow with clipping has been created.

/Grid/Processes/Mean Inside Polygon now runs when XML report file is blank

24447

The creation of grid mean value attributes for polygons now occurs whether or not the optional output XML report file is specified.

/Grid/Statistics/Inside Polygon produces no ASCII statistics when XML output file is blank

27217

Grid/Statistics/Inside Polygon produces ASCII statistics without the need to select XML statistics file

/Grid/WellTie no longer warned about non-existent polygon file when not using polygon method

27123

A spurious non-existent polygon file warning used to be displayed even when the WellTie method was not a polygon type.

/Workflow/Task parameters - SDF and SDF horizon selectors can now be run interactively

24014

SDF selection and associated horizon selections now work when set interactive under the "Workflow/TaskParameters" options.

The following options have been upgraded:

➢ Grid/Backinterp/To Seismic
➢ Contour/Backinterpolate To Seismic
➢ Fault/Extract Z values From Seismic

Gridding IESX prompts for connection when required

26732

Now prompt for an IESX connection when there is no current connection and the interpretation model, horizon or survey button is pressed. Once connected, no further prompts occur for the session.

Improved error handling for Petrosys fault data

23168

Error events related to fault files are now caught and an appropriate warning dialog is displayed. Previously, the software could crash when Petrosys faults files had an extension other than fal.

Scripting faults- Fault surface list is not populated when scripted

28032

Fault file surfaces can now be interactively scripted. A combo-box which lists all possible surfaces is displayed.

Scripting of WDF attributes now functional

27058

Can now interactively script a WDF attribute field. Previously, it would get mixed up with a zone name.

Surface Modeling/Contouring Enhancements

Minor performance improvement when adding a new contour during contouring
27160

A minor performance improvement has been made when creating contouring files. Testing has revealed a performance improvement of around 20% depending upon data sets.

Surface Modeling/Contouring Bug Fixes

Contour compress option used to crash when the input contour file had more than 10,000 points
28175

Contours with more than 10000 points can now be compressed. Previously, there was a hard-coded limit in the code and compressing contours with more coordinates would cause Petrosys to crash.

Surface Modeling/Grid Operations Enhancements

/Grid/Processes/Arithmetic now supports third-party faults
26297

Third-party faults can be used as input to /Grid/Processes/Arithmetic.

Surface Modeling/Grid Operations Bug Fixes

/Grid/Convert/ConvertCoords was clipping polygons incorrectly
28474

Two problems were fixed in the Surface Modeling - /Grid/Convert/ConvertCoordinates option:

1. Valid nodes near the clipping polygon were incorrectly clipped.
2. Grids containing multiple clipping polygons had all nodes clipped.

Surface Modeling/Gridding   Enhancements

Grid/Create - visual display - now uses a "cross" icon to close window rather than a "trash-can".   26971

The icon for closing the visual display window in gridding has been changed from a "trash-can" to a "cross".

Improvements when working with a large number of input sample points (more than 2 billion or 2^31)   28902

Several problems when importing and creating grids with a large number of input points have been fixed.

Surface Modeling/Gridding   Bug Fixes

/Grid/Back Interpolate to WDF produces correct results when grid CRS has non-metre units   27007

A correct result when back interpolating to a WDF and the input grid's CRS has a unit other than metres is now computed. Previously non-metre CRSs caused incorrect calculations in back interpolation.

/Grid/Create/Grid - Culture data source - formula entry now retains focus on each keystroke   26999

Under Grid/Create/Culture data source, when typing in a formula, the formula field used to be made inactive after each keystroke. You needed to click on the formula field to make it active again. This has now been fixed.

Faults are now treated as opaque barriers for all passes when gridding   26480

The gridding algorithm used to ignore faults on the first pass of its multi-grid algorithm, which meant that data could be "seen" in faulted regions with no input data. This has now been fixed. Note that faults can still be ignored in early passes of the multi-grid algorithm by setting the "No. of passes to use faults" field as required.

Surface Modeling/Kriging   Bug Fixes

Get misleading error when the KED external grid not specified   28626

When using the External Drift kriging method, an error is now reported if the required trend grid has not been specified. Previously a misleading error about a CRS mismatch was reported.

Surface Modeling/Volumetrics   Enhancements

Contour-based volumetrics is no longer supported

18680

As of Petrosys version 17.0, support for Contour-based volumetrics has been dropped. The recommended method for volumetrics calculations in Petrosys is via the Surface Modeling/Volumetrics/Grid-based-slices method. Contour-based volumetrics tasks stored in existing task files will be ignored when reading the task file. This may cause these task files to run incorrectly.

Volumetrics upgrade - grid horizontal grid units are now set by the input grid and US-Feet support has been added

17750

Volumetrics functionality has been upgraded so that:

➢ Volumetrics grid horizontal units are now constrained to match the input Grid CRS units
➢ CRS conversion is enabled for all polygon usage in volumetrics
➢ US-feet has been added as a valid grid horizontal unit

Surface Modeling/Volumetrics   Bug Fixes

Slice volumetrics Top&Base now displays grid statistics

25153

In previous versions the grid statistics information field was not populated correctly on Linux. The missing information had no affect on the output of the volumetrics operation.

Well data   Bug Fixes

WDF editor - spreadsheet data sometimes disappeared

18290

In the WDF editor (Mapping/Wells), sometimes when you selected a zone spreadsheet to display from the Well selection/Zone data folder, the spreadsheet list to the right would become empty, even though there was data available.