Release Notes

(Version 2014.1)

Midland Valley Exploration Ltd
144 West George Street
Glasgow G2 2HG
United Kingdom

Tel: +44 (0) 141 3322681
Fax: +44 (0) 141 3326792
www.mve.com
# Table of Contents

1. **Move2014 Release Overview** .............................................................. 2  
   - Release Statement ................................................................................ 2  
   - Single Move Environment ..................................................................... 4  
   - Software Components delivered in Move2014 ...................................... 4  
   - System Requirements Changes and Notifications ................................. 5  
   - Software and Supporting Documentation ............................................. 5  
   - Software Downloads ............................................................................ 6  
   - FLEXnet License Manager™ – FlexNet 11.11 ......................................... 6  

2. **Move2014 New Functionality** ............................................................. 7  
   - General .................................................................................................. 7  
   - The Move Application ........................................................................... 8  
   - 2D Kinematic Modelling Module ......................................................... 14  
   - 3D Kinematic Modelling Module .......................................................... 16  
   - Stress Analysis Module ....................................................................... 17  
   - Strain Analysis Tool ............................................................................ 17  
   - Move Link for Petrel ............................................................................ 18  
   - Move Link for OpenWorks .................................................................. 19  

3. **Issues Fixed for Move2014** ................................................................. 20  

4. **Known Issues and Compatibility** ....................................................... 30  
   - Known Issues ....................................................................................... 30  
   - Compatibility ....................................................................................... 30  

5. **Contacting Midland Valley** ............................................................... 31
1. Move2014 Release Overview

Release Statement

The 2014 release of Move, structural modelling and analysis software, includes substantial new features and improved and new functionality. This release accomplishes the goal of delivering our structural toolset from within a single environment and application called Move - the Geologist's Toolkit.

![Move Logo]

We have focused on enhancing the entire toolset by adding new tools and functionality, improving existing tools, and improving the overall usability. Move2014 provides 2D/3D model building, analysis, surface creation and modification tools that were previously only available in 2DMove and 3DMove releases.

One of the highlights of the Move2014 release is the introduction of a brand new advanced Module/Workflow called "Stress Analysis". The tool presents a quick and easy to use graphical method for analysing fault and fracture systems under a user defined 3D stress state. It computes stress attributes for Slip Tendency, Dilation Tendency, Slp and Dilation Tendency, Fracture Stability and Slip Stability of planes and allows visualization and evaluation of critically stressed planes in a 3D View. It helps when identifying which planes are more likely to fail under specified parameters. It gives input to geological models/scenarios for risk analysis and reduces uncertainties (e.g., for leakage, earthquakes, and in managing complicated reservoirs, planning mining, CO2 storage, waste disposal and other engineering applications).

We have added a new Depth to Detachment method in the Fault Construct Tool, and a simple 2D Section Analysis Tool for line length restoration scenarios. The option to calculate Depth to Detachment uses excess area or lost area.

In order to improve section construction and interpretations the Tidy and Auto-Polygon tools have been enhanced substantially, with a new feature to identify and remove invalid line segments or incomplete intersections that are hard to spot at normal zoom levels.

Another new feature of Move2014 is the ability to load and visualise 3D Seismic Volumes (SEG-Y). You can clip and explore the 3D Volume via in-scene manipulation, as well as build 2D Sections from the 3D data cube.

Again and specifically in Move2014 you can now handle large imagery and large DEM data by utilising the new “Terrain Layer” functionality without the need to down sample. Terrain Layers adapt their visualised level of detail in the 3D View automatically, depending on how near or how far you zoom in or out.

We introduced substantial new log curve functionality and support in Move 2013, and now in Move2014 log curves can now be viewed in 3D, inserted separately from well tracks, and you can link as many logs to each well as needed.

In Move2014 many more 3D surface construction analysis tools have been migrated to Move including the Area Misfit Tool (Jigsaw Map Fitting), plus the Alpha Shapes model building
functionality. The Dip Domain Horizon Construction Tool (Ribbon Tool) has also migrated to Move with substantial enhancements and usability improvements.

We have improved and migrated the 2D Dip Domain Horizon Construction Tool (Kink Band) to complement the existing powerful Isogon Construction method in this tool. The Snap and Allan Mapping Tools have seen improvements also.

Move2014 new functionality includes a new ".move" and ".movd" Midland Valley file format, designed for faster I/O of projects by a factor of five, as well as an ability to scale to a very large project size. Saving minor changes is also much quicker!

Several existing tools, especially in model building and editing, have been improved so that they are more integrated and easier to use. Complex workflows will require fewer mouse clicks and model building will be less time consuming.

On the UX (user experience) and the UI (user interface) backend we have invested some time in simplifying the Model Browser, Set Browser, and Section Browser into one integrated Model Browser. Another UI change is the introduction of a new basic modify/transform tool for powerful in-scene transforms.

The legacy 2DMove and 3DMove stand-alone applications have been discontinued for this release and are available on request only.

**Main Release Highlights**

- Stress Analysis additional Module/Workflow
- Support of 3D Seismic Cube Volume visualisation
- Auto-Polygon and Tidy Tool improvements
- Large DEM and Overlay support via New Terrain Layers
- Modify Tool and Advanced Transform improvements
- Dip Domain Horizon Construction Tool – 2D (Kink Band method)
- Dip Domain Horizon Construction Tool – 3D (Ribbon method)
- Area Misfit - Map Fitting, Jigsaw Restoration, Block Fitting Tool – 3D
- Alpha Shapes Tool – 2D and 3D
- Introducing a new Move File Format (.move, .movd)
- Depth to Detachment method in Fault Construction Tool
- Model Analysis Tool – Line length restoration
- Model Browser / Set Browser / Section Browser now combined
- Snap Tool improvements including Seismic on Fault QA
- Well Log rendering in 3D View
- Move Link for Petrel - Supports Geocellular
- Launcher, Licensing, and Modules panel changes for Move2014
- Performance improvements for Snap, Allan Mapper, Intersect, Split and Extend tools

Please see Page 9 for a more detailed list of all the new and improved 2014 functionality.
Single Move Environment

Midland Valley remains focused on developing kinematic software tools and pushing the frontiers in structural geology. We are committed to delivering the best specialist service and software solutions in structural geology to all industry sectors and to develop new workflows to impact commercial problems.

To continue to deliver new workflows and algorithm improvements, as well as provide complete consistency across the entire toolkit, we have re-engineered our legacy 2DMove and 3DMove software products into a single environment and application called Move - the Geologist’s Toolkit.

As of this version (2014.1), the Move environment now allows you to complete your 2D and 3D modelling workflows, from data loading, to model conditioning, to kinematic restoration and forward modelling, to analysis in a combined and unique 2D/3D working environment.

MoveViewer will continue to be freely available as a download from the Midland Valley website (www.mve.com/software/moveviewer). FieldMove provides a complete digital toolset for collecting data all tectonic environments (www.mve.com/software/fieldmove).

The Midland Valley Launcher and the Data Link are now discontinued, with functionality now available within a single Move environment, and without the need now to utilise multiple applications.

Software Components delivered in Move2014

- Move (the application), Modelling Modules and third party software Links:
  - 2D Kinematic Modelling
  - 3D Kinematic Modelling
  - Geomechanical Modelling
  - Fracture Modelling
  - Stress Analysis
  - Sediment Modelling
  - Move Link for Petrel
  - Move Link for OpenWorks

- Move2014 Tutorials
- Help Pages
- FieldMove (stand-alone application)
- MoveViewer (stand-alone application)
- Midland Valley License Manager (FLEXnet 11.111) software
System Requirements Changes and Notifications

Platforms that are no longer supported:
- 32-bit versions of Microsoft Windows XP, Windows Vista, and Windows 7

Last year we sent a notification that we would not be issuing Move2014 or FieldMove2014 on the 32-bit Windows platform. In line with other vendors this means that Move2014 is a 64-bit only release on Windows, Linux and OS X.

If this decision will adversely affect your current software deployment strategy for Move2014 then please notify us immediately.

Please note also that Windows XP in line with Microsoft will no longer be supported as a maintained platform as of April 8th 2014.

Please note the following projected change for Move 2015:
- Mac version will require Mac OS 10.8.5 or later
- No other anticipated major changes

Software and Supporting Documentation

- Move installer
- MoveViewer installer
- FieldMove installer
- Midland Valley Licence Manager (FLEXnet 11.11) software
- Move Link for Petrel installer

Move2014 Software Installers

Move2014.1.0/Windows64  Installers for Windows (64-bit)
Move2014.1.0/Linux64   Archive for Linux (64-bit)
Move2014.1.0/Mac64     Installers for Mac (64-bit)

FieldMove2014 Software Installers

Move2014.1.0/Windows64  Installers for Windows (64-bit)
Move2014.1.0/Mac64     Installers for Mac (64-bit)

MoveViewer2014 Software Installers

Move2014.1.0/Windows64  Installers for Windows (64-bit)
Move2014.1.0/Linux64   Archive for Linux (64-bit)
Move2014.1.0/Mac64     Installers for Mac (64-bit)
License Manager Software

LicenseManager/FLEXnet11.11/Windows64  Licence Manager for Windows (64-bit)
LicenseManager/FLEXnet11.11/Linux64  Licence Manager for Linux (64-bit)
LicenseManager/FLEXnet11.11/Mac64  Licence Manager for Mac (64-bit)
LicenseManager/FLEXnet11.11/docs  License Manager Documentation

Move2014.1 Documentation

The following documents are provided with Move2014 and also can be found in the Client section of our website (www.mve.com/clients).
- Move2014 Release Notes (this document)
- Move2014 Installation Guide
- Move2014 Licensing Guide
- Move2014 Tutorials
- MoveViewer2014 Installation Guide
- FieldMove2014 Installation Guide

Software Downloads

Move, FieldMove and MoveViewer 2014.x (on-going maintenance updates) will be available to download from the ‘Client’ section (www.mve.com/clients). Clients can register for access to this area however certain files and documents are restricted to maintained clients and academic institutions that have purchased a support package.

FLEXnet License Manager™ – FlexNet 11.11

With the Move2014 release we have incremented our license key versions to “2014.1”.

Move2014 software cannot be run or licensed with the previous Midland Valley license files. Previous Move versions (Move2008 – Move2013) of the software however can be run and licensed with an upgraded license file.

Midland Valley is using version 11.11 of the FLEXnet License Manager™ for all Move components. This is the same License Manager version shipped with Move2013.

If you have upgraded to Move2014 please contact support@mve.com as an updated licence file is required.
2. Move2014 New Functionality

General

File Format

- Update to .move (plus .movd) as the default Move format
  The .move file is a small index file into the bulk data project .movd folder
- Move2014 will load previous Move 2008-2013 .mve versions
- Move2014 will save .move by default
- Move2014 allows save as .mve for compatibility with previous versions
  Note any reference to the new support of 3D Seismic Volumes in your project/tree will be lost, as well as any project/tree reference to the new Terrain Layers

License Manager

- Updated to FLEXNet 11.11
- New license feature to support the Stress Analysis module

Additional functionality released in Move2014.1.1

- Default (Left Mouse Button) behaviour for translations has been changed to 'Translate in Plane' from 'Translate along Plane Normal'
- Alternative (Middle Mouse Button) behaviour has now been set to 'Translate along Plane Normal'
- Full 3D Interactive mode can be used for quick transformations within a model. The model will be transformed after each user interaction using the transform manipulator allowing quick translate, scale and rotation commands to be applied to the current model
- Transform > Rotate 3 Axis will now allow the user to rotate objects using the manipulators and the UI controls
- Lock translation axis using the Shift Key when translating using Move and Transform Tool or Middle Mouse Button
- ASCII Export: support added for exporting horizon, fault and section names, ID numbers, colours and PType (for fault exports)
- 3DStress Import and Export
- Automatically detect whether Move is being run in a remote desktop session, and use software OpenGL library (remote render) accordingly
- Snap Tool now provides Displacement statistics
- Geosec Export
The Move Application

The Move application allows the creation, analysis, and storage of concepts and ideas using a flexible, linked 2D and 3D modelling environment.

Model Building Panel

Create Auto Polygons

- Improved with tidiness check functionality (Tidy Tool)

Create Surface

- Create new Planar Surface/Grid: Ability to create a single best fit surface from several orientations
- Line Extrusion:
  - The Extrusion and Length tab now has two Extrusion controls. Extrusion (+) is the extrusion in the Plunge/Plunge Azimuth direction. Extrusion (-) is in the opposite direction to this. By default, Extrusion (-) is set to 0, and so the extrusion is in one direction
  - The Projection curve points are editable as follows:
    - The point where the displacement along the curve is at 0 will not be movable. This ensures that the surface created honours the source line
    - The points at maximum extrusion and maximum negative extrusion (if not 0) are not moveable in the positive direction. This ensures that the maximum extrusion honours that set in the Extrusion (+) and Extrusion (-) controls
  - The projection curve now has a grid that honours the unit system i.e. the grid should be in steps of 100/1000/etc.

Shape Tool (3D)

- Alpha Shapes and Convex Hull creation

Image Tool

- The interface has been cleaned up
- New “Map Snapshot” method has been added:
  - Snapshots Map Views and Google Map Views and stores the information in horizontal images

Well Marker Tool

- This tool has been moved, in order to group all well related tools. This tool was previously located in the create/modify points tool
Well Log Tool
- This tool has been moved, in order to group all well related tools. This tool was previously located in the Data & Analysis panel

Edit Tool (2D)
- Better multi line edit functionality

Advanced Transform Tool
- Translate and Scale using 2 Points
- Scale Using Line / 2 Points
- Move and Scale Section in Map View
- Rotate Horizontal
- Rotate Vertical

New Basic Transform Tool
- New tool for completing basic transformations like move, scale, rotate
- Ability to rotate around a user defined center

Snap Tool
- Exaggerate the separation between target lines along the transport direction using Displacement Profiles in the Snap Tool
- Visualize displacement with surfaces and lines which already lie on the fault surface - without having to snap first – using the Snap Tool
- Snap Tool now shows Displacement statistics (min, max, mean displacement) along-with Vertical & Horizontal displacement
- Snap Tool now clips the source surface where it cuts through the target surface and, by default, restricts the target line to be the width of the source surface edge

Split Tool (3D)
- Speed of splitting a surface with another surface has been improved

Tidy Tool (2D)
- New advanced tidy option:
  - Check short lines
  - Check Fault, that should be joined
  - Check Horizon connectivity
  - Check Fault connectivity
  - Check overlapping lines and self-overlapping lines
Single Section (previously called Blank)

- Ability to create Vertical, Horizontal and Inclined Sections
- Ability to slice surfaces and lines once section has been created
- Interactive Planes (Section Creation and Clipping Plane) now are entirely interactive as opposed to using the small handle. Right Mouse button will move the plane along the normal to the plane and the left mouse button will move on the XY of the plane. Shift key to lock movement direction

Multiple Sections (previously Slice 3D)

- This tool has been renamed

Create Layer Cake

- Create layer cake on inclined sections

Project To Section

- Ability to project data to inclined / horizontal sections
- Apparent dip calculation for inclined / horizontal sections

Horizon Construction from Template (3D)

- New 3D dip domain construction method (Ribbon construction) using lines
- Enhanced interface

Horizon Construction from Template (2D)

- New Kink band construction method using dip data
- Enhanced interface

Horizon Construction from Fault (2D)

- When using Fault Bend Fold, Fault Propagation or Detachment Folds, invalid fault vertices are now highlighted. This allows quick creation of valid fault interpretations

Fault Construction (2D)

- New option to calculate Depth to Detachment using excess area or lost area
Data and Analysis Panel

Symbol Data Base
- New symbols and new default settings for dips, fault structures, lineation and Fieldbook symbols

Stratigraphy Data Base
- By adding an additional column in the Stratigraphy table, it is possible to alias horizon names quickly. For example a horizon is called Horizon1 belonging to a set of Marker data - and this really should belong to a horizon called Horizon_01

Vertex Attribute Analyser
- The user can now easily change/modify selected cells from one specific attribute within the table, cross plot, stereo plot, and tangent plot

SCAT Tool
- Orientation data calculation for lines
- Ability to attach these as attributes to lines

Document Properties
- The Document Properties dialogue now allows coordinate system information to be displayed in either WKT (Well Known Text) or PROJ.4 format

View Panel

New Clipping Tool (3D view)
- With user defined clipping plane
- Ability to clip selected objects only
- Interactive Plane will now move in the direction of the normal as opposed to moving along the Z-axis

Contour Tool
- New attribute contouring functionality

Colour Map Tool
- Existing colour maps have been improved and new colour maps added
- New default colour maps for colour mapping azimuth added
- Histogram diagram with amplitude statistics for 2D and 3D seismic
- Added alpha channel feature for colour maps in order to see through 3D seismic
Quick Editor

- For wells, can now show Log Helper Grid
- New options in the Quick Editor for changing sizes of point cloud data:
  - Sizes can be taken from the Symbol table (Default Mode) or a vertex attribute
  - Can then be scaled with various equations and a multiplier

3D View

- Improved rendering for shader-rendered dip markers. Spheres appear smoothly spherical, circles circular and cubes properly cubic. Cylinders and cones now have end caps, and all markers now have per-pixel specular lighting
- Shader-accelerated rendering of point, dip and well marker data is now enabled on the MAC, as well as any system that supports OpenGL shading language version 1.2 and the instanced rendering and floating-point texture extensions
- Well log display
- 3D Seismic Cube rendering
- New display tool button: Zoom To Selected Items

Map and Section Views

- Scale Section View
- New display tool button: Zoom To Selected Items

New Model Browser

- Includes the Section Browser
- Includes the Set Editor:
  - A new default set type "FaultBlock" has been added
- Includes the Object Type list:
  - The object type list now covers all types of Move objects
  - New 3D seismic object
  - Each object is represented with its individual icon
- Quick Editor
- Ability to filter on selected sections and sets

Context Menu

- The Context Menu to "Extend Surface using Selected Boundary" now updates the selection with the newly created edge to speed up further extension

New Edit Menu

- There is a new Edit option on the Main Window menu, which contains Undo, Redo, Cut, Copy, Paste, Delete, and Copy View To Clipboard
Preferences

- Mouse Buttons preferences can be modelled on the following applications:
  - Move
  - Inventor
  - GOCAD
  - EarthVision
  - Petrel*

General Tool Interface Layout

- Layout of many tools has been changed to list options as radio buttons at the top (rather than using separate panels)

Remote Desktop Connection

- Move will prompt you to install the compatible software 3D OpenGL libraries if it has been started via Windows Remote Desktop Connection. If it is subsequently started normally, it will prompt for automatic uninstall the software OpenGL libraries. Please note that Move running via remote desktop using software rendering will not support the 3D Seismic Volume display, and the rendering of models in the 3D View may be substantially slower

Import

- Well positions can now be loading using lat/long coordinates
- Added the support of 3D SEG-Y volumes
- Split the SEG-Y import to let the user differentiate 2D and 3D SEG-Y files
- Added the support of importing DEMs or Image Overlays as Move Terrain Layers

Exports

- Horizontally-referenced images in georeferenced documents (including those taken from map snapshots) can now be exported to the MBTiles format from the right-click menu Export As options. These files can then be loaded as base maps in FieldMove Clino
- ASCII Export, support added for exporting horizon, fault and section names, ID numbers, colours and PType (for fault exports)
2D Kinematic Modelling Module

The 2D Kinematic Modelling module contains the Restoration and Forward Modelling functionality which was previously found in the legacy 2DMove stand-alone application. Please see the Move Help Pages, accessed from within the software, for further details and descriptions of functionality.

The 2DMove Forward Modelling toolset has been integrated into the 2D Kinematic Modelling module, sitting inside the Move Environment:

- Fault Bend Fold (Suppe 1983) with support for sedimentation, erosion and creation of splay faults
- Fault Propagation Fold (Suppe & Medwedeff 1990) with modes to handle constant thickness and fixed axis
- For all other algorithms, possibility to apply sedimentation and erosion – now utilising/linking to the stratigraphy
- Possibility to control the ductile height. Different modes (Poblet & McClay 1996)
- Support of Wedges and Out-of Sequence faulting
- Ability to edit the colour of bisectors

Depth Conversion

- Now displays now the used Velocity/Time/Depth relationship in both a table and a diagram
- New checkshot loader plus table and plot display of time, depth and velocity curves

Decompaction

- Displays the burial history in a table view
- The input load density for Airy and flexural isostasy has been standardised to bulk density. The list of recommended Load Density values contained grain density values. In Move when using the Database option, if the Rock Properties table contains a grain density value, then the bulk density for the load is calculated using this density and the porosity. If the rock properties table does not contain a density or if default values are being used, then the default bulk density value is used

Section Analysis (New tool for 2014)

- The tool allows the user to automatically unfold a cross section to get a first look line length restoration. In doing so, the user is able to quickly perform a first-order check for line length inconsistencies in a section and test the validity of the interpretation.
Move On Fault

- The display options in this tool are now only displayed when appropriate.

Block Restoration

- This is now a separate tool. The functionality was previously found in the Move on Fault tool.
3D Kinematic Modelling Module

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Decompaction

- The direction of the calculation grid for 3D Compaction is now automatically calculated to give the best fit to the data

Move On Fault

- The display options are now only displayed when applicable

Area Misfit (New tool for 2014)

- The Area Misfit Tool can quantify the gap and overlap between fault blocks as a total area (in the X-Y units of the model) or as a percentage of the model area

Allan Mapper (New tool for 2014)

- The Allan Mapper tool allows the user to analyse the offset of surfaces or lines that are intersected by a fault
Stress Analysis Module

New for Move2014, the Stress Analysis module is a quick and easy-to-use graphical method for analysing the behaviour of fault and fracture systems under a user-defined 3D stress state. It computes and plots stress attributes for parameters such as Slip Tendency, Dilation Tendency, Slip and Dilation Tendency, Fracture Stability and Slip Stability of planes and allows visualization and evaluation of critically stressed planes in a 3D View. It helps to identify which planes are more likely to fail under user defined stress conditions. It helps to estimate stability, permeability and leakage.

Hence, it gives input to geological models/scenarios for risk analysis and to reduce uncertainties – for example leakage, earthquakes, in managing complicated reservoirs or planning mining, CO2 storage, waste disposal or other engineering applications.

Summary of main features

- Stereo Plot with stress attributes representation and minimum fracture stability planes
- Ability to rotate the stress fields in any orientation
- Mohr Diagram with stress attributes representation. The Navier/Coulomb criteria of shear failure and the Griffith criteria of tensile failure are expressed graphically
- Ability to colour map surfaces, fractures, fault traces and dip data in the 3D View with a stress attribute under the stress state to be investigated
- Rose Plot, Histogram, Cross Plot and table view for detailed statistical investigations
- Ability to add fluid pressure
- Allows analysing the impact of varying principal stresses and pore pressure profiles through depth
- Offshore and onshore pressure profiles
- Automatic calculation of orientations for surfaces and 3D lines (e.g. fault traces), if required

Strain Analysis Tool

- The Strain Analysis tool has been moved into the modules panel, and runs now with the 3D Kinematic Modelling or the Geomechanical Modelling license.
Move Link for Petrel

Supported Platforms

- Version 2012 of Petrel* and upwards

New features of Move Link for Petrel

- New Object Types supported
  - Full support for 3D Grids / GeoCellular Volumes with Attributes to transfer from Petrel* to Move and update, and transfer from Move to Petrel*
  - Mesh surfaces now transfer from Petrel to Move and update if edited within Move. Previously, mesh surfaces only transferred from Move to Petrel*
  - Fault Interpretation, 2D Horizon Interpretation, 3D Interpretation grid objects will now update if changed within Move

- Attribute Support
  - Support for Discrete and Continuous Attribute types including date/time. Previously only Continuous Attributes of type real would be transferrable
  - Attributes now supported for Polylines

- General Functionality
  - Cancel button now offers option to terminate a session while transferring data
  - Move Bulk Transfer Tab introduced to make transfer of objects from Move to Petrel* easier
  - Move Link session now terminates when Petrel* project is closed
Move Link for OpenWorks

Supported Platforms

- Version R5000-8.3 of Landmark OpenWorks onwards (Linux 64-bit only)
- Version R5000-8.3 of Landmark OpenWorks onwards (Windows 64-bit only)

New features of Move Link for OpenWorks

- Improved naming of objects in the Tree View
- Two new options are provided in the OpenWorks Connection sheet.
  - Use Object Display Datums. This will load all time domain data using the OpenWorks Display/Seismic Datum. If you want all time domain data to be loaded relative to zero then deselect this option.
  - Use Object Display Datums. This option should normally always be selected. It is provided to handle some older projects with inconsistent storage/display datum settings.

Additional Information

- Move cannot currently setup the Geographical Coordinate System from OpenWorks. If you intend to integrate GIS or other geo-referenced data then you must set the correct coordinate system when creating the new file.
- The OpenWorks link is under continued development and we plan to add support for a wider number of OpenWorks data types as soon as possible. These include rotated grids, Line, Fault and Horizon lists and Seismic Time Slices. Other plans to add the ability to update or add interpretation data such as horizons or faults to your existing OpenWorks project are also in development.
- Move Link for OpenWorks is designed to pull data from OpenWorks. A future development to allow Move to write back some Move data types to the OpenWorks database. In order to do this, the triangulated mesh data would need to be converted to a grid format that is native to OpenWorks.
3. Issues Fixed for Move2014

- The quality of images displayed in 2D views has been increased significantly, when they are zoomed out to be shown smaller than their native pixel size. This is particularly noticeable in high-resolution seismic images in section views. Note that this can cause zooming performance to be slower with very large images, so it can be toggled off or on again via the "High Quality Image Down Sampling" option in the Performance section of the preferences dialog.
- Move on Fault 3D, results were not always correct when using an inclined transport plane.
- 3D View UTM Bounding Box grid intervals now correct for occurrences with very large models, where grid intervals would be incorrect.
- 3D View will no longer show incorrect model when using Move Tool | Rotate Tool | Transform > Translate | Transform > Rotate XY in Map View.
- 3D View lighting artefacts should be reduced when viewing sediment modelling analysis.
- 3D View camera position is now preserved when z-exaggeration is changed.
- 3D View model bounding box now updates accordingly after rotations in section view.
- Added undo/redo capabilities for updating Total Measured Depth.
- All of the available dip types now have discrete shapes when rendered via shaders in 3D.
- Dip markers are now lit more properly when GL Shader Rendering is enabled.
- Dip markers with GL Shader Rendering Enabled now have lighting affecting their rendering.
- All shapes point in the appropriate direction, when rendered:
  - Triangles point in the dip direction, like cones do.
  - Cross and origin shapes lie along the dip plane like circles do.
  - Cylinders are axially aligned along the dip direction.
  - Dip shape complexity for spheres, cones and cylinders is reduced in non-shader mode.
- Line, LineNS and LineEW types are now renamed Line (Normal), Line (Dip) and Line (Strike) to better describe their relative orientations.
- Attribute Analyser: the calculator will work if attributes have a number in their name.
- Cancelling Modify Colour within Attribute Analyser will no longer set the colour to black.
- Changes to view background colour will now take effect in the Sediment Modelling 3D view.
- Closing a 2D view whilst editing a label caused Move to crash.
- Construct Fault in some situations create a fault in a reversed direction in error.
- Construct Horizons from Fault using stratigraphy crashed if the number of beds exceeded the number of stratigraphy layers.
- Construct Horizons from Fault with Trishear: syn-tectonic beds were not correctly created when using a non-horizontal fault.
- Copy/Paste part selections in section views does not crash any more.
- Create Horizon from Fault, negative displacement range was incorrectly displayed for Fault Bend Fold.
- Creating the Boundary Line of a merged mesh now creates a line for each of the surfaces.
- Default import setting for a Horizontal Image is now "horizontal extents" rather than "non-referenced".
- F5 key will now cause 3D view to be fully re-rendered.
- Fault Construct was ignoring the penultimate point on the hanging wall when calculating the fault.
- Fault Construct was using reversed shear angle for faults which dipped to the left.
- Fix for issue where merging .mve files would create new horizon types for duplicate horizons.
- Fix for problem where section browser order of sets wasn’t being saved to file correctly.
- Fixed crash when converting edited Line to Plain Points.
- Fixed crash when deleting all sections from Section Browser when section/sub-section relationship present.
• Fixed crash when first attempting to display a well that has been saved with its well track set to be invisible
• Fixed crash when using various transform methods with image selected within the Transform Tool
• Fixed crash which happened, on occasion, when undoing creation of a well interpretation section
• Fixed crash which would occur when collecting objects into Transform Tool > Full 3D Interactive
• Fixed crash which would occur when collecting passive beds within the reshape tool
• Fixed crash which would sometimes occur when opening "Create Horizon" with the section view active
• Fixed issue when Undo would not correctly return a well to its original position after Transform > Translate operation
• Fixed issue where "Select All" in the section browser would cause move to hang in busy state
• Fixed issue where "dip meter ratio" is set as 10 within the UI but the actual dip meter ratio is 1
• Fixed issue where "set rotation centre to model / selection" button status will be retained after applying a rotation transformation
• Fixed issue where 'Move' tool would move labels to the incorrect location
• Fixed issue where compass widget would not be visible when exporting 3D view as image
• Fixed issue where Reshape > Pull to Points would have different functionality for points above the surface and points below the surface
• Fixed issue where Rotation (XY) with all objects selected, where an image was selected, would not correctly rotate the various objects
• Fixed issue where Transform Tool > Interactive Image wouldn't allow images to increase size when maintain aspect ratio is selected
• Fixed issue where UTM bounding box would not resize when Unfold > To Datum is processed
• Fixed issue where Undo would not correctly return label to original position after Transform > Translate operation
• Fixed issue where a single section within the section browser wouldn't allow the section browser buttons to be pressed
• Fixed issue where attributes created for multiple objects would be lost when attribute analyser is re-opened
• Fixed issue where bisector display was incorrect for Unfolding Tool and Create Horizon from Faults
• Fixed issue where choosing "User Defined Centre of Rotation" for Transform Tool > Rotate (XY) would not update rotate manipulator
• Fixed issue where converting dips to points would leave a dip label visible in the 3D View
• Fixed issue where delete button would not be available within the Stratigraphy Table dialog after applying stratigraphy changes
• Fixed issue where digitising lines in Map view with surface Z-value selected, would not create the line, if it was not digitised on a surface
• Fixed issue where first dip data marker would not be created properly and would not be visualized until the second dip marker is created
• Fixed issue where inserting image onto section would resize the image incorrectly depending upon the post width
• Fixed issue where label tool would not update text when selecting various types of objects
• Fixed issue where labels may be created at incorrect position when creating labels on horizons / faults
• Fixed issue where loop selecting dips/points over an image in Map View would also select the image despite being in "point selection" mode
• Fixed issue where moving and scaling images within the Transform Tool > Interactive Image would detach the image from the manipulator in Map View
- Fixed issue where objects become invisible when Transform Tool is opened with the objects selected
- Fixed issue where opening Polygon Tool with a line selected would not allow you to de-select this line
- Fixed issue where reversing view with Transform Tool > Interactive Image open would make the image disappear
- Fixed issue where rotating images in map view would sometimes change the image position
- Fixed issue where rotating objects in section view with axis set to depth would rotate incorrectly
- Fixed issue where section browser list modification could cause "Invalid Persistent Model Indexes" message to appear during modification or when closing document
- Transform Tool: fixed issue where switching between "all objects" and "selected objects" will drop some of the objects from the selection box
- Fixed issue where switching between orthographic and perspective mode within the 3D view would cause issues when moving to "Map View Mode"
- Fixed issue where transparency value would be reset when splitting polygons, lines and surfaces
- Fixed problem where "Insert Vertical Image on Section" wouldn't work when using a selected trace line. Inserting vertical images will now work for both the trace line and the section set
- Flexural Slip Unfolding of large images was excessively slow
- Full 3D Interactive applied rotations will now be as represented in the preview on screen
- Horizons will not be allowed to be created or renamed to use a name already associated with a Set/Horizon
- Images in 3D views should no longer become blank after all 3D views are closed, and then a new 3D view gets opened
- In Edit Line Tool, "Show Unmodified Line" setting is remembered when closing / opening tool
- Individual polylines created from the contour tool are now selectable
- Issue with transforming and cropping reversed vertical images have been resolved. Image will no longer flip back
- It is now possible to delete a Trace-Line when not in Section View - with the option to delete the "Section Only" or all "Associated Data"
- Labels for measured depth values on wells are now drawn in 3D views
- Lines such as section traces that are exactly coincident with the bounding box grid in the 3D view should now be visible
- Maximum texture size has been removed from the Performance Preferences. It is irrelevant because large textures are now automatically split into tiles by the 3D renderer
- Labels in 3D view: The OpenGL string renderer has been added in its place. The OpenGL data is also correctly shown, now, if any of the capability tests fail. In particular, the new data will indicate if the supplied Mesa 3D software rendering library is being used
- Measured depth ticks will now render if OpenGL shaders are disabled or unavailable
- Move on Fault 3D Simple Shear: movement was not always calculated correctly when using non vertical shear angles
- Move on Fault when creating new fault splays, any newly created horizontal fault segments are now removed
- Move on Fault with Trishear: movement was not correctly calculated when moving down a listric fault
- Move on Fault with Trishear: after moving down a fault while the trishear zone was propagating the zone upwards. The propagated fault was not added to the section
- Move on Fault (Fault propagation Folding): in certain cases lines and polygons were not completely tidy with the fault
- Move on Fault: 3D fault surfaces were not correctly handled if the x and y widths were very different
- Move on Fault (Fault Bend Fold): fixed calculation errors when applying multiple displacements
- Move on Fault (Fault Parallel Flow): angular shear was not displayed in sections
- Move on Fault (Fault Propagation): calculations of movement with the forelimb when using fixed axis mode has been improved
- Move on Fault (Fault Propagation): the propagated fault is now added to the section
- Opening and closing 3D views (including the sediment workflow) quickly will no longer cause a crash
- Page Up / Page Down will no longer scroll the 2D views to the top/bottom of the workspace
- Points and dip markers can now be made semi-transparent in map and section views
- Polygon items composed of multiple disjoint polygons will now render correctly in 3D views
- Polylines will now correctly display the effects of changing the 'closed' property in the 3D view
- Removed "Close SCAT Tool" button from right-mouse button Context Menu. SCAT tool can be closed using red X in top corner
- Removed "Scale Using Two Points" from available transform types when a label is selected
- Reshape Tool > Pull To Lines will accept Pins as lines
- Reshape tool: When pulling to lines does not produce artefacts, if the line sampling is coarser than the mesh surface
- Resolved issue where document was not marked as modified when fracture sets were added to the model
- Resolved issue with selection of points on multiple objects
- Rotate section to Horizontal using a line was not rotating seismic images
- Rotating Seismic images in sections was not working
- Scale dropdown on map view toolbar should update properly in response to view-all, object focus and rectangle zoom commands
- Section traces are now created with the correct colour in 3D views
- Seeking to selected labels will bring the label into view properly now, and allow zooming normally afterwards
- Zooming with the mouse wheel will no longer stop, when the user approaches the focus point, instead the focus point will start to be moved back in Z at an equivalent rate
- Seismic Cubes, creating new inlines, xlines or time slices did not update the model bounding box and did not create an undo option
- Select Above/Below/Left/Right will no longer select a Section Trace-Line
- Single-pixel offsets of 2D gridlines from the corresponding ticks on the border axes have been eliminated
- Symbols now appear correctly when applied to multi-lines (instead of incorrectly joining between lines)
- The 3D view focus point will now be preserved when changing z-exaggeration
- The 3D view, when flung by the mouse, will now automatically stop panning if the model bounds are about to travel completely off-screen
- The bounding box is now automatically resized when loading data from seismic cubes
- The image manipulator resize and rotate nodes are now disabled along with the relative UI controls when working with Transfrom Tool > Interactive Image
- The show toolbar button will now appear on section views that are part of tri-view layouts when the view toolbar is hidden
- Toggling maintain aspect ratio when using "Transform Tool > Interactive Image" will now reset the image manipulator and UI to the original size
- Tools can no longer be closed whilst they are running preventing a crash
- Transform Operations with "Transform All objects" selected will not show a preview
- Transform tool, in certain cases cropping images caused the image to disappear. Work around in the 2013 release was to undo the change then reverse the view
- Transform tool, selecting a seismic image which was not part of a section into the toolbox could crash Move
• Transparency sliders in both 2D and 3D views can now be moved freely. Clicking either side of the slider head will move in 10% increments
• Tri-Mesh representation option has been removed for polygon data as it has no effect
• Trishear in certain cases could ignore strain circles within the trishear zone
• View tabs will now update with the correct name when replacement sections are dragged in to a section view
• Welcome screen can now be floated by detaching its tab, without it crashing
• When modifying images using the transform tool, the minimum size of the manipulator rectangle has been limited to prevent it being reduced to an unworkable size
• When an image has been rotated using the Transform Tool > Interactive Image, the maintain aspect ratio check box will not be enabled until the rotation is confirmed or reset
• When importing Polygon Shape-files, the preview panel now fills the features to indicate they are polygons
• When re-selecting points (e.g. dips etc.) after deleting some points from the Vertex Cloud, the correct point is chosen
• When resizing views to small dimensions, toolbar items that do not fit in the available space will be moved to a lower toolbar that can be made visible by a drop-down button "Show hidden controls" located at the end of the view toolbar
• When splitting a line and removing a segment between two vertices, end points of the line can no longer be selected
• When splitting a multi-polyline using a vertex, the correct point is now selected on each individual line
• When splitting a surface with a "closed" line, the tool will ensure that the final segment is included in the split
• Will no longer crash when hovering the mouse out with the range of valid coordinates in map-view (e.g. off the edge of a map projection)
• Shape files exported from Move, now generate a .prj file recognised by non ESRI products (such as Global Mapper)
• When importing GIS Vector data (e.g. Shape files) which contain an attribute “name”, the user can choose to name objects using a different attribute (e.g. “name_2”)
• GIS Vector data (e.g. Shape files) can now be inserted into documents, even when there is a conflict between an attribute name to be imported and an attribute defined in the Move document
• Compaction and Isostasy. The input load density for Airy and flexural isostasy has been standardized to bulk density. In 2DMove and 3DMove it was not clearly indicated if the load density represented the bulk or grain density. The list of recommended Load Density values contained grain density values. In Move when using the Database option, if the rock properties table contains a grain density value, then the bulk density for the load is calculated using this density and the porosity. If the rock properties table does not contain a density or default values are being used, then the default bulk density value is used
• Apparent panning speed is now consistent between perspective and orthographic projection modes in 3D views
• Attribute Analyser: Histogram does not pick up tiny values (1e-5). These values are excluded from the statistics
• Attribute Analyser: attribute selection boxes have no fixed size in order to display longer attribute names
• Fixed issue where elevation/depth label would be incorrect in the pick coordinate status bar
• Fixed issue where the Z-value of the pick position on the status bar is incorrect for elevation or depth settings
• Rectangle-zoom now works properly in 3D orthographic projection mode, and is also usable with perspective projection
• Scale operations now working using both UI and interactive manipulators
• The 3D view can now switch consistently between Perspective and Orthographic projection modes, without confusing jumping between viewpoints and zoom levels, or corruption of the camera projection matrices
• In Transform > Interactive Image, maintain aspect ratio set as true by default
• Move Link for Petrel - Clockwise oriented grids in Petrel* now correctly transferred to Move
• SEG-Y - When projecting SEG-Y Data to section, if there is a gap in the SEG-Y this was displayed in blue
• Horizons from Fault: Simple Shear - Within Simple Shear, a series of shear pin lines was displayed once the fault was collected. These were a user display option and are now OFF by default
• Depth Conversion - when converting a section from time to the depth domain, if the vertical axis display was in depth then after conversion the vertical axis display was incorrect
• 3D UTM Bounding Box grid intervals now correct for occurrences with very large model where grid intervals would be incorrect
• 3D View will no longer show incorrect model when using Move Tool | Rotate Tool | Transform>Translate | Transform > Rotate XY in Map View
• 3D Z-fighting artefacts should be reduced when viewing sediment modelling analysis
• 3D view camera position is now preserved when z-exaggeration is changed
• 3D view model bounding box now updates accordingly after rotations in section view
• Well Tool: Added undo/redo capabilities for updating Total Measured Depth
• All of the available dip types now have discrete shapes when rendered via shaders in 3D
• All shapes point in the appropriate direction, when rendered by both methods:
  o Triangles point in the dip direction, like cones do
  o Cross and origin shapes lie along the dip plane like circles do
  o Cylinders are axially aligned along the dip direction
  o Dip shape complexity for spheres, cones and cylinders is reduced in non-shader mode
• Ctrl-X, Ctrl-C and Ctrl-V (cut, copy and paste shortcuts respectively) will now work in floated views
• Default import setting for a Horizontal Image is now "horizontal extents" rather than "non-referenced"
• Fixed right-mouse button Context Menu crash accessing right-mouse button context menu from Model browser for Surfaces, polygons and polylines
• The OpenGL renderer string has been added in its place. The OpenGL data is also correctly shown, now, if any of the capabilities tests fail. In particular, the new data will indicate if the supplied OpenGL 3D software rendering library is being used
• Measured depth ticks will now render if OpenGL shaders are disabled or unavailable
• Move on Fault 3D Simple Shear, movement was not always calculated correctly when using non vertical shear angles
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Removed "Close SCAT Tool" button from right-mouse button Context Menu. SCAT tool can be closed using red X in top corner
Removed "Scale Using Two Points" from available transform types when a label is selected
Reshape Tool > Pull To Lines will accept Pins as lines
Reshape tool: When pulling to lines it does not produce artefacts, if the line sampling is coarser than the mesh surface
Attribute Analyser: calculator modifications are now connected to undo/redo
Attribute Analyser: Modify Cell(s) option is now working properly with feet and time units
Face Attribute Analyser: the calculator can be used properly
Fixed issue where elevation/depth label would be incorrect in the pick coordinate status bar
Fixed issue where the Z-value of the pick position on the status bar is incorrect for elevation or depth settings
Rectangle-zoom now works properly in 3D orthographic projection mode, and is also usable with perspective projection
Transform Tool: Scale operations now working using both UI and interactive manipulators
The 3D view can now switch consistently between Perspective and Orthographic projection modes, without confusing jumping between viewpoints and zoom levels, or corruption of the camera projection matrices
In Transform > Interactive Image, maintain aspect ratio set as true by default
Higher quality image capture can now be performed using the scale functionality when choosing to "Save Image..". This can be activated, by toggling on the "Enable Upscaled Image Capture" check box within the Preferences > Performance Tab. The default setting for this at the moment is 'off' but this may default to 'on' in a future release
The strain tool now produces only positive dips for all strain directions, applies to geocells and surfaces
Exporting polygons as KML should produce correct polygons in the Google Maps application
Polygons should now display correctly in Google Maps view
Picking footwall and hanging cut-offs in Geomechanical Modelling should now be simple and update when the user apply
Model building on a surface will now remove previous strain tracking, previously this would produce invalid strain results
When creating new sections the naming will just be 'section, section_1' etc.
Filling holes in surfaces is now easier, the user now just needs to select the surface and click edit>fill holes
When picking objects in map and section view users with a more sensitive mouse is able to cycle through all objects below the cursor more easily
When editing and extending lines the object selection after opening and closing tools is now consistent
Splitting lines no longer changes the Z-values of projected lines
When opening the edit tool the amount of passive points should now be correct
Splitting lines in map view, the lines can now be at different Z-heights to each other and still split
Copy to clipboard in map view will now paste directly into programs like paint
When using grid resampling the slider for the grid size is now more intuitive
Move no longer crashes when the user tries to create a polygon with excessive re-sampling values
3D View - section area display disappears properly when selected objects from the section are deleted
3D View, Copy To Clipboard will only copy the selected objects if there is a valid selection. To copy the entire view there should be no selection
3DMove Fracture Sets will now save correctly on OS X platform
ASCII Export, resolved issue where some combinations of options in ASCII export could resulted in an empty line between every vertex
ASCII Export, there is a new option to allow section data to be exported using section coordinates
ASCII Import, fixed crash caused by selecting Line Number as an import column
ASCII Import, null values will be now detected if the z column is listed before the XY columns
ASCII Well Loader, loading direction wells. If using the 'First Line is Well Position' option then the unit selection was being ignored and the position was always assumed to be metres
Big endian SEG-Y file loading has been fixed so that they should now load using linux or mac if there is an associated mve SEG-Y config file
Construct Horizons, changing the method to Trishear while editing will no longer create a 'ghost' image of the original fault on the screen
Construct Horizons/Construct Fault, Changing sections by dragging from the Model Browser will no longer leave temporary objects created by the toolboxes visible and editable in the new section
Convert Polygon to Mesh from the Context Menu will now handle problem polygon geometry such as simple self-intersections
Create Surface from Lines (linear method) will no longer create invalid triangles if there are duplicate points
Depth Conversion, when using a seismic datum an invalid warning message was generated. This can be safely ignored
Dip markers on wells in 3DViews are no longer affected by colour maps, only the well track (the colour they were previously receiving was incorrect)
Duplicating a section now gives the new section, the same colour as the original
Dxf Export, file could not always be loaded into other software if the section names contained spaces
Dxf files with only XY positions which represent a section can now be loaded as a section
Eclipse Import, has a checkbox option to negate the y values in a new wizard sheet. If checked, the y values within the file are negated when loading
Edit Tool 3D, will now attempt to fill holes in surfaces which have a complex/overturned outer boundary. A warning message is displayed if filling holes was unsuccessful
Export to GoCAD formats (such as .ts) will not preserve custom Object Attributes, since these are not supported by the target format
Export to GoCad ASCII will now provide a warning if attributes are not supported for export
Export to Gocad, objects in time are no longer saved with the units set to depth
Export to MapInfo Tab format should now preserve the Coordinate System in the Move document
Extend to UTM with multiple surfaces will preserve the user's input bounding-box
Extend using Strike Direction is only available for Mesh Surfaces and not Grid Surfaces which are invalid input
Fault Construction, editing changes to the fault are no longer lost if the construction method is changed
• GIS Vector Import, when importing multiple files, each file will be treated as separate layers in the import. Layers can be individually turned off and on in the settings sheet, and the preview will be updated.
• The attribute usage sheet can either set settings for all layers at once (eg attribute for name, colour, used for Z, and horizon set), or they can be set one layer at a time (by checking the "Set Layers Individually" check box). Symbol settings and the Attribute Table preview are only enabled when this check box is checked.
• When files are georeferenced with different coordinate systems, then they will be transformed to the first coordinate system in the import, and the extents settings displayed will be in that coordinate system.
• Gocad Import, files containing multiple volumes are now being read correctly.
• Google Maps Views will no longer pop up Javascript error boxes when they are closed as a document closes.
• Inserting a file that contains a seismic cube with missing original index will no longer crash.
• Label Tool, fixed a crash when deleting a label which is currently being edited in the tool.
• Lines will now show colour map by elevation properly, in the same way as other object types in the 3D view.
• Locace Import, it is now possible to set the world position of the section when importing a single locace file.
• Move on Fault 2D, when using steps the section view is only updated on each step if it is the active view (the currently selected view).
• Move on Fault using Fault Bend Fold, the movement steps setting was ignored if moving from left to right.
• Move on Fault, Trishear, when propagating the fault to the left, the active fault was not being updated in the section.
• Move on Fault, duplicate axial surfaces were being created when axial surfaces were attached.
• Move on Fault, movement was always in metres.
• Move on Fault, when using the extend fault options the extended fault was not being updated to the section.
• Move on Fault. Improved passive fault handling when carrying out multiple step forward modelling.
• Object List, fixed issue were newly created attributes were not visible in the table view.
• On Linux machines, Alt + mouse click often defaults to moving the window. In order to fix this, the user can change the Modifier Key under User Preferences, or they can consult their system administrator and change the window manager behaviour.
• The modifier key can either be set to Alt (default) or the Meta key (Windows Key, or Cmd depending on the platform). The modifier key preference only affects shortcuts that use some combination of Alt + mouse click, for example when using the Seek function, or dragging a section into a multi-section view.
• Point Referenced images can now be projected to surfaces using the surface projection tool.
• Projecting dogleg seismic should now produce a visible seismic image.
• Resampling a surface using the Grid Sampling method with outer boundaries preserved will no longer leave gaps where the resampled data is out with the elevation range of the surface boundary.
• Resolved issue where assigning horizon using the set editor was not preserved.
• Section Browser Controls have now been moved to within the section view bar.
• The option to remove/include sections within the currently viewed restoration path are included in the quick editor with the specific set selected.
• Section projection, when projecting seismic the height always remains constant.
• SEG-Y Import, using trace sampling could produce an invalid seismic image.
• SEG-Y Import. When loading depth converted seismic with a none zero top position, in some cases the top position could be set incorrectly.
• Selecting points (by shift-clicking) on Fractures and Tetravolumes now works correctly.
• Separate Mesh, from the right-click context menu can now be cancelled and will not attempt to split meshes with corrupt edges
• Set assignment is maintained when resampling a surface
• Sidebar selection buttons now affect views properly immediately after they have been floated
• Snap Tool no longer crashes when nothing is selected and the x, y units are changed in file preferences
• Snap Tool, Visualize in 3D for Vertical and Slip Displacement Profiles has been improved
• Split Line Tool, when splitting a line which meets at its end points, the displayed intersection point is now in the correct location, instead of the shared end point
• Split Surface with Surface will now (optionally) create an intersection line, even if the target surface was not split
• Split Tool, now allows you to split a line in 3D view using a Digitized/Existing Line
• Split Tool: Splitting multiple surfaces with a single plane will now attempt to split all surfaces instead stopping when a single surface is not split
• Split Tool: when splitting a surface with a plane, the Cancel button is now more responsive
• Split vertex cloud by attribute, attributes are no longer lost after undo
• Split vertex clouds by selection, fixed crash after undo
• The Edit Tool will now allow you to join (using "Fill Hole") between two distinct meshes when you have selected the full mesh surfaces as well as the vertices to be used in the join
• The Section Editor has been removed
• The Vertex Attributes Table will no longer wipe an existing vertex selection when the "Show Selected Vertices" button is toggled on
• The interactive plane is now fully interactive. You simply have to grab the plane and move it using the mouse buttons to determine the direction. Left Mouse Button will move it forward and backwards in the direction of the section plane's normal and Middle Mouse Button will move it around the plane. Holding shift will constrain the movement to one direction
• Transform Tool, changing selection within the model browser, with the tool open, will no longer change the tools work list
• Tri-mesh state will now be saved in 3D views for Surfaces and Grids
• User Interface direction dials (e.g. for dip-data) will no longer move when the user presses left and right arrow keys
• Well Marker Tool, fixed issue where 2 dips on a well had to be selected before a user could change the dip values
• Well markers set perpendicular to the track now compensate properly for z-exaggeration
• Well markers, turning on the display option to show markers down a well will no longer show all objects (such as dip data)
• When projecting point clouds to a section, the default name of the projected point cloud will now be "pointdata"
• When projecting plain point clouds to a section, the default name of the projected point cloud will now be "plaindata"
• Projected dip data clouds will still be named "dipdata"
• When the mouse mode is set to 'Petrel', the user needs to hold the Ctrl Key to achieve translation in the direction of the normal to the plane when using the Basic Transformation Tool in 3D view
• When the user alters the position or extents of a new blank section, the user will no longer see an incorrect boundary
4. Known Issues and Compatibility

Known Issues

3D Graphics
- For machines using a graphics card from the NVIDIA Quadro 4 Series, line thickness in 3D view cannot be viewed at a size greater than 7 px. In some cases this can be resolved by disabling some of the anti-aliasing settings within the NVIDIA Control panel.
- Interactive 3D Clipping has been removed; it will be reinstated in an upcoming release

Move on Fault
- Passive faults are not automatically extended across the section / active fault so it is important to manually extend the faults if required
- Vertical Images may be truncated if above all other lines. Work around: add a line at the top of the image

Move on Fault: Fault Bend Fold
- Only one step will apply if objects are being moved from right to left

Move on Fault: Fault propagation folding
- Sediment is not supported

Horizons From Fault: Detachment folds
- Syn-tectonic beds may not be fully drawn correctly if the sediment thickness is less than the uplift in each step

Horizons from Fault: Fault Bend Fold
- Faults must only dip in one direction. Any small change in the elevation of the fault opposite to the major fault angle will cause the calculation to fail

Linux platforms
- Camera animation is disabled
- On some graphics cards, a bug in the OpenGL driver may cause the application to lock until the mouse cursor is moved out of the main window when Direct Rendering is enabled. To disable Direct Rendering, set the MOVE_DISABLE_DIRECT_RENDERING environment variable before starting up Move (this can be done in the move startup script, contact support@mve.com for assistance with this)

Compatibility

- Move2014 can no longer generate .mve files for versions prior to Move 2013 (1.5)

Please contact help@mve.com for further information.