OVERVIEW

With exploration and drilling increasingly done in complex geologic environments, these complex plays use data from many disciplines in multiple formats. Permedia™ Viewers software is a suite of visualization tools for seismic, well, interpretation, and basin model data. The software leverages an OpenGL-accelerated 3D visualization environment and includes powerful reporting tools for querying and analyzing data. Lightweight, easy to install, and supporting dozens of file formats, the software provides an ideal tool for explorationists and basin modelers to co-render and analyze data from multiple software packages, including data in Landmark’s OpenWorks® database, for a powerful perspective on complex petroleum systems.

KEY FEATURES

Co-render and analyze data from multiple packages and across all length scales

Full OpenGL-accelerated 3D visualization environment

Suite of map processing tools for quick prospect ranking and map manipulation

Suite of data processing tools for analyzing and plotting project data

BENEFITS

Get an Integrated View

With its industry-leading data support, use Permedia™ Viewers software to co-render and analyze data from multiple packages in a single view with drag-and-drop ease.
FEATURES

Integrate Data from Any Source
Integrate regional, basin, and reservoir data in a single 3D visualization environment. With support for Z-Map Plus™, PetroMod™, Temis, Trinity, GOCAD® objects, Eclipse, Irap™, RMS and VIP® grids, SEGY, LAS, Esri Shapefiles, and many more formats, 3D Viewer can be used to calibrate and add quality control to all of an operator’s models. 3D Viewer is powered by Open Inventor.

Evaluate Prospects Quickly
Permedia Viewers software includes Map Viewer, an advanced set of mapping tools that can be used for quick prospect ranking and map processing. It includes all the map analysis features required by a petroleum system modeler, including fetch, closure, and fill/spill analysis. It also features tools for basin model pre-processing, including interpolation, extrapolation, kriging and refining.

View Wireline and Well Data in Context
The software’s Well Viewer includes trace colorizers, calculation options, and live links with Data Explorer for plotting well data. Take any well data as a starting point and augment it with data derived from curves, tables, volumes, and meshes. Well Viewer supports all major well formats, drag and drop assignment of traces into tracks, interaction with other viewers, and zones and markers.

Plot Complex Relationships
Use Data Explorer to plot complex relationships, summary statistics, and create report-quality graphics. Load well data, maps, meshes, or geochemistry data. Data Explorer creates a variety of easy-to-use plots and allows users to constrain the data to a specific data range for any variable in the data set. Results can be exported to an Excel spreadsheet.
Analyze Data
Permedia Viewers software includes a rich set of tools for analyzing and manipulating data. Perform operations such as extracting mesh data coincident with wells, cross plotting mesh and well properties, extracting volume data along a mapped horizon, generating burial histories, querying mesh properties through time, and many more.

Take Control of Data
Use equations to derive properties on virtually any data type. Add calculators in Data Explorer to dynamically plot equation-based calculations against the data. Apply calculators to well traces in Well Viewer to create new traces, and live link them with Data Explorer. Or, use calculators to create new mesh properties at the basin or reservoir scale.

Visualize Large Volume Data
Permedia Viewers software includes Large Data Model (LDM) volume rendering extensions for interactive visualization of very large volume data sets, even on low-end hardware. LDM works by storing volumes in a hierarchical “bricked” format, which allows data to be loaded as required by the scene, rather than loading the entire volume into memory. LDM volumes can be created from any supported volume format, including SEGY, VoxelGeo®, GOCAD, EarthVision®, SEP, JavaSEIS formats, and more.

View and analyze well and wireline data in Well Viewer.
DATA SUPPORT

Use Permedia software seamlessly with existing tools. Now compatible with Landmark’s OpenWorks® database, the software reads files created by virtually every major package, including Temis, PetroMod, Eclipse, Irap™, and GOCAD applications, as well as industry-standard seismic, map, and well files:

- Visualize PetroMod and Temis 2D/3D meshes, and Eclipse and Irap meshes
- Add faults using data derived from Badley’s TrapTester, or GOCAD surfaces
- Geostatistical data – reads GSLib volumes
- Seismic surveys – supports SEGY data from a variety of sources, and reads VoxelGeo volumes
- Cultural data – co-render cultural data from Landmark’s Z-Map Plus™, GOCAD, Irap, and Temis applications
- Well data – reads all industry-standard well formats (Irap ASCII well file, GOCAD wells, LAS well file), supports well markers and zones, and writes to GOCAD well format
- Mapping – reads all industry-standard mapping formats (Beicip, Z-MAP 2D Regular Grids, Generic 2D Regular Grid, Irap Grids, Grass 2D Raster Map, CPS-3 2D Regular Grid), and writes to Z-Map Plus, Beicip and Irap formats
- Native GOCAD support – provides native support for most standard GOCAD objects

“Permedia software is the Swiss Army knife of modeling software.”

GEOScientIST, MAjOR OIL COMPANY

Landmark offers solutions to help you deliver on your business strategies. For questions or to contact your Landmark representative, visit us at landmarksoftware.com.