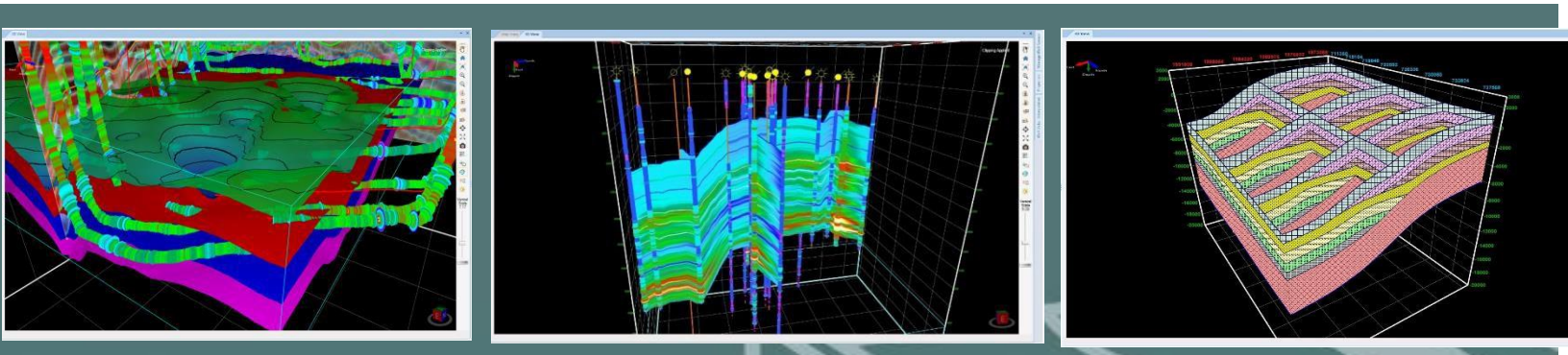


GVERSE® Geomodeling

Fully Integrated 3D Interpretation

GVERSE Geomodeling offers an extensive integrated solution for subsurface Geological/Reservoir Modeling. Detailed analysis of the reservoir is always crucial prior to final consideration. With GVERSE Geomodeling, making an informed decision is much easier as this application supports numerous types of data sources for comprehensive understanding of the petroleum system components.

The integrated solution combines geological, geophysical, petrophysical, and engineering data in a single environment, with real-time 3D visualization of the developing geomodel that helps interpret the results from different domains of geosciences and formulate optimized and cost-effective solutions.

Coupled with 3D modeling, get the maximum out of our GSM feature – an efficient tool in handling complex linked structural and sequential geometries in a seamless environment.

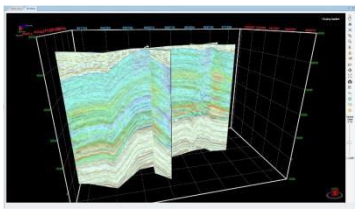
Benefits

Real-time Integrated Visualization of Results

GVERSE Geomodeling provides an integrated real-time map view, cross section view, and 3D visualization of a developing geomodel. Integrate petrophysical, geophysical, drilling, and GIS data into the interpretation and observe real time effect on a comprehensive Geomodel.

Quick and Easy

As compared to traditional tools, GVERSE Geomodeling allows geoscientists to load and display large datasets with minimum time and effort required.



Flexibility

Features like the ability to quick pick on Main Map view, clipping of 3D gird, developing fence diagrams, and creating regions and groups for wells offer greater flexibility in Interpretation workflows. Docking windows and panels provide the freedom to arrange the workspace as desired and saving complete state of the workspace facilitates the user to resume the work from where they left off.

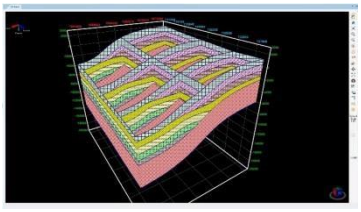
Key Features

Interpolation

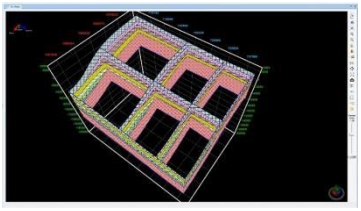
Advance your understanding of the reservoir by analyzing different geological sections and identify lithofacies, stratigraphic sequences, and depositional trends from the logs. GVERSE Geomodeling offers multiple interpolation methods to help diagnose interplay between lithofacies, depositional trends as suggested by the log curve response.

Fence

Construct a true Geomodel of the region by creating fence diagrams. This feature assists in construing and representing litho-stratigraphic relationship, pinchouts and truncations of units, unconformities, structural and stratigraphic traps and any other geological associations that exist in a region.



Considering importance of Petrophysics, our application facilitates in representing petrophysical modeling (porosity, saturation and geomechanics etc.) based on statistical methods. These petrophysical modeling results are used to populate the fence diagrams to comprehend and analyze general behavior of the reservoir and future prospects.

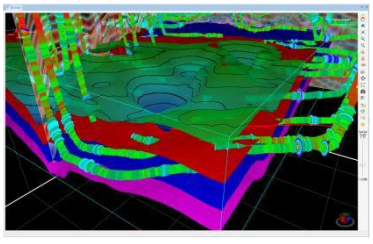


Fence over seismic

Justify the reservoir behavior by means of harmonizing acoustic impedance contrast with interpolated curve, lateral lithofacies variation, and relating structural geometries from both cross sections and seismic sections. Regional behavior of the reservoir can be quickly analyzed by applying co-blended Interpolated computed or raw curve responses over entire seismic.

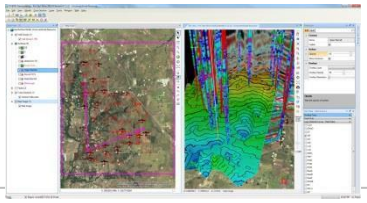
Clipping Planes

In a complex Geomodel, clipping plays a significant role in examining interrelationships and intrarelationships between surfaces and faults. Using GVERSE Geomodeling clipping tool, you can easily clip planes vertically or horizontally to keep a specific portion of the scene's geometry in focus and analyze trajectory of wells as they are drilled through Geomodel surfaces.



Integration

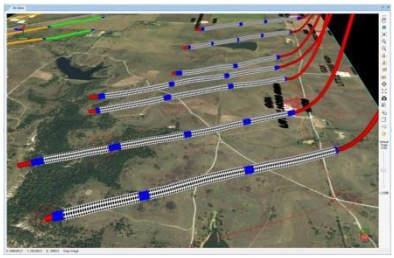
Observe the real time effect of topography and subsurface geology in your geomodel with tightly integratred and synchronous Map, CrossSection and 3D views. Designed for the geoscientists who work on integrated data sets that include petrophysical, geophysical, drilling, and GIS data, GVERSE Geomodeling introduces an integrated map,



cross section, and 3D view of a geomodel which enables you to work in 2D or 3D views simultaneously. Using the Geo Surface Model tool, efficiently handle and update linked and complex geometries on all the views of GVERSE Geomodeling.

Perforation Postings

Display **Completion**, **Perforation Stage** and **Perforation** along the wellbore path in **3D View** to identify the productive zones of the targeted formations. Display of satellite image **along** the perforation data also helps to determine potential environmental hazards and plan areas for future prospect accordingly.



Requirements

The following sections list the system requirements for the GVERSE Geomodeling.

Software

The software that must be installed on the system running the application are as follows:

- GeoGraphix Discovery 2017.2
- LMKR License Management Tool 3.2 for GVERSE Geomodeling license

  The LMKR License Management Tool (LMT) must be installed to configure the license.
- Microsoft DirectX End-User Runtime (June 2010)
- Adobe Reader for selected help files (optional)

Operating System

To run the application, you need one of the following operating systems installed on your system:

- Windows® 7 Professional x64
- Windows® 7 Enterprise x64
- Windows® 7 Ultimate x64
- Windows® 10 Professional x64
- Windows® 10 Enterprise x64

Note: It is recommend to use the latest Microsoft® service packs and security patches. Geomodeling specifically requires Windows platform update KB2670838 installed on the machine, in case the operating system is Windows7.

Hardware

The hardware requirements for this application are the same as the GeoGraphix hardware requirements.
Note: To run Geomodeling, it is recommended that an NVIDIA DirectX 11 compatible card be used. We recommend using the latest video drivers and Microsoft updates for your system.

Licenses

The following licenses are required to run the application:

- GeoGraphix Discovery 2017.2 license
- GVERSE Geomodeling 2017.2 license

  The GVERSE Geomodeling license is required to enable Model 3D view and Contours on Map view. Also note that FrameBuilder™ is part of the GVERSE Geomodeling license.