GeoGraphix smartSECTION is a 3D geomodeling application that combines the industry’s most intuitive log correlation capabilities with advanced tools for 3D surface modeling, sequence stratigraphy, structural analysis, and horizontal well correlation. It supports high-volume geologic interpretations and boosts interpreter productivity many times over conventional interpretation tools. Its ease of use, combined with its advanced geological tool set, has given users a significant competitive advantage.

When used in an integrated manner, GeoGraphix smartSECTION, FrameBuilder™ and smartSTRAT™ comprise the industry's premier geological interpretation system for both conventional and unconventional resource plays.

Benefits

Fast, intuitive well-log correlation and interpretation
Allows the interpreter to view their geomodel simultaneously in cross sections, map views, or 3D views for the most accurate and efficient interpretation possible. Builds well-to-well and/or projected cross sections and correlates both raster and vector well logs quickly and efficiently using tools that simulate paper-based correlation.

Easily and accurately identifies unconformities, fault planes, and fault intersections
Using unique correlation and unconformity trimming tool-sets enables the interpreter to execute powerful sequence stratigraphic workflows critical in uncovering subtle stratigraphic relationships often indicative of hydrocarbon accumulations. Faults and fault network relationships are easily interpreted with or without input of vertical separation values provided by the user.

Integrates geophysical and geological interpretations
On-the-fly depth-converted seismic backdrops, dynamically scaled to individual cross sections, helps insure the most comprehensive and accurate interpretation possible. Combine depth-converted seismic horizons via IsoMap layers and WellBase well data to generate more data-constrained surfaces.
Features

**Geosteering correlation tool supports horizontal well correlation**
- Correlate horizontal wells within the context of a live geomodel using type logs hung at correlation points along the wellbore
- Multiple type logs can be used for correlation anywhere along the horizontal wellbore
- Intuitive design
- Dynamic geomodeling while interpreting workflows that increase interpretation speed and geological accuracy
- Highly efficient log-correlation workflows that simulate paper-log correlation (log dragging, slipping, and track clipping) combined with the ability to instantly hang logs structurally or stratigraphically

**Surface-based interpretation**
- Simple and intuitive surface modeling of formations, unconformities, channels, and fault surfaces and intersections
- Combines data from WellBase and IsoMap surfaces for a more comprehensive and complete interpretation
- Fault offsets and unconformity intersection trimming are performed in the 3D model and viewed in 2D cross section slices
- Access to the FrameBuilder mapping module which instantly maps formation/unconformity intersections

**Dynamic depth-converted seismic backdrop**
- Dynamic depth-converted seismic backdrop in the cross section view combines geological and geophysical workflows and enables seismic data to be displayed behind cross section well-log images and curves
- Converts a time section to a depth section based upon the velocity survey in SeisVision™
- Backdrop includes both 2D and 3D seismic and 3D horizon and fault picks

**Surface prediction with conformance mapping**
- Design formation-to-formation thickness maps to model and predict deep structure on surfaces with few control points
- Constrained surfaces are viewable as contour maps with the addition of the FrameBuilder™ module

**Fault gapping for structural analysis workflows**
- Fault gapping to enable the user to restore section removed due to faulting (with additional capability to pick missing tops in fault gaps)
- Use vertical separation values to constrain surface offsets across faults as well as automatic fault offset abilities based on horizon interpretations and resulting 3D geomodel

**Ability to set up fault hierarchy to establish fault networks and truncation relationships**
- Unconformity gapping to support sequence stratigraphic workflows
- Interactive unconformity gapping and missing/restored surface modeling supports highly accurate subcrop maps
- Unconformity networks are supported to model complex sequence stratigraphic relationships and to help reconstruct stratigraphic geometries in cross section view

Requirements

**Hardware (MINIMUM)**
- 2.4GHz 64-bit Intel class or better
- 4GB RAM
- 1,024 x 768 graphics resolution
- CD-ROM drive
- 19-inch monitor

**Hardware (RECOMMENDED)**
- Quad 2.4 GHz 64-bit Intel class or better
- 8 GB RAM or greater
- NVIDIA GeForce or Quadro - 2GB video RAM
- DVD-RW drive
- Dual 21+-inch monitors

**Software**
- Microsoft® .NET 4.0
- Microsoft DirectX 11

**Operating System(s)**
- Windows® 7 Professional x64
- Windows® 7 Enterprise x64
- Windows® 7 Ultimate x64