SeisSpace®/ProMAX® software is Landmark’s next generation comprehensive seismic processing system for large volume land or marine processing of 2D or 3D pre and post-stack data. This system combines ease of use with effective analysis tools, superior geophysical algorithms, and optimized parallel processing infrastructure. With SeisSpace software, you can derive greater value from your investment in seismic data, increase productivity, reduce project cycle times and ultimately lower drilling risks.

Whether you are part of an oil company’s in-house processing team or a contractor trying to keep up with the growing number of surveys in your backlog, your ability to deliver large volumes of data, quickly and accurately, remains a hallmark of your processing operations.

SeisSpace technology is designed to help the user better understand their seismic data through visualization tools that allow rapid viewing of pre and post-stack seismic data. The power and flexibility of SeisSpace software enables you to optimize seismic processing sequences by leveraging your understanding of the area’s geology as a guide to seismic data analysis and parameter selection. These workflows facilitate construction of the optimum seismic image of the geologic target.

Benefits

**Optimize Reprocessing Value:** New processing and parallelization techniques allow for more efficient data handling, noise removal and seismic imaging when revisiting the potential of old surveys

**Data Integrity in Complex Geology:** Given acquisition and geologic conditions Landmark’s processing tools can non-destructively remove noise and deliver precision data

**Production Throughput & Productivity:** By leveraging the economies of scale in IT infrastructure advancement, Landmark’s processing infrastructure can maximize seismic processing throughput.

**Large 3D Volume Support:** New multi-azimuth shooting approaches can severely test a processing systems ability to manage much larger volumes of data. SeisSpace/ProMAX was designed with wide azimuth swath handling in mind.

**Enables Tight Integration with Seismic Interpreter:** Enabling tight collaboration between the processor and interpreter can ensure quick and improved understanding of data amplitudes and seismic images. Ultimately, this reduces reprocessing bottlenecks and enhances the processor’s ability to contribute to the asset team.

**Premium Development Platform for Proprietary Algorithms:** SeisSpace/ProMAX software makes it easier for oil companies and contractors to port proprietary technology into our easy-to-use processing environment.

Features

**Easy to Use Parallel Processing:** Driven by the SeisSpace user interface, the ability to easily build, execute, and manage multiple processing flows has never been easier in a production processing environment. In addition, this environment provides the capability of tracking job execution across available computer resources and graphical management of datasets, tables and flows.
**JavaSeis Prestack Parallel Format:** Developed for optimal execution in parallel environments, JavaSeis is the pre-stack data format that allows users to build jobs that can run on multiple nodes that scale well. The JavaSeis format which can be designed to provide a 5D seismic data framework is particularly useful for the application of full wave noise suppression and depth imaging algorithms.

**Processing – Based Visualization:** Unlike conventional processing technology, Landmark places special emphasis on providing processors with unique visualization tools to better understand data quality control issues. To that end Landmark has delivers “built for purpose” visualization tools that provide the processor with the ability to navigate through their data in 3D and interactively apply and measure the affects of their various processing flows.

**Data Conditioning:** ProMAX seismic processing includes an extensive array of robust modules for data editing and conditioning.

**Ray Path Depth Imaging:** Part of the base SeisSpace/ProMAX package, the processing tool kit includes robust pre and post-stack time and depth imaging algorithms, including an excellent and comprehensive Kirchhoff pre-stack, post-stack, 2D, 3D tool with support for anisotropy.

**Full Wave 3D Geophysics:** While the ProMAX/SeisSpace software includes a wide array of 2D & conventional 3D algorithms, it also boasts a series of interactive full wave 3D noise suppression tools like FKK and FX-Y decon to provide cutting edge noise suppression.

**Optimized for High Performance Computing Environments:** Recent infrastructure advancements to Landmark’s processing software include JavaSeis data support. This allows for simultaneous reading and writing to the dataset with a new trace processing executive. These new parallel improvements ensure optimal throughput in a distribute memory, Linux cluster environment.

**Development Kit for Proprietary Algorithms:** Inclusive with the software is a development kit that allows for the integration of proprietary processing algorithms. One of the key highlights of the development kit is the ability to build true 3D algorithms using the SeisSpace development infrastructure.