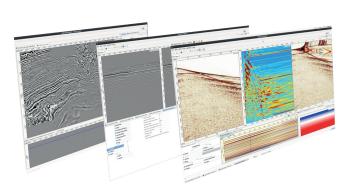
SHEARWATER

Dedicated In-house Processing Solutions

In-house packages available:

As part of The Shearwater collaborative processing and imaging solutions, we offer customers access to our processing and imaging software to provide in-house processing capabilities for the duration of a processing project.

Customers that use Shearwater Reveal are able to benefit from a wide range of processing tools and key data sharing capabilities. These allow test results, velocity files and intermediate datasets to be transferred in internal Reveal format via FTP sites or Shearwater Connect, giving Clients faster access to data and speeding up the QC process.



1

Project Term License

Entitles the Client to a single license of Reveal, at no additional charge, for the duration of the processing project. This option includes a Linux workstation or laptop, if required.

2

Remote Processing Support

In addition to the project term license, Shearwater GeoServices will provide additional remote support and training from an experienced Geophysicist, to assist in designing specific QC and processing workflows.

3

On-Site Seismic Processing

Entitles the Client to a dedicated Reveal workstation and an on-site experienced Shearwater Geophysicist to assist in key stages of processing. This option can be scaled up to include additional personnel and workstations depending on project requirements.

Shearwater Reveal Software Features and Benefits

QC, Time & Depth Imaging:

A modern, fully integrated processing interface developed for QC, time and depth imaging with all velocity picking, visualization, interactive testing and batch processing in one package.

Interactive Processing & Real Time Parameterization:

Innovative interactive processing technology allows users to change picks or parameters and see the effect on data in real time.

Advanced 2D & 3D Visualization:

Next generation, fast 2D & 3D viewer and interactive crossplots with instant access to headers and trace statistics.

Developer's Environment:

The powerful API allows writing of modules in C++, Java, Fortran90 and Python. The Python API does not require compiling and can be used for real time programming.

Key Processing Tools Include:

Input/Output	Read data from SEG-D, SEG-Y, seis, SeisSpace®, ProMAX®, SEPLib/Madagascar, SeismicUnix, SEG-B, ASCII Write data in SEG-Y, seis, SeismicUnix, seplib
Geometry	P190 Import, DB Merge/Setup, Header Setup, SPS Import, P1, UTM2LatLong
Amplitudes	SCAmps, Spherical Divergence, Time Varying Scaling, AGC, GateDecon, Gate Amplitude
Statics	Elevation Statics, Residual Statics, Refraction Statics, First Break AutoPicking with Smart Refractor Picking, Static Shift, Trim Statics,
Spectral Shaping	De-signature, Minimum/Zero Phase Conversion, Spectral Balancing/Whitening, Q Compensation (Phase & Amplitude), Offset Spectral Balancing
Noise Attenuation	Swell Noise, Linear Noise, FK Filtering, Bandpass Filtering, Time Varying Filtering, TX and FX Deconvolution, Airblast Denoise, Noise Adaptive Filtering, Radial Filter
Multiple Attenuation	High-resolution Radon Demultiple, 2D & 3D SRME, Frequencey dependent adaptive subtraction, 2D & 3D SWME, Tau-P Deconvolution, Wave Equation Demultiple, Adaptive Subtraction
Regularization & Interpolation	FX Interpolation, PostStack Regridding, 5D regularization, 2D offset regularization
Velocity Tools	Dix Conversion, Semblance Picking, Eta Semblance, LMO, NMO, Residual Moveout, Residual Semblance Spectra, Velocity Muting, Constant and Percentage Velocity Stacks
Time Imaging	Kirchhoff Pre-Stack Anisotropic Migration, Post-Stack Wave Equation Migration & Demigration, DMO
Parallel Processing	Job replication, MPI-based parallel processing, OpenMP-based parallel processing, Queuing Systems: Torque, LSF, PBS Pro, Slurm, Moab, Maui.
Developer's Environment	Open API; Example code for C++, Java, F90, Python. Interactive programming with Python modules

Training & Support

Initial training and technical support is offered and will be provided at the start of the project or commencement of the in-house processing option. After the project is complete, additional training and support, if required, will be agreed under a separate license agreement.