

ION Survey Optimization Solutions

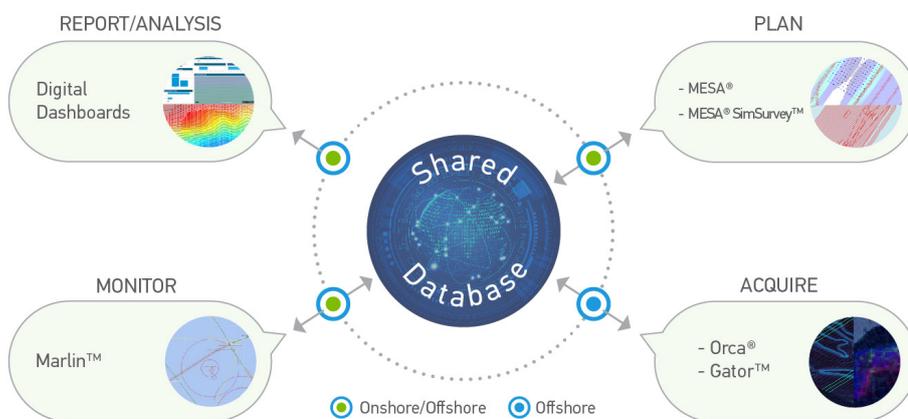
Remote QC

ION has developed a state-of-the-art solution for the offshore QC market to replace the current, manual model of traditional marine navigation QC.

The Remote QC solution from ION enables geophysical service providers and E&P companies to manage seismic surveys in real time, through a centralized and automated database reporting system. The database can be fully integrated with a variety of acquisition applications, and it is accessible to all project members whether they are located onshore or offshore.

The solution enables companies to effectively manage and monitor survey progress, view QA statistics, and ensure that the planned project specifications are met. The survey data can be monitored and assessed by experts irrespective of their location. Users benefit from remote visualization of the key aspects of the survey to better understand past and current state of the operations. High-level data visualisation dashboards can be used as live reports during project meetings, and with customers.

ION Web-based Real-time Remote QC Architecture



ION Dashboards

Take your data visualization to the next level with ION's powerful dashboards. Remote QC uses customized dashboards to provide crews and shore-based customers with automated analysis of navigation attributes with pass/fail statistics based on contractual specifications. Survey progress is also included as part of the QC, provides real time updates on operational efficiency. Survey progress provides real time updates on operational efficiency.

ION dashboards provide end users with a view of operational progress and production statistics to monitor key survey metrics for efficiency and data quality.

Attributes recorded by the Gator navigation system are presented in numerous views to provide a survey-wide overview and increasing levels of drill down to interrogate data and identify trends or anomalies.

Key Benefits

Targeting lower operational costs, reducing HSE exposure and improving personnel safety:

- Improved communications
- Better decision making
- Enhanced data quality
- Plan vs. actual analytics

Dashboards

- Survey progress metrics
- Statistical breakdown of attributes
- QA for each sequence providing pass/fail status against client specifications

Gator Survey Progress

- Live operation monitoring
- Replay/audit functionality
- Spatial attributes

Each attribute is also compared against defined contractual specifications, to assign the QA status of acquired sequences as either 'pass' or 'warning'. The dashboard allows user to examine each sequence in detail to understand which attributes may not be meeting these specs.



Landing page



Attribute QA



Survey wide

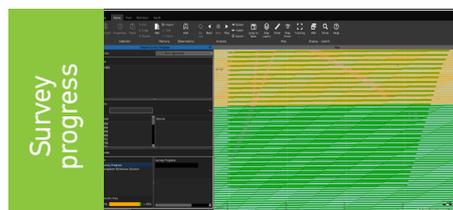
Gator™ Survey Progress

Gator survey progress is currently delivered using Marlin™ technology.

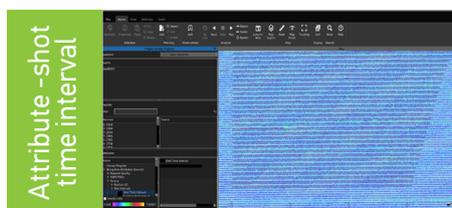
The Marlin application provides a live view of operations taking real-time AIS data from the survey vessels that is logged to the project database with playback functionality to review past events and serve as an auditable database.

Gator survey progress provides visualization of offshore operations using live and analysis modes to allow monitoring of current activity and vessel locations. For remote QC, spatial displays of navigation attributes are presented to the user along with survey progress visualization to highlight which source and receiver prep lot lines have been acquired to date. Users can also interact with the acquired sequences to confirm the number of deployed nodes is sufficient for the source line acceptance (and vice versa for receiver lines).

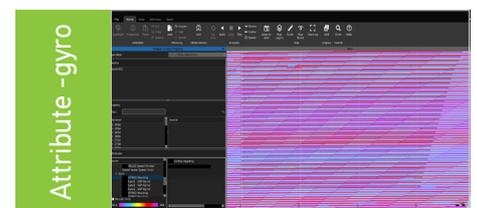
For office-based personnel, the application is accessed via a browser and mirrors the offshore installation providing a live view of acquisition.



Survey progress



Attribute -shot time interval



Attribute -gyro

Value Added Services

A bespoke solution can also be developed to match customers' specific business models and processes or to supplement their current systems. Using a collaborative approach, the ION team works closely with customers during the planning process, suggesting ideas and developing solutions to ensure that the resulting product is perfectly matched to their needs.

About ION

Leveraging innovative technologies, ION delivers powerful data-driven decision-making to offshore energy and maritime operations markets, enabling clients to optimize operations and deliver superior returns. Learn more iongeo.com

