Case Study:

HYPACK's Processing Software Integrated with the Absolute Ocean Platform Provides Speed, Supports Collaboration and Reduces Resource Costs

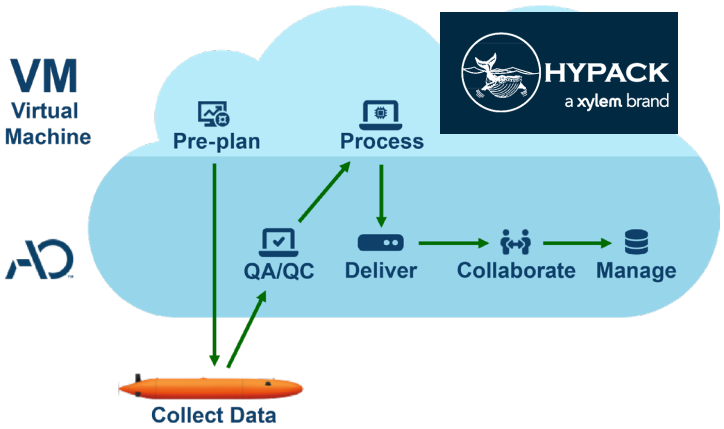
HYPACK, a Xylem brand, has been a world leader in software development for the hydrographic and dredging industries since 1984. Their software is one of the most widely used hydrographic software packages in the world with more than 10,000 users in over 140 countries.

"HYPACK® data processing in the cloud, hosted by Absolute Ocean, marks an exciting industry first," said Straud Armstrong, Director of Business Development at HYPACK. "This solution offers a comprehensive subsea geophysical data workflow in the cloud and delivers significant efficiency gains, all while ensuring secure, remote processing from any location."

CHALLENGE

Surveying and data processing often involves a costly, time-intensive, and fractured workflow. Survey team members work around the clock collecting and processing vast amounts of ocean data. Traditionally, datasets were gathered during the day, then pre-processed at night to evaluate and adjust their survey plan. Final processing was either completed on the ship by a separate processing team, or by the survey team or staff in a different location upon completion. When datasets were processed elsewhere, they were often transferred via hard drives or FTP services for processing. Both the survey team and processing team required costly, high-powered laptops to handle the data and software. Final delivery was normally completed through the same cumbersome methods of hard drives, static PDF documents or plot sheets, and FTP folders.

CLOUD DATA MANAGEMENT



SOLUTION

To address these challenges the Absolute Ocean (AO) platform was utilized not only to store, visualize, and analyze survey data, but also to plan survey missions and process the data. This additional capability was made possible by integrating the HYPACK survey planning and processing software. HYPACK(R) OFFICE and HYSWEEP(R) OFFICE were installed directly in the AO cloud environment alongside collected and processed data, making data access easy for an optimal workflow. This solution provided a seamless survey planning and data-processing pipeline that leverages cloud computing for enhanced efficiency. For maximum speed, survey teams utilized on-board Starlink internet for maritime users, enabling real-time data access and processing.

RESULTS

The result is a modern, efficient workflow with near real-time data access all in the Absolute Ocean platform. Processing staff can work remotely, distributing data sets and their workload efficiently, while interim results are instantly available for collaboration and planning. Field teams are no longer reliant on localized high-powered computers due to added storage and processing capacity through the cloud, where valuable datasets are stored. Visualized data can be securely shared with all stakeholders anywhere in the world through the Absolute Ocean platform.

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contact@terradepth.com www.terradepth.com

2000 Windy Terrace, Unit 18B, Cedar Park, TX 78613 USA

1816 Allison Ave, Panama City Beach, FL 32407 USA