

AN INFLUXDATA CASE STUDY

Seadrill Unlocks Real-Time Insight from Offshore Rigs with InfluxDB







The Data-Driven Offshore Drilling Contractor

Seadrill is an offshore drilling contractor serving oil supermajors and independent operators. It operates a modern fleet of drillships, semi-submersible rigs, and jack-up rigs deployed globally.

To support its focus on operational excellence and data-driven performance, Seadrill developed **PLATO**, a proprietary analytics platform designed to democratize data, transforming rig telemetry into actionable insights for rig crews, onshore engineering teams, and customers.

The Challenge

Unleashing Rig Data at Scale

For years, one of the biggest challenges for Seadrill's PLATO platform was acquiring and using operational data from its offshore rigs. That changed in 2023 with the implementation of high-speed satellite broadband. Suddenly, every rig could stream 15,000 to 22,000 time series with sub-second updates.

But unlocking that data stream exposed a deeper issue: PLATO's relational databases and data historians couldn't keep up with the demands of time series data. "The performance and scalability of traditional databases were really holding us back from moving to that next level," said Nick Pridmore, Senior Technical Superintendent at Seadrill.

Real-time querying and historical analysis also fell short.

"We tried using legacy historians; they weren't particularly reliable."

"Traditional databases, with their complex queries and stored procedures, made it difficult to access historical data. And it was terrible for post-processing."

Richard McConney

Head of Data and Analytics at Seadrill

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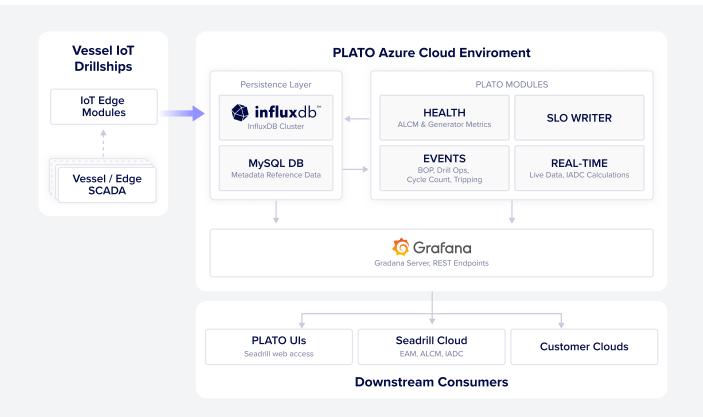


InfluxDB Enterprise

The Time Series Engine at the Heart of PLATO

Seadrill replaced its legacy data infrastructure with InfluxDB Enterprise, deploying to a multi-node InfluxDB Enterprise cluster in Azure. The platform now ingests tens of thousands of time series per second from drilling and vessel management SCADA systems across the fleet. Thanks to InfluxDB's standard integration interfaces, the team can connect to existing edge systems, analytical tools, and Grafana dashboards.

These dashboards allow rig crews and engineering teams to monitor power, optimize engine use, reduce fuel burn, and track emissions. Safety-critical signals—such as Blowout Preventer (BOP) events, alarms, and preventer cycles—are all surfaced in real-time.



InfluxDB's storage engine also unlocked years of historical data for analysis. Post-processing tasks that once took days now complete in minutes or seconds. "Especially for the analytics tools and troubleshooting," said Nick Pridmore, "We can go and see what happened a week ago, five days ago, or even compare it to when they performed the same operation a year ago."

As the backbone of Seadrill's real-time operating center, PLATO, powered by Influx, ensures visibility and responsiveness across the fleet.



The Impact

Real-Time Visibility Empowers the Organization



InfluxDB Enterprise helped PLATO achieve one of its core goals: data democratization.

"How can we make data available to everyone—the guys and girls working on the rigs or in the office—so we can really empower them?"

Richard McConney

Head of Data and Analytics at Seadrill

Getting the right data to the right people at the right time delivered real results. With access to historical time series data, Seadrill shifted from calendar-based to condition-based maintenance, saving approximately \$55 million in asset lifecycle costs. Other teams used the platform to optimize operations, achieving a 30% improvement in operational efficiency on select rigs. In one instance, real-time insights helped Seadrill avoid a costly shutdown, resulting in more than \$6 million in savings.

Powering PLATO with high-volume, high-resolution time series data, InfluxDB made that vision a reality. As Richard McConney summed up, InfluxDB isn't just about architecture; it's "the whole heart of our program."

\$55M

Saved in asset lifecycle costs by shifting to condition-based maintenance. 30%

Improvement in operational efficiency on select rigs.

\$6M+

Savings by avoiding a costly shutdown with real-time insights.

Try InfluxDB

Contact us for a personalized demo at influxdata.com/contact-sales