



## Simplifying M&A Data Integration

Valaris plc is one of the world's largest offshore drilling companies, with operations across 6 continents and a diverse rig fleet of ultra-deepwater drillships, versatile semisubmersibles and modern shallow-water jackups.

### Background

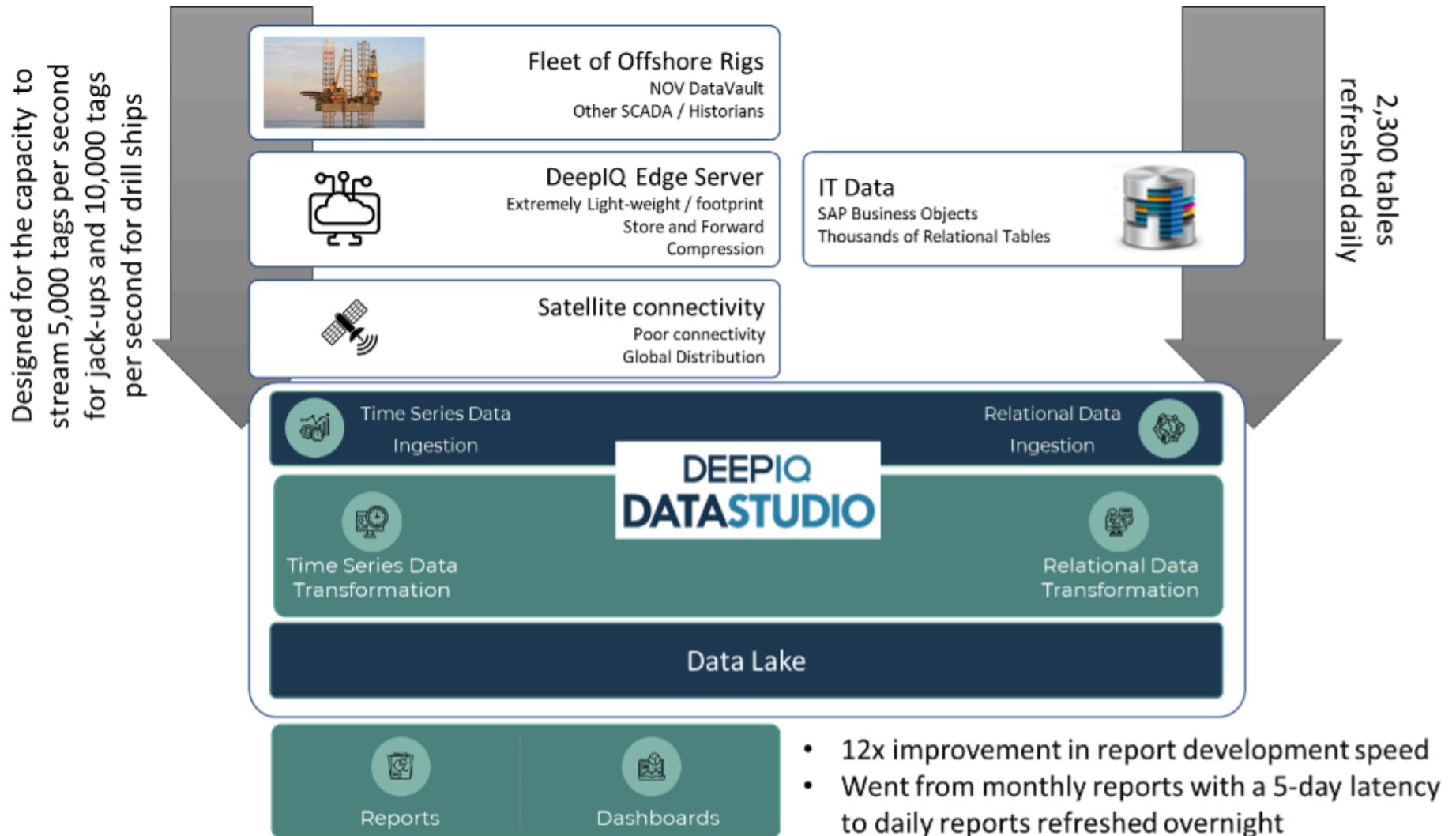
In 2019, offshore drilling contractors, Ensco plc (Ensco) and Rowan Companies plc (Rowan), merged to form Valaris. The newly formed IT team assumed responsibility for an application and data landscape that would double in complexity and size, virtually overnight. Further complications, the data workloads and infrastructure spanned across multiple cloud and on-premise environments, and all assets would migrate to a unified company domain. Unable to take action prior to closing the merge, the team's challenge was to integrate a large set of data sources as

rapidly as possible and provide uninterrupted access to data. This required a technology to support migration of existing data assets into Valaris' new environment, while adding new data assets and maintaining existing data capabilities.

## Technology Strategy

Prior to the merger, Rowan had developed a big data program that encompassed both its industrial IoT and business systems, coupled with context metadata and security. Rowan leveraged DeeplQ's DataStudio software to ingest more than 2,300 tables from multiple IT sources including commercial and in-house databases into Hive data lake with periodic and automated updates. Rowan also used DeeplQ software to ingest time-series data from its fleet of offshore drilling rigs into their data lake designed to handle 5,000 tags per second for jackups and up to 10,000 tags per second for drillships. Leveraging the data lake, Rowan automated its business intelligence reporting with integrated IT-OT datasets including health, safety, and environment (HSE); drilling performance; supply chain; and finance. Using this platform, Rowan went from monthly reports with a 5-day latency to daily reports refreshed overnight and also achieved 12x improvement in report development speed.





The following figure illustrates the architecture used by the team.

To meet the aggressive timeline of merger integration efforts, Valaris IT chose to leverage DeepIQ's 2nd generation DataStudio software to ingest all of its business system data into their data lake and deliver integration reports using this capability. The 2nd generation software enabled Valaris to better utilize memory resources throughout their data platform and was intuitive enough for analysts to administer it.

- 
- Valaris rapidly evaluated, tested & upgraded from DeepIQ's 1st generation to 2nd generation DataStudio software in time for the merge.
  - Valaris successfully connected to the additional data sources and automated refreshes on all the required tables into data lake from both Azure and on-premise environments.
  - Valaris, along with the DeepIQ team, integrated active directory authentication and authorization to give users access the data lake from the two legacy enterprise domains as well as the company's new domain.
  - The team delivered a centralized BI infrastructure capable of meeting the needs of Integration, Operations, supply chain, HSE, and others.

The schema on read strategy employed by Valaris' data lake delivered the speed and agility necessary to build out the data as a service capability because there was no prerequisite of reconciling all the business system data from both enterprises into a golden data model. Instead, business teams were granted controlled access to any data artifact they required during the integration effort. This decentralized reporting approach created a force multiplier, which allowed for unified business intelligence during the same quarter as the merge.

## More Information

If you would like to learn more, please contact DeepIQ at [info@deepiq.com](mailto:info@deepiq.com)

Download the whitepaper [here](#)

DeepIQ is on a mission to transform industrial processes by digitizing industrial expertise. Our vision is to drive end-to-end automation, enabling systems such as self-running power plants or drilling rigs using generative AI as the higher order reasoning layer operating over existing industrial automation technology stack.

[Privacy Policy](#) [Terms of Services](#)



FEATURES

INDUSTRIES

SOLUTIONS

PARTNERS



Extract  
Engineer  
Explore

Upstream  
Midstream  
Downstream & Chemical  
Mining

IT-OT Contextualization  
Well Construction  
Optimization  
P & ID Digitization  
Predictive Maintenance  
Production Optimization  
Route Optimization  
Sustainability

AWS  
Azure  
Cloudera  
Google  
Databricks  
OSIsoft(AVEVA)  
Snowflake

## COMPANY

About Us  
Resources  
News  
DataStudio Deployment  
Guide  
Career  
Contact Us

