

## Simplifying M&A Data Integration with DeepIQ's DataStudio

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 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 complicating matters, the data workloads and infrastructure spanned across multiple cloud and on-premises environments, and assets would migrate to a unified company domain. Unable to take action prior to closing the merger, 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.

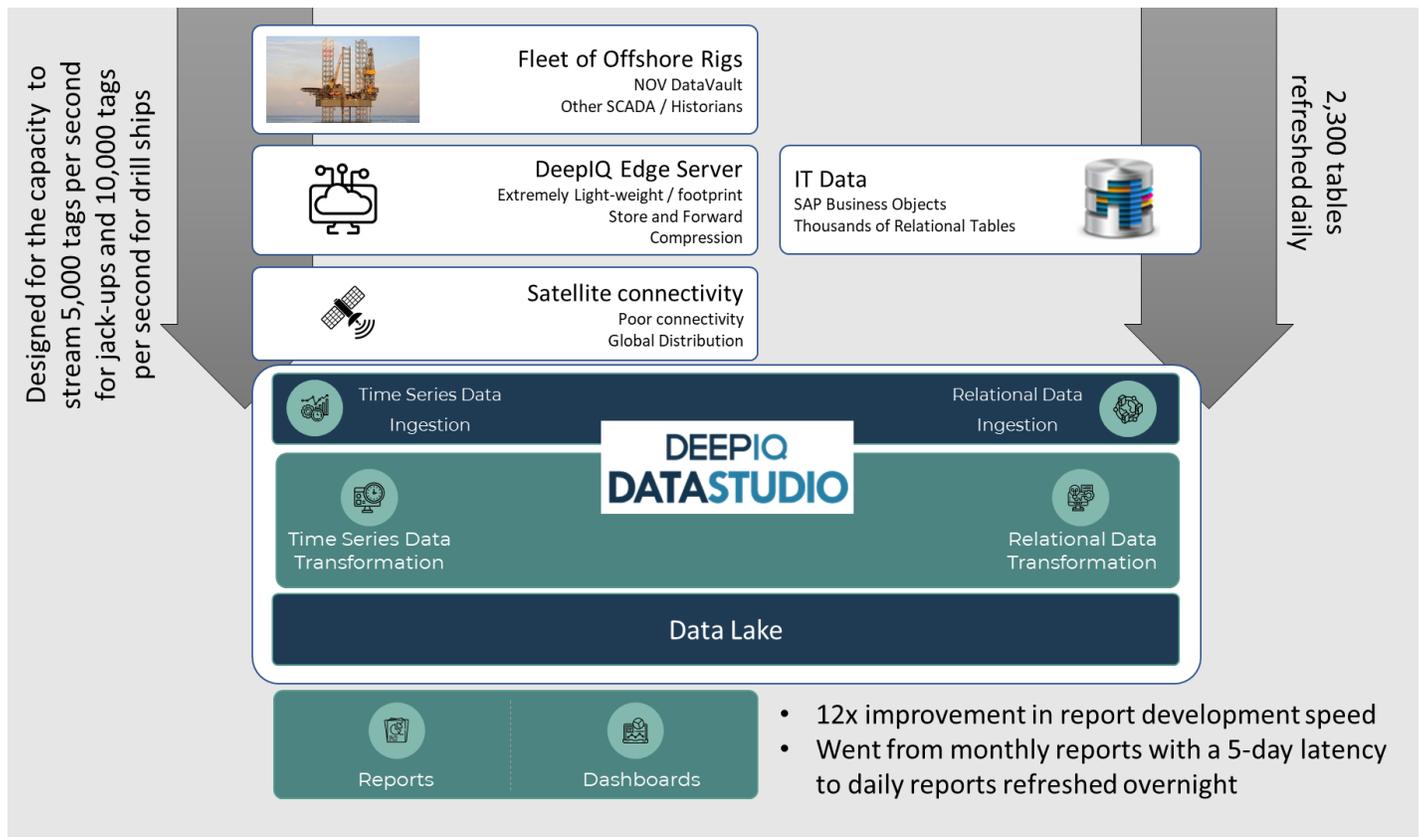
### Technology Strategy

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 DeepIQ'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 DeepIQ 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 manual, monthly reports to automated, daily reports refreshed overnight with a 12x improvement in report development speed.

*"DeepIQ's Data Studio was just what we needed to successfully meet the scope and schedule requirements of our integration."*

**-Jimmy Holmes, Director Data Management & BI, Valaris**

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 2<sup>nd</sup> generation DataStudio software to ingest all business system data into their data lake and deliver integration reports using this capability. The 2<sup>nd</sup> 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 1<sup>st</sup> generation to 2<sup>nd</sup> generation DataStudio software in time for the merger.
- Valaris successfully connected to the additional data sources and automated refreshes on all the required tables into the data lake from both Azure and on-premises environments.
- Valaris, along with the DeepIQ team, integrated active directory authentication and authorization to give users access to 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.

Through a schema on read strategy leveraging their data lake, Valaris avoided the prerequisite of mapping out all the business system data from both enterprises into a golden model. This time to value approach delivered the speed and agility necessary to rapidly build out data as a service to the new company. Business teams were granted controlled access to any data artifact they required during the integration effort. The result was a force multiplier through decentralized reporting, which allowed for unified business intelligence during the same quarter as the merger.

### More Information

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