4insight® Data Analytics is a cloud service enabling engineers and data scientists to connect to data sources, create new insight through cloud computing, and publish insight and dashboards to third parties. The solution comes with a range of available data connectors for easy connection to external data sources.

4insight® is a digital service providing key decision support to energy operators. The service enables domain experts to collect large amounts of data and create new insight based on machine learning and AI. Users can choose from a large selection of readily available applications or tailormake their own apps running on 4insight®. The portfolio includes 4insight® Asset Integrity, 4insight® Drilling, 4insight® Data Analytics, and 4insight® Marine Operations.

KEY BENEFITS

- Easy to use and highly scalable cloud application for data streaming, data analytics, and data sharing
- Provides domain experts with a tool to work with large, live data sets to create new insight
- Enables engineers to safely share insight and decision support with stakeholders
- Gives access to a selection of data connectors for easy connection to relevant data sources
- Lets engineers develop and run their own application as a managed service in the cloud, including publishing of the results to clients and third-party stakeholders
- Allows engineers and data scientist to perform data analytics on large data sets using their preferred analysis tools such as Python, Power BI, Seeq or similar
- Open APIs enables efficient integration with other systems
Creating value from data

4insight® Data Analytics is a safe and highly scalable solution that allows engineers and data scientists to start working with large and live data sets. The solution comes with a range of available data connectors for easy connection to external data sources. Once connected you can run cloud computing on large data sets using your analysis tool of preference through the open APIs or you can share access to data with third parties that analyse the data for you. Users may also create their own cloud applications that run as a managed service on 4insight®, including publishing of results to end-users as a web service.

A key principle behind the 4insight® service is its open APIs and open accessibility. Operators are free to hook onto any data stream of raw or processed data through open APIs. The operator is also free to give access to the solution and its data to any third-party organisation of choice.

System Architecture

The architecture behind 4insight® is designed to receive and compute large amounts of data, unlocking the true potential of the data to ensure the best possible decision support for operators. The service contains Digital Twins of the assets and helps operators improve data quality and manage the ownership, security, sharing and use of data, while at the same time reducing operational costs and risk.

System Architecture Diagram:
- Data sources (Pi Server, 4Subsea sensors, Other data sources)
- 4insight® Data services (Microsoft Partner, Microsoft Azure)
- End user applications (4insight® DRILLING, 4insight® ASSET INTEGRITY, 4insight® MARINE OPERATIONS)
- 4insight® Open API
- 4Subsea domain experts

4Subsea is a leading provider of technology and services that help operators optimise energy production from subsea oil & gas fields and offshore wind farms. We combine domain expertise with data analytics and digital services to maximise lifetime of assets, reduce operational cost and optimise future projects through data-driven design.

The company was established in 2007 and clients include the major energy operators as well as the large suppliers of subsea equipment. 4Subsea is headquartered in Asker, Norway with additional offices in Bergen, Kristiansand, Stavanger, Rio de Janeiro, and Aberdeen. 4Subsea is a company in the Subsea 7 Group. More info at www.4subsea.com.

4Subsea - Share ideas, move forward