

Rolta OneView™

Enterprise Intelligence Suite



Operational Insights for Oil & Gas
Drilling Operations





Lower Costs, Higher Profits with Rolta OneView

Rolta OneView is a web-based Business Intelligence solution that enables personnel at all levels of the organization, from executives to field personnel, to make accurate and on-time decisions by visualizing their vast data in real time. Rolta OneView provides a platform to improve performance and overall operational effectiveness of the organization by aligning the work process of personnel with the goals of the business and what is actually happening within the operation.

This innovative solution breaks down barriers to operational and business excellence, such as data silos across the enterprise, thereby providing a 360° view of operations. Rolta OneView's logical architecture, derived with the "Integrate-Analyze-Deliver" theme, has been built using best-of-breed BI platforms as well as significant intellectual property from Rolta. Rolta OneView has more than 1,300 unique performance measures.

A Sampling of Rolta OneView Performance Measures

Verticals ▼	Count of Performance Measures	For Executives	For Heads of Departments	For Operations
Refineries	230	53	222	221
Chemicals	575	104	575	392
Petrochemicals	578	105	577	396
Power Generation	389	29	389	389
Utilities - Electricity	436	59	436	436
Utilities - Water	426	69	426	426
Oil & Gas Upstream	321	27	68	312
Asset Insights	19		1	19
Business Insights	61	8	31	59
HSE Insights	82	1	4	77
Maintenance & Reliability Insights	40	3	6	40
Operations Insights	32	8	5	32
Project insights	17		9	16
Supply Chain Insights	32	3	4	31
Sustainability Insights	38	4	8	38
Grand Total	2955	446	2693	2572

Rolta OneView — Advanced Analytics to Maintain Margins

Today's lower commodity prices are squeezing margins and putting oil and gas producers under pressure to monitor and minimize development and operational costs. While an emphasis is being placed on trimming budgets, there is a corresponding need to improve efficiencies. Indeed, Gartner reports that using advanced analytics to reduce operating costs and increase production rates may be essential for upstream companies' survival.¹

Improving business efficiency requires integrated data analytics across the enterprise. But as upstream oil and gas companies seek to implement enhanced operating procedures and drive data-based business decisions, they all too often find barriers in the form of data silos among functional and organizational groups. What the upstream oil and gas industry needs right now is an enterprise-wide planning system that is both integrated and agile to more dynamically optimize resource utilization.



Rolta OneView delivers upstream oil and gas executives a precise yet holistic view of an operation's overall effectiveness and efficiency, along with the tactical data managers in the field need to achieve improvements. Information compiled from disparate systems across the enterprise and presented in dashboard view immediately uncovers critical process, production and asset situations that, without immediate attention, can cause huge production losses and unsafe conditions. Rolta OneView allows executives to quickly understand what is working, what isn't what soon may not and to consider "what if" scenarios. Location visualization further enhances operational levels of understanding, showing where assets and issues are sited.

1. "How Forward-Thinking Oil and Gas CIOs Should Approach Price Declines," Gartner, Dec. 2014

Insights across the Life Cycle of Wells

At each stage of the life cycle of a well — exploration, planning, drilling, completion, production and abandonment—critical decisions must be made. Vast amounts of data is created throughout the well life cycle that should be used to analyze development and operational costs. Rolta OneView captures both structured and unstructured data at every stage, offering advanced analytics and metrics tailored to upstream oil and gas operations.

Exploration

At this stage in the well life cycle, much geological and geophysical work is done, and substantial unstructured data generated to locate oil and gas reservoirs and determine their profile. To do so, increasingly 3-D modeling plays a part. Engineers build profiles of wells in 3-D using seismic surveying, whereby sound waves are bounced off underground rock formations. The waves that are reflected to the surface are captured by sensors and the data recorded. In the ocean, ships use seismic equipment to emit sound waves and track the reflecting waves, building a pattern.



Planning

Drilling plans and production plans can be compared to what you have actually drilled and produced. For example, usually in a single reservoir, depending on its size, several wells may be drilled to get the maximum benefit. In that case, when several production wells are drilled in the same area, the conditions for drilling and completing are going to be similar. You can then consider the drilling and completion plans for one successful well and reapply them, to some extent, to new wells in the same reservoir, thereby reducing the planning time. All this is unstructured data that can deliver operational insights through Rolta OneView.

Drilling



The drilling industry "is dedicating more resources than ever to ensuring the integrity of its assets." Part of this is due to the increasing complexity of equipment required to drill non-conventional horizontal wells onshore as well as ever-deeper offshore wells. Onshore, rigs drill on average 5,000 to 6,000 feet underground. In offshore drilling, it is not uncommon to drill at depths of 10,000 feet beneath the surface, which requires a slew of instrumentation and devices. Robotics, such as remotely operated

vehicles (ROVs), are used to connect and disconnect parts and devices subsea. In subsea drilling operations, much of the equipment is on the sea floor, and there are riser tubes that come up to the drilling platform.

Although the goal of onshore and offshore drilling is similar—that is, to create a channel to be used for oil extraction—they obviously have different structures and functions. Rolta OneView benefits both.

^{2. &}quot;Ensuring reliability, and proving it", July 10, 2014, Drilling Contractor (http://www.drillingcontractor.org/ensuring-reliability-and-proving-it-29640)

Completion

Completing a well happens after the drilling operation. The drill hole is cased with a specialized metal pipe that is cemented into the ground. There are several types of cement that can be used. One common type is foam cement, which has nitrogen in it and allows you to drill to deeper depths so that the hydrostatic head of the cement does not break the drill hole structure.

After the well has been completed and the casing put in place, calipers can be run through the drill hole to x-ray using tomography to determine the width of the cement and whether it is sufficient. This is another example of the type of unstructured data that is easily accessed and analyzed with Rolta OneView.



Drilling Performance Dashboard featuring Rolta OneView WITSML Capabilities

Production



If you are in the production stage, Rolta OneView KPI reports inform you how much oil is produced, planned versus actual and costs associated with operations. Shale operations are particularly sensitive to overhead costs, and companies are aggressively looking at ways to improve productivity and lower costs. Analytic insights and real-time monitoring of operations that Rolta OneView provides helps shale operators make the right data-based business decisions. Rolta OneView for Upstream Oil & Gas can help determine trends in production rates in particular wells, in making sure that the quality of drilling and appropriate level of production is met, and that profit is achieved.

Rolta OneView touches all critical functions, providing users with the status of hundreds of upstream industry-specific KPIs, such as asset utilization, operational integrity and safety, inventory, cost control, compliance, customer impact, system reliability and much more – presenting past, current, and predictive analysis-based future views to optimally manage enterprise operations. No other business intelligence solution combines the power of SAP technologies with the depth of asset and production insight and the breadth of integrated departmental databases.

Fast Facts about Rolta

- SAP Global Solutions Partner
- SAP Strategic OEM
- Established public company founded 26 years ago
- Global company with projects in more than 40 countries
- More than 3,500 employees and growing
- Annual revenue of \$400 MM
- Forbes Global 200 Best Companies—4 times in 6 years

About Rolta

Rolta, a global SAP partner, is a strategic original equipment manufacturer (OEM) vendor, integrating its numerous industry solutions with platform technology from SAP. Rolta is the 2014 SAP® Pinnacle Award recipient for OEM Partner of the Year, recognized out of 21,000 partners for the most strategic level of innovation and the fastest new product introductions.

Rolta provides customers with cutting-edge solutions that exploit the power of SAP technology by combining Rolta's products with the technology portfolio offered by SAP. Enterprise-level solutions are built around Rolta's intellectual property and domain expertise to offer deep insights and understanding of industry drivers and supporting business processes that help organizations achieve their business goals.

Rolta is very excited to offer our Rolta OneView capabilities. If you have any questions or would like further information, please call us or email us at any time.

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