



SCADA in the Cloud

for Oil & Gas Real-Time Operations

Table of Contents

Service Description..... 3

Our Process 5

Key Benefits 6

Wellmonitor Characteristics 7

Graphic user interface..... 8

Production Module 9

Process Monitoring..... 10

Wellmonitor App 11

Telecommunications 12

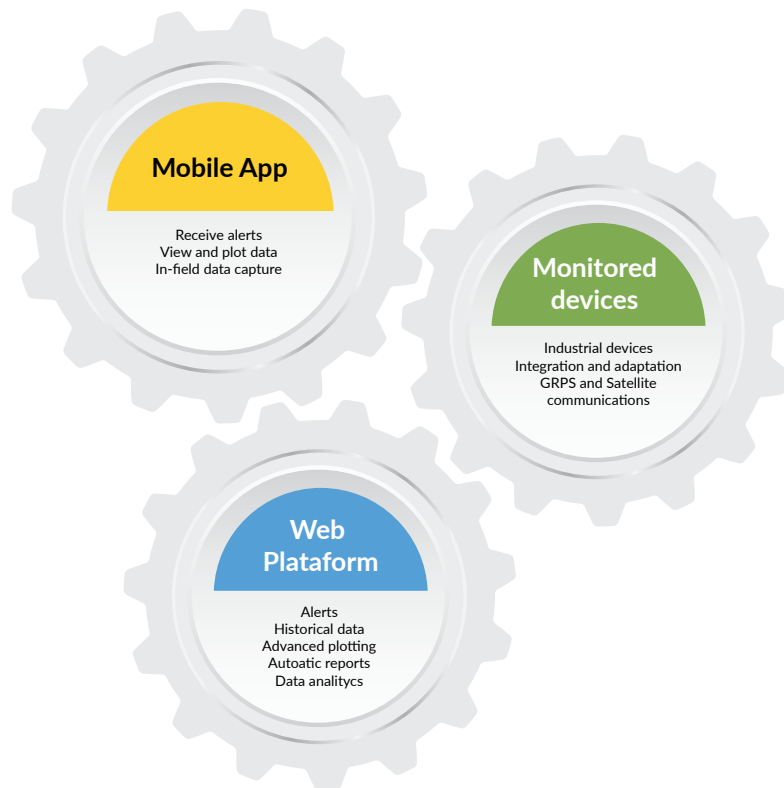
Support..... 13

Users of our system..... 14

Service Description

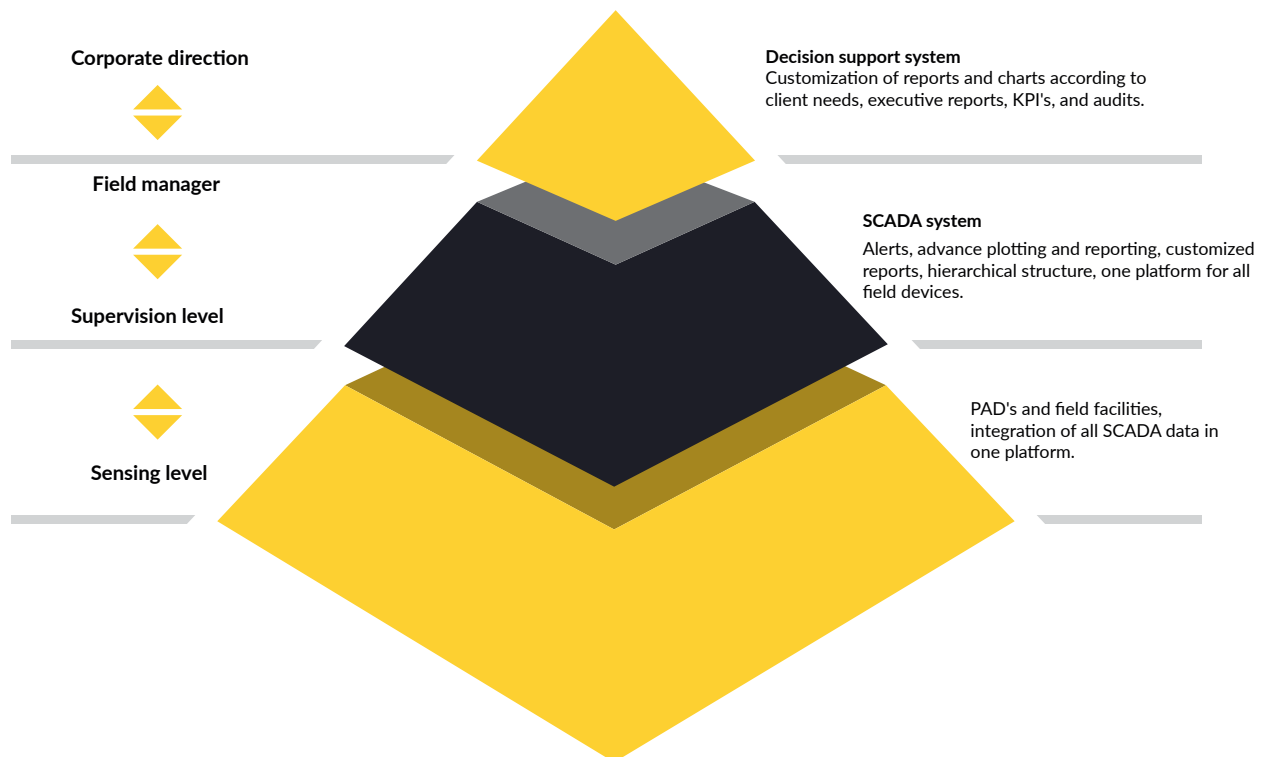
We provide tailor-made technology services to monitor real-time operations systems. We have extensive experience in the implementation of SCADA systems in mission-critical industrial equipment, satellite and terrestrial communications systems, statistical systems for data analysis, artificial intelligence systems applied to pattern recognition and development of APPs for mobile devices that are interconnected with the other elements of the system.

- Hardware: we integrate and adapt all types of devices needed for the operation such as sensors, signal capture devices, and communications systems.
- SCADA platform for two-way communication with the devices connected to our system.
- Database system for storing captured data and generating reports.
- Data analysis systems that use statistical methods, pattern recognition, data analytics, and artificial intelligence algorithms.
- APP for smartphones that allows users to access their SCADA data, view / plot your online data, and following alerts of your monitored devices.



Our services apply to each level of the automation pyramid.

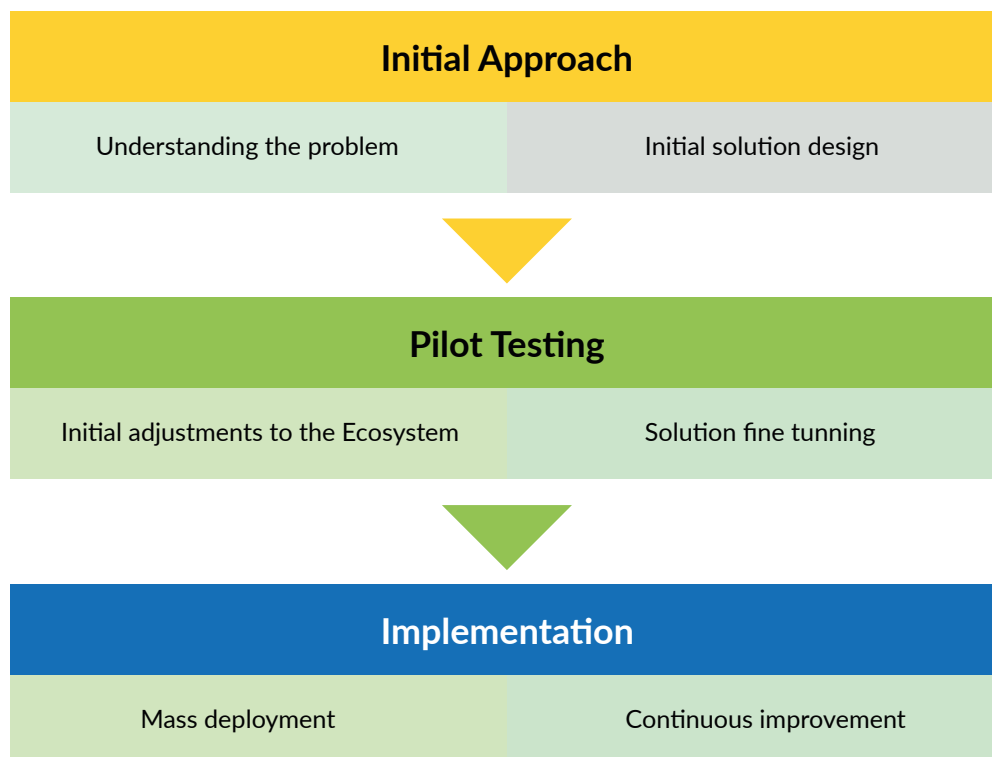
- Sensing level and control: we advise our clients in the selection of sensors and controllers, design of field data networks and telecommunications.
- Supervision and control level: alerts systems, automatic periodic reports, historical data, and advanced plotting capabilities.
- Management level: statistical analysis of the data, structure executive reports, KPIs, audits, statistics and projections, personalization of the system according to the requirements of the client.



Our Process

From the very beginning, we work with our Customer to identify his problems and requirements in order to propose an initial solution that may later be tested with a pilot. During the pilot we will be able to make, together with our Customer, the necessary adjustments to the initial solution proposed in order to obtain the best solution and later to mass it at a productive level.

Once the final solution is put into production, there is a process of continuous support and improvement that consists of keeping the solution up to date so that it will not lose its validity over time or after the Customer's operational changes.





Key Benefits

1. Optimize production costs and resources by concentrating the monitoring and control of nearby fields in one place.
2. Save time for your staff. The high level of customization of reports and analytics that we offer to our customers allows automating every-day tasks so your staff members can spend time on relevant matters.
3. Optimize operative costs. Our services are charged on a daily basis so you can pay only for the days that you really use them.
4. Get free of software licensing and IT infrastructure. Our technological offer is based on the software-as-a-service model so that our clients do not need to undertake cumbersome processes of software licensing or configuration of networks or equipment within their company.
5. First-class customer support. Every person on our team is committed to providing the highest levels of customer satisfaction.

Wellmonitor Characteristics

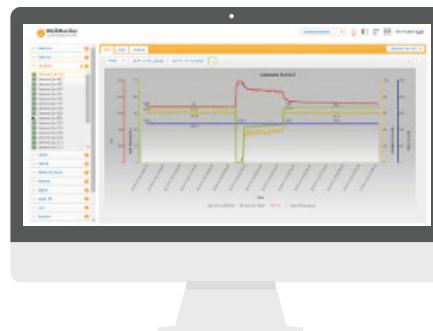
1. Supports all artificial lift systems like ESP, PCP, SRP and others.
2. Supports electric generators, flowmeters, level meters, electrical power quality measurement devices and other industrial equipment.
3. Easy-to-use web user interface.
4. Frequency ramps and PID control.
5. Production calculations. Allows calculating real time production of each well and production losses.
6. Advanced alerts module that monitors the behavior of monitored variables and alerts when changes occur.
7. Customizable reports and charts for each client.
8. Advanced plotting capabilities.
9. Comparative charts (chart with the same variable for several devices).
10. Parameterizable alerts system.
11. APP for smartphones and tablets.
12. Geo-referenced location of the motored device on the map.
13. Customizable map with information of interest to the customer, e.g. roads, pipelines, and other industrial equipment.
14. There is no limit on the number of users who can access the system.
15. Customization of the software with the logo and colors of the client.
16. Access using your own subdomain, e.g. client.wellmonitor.net

Graphic user interface

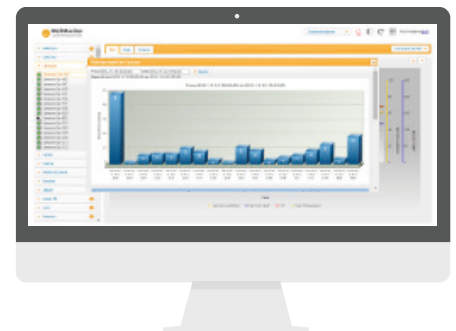
The WellMonitor graphical user interface displays the information in different environments, which can be configured by each user to fit their information needs.

Our philosophy is that WellMonitor is adjusted to the needs of our Customers. We are able to make adaptations to the graphical user interface, such as special reports, specific graphics, to fit the requirements of our customers.

Trend chart (Multi-axis)



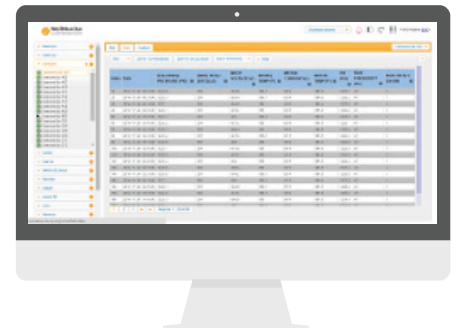
Stops and alerts reporting



Control panel



Tabular information



Comparative charts



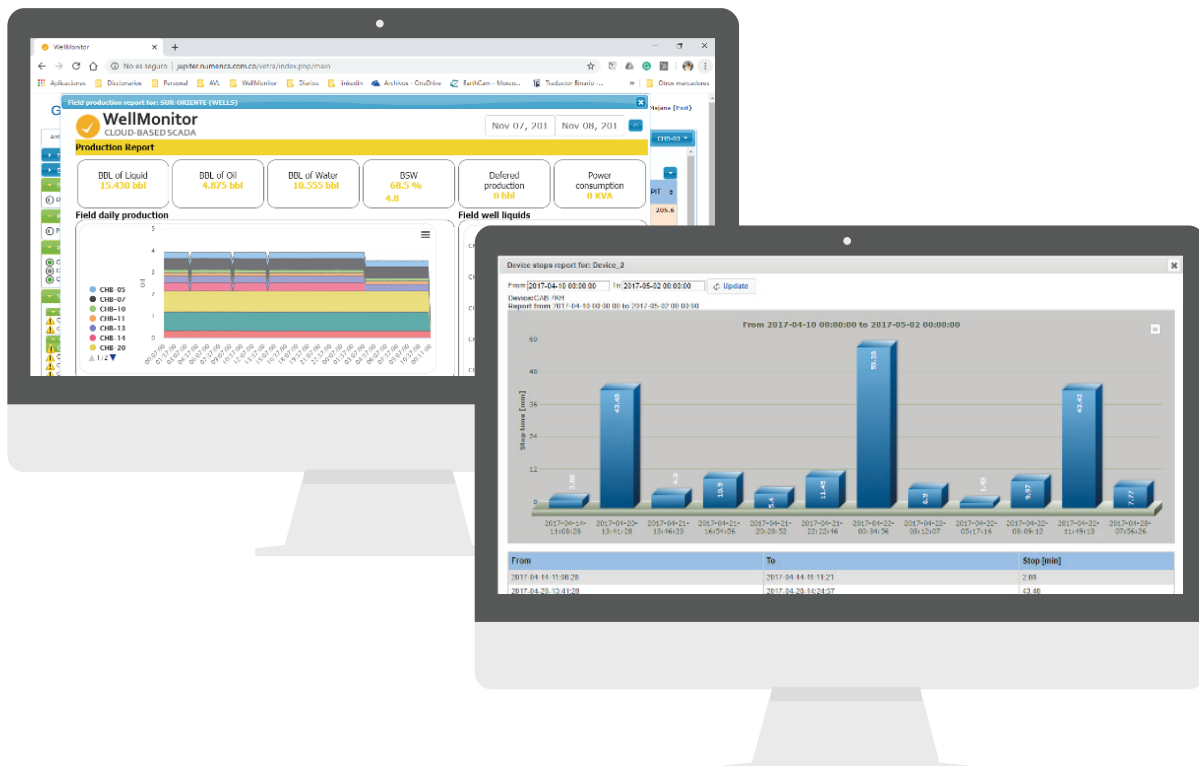
Production report



Production Module

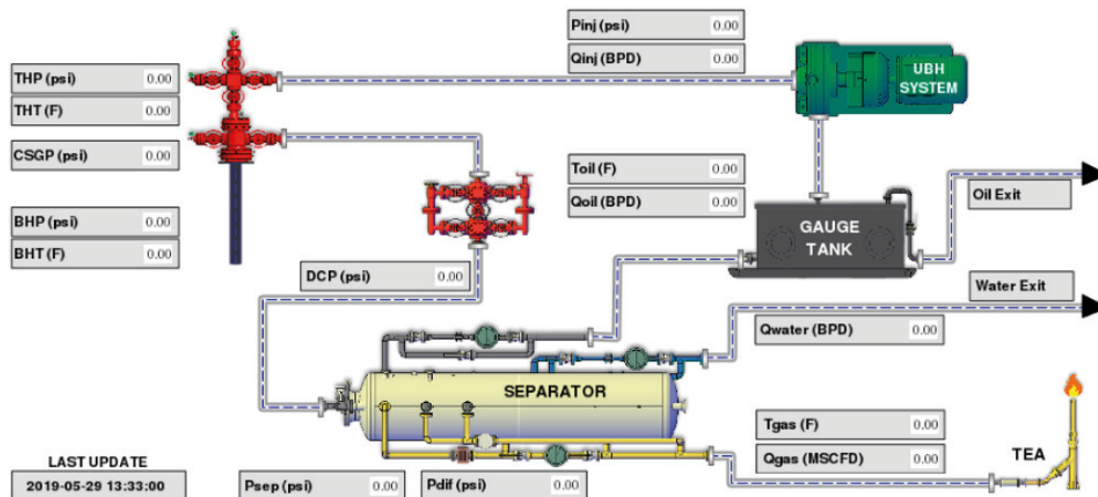
The production module of WellMonitor allows making production calculations of each well in real-time.

- Calculation of:
 - Liquid flow produced.
 - Oil flow produced.
 - Gas flow produced.
 - Water flow produced.
- Calculation of fluid level in the annular.
- Reports:
 - Total volumes produced: total fluid, water, oil and gas.
 - Production losses.
 - Causes of production stops.

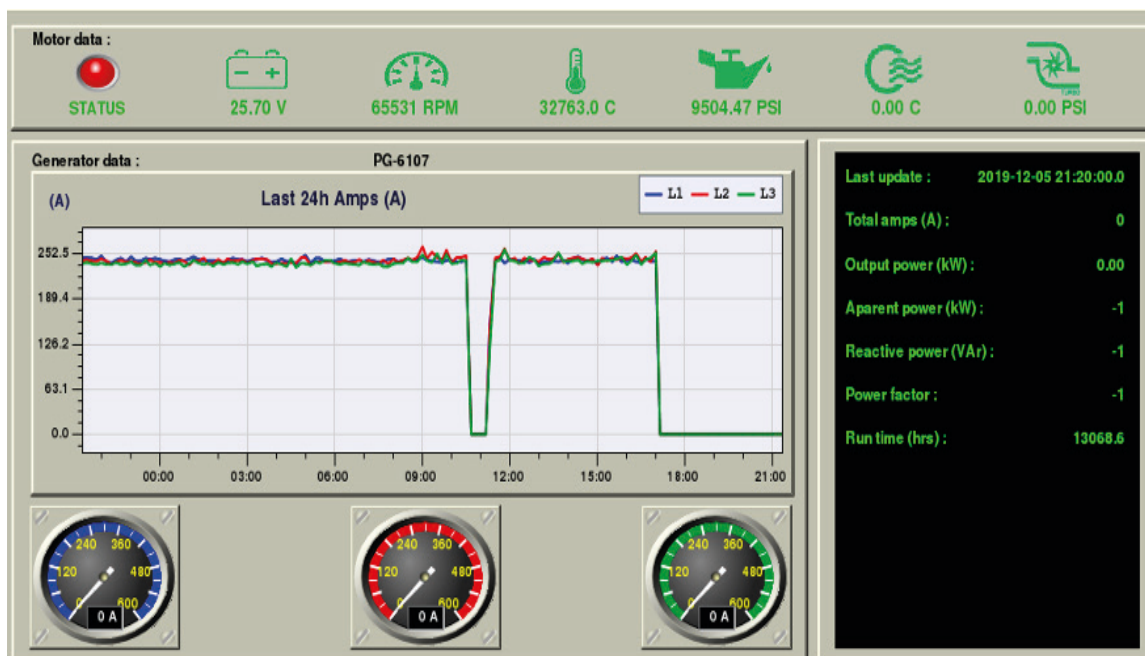


Process Monitoring

From ALS to surface facilities, WellMonitor has been used to monitor and control many kinds of process and devices.



Testing Station



Electric generator control panel (mimic)

Wellmonitor App

WellMonitor APP is a free application for users registered in WellMonitor that allows to receive and visualize the alerts that are generated in the equipment monitored, to see data generated in tabular form and in graphic form. In addition, WellMonitor APP allows manual capture of data from equipment not connected to the system as wellhead information or tank levels, the captured information is sent directly to the server and made available to our Customers.

WellMonitor APP is available for devices with Android and iOS systems.

Characteristics:

- Monitoring of alerts.
- Graphical display of the data.
- Tabular display of the data.
- Data capture manually.
- Alerts are sounded and/or vibrated in the status bar of the device (as shown in Whatsapp messages).



Telecommunications

The telecommunications system is a fundamental axis in the automation process since it directly impacts on the system AVAILABILITY. WellMonitor allows continuous auditing of the telecommunications service.

For our customer's convenience we offer different options to supply the communications required by WellMonitor:

1. We provide the appropriate satellite or cellular communications system (gprs) specific for SCADA applications.
2. In case our customer already has a suitable communication system on the field, we can use it to transfer the SCADA data to our servers and put it online.

Support

Every person on our team is committed to providing the highest levels of customer satisfaction. We have supported the implementation of projects of SCADA systems for ALS and facilities in Egypt, Colombia, Ecuador, and Central America.

Characteristics

1. Support tickets system. This system is available for registered users at www.wellmonitor.net, requests are handled through forms that allow them to follow up each request (Tickets).
2. Face-to-face and online training. Although the software WellMonitor is very friendly and easy to use, we offer free online training to our customers. A face-to-face training can be arranged if the customer takes care of the traveling charges of our technical staff.
3. Live support. We have operators that offer online support services to our customers worldwide.

Users of our system

NUMÉRICA started this Business Unit since 2010 and today we have as users of our System the following companies with more than 400 supervised devices 7x24x365:





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