



# SCADA SOLUTIONS FOR OIL & GAS



## INTRODUCTION

Processes in oil and gas operations i.e. exploration, development, production and transportation generate large amounts of data. Converting this data into useful information that can help you in making better and more accurate business decisions requires a stable, robust and scalable means of integrating, managing and distributing data throughout the business enterprise.

Avanceon, an industry leader in Supervisory Control and Data Acquisition (SCADA), offers flexible, secure and cost-effective SCADA solutions that give you comprehensive view of your processes and operations. Our SCADA solutions collect diverse data from multiple sources (surface facilities, wellheads, processing plants, pipelines, pumping and gathering stations, compressor stations, sensors, electronic flow measurement (EFM) devices etc.) and disseminates important information to respective users in real time.

Combined with the ability of developing automated workflows, our solutions enhance strategic decision making and optimize operational productivity across your organization.

Avanceon offers following three SCADA solutions, developed keeping the needs of oil and gas customers in mind:

- Plant SCADA
- Wellhead SCADA
- Pipeline SCADA

## PLANT SCADA

A SCADA system is an essential component of many distributed activities within an oil and gas production field. It provides for monitoring and remote control of important field assets (wellheads, manifolds, separators, other treatment facilities etc.) from a central control room.

Avanceon's offered Plant SCADA solution is reliable, has easy to use operator interfaces, and can integrate with producer's existing infrastructure; contextualizing and presenting data to operators in real time as meaningful, actionable information. Not only this, Plant SCADA can accommodate growing number of industrial Internet of Things (IIoT) devices and other newer technologies being adopted in oil and gas operations, thus offering a true **Digital Oilfield** experience.

## WELLHEAD SCADA

The principal role of Avanceon's Wellhead SCADA solution is remote data transmission from geographically dispersed Wellhead/ Christmas-tree locations. It provides integrated and reliable link from the oil/gas well to the field headquarter so that your operators/engineers have greater visibility of equipment and production, and its safety and performance. With reliable data transmission, they can use accurate, real-time data as the basis of their decisions and respond to critical situations in a faster manner.

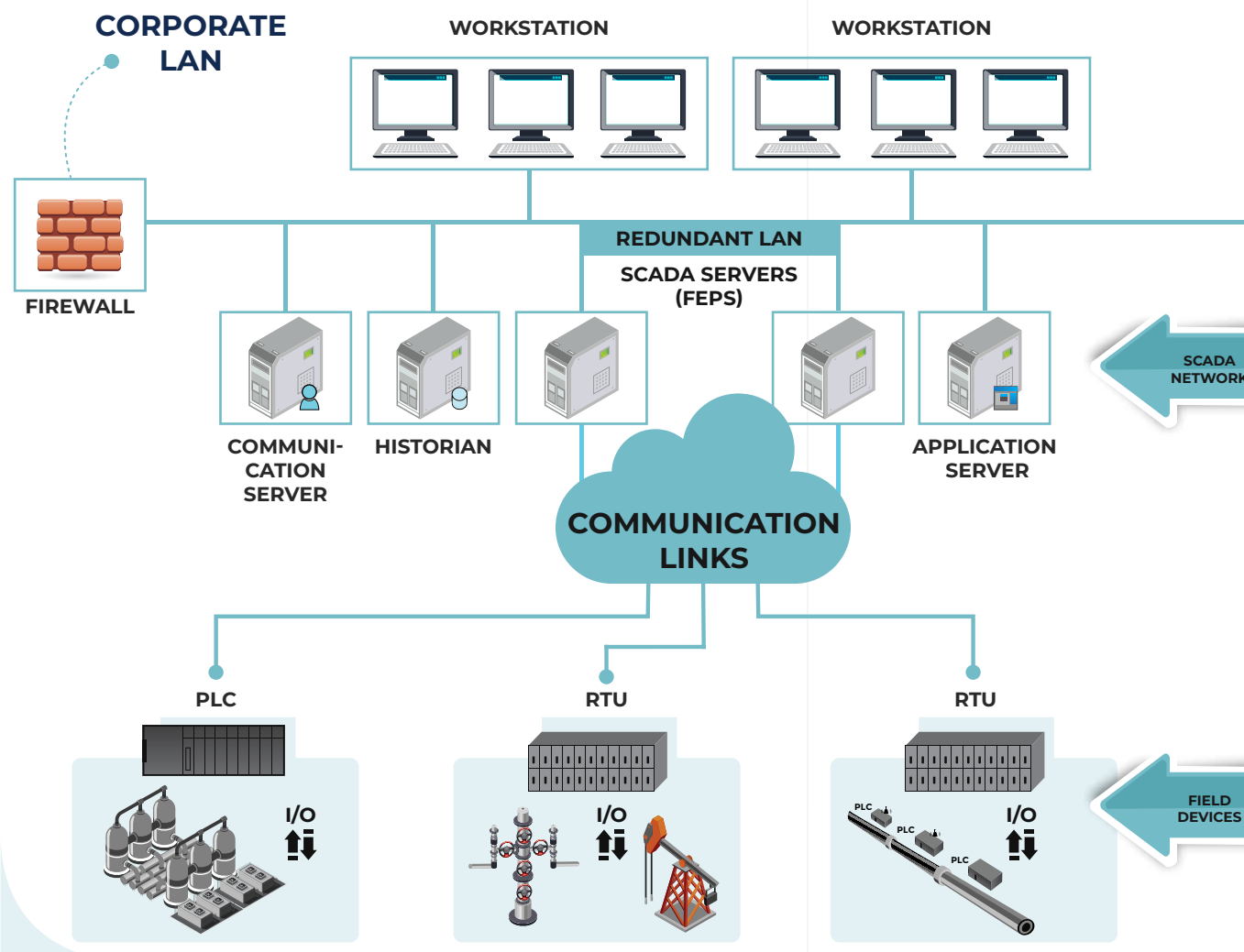
## PIPELINE SCADA

Oil and Gas pipelines play a crucial role like blood vessels, delivering petroleum products from producing fields to finished products' distribution terminals. Compounded by varying market conditions, demand for safe and reliable operations, strict compliance to environmental & regulatory standards and ever-increasing quench for operational excellence make pipelines' operations even more challenging.

In order to ensure pipeline integrity, safety, security

and reliability, operators require a robust, flexible and state-of-the-art SCADA system that can help them meet demanding delivery schedules and optimize operational costs.

Avanceon offers integrated, flexible and secure Pipeline SCADA solution that facilitates availability of live data for monitoring pipeline, delivery conditions at all major terminals, product reconciliation and accounting for entire pipeline network and for taking necessary corrective and preventive actions.



## COMPREHENSIVE FEATURES

Avanceon's highly flexible, robust and scalable SCADA solutions are feature rich and include:

- Remote Terminal Units (RTUs) for real-time data acquisition and monitoring
- Master Terminal Unit (MTU) for centralized control of SCADA system. MTU initiates all communication, gathers data, stores information, and interfaces with operators
- Reliable Communications and Network System for SCADA uplink e.g. cellular network (GSM/LTE), wireless radio, fiber optic cable etc
- SCADA Software for enabling remote site communication and designing Human Machine Interface (HMI)
- Seamless integration with existing control systems including DCS, PCS, SIS and F&G
- Data Analytics and Dashboards for production reporting, asset performance and financial management
- Alarm management, notifications and analytics
- Solar panels, regulator and batteries
- IP65/NEMA certified control panels to provide protection in harsh weather conditions



## BENEFITS

### Operational Excellence

- Precise and current monitoring of field operations across local and/or remote sites helps operators in maximizing availability of field operations and minimizing production losses
- More efficient processes through automation where manual intervention is not required. This reduces the risk for downtime and improves operational efficiency

### Equipment Effectiveness

- Enhanced operational safety and process reliability of oil and gas assets
- Reduced asset maintenance costs through efficient management of plant faults instantly
- Real time faults identification helps maintenance team in faster incident resolution
- Clear analysis of remote incidents through time stamped historical event logging

### Improved Decision Making

- Seamless data integration from multiple sources helps customers study data carefully, discover risks, opportunities and collaborate across integrated operations for informed decision making
- It also helps in improving compliance with regulatory and fiscal requirements



### GET IN TOUCH

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