

SIERRA RESOURCES CASE STUDY

Scada 2.0 System for a gas processing facility including devices, custom dashboard and alerts.

Overview

Meshify was selected as the remote communication (sometimes called “call-out” system) for a new gas-processing facility in South Texas. The solution required an economical option with a quick deadline for remotely connecting and communicating with many different systems in a local area.

Meshify used their M1 hardware over AT&T cellular connectivity to connect ABB Total Flows, Siemens PLC’s (with 10 tanks reading in) and several digital in/outs for critical infrastructure status monitoring like flares. The system uses Meshify edge analytics and real-time message-based infrastructure to send real-time significant values to the servers. No polling engines are used and no VPN’s are required. Rather the system makes a secure outbound connection from each individual M1 to the server and communicates over encrypted tunnels to ensure security.

Business Analytics were assembled in a custom dashboard for Sierra in a matter of a few days with several feedback loops between Meshify and Sierra Resources. The system notifications are defined by Sierra and can be self-managed. Access as well can be self-managed by Sierra. All goals were met and the project was well within budget and time requirements.

Key Results

Meshify Delivered the Remote Communication (i.e., “Call-out”) System for a New Gas Processing Facility in Southern Texas.

Critical Infrastructure Monitoring Goals Were Achieved

No Polling Engines Were Used and No VPN’s are Required: System makes a secure outbound connection from each individual M1 to the server. Communication is via encrypted tunnels ensuring security.

Goals

Monitor 5 ABB Total Flows: RS-485 Modbus outputs configured for us and pushed to the back-end in real-time

Monitor Flares: Ensure through a DIO that the flares are always running

Monitor Siemens PLC: A custom registry map was read from a Siemens PLC over Modbus

Mission-Critical Alerts: Custom notifications that get to the right people at the right time.

No Polling Engines OR VPN: Real-time data updates without a polling interval

Security: No compromise on top-notch security

Easy to learn and manage: Intuitive interface, customized just the way we want, self-managed



“We thought our gas processing plant should utilize only ‘off-the-shelf’ solutions. As it turns out ‘customized’ means a few days for Meshify and we got exactly what we need done. We got great value out of our relationship with Meshify and plan to look for new use-cases with them.”

John Campbell, VP of Operations,
Sierra Resources