AUTOSOL
Data in motion.

Automation Solutions Inc., better known as AUTOSOL, is a global award-winning company based in Houston, Texas, specializing in providing reliable, flexible solutions for the automation and data delivery needs for mission-critical infrastructure. Suzzette Rainey, VP of AUTOSOL Canada, shares with Energy Connect how their products are helping the Oil & Gas industry – and how the parent company continues to innovate after 32 years in business.

Those who are familiar with the AUTOSOL name know the company for its software products, mainly its OPC Servers, which help solve communication challenges out in the field. Since the beginning, AUTOSOL has never stopped building on their solid foundation. The Autosol Communication Manager (ACM) is a "middle-ware" software product, putting AUTOSOL between SCADA & Measurement systems and field assets, many of which can be thousands of miles apart, using legacy protocols and spotty communication methods.

STARTING OUT

AUTOSOL started out in 1987 as a system integrator in the Gulf Coast region in Houston providing solutions to integrate office and industrial automation hardware and software challenges in a variety of industrial facilities, primarily in oil and gas production, transmission, and distribution. Solving these challenges is what led AUTOSOL to develop the original multi-protocol communication software, which combined several protocol drivers into a single host able to communication to a large number of client applications. The development

of the company's current communication manager dates back to 1994, with the development of the Autosol Universal Communication Server (AUCS), which evolved into the Autosol Enterprise Server (AES) in the early 2000s.

"Our solid reputation for being reliable has allowed us to become the de facto standard in the remote data acquisition marketplace. In addition, our company has built our reputation on customer service and support," says Rainey. "AUTOSOL's core capabilities have become an integral part of North America's critical infrastructure, providing the communication layer for more than 1,200 systems that communicate with more than 325,000 devices performing various automation missions."

As a testament to their role in the industry, AUTOSOL recently took home the award for Corporate Achievement in the Field of Automation at the International Society of Automation Calgary 2018 — North America's leading event in Instrumentation, Systems & Automation. And they aren't slowing down anytime soon.

MOVING FORWARD

Currently, AUTOSOL is building on its Autosol Communication Manager foundation by developing a new edge application called eACM, which fits on edge computing devices to convert native protocols to MQTT and MQTT Sparkplug B. eACM communicates to RTUs and PLCs and converts their native protocols to MQTT. "Essentially, an MQTT-enabled ACM would allow customers to get data from existing legacy proprietary devices and publish via MQTT to a broker," explains Rainey.

"We can support both multiple protocols and devices simultaneously," she adds. "ACM and eACM are built on the shoulders of our continuous innovation. AUTOSOL is excited to introduce eACM or Edge ACM – the next phase in a digital transformation, allowing customers to move their data collection to the field. eACM's lightweight software solution works in tandem with almost any edge Linux box, such as cell modem, radio, smart switch or smart router. Using MQTT in this application enables high-resolution data acquisition."

Since the beginning, AUTOSOL has constantly been innovating. "We are transforming our proven-reliable SCADA & Measurement products to help our client's evolution to Industry 4.0," explains Rainey. "As more devices become IIoT-enabled, security concerns become more prevalent and since AUTOSOL has been providing communication to these devices for more than 30 years, we wanted to also begin providing a secure communication path." In 2014, AUTOSOL introduced the CryptoMod to provide OT security for legacy field assets. This patented communication appliance secures geographically remote field devices used for control, surveillance, data acquisition and metering allowing for end-to-end security and encryption.

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But it's not just protection from digital threats AUTOSOL delivers – it is protection from physical safety hazards as well. For instance, its real-time Alarm Manager can alert control room operators to elevated pressures or temperatures, enabling a quicker response that ensures mission-critical infrastructures are closely monitored and helping to expedite a fast response when necessary.

AUTOSOL representatives are looking forward to representing their flagship software during Energy Connect, May 21-22, 2019 where you'll have the opportunity to check out David Blanco's webinar, Introducing AUTOSOL's eACM, an MQTT-Enabled Edge Gateway, and watch a demonstration of AUTOSOL's application. •

To learn more about AUTOSOL, visit www.autosoln.com.