



Driving industrial insights through cloud connectivity

Emerson easily develops and deploys an industrial IoT solution that delivers new data insights by partnering with Dell OEM Solutions



Manufacturing

United States

Business needs

Emerson needed to quickly develop and deploy a scalable industrial automation solution that collects IoT data to help customers better manage and troubleshoot control valves.

Solutions at a glance

- [OEM Solutions](#)
 - [Dell Edge Gateway](#)

Business results

- Quickly develop solutions on a global scale
- Give customers a better way to manage and troubleshoot control valves

Speed time-to-market
for new IoT solution
development



**Spend more time
on innovating**, less
time on managing
infrastructure



When chemical, oil & gas, and power companies need to control flow and pressure in their process operations, they increasingly use Emerson control valves to do the job. Emerson, a fast-growing Missouri-based Fortune 500 company with 205 locations, provides automation technology for thousands of process industry organizations throughout the world.

These days, though, Emerson customers are demanding more than just reliable control valves. They need help performing predictive maintenance on those valves. “The industry is growing quickly, and there is a lag in expertise because retirement is on the rise,” says Mike Boudreaux, the director of connected services for Emerson. “Many of our customers lack the resources to do things like valve data analysis, which impacts their ability to do predictive maintenance.”

Additionally, industrial Internet of Things (IoT) technologies are enabling Emerson to help its customers get data insights from sensors embedded in their digital valve controllers. “Valves today have rich sensor information that can help technicians diagnose problems,” Boudreaux says. “Connected services are enabling Emerson to collect data from our customers’ equipment and then, using that data, help them improve the performance and reliability of their operations. To do that effectively, we need simple, scalable and secure connectivity solutions.”

Building and delivering a wireless valve monitoring solution

To address its customer demands, Emerson reached out to Dell — its longtime technology partner — for assistance. Emerson has integrated Dell EMC servers with Intel® Xeon® processors, as well as Dell workstations, into the products it has been selling to customers for more than 20 years. Those products are integrated with Emerson control systems. “We have always been impressed with the reliability and support we have received from Dell,” Boudreaux says. Emerson also utilizes Dell software and hardware for its DeltaV system health monitoring software. “We trust Dell, and we were excited to work with them again.”

Emerson chose to build on its existing relationship with Dell OEM Solutions — a provider of global manufacturing, distribution, software and hardware integration. Emerson worked with Dell OEM to develop a new wireless valve monitoring solution. The solution collects information from digital valve controllers and sends it through a Dell Edge Gateway to the cloud. The Dell Edge Gateway is an IoT gateway device that aggregates, analyzes, secures, processes and shares sensor data at the edge of a network. The data travels from the gateway to the internet and into a Microsoft Azure-based cloud platform. “The Dell Edge Gateway is a key component of the IoT architecture,” says Boudreaux.

Emerson is currently developing a control valve condition monitoring service that uses the Dell Edge Gateway solution. Once ready for official launch, the service’s components will be ordered by Dell OEM teams in markets throughout the world and shipped directly to Emerson service centers. Emerson will then install the service at customer sites.

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Mike Boudreaux
Director of Connected Services, Emerson





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Mike Boudreaux
Director of Connected Services, Emerson

Winning the time-to-market race

Through its partnership with Dell OEM, Emerson can bring its control valve condition monitoring service to market quickly. “Right now in our industry, it’s a race as far as time-to-market is concerned,” says Boudreaux. “Working with Dell OEM, we can move faster through our proof of concept and test bed projects. The connectivity stack model we’re employing, relying on partners like Dell OEM, is enabling us to enhance our capabilities much faster than we could on our own.”

Focusing on innovation, not manufacturing

Emerson can spend more time developing new products and services because it is depending on the expertise of Dell OEM and the reliability of the Dell Edge Gateway. “We are in an innovative mode of operation right now, going to market with a first-generation connectivity solution and developing a next-generation solution,” says Boudreaux. “We can focus squarely on the innovation and not on creating the gateway itself by having Dell OEM take care of the assembly and distribution.”

Taking advantage of global scale and support

Once the company’s new product is released, Emerson will be able to quickly deliver it to customers worldwide. “When we launch our next-generation solution for streaming control valve data to the cloud, we will be doing it on a global scale with global support from Dell OEM,” says Boudreaux. “And once we go to market, we will be able to scale the solution quickly by taking advantage of that same supply chain and support. There are many gateway manufacturers, but they don’t have the worldwide manufacturing and support capabilities we get with Dell OEM. That’s a real differentiator for our business.”



Helping customers gain new data insights

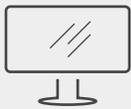
Emerson will ultimately benefit its customers by giving them a new, better way to manage and troubleshoot control valves and enhance their industrial automation. “Working with Dell OEM, we have a partner that’s very interested in solving our customers’ problems,” Boudreaux says. “We are developing secure connected services to collect data about our customers’ equipment, so they can take action based on that data.”

In addition, Emerson plans to work alongside Dell OEM on future projects. “This is just our first step in what we see as a long journey to transform our services across our entire business,” says Boudreaux. “We are very happy to partner with Dell OEM on this transformation.”

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Mike Boudreaux
Director of Connected Services, Emerson

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