Powering enterprise class systems at the edge — and beyond

Situation Analysis

Making edge computing a reality

Market trends show that in just a few short years, more data will be generated at the edge of the network than in a traditional data center. As a result, businesses and government agencies are looking to develop edge strategies to support their mission-critical applications, such as real-time analytics, artificial intelligence (AI), machine learning (ML) and deep learning (DL).

Tracewell Systems helps organizations deploy their edge applications by adapting enterprise-class systems into platforms optimized to deliver high-performance computing capabilities in edge environments. Working with Dell Technologies OEM Solutions, Tracewell has access to a deep portfolio of market-leading compute, storage, networking and other specialty technology. The company’s expertise makes it possible to transform enterprise-grade technology to operate in a wide range of edge environments — in the air, at sea or on the ground — in locations where size, weight, power and other environmental challenges cannot be met by standard technology.

“Everything we do starts with what our customers need to support their mission-critical requirements at the edge. Working with Dell Technologies OEM Solutions enables us to rapidly engineer our customers’ edge platforms based on the industry’s broadest enterprise-class technology portfolio.”

Matt Tracewell
Vice President, Tracewell Systems
Design Partnership

Exclusive collaboration delivers high-performance computing for edge environments

With Dell Technologies OEM Solutions and Tracewell, organizations get the best of both worlds. From Dell Technologies, they can get enterprise-grade technology to make their edge applications a success, and Tracewell adapts those platforms to operate in the edge environments required to support their mission.

Two new Tracewell Systems platforms illustrate what a collaboration with Dell Technologies OEM Solutions can accomplish. Based on the Dell EMC PowerEdge XE2420, the Tracewell T-XE2420 has all the benefits of the standard Dell EMC product plus groundbreaking GPU capabilities for powerful AI/ML at the edge. The Tracewell T-C6420, based on the Dell EMC PowerEdge C6420 server, is a compute-intensive device that complies with Airline Transportation Association regulations and fits in the overhead bin of a commercial airplane.

Creating value from solutions that customers are familiar with is a significant advantage for Tracewell. “Customers are aware of Dell Technologies innovation leadership and appreciate its successful track record in supporting federal and defense agencies — and we extend that capability,” says Matt Tracewell, company vice president.

A summary of the Tracewell and Dell Technologies OEM Solutions collaboration:

- The unique jointly designed solutions address highly specific customer concerns about challenging environments at the edge.
- The Dell Technologies OEM Solutions engineering and product group offers program management with regular touchpoints. For Tracewell, this makes it easier to plan, design and continuously innovate customer solutions.
- For customers who already trust Dell Technologies, learning about and acquiring Tracewell products is comfortable and efficient. Tracewell and Dell Technologies OEM Solutions work together closely on sales efforts, and customers can purchase Tracewell offerings directly through Dell Technologies or its sales channels.

Outcome

Tracewell’s platforms help customers drive success at the edge

Federal agencies can run their edge applications on an optimized Dell Technologies infrastructure transformed by Tracewell to meet specific field requirements, including form-factor modifications, integration with third-party technologies and meeting MIL-SPEC requirements.

Because Tracewell platforms are adapted from standard Dell EMC products — not created as custom hardware — organizations can develop and deploy their applications quickly to the field. This approach also offers customers the powerful capability of a common edge solution footprint, so the Dell EMC hardware running in their traditional data center environment can now run on the same platform they are using in the field.

“Dell Technologies OEM Solutions is with us every step of the way, and our customers looking to develop their edge applications can be confident that solutions from Dell Technologies can also effectively meet stringent federal standards for product security and supply chain compliance,” says Matt Tracewell. Customers also benefit from the worldwide deployment reach and lifetime support services that Dell Technologies offers, including technicians who have access clearances to enter customers’ secure facilities.

Collaborative innovation into the future

Tracewell will continue to develop platforms based on the advanced innovations of Dell Technologies OEM Solutions. Matt Tracewell concludes, “Dell Technologies OEM Solutions is very open and collaborative. That kind of trust-based relationship helps us adapt our products and get them to our customers faster.”