SOLUTION BRIEF: Embedded and Edge Solutions for Federal Customers

Your Mission, Designed Your Way: Why Digital Transformation Demands Customized Solutions
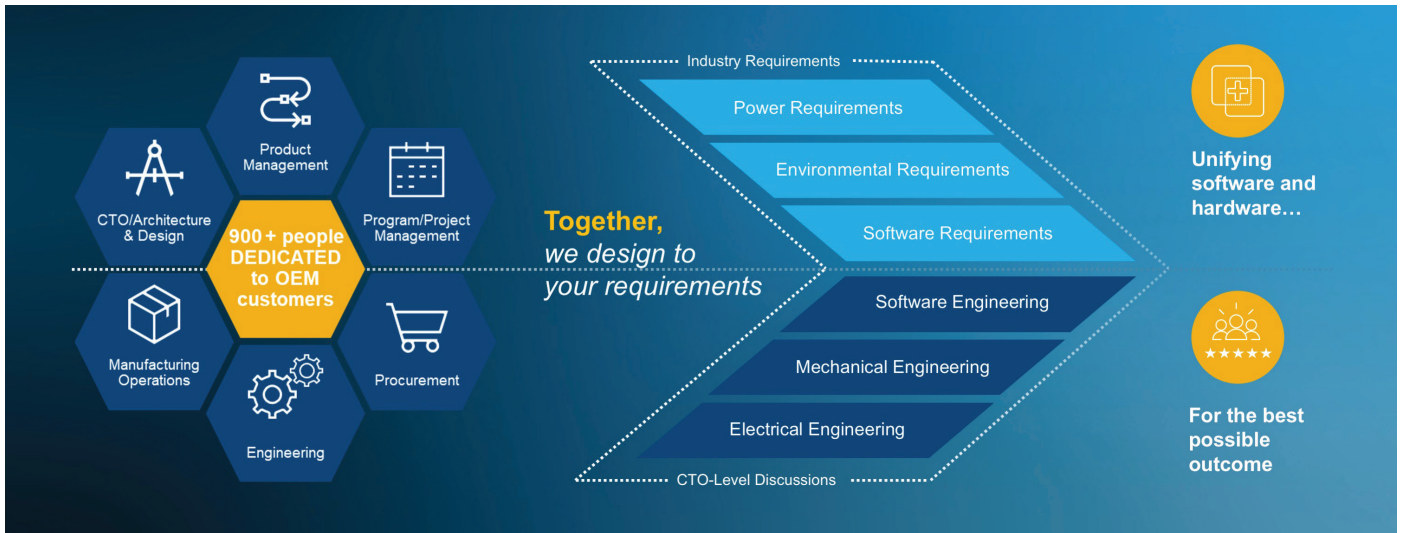
Federal agencies collect massive amounts of data in the field with Internet of Things (IoT) sensors and remote computing solutions. As a result, there is a hard requirement to bring customized compute capabilities to the network's edge to enable better, faster insights, and ultimately, a mission advantage. By 2025, Gartner projects 75 percent of all enterprise-generated data will be processed outside of a traditional data center or cloud, in many cases powered by emerging Artificial Intelligence (AI) and Machine Learning (ML) capabilities.

In addition to the capability to transport data for centralized analysis, federal teams need high compute capabilities in often rugged environments to enable these insights at the edge. Edge environments call for portable solutions, without sacrificing power, speed, storage, or security. An atypical field environment, such as a Humvee or a submarine, may require equipment to tolerate a higher level of vibration, and function in different thermal ranges. Often, space constraints demand new and different form factors. And, many missions have highly specialized security requirements that necessitate locks, external casings, or smart card functionality.

Agencies and federal systems integrators need a trusted collaborator to propel innovation, ensure regulatory compliance, and get powerful, end-to-end enterprise-class IT capabilities to drive agency missions through digital transformation — from the edge to the core to the cloud.

FASTER, SMALLER, SMARTER: SOLUTIONS FOR MODERN MISSIONS

The Dell Technologies OEM | Embedded & Edge Solutions division has a team of engineers dedicated to modifying and integrating Dell Technologies Tier 1 infrastructure to meet specific mission requirements. Customers gain direct, dedicated access to 100% in-house engineering, hardware, and software development support to customize solutions from laptops to rack servers, and from edge devices to cloud technology. Dedicated program managers work with the customer to build solutions that help missions stay on track. Teams also benefit from Dell Technologies' buying power, capacity to scale, and secure supply chain. The result: solutions that are faster, smaller, smarter and, importantly, in the field more quickly and securely.

The Dell Technologies OEM | Embedded & Edge Solutions division offers OEM standard solutions, like the PowerEdge XR2 rugged server, customized engineering services, and turnkey solutions from OEM customers, like Tracewell Systems' FX2 platform.

ON THE FRONT LINES: SPOTLIGHT ON THE TRACEWELL TACTICAL DATA CENTER

Tracewell Systems worked with Dell Technologies OEM | Embedded & Edge Solutions to extend the value of the Dell PowerEdge FX converged computing solution, featuring servers, networking, and storage in a complete system. Tracewell Systems further customized the FX architecture for the forward-deployed community, creating a family of products that deliver a short-depth form factor, integrate high-powered PCIe cards, and are optimized for hyperconverged, software-defined storage.

For one of Tracewell's federal customers, the FX2 platform significantly reduced the staffing and logistical time needed to take data captured on mission in the field and integrate it back into a traditional back office data center. By building platforms that are optimized to work in tactical environments, and yet still interoperable with standard Dell EMC server sleds, the customer's field team can now "plug and play" with powerful Dell EMC compute and storage products – taking them seamlessly from the field to the data center.

WHY DELL TECHNOLOGIES OEM | EMBEDDED & EDGE SOLUTIONS

Dell Technologies OEM | Embedded & Edge Solutions delivers customized infrastructure, services, and a secure supply chain designed for your vision and business goals – all from one trusted, sustainable, and secure vendor.

With 900+ dedicated team members, the organization has embraced challenges for 20 years, creating more than 10,000 unique project designs and earning the title of the #1 OEM provider worldwide.[1]

To learn more about Dell Technologies OEM | Embedded & Edge Solutions visit delltechnologies.com/oem

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[1] Global Share based on 2016 Dollar Volume Shipments, VDC Research worldwide OEM provider, Dell Technologies OEM Embedded & Edge Solutions provides the expertise, scale and Tier-1 infrastructure to rapidly turn your ideas into market-ready solutions and take them to the world.