

## VMware + Dell Technologies + Tracewell Systems Delivering the VMware Edge Compute Stack (ECS) for Tactical Environments



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As business and government organizations turn to the edge to deliver the innovation, growth and capabilities they need, having a reliable, scalable and manageable virtualization and cloud computing infrastructure to enable their “enterprise to edge” needs is more mission critical than ever.

As the leading provider of multi-cloud services enabling digital innovation with enterprise management, VMware introduced its VMware Edge Compute Stack (ECS) which provides a consistent multi-cloud edge platform that enables organizations to build, run, manage, connect and protect their sector specific edge native applications at the near and far edge, while leveraging consistent infrastructure and operations across all of their data centers and cloud environments.

### SOLUTION OVERVIEW

Tracewell Systems teamed with Dell Technologies and the Office of the CTO at VMware to create Tactical VMware, a platform configured, optimized and integrated specifically to deliver the benefits of the VMware Edge Compute Stack (ECS) in “beyond the back office” environments.

#### APPLICATION LAYER FOR EXAMPLE: ANALYTICS ANYWHERE

#### APPLICATION LAYER

A wide range of edge compute applications leverage the ECS infrastructure. For example, the Dell Technologies real-time Federated Analytics and Learning solution.

#### VMWARE EDGE COMPUTE STACK (ECS)

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A purpose-built integrated stack for small scale VM and container compute, with edge HCI and SD-WAN that enables organizations to deploy edge-native applications at the far edge. ECS comes in three editions: Standard, Advanced and Enterprise. The Stack leverages vSphere, vSan and Tanzu standard (including Tanzu Kubernetes Grid and Tanzu Mission Control) to deliver a platform on which customers can develop and innovate for edge-native applications.

#### DELL TECHNOLOGIES DELL EMC POWEREDGE XR11

#### TRACEWELL SYSTEMS

Optimized for the tactical edge in a rugged, MIL-SPEC transit case featuring enhanced shock and vibe isolation and system protection in a transit case that features wheels and a handle for highly mobile applications.

#### TRACEWELL SYSTEMS

#### DELL TECHNOLOGIES

Features core compute power from Dell. Dell PowerEdge XR11 certified rugged for Telco and Defense applications.

## Tactical VMware

Tactical VMware is configured and optimized to specifically support the VMware Edge Compute Stack (ECS). Tracewell Systems integrated the platform into a rugged MIL-SPEC transit case which makes it possible to deploy ECS in virtually any rugged environment for any organization that needs to deliver enterprise-class compute power to support their edge applications. The system features three Dell EMC PowerEdge XR11 servers, 1 Dell PowerSwitch S-Series switch and one PDU.



### Highlights

System optimized for the tactical edge. Custom integration and additional form factor modifications are available to meet targeted industry, program or mission requirements.

Future platforms and form factors supporting Tactical VMware are in development, including options for Airline Transportation Association (ATA) compliant and other highly compact and mobile systems.

Dell PowerEdge XR11 servers are compact and ruggedized for the edge:

- Operational in dusty environments and extreme temperature ranges from -5C to 55C (23F to 131F).
- NEBS Level 3 compliant for communications and MIL-STD qualified for shock, vibration, dust and other environmental variants.
- One 3rd Generation Intel® Xeon Scalable processor with up to 36 cores per processor (multi-accelerator support available).

vmware®

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### ABOUT TRACEWELL SYSTEMS

For more than 40 years Tracewell has enabled the nation's largest military and commercial organizations to deliver powerful and reliable computing solutions in environments where size, weight, power and other constraints present challenges that cannot be met by standard computing systems. Tracewell Systems have been recognized by the top names in the defense and technology sectors for their commitment to Trusted Innovation — a process where the company solves previously impossible, sensitive, mission-critical platform challenges through customer solution design, engineering and manufacturing, all under one roof.

More information: [www.tracewell.com](http://www.tracewell.com)

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Tracewell Tactical VMware Solution Overview