Dell EMC + Tracewell + Red Hat

Delivering the Benefits of Hyperconverged, Software-Defined Infrastructure

Traditional IT – with its separate server, networking and storage hardware – is giving way to hyperconverged computing architectures featuring software-defined and managed infrastructure.

US Government agencies recognize this new software-defined future has the potential to deliver tremendous benefits from infrastructure consolidation, including reduced costs and increased operational efficiency by making it easier to acquire, deploy, upgrade and maintain hardware and software. In the field, hyperconverged systems address size, weight, power and other platform requirements making it possible to deploy increased computing power, greater flexibility and more efficient systems management – all with fewer technical specialist resources and complicated system upgrades. For example, a hyperconverged, software-defined platform for one government agency reduced the number of mobile transit cases from six separate units to a single, mobile ground unit.

SOLUTION OVERVIEW

Tracewell Systems has teamed with Dell EMC to create the T-FX2e – an integrated compute, networking and storage platform that reduces the form factor and significantly increases storage density for Dell EMC's FX architecture. The T-FX2e has been tested and validated to deliver Red Hat® Hyperconverged Infrastructure to government agencies looking to take advantage of the benefits of software-defined infrastructure and requiring a long-term roadmap for their data center and forward deployed solutions.

RED HAT HYPERCONVERGED INFRASTRUCTURE

RED HAT: HYPERCONVERGED INFRASTRUCTURE

Red Hat has a proven track record in the defense industry, from software co-developed with Department of Defense agencies to cloud platforms that provide software-driven compute and storage functions. As the industry's only complete and fully open source, hyperconverged, solution stack provider, Red Hat provides businesses and government agencies a long-term architecture and software-defined computing roadmap. Red Hat Hyperconverged Infrastructure is an ideal solution for remote/branch office or edge of networking computing needs. Built on Red Hat Virtualization and Red Hat Gluster Storage, Red Hat Hyperconverged Infrastructure provides simplified planning and procurement, streamlined deployment and management, and a single support stack for virtual compute and virtual storage resources.

TRACEWELL SYSTEMS T-FX2e

THE T-FX2e FORM FACTOR

Based on the Dell EMC FX architecture and primed to deliver the future of hyperconverged computing and software-defined infrastructure. Platform optimized to provide solutions based on Red Hat Hyperconverged Infrastructure.

DELL EMC FX ARCHITECTURE

THE DELL EMC FX ARCHITECTURE

Features a converged design with servers, networking and storage in one complete system. Flexible footprint with simplified Dell EMC FX Architecture management tools.

Tracewell T-FX2e

Dell EMC's PowerEdge FX – with a converged design featuring servers, networking, storage and management tools in one complete system – has been hailed by Forrester Research as "a bold new computing architecture." Tracewell Systems makes it possible to deploy Dell EMC's powerful FX architecture "beyond the back office," in environments where standard systems are not designed to operate. The T-FX2e was designed from the ground up to enable the next generation of hyperconverged, storage-intensive applications and has been optimized for a wide range of software-defined workloads, such as virtual desktop infrastructure (VDI).

FULLY COMPATIBLE
Features Dell EMC FX compute, networking, storage and systems management.

MAXIMUM CAPACITY
Fully configured system supports up to 176 processor cores (352 hyper-thread), 154TB of raw storage, hybrid SSD/HDD for maximum performance at lower cost, over 6TB of DDR4 RAM and redundant L2/L3 internal 10GB switch modules.

EASILY ADAPTED
Can be customized to meet specific field mission and program requirements.

EXTENDS STORAGE CAPACITY
Adds an additional 8 drives per Dell EMC PowerEdge FC630 (half-width) server block – offering greater density than rack-and-stack systems.

OPTIMIZED FOR LIMITED SPACE
Features a short-depth platform of 23.7" (height: 4U).

INCREASED EFFICIENCY
Features increased cooling, lighter weight and less power consumption than standard Dell EMC FX2 systems.

SECURE SUPPLY CHAIN / TAA

ABOUT TRACEWELL SYSTEMS
Tracewell's T-FX2 family of products, based on Dell PowerEdge FX, represents the company's fourth generation of blade-based systems engineered to deliver high-performance computing in a form factor designed for forward deployment in space-constrained environments, such as in the air, at sea or on land, in unique fixed or mobile installations. The company has a 40-year history of enabling 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 has become 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 custom solution design, engineering and manufacturing, all under one roof. For more information, www.tracewell.com.