M-DRIVE Data Center

Multi-Enclave Command and Control Hosting on a Single Platform

M-DRIVE enables the Warfighter to host multiple Mission Partner Environments on a single platform. Soldiers, Sailors, Airmen, and Marines can easily configure, reconfigure, and deploy enduring and episodic networks in support of MPE requirements.

Utilizing industry-leading Hyper-Converged Infrastructure (HCI) technology and software defined networking (SDN), M-DRIVE delivers Commander's next-generation MPE capabilities to communicate and fight with Allies and Mission partners.

Delivering a turn-key tactical data center with multi-tenant isolation of mission enclaves, M-DRIVE uses secure network virtualization to reduce infrastructure while improving Warfighters operational agility, precision, and speed.

M-DRIVE supports multi-network access to improve performance, decrease time to swap mission enclaves, collapse legacy multi-server stack infrastructure, and enable support in modern warfighting CJADC2 and MPE operations.

SPECIFICATIONS

M-DRIVE® Standard Baseline*

Integrated Hardware Platform: **10U (5 servers/2 switches)**

Hyper-Converged Infrastructure (HCI) Servers: **6U**

HCI Storage: **122 TB**

CPU: **180 cores**

RAM: **3.3 TB**

Enclaves: **4 active/3 inactive**

*M-DRIVE can be dynamically expanded for more storage and capacity options.

FEATURES & BENEFITS
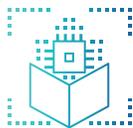
Full COTS Solution
Designed from trusted industry vendors and based on Software Defined Data Center (SDDC) concepts and hyper-converged technologies.

Pre-Integrated Platform
Flexible ordering includes options for pre-configuration and customized solutions as required.

Operational Scalability
Standardized scaling model to rapidly provide modular expansion.

SWaP Efficiency
Decreased Size and Weight, with increased Power in comparison to other comparable solutions.

Reduced Cost
Decrease infrastructure costs and footprint with a pre-integrated COTS solution designed for simplified operations.

Transport Agnostic
Utilize any transport method as needed to most efficiently meet customer needs.

M-DRIVE proved integral to the Navy & Army MPE on land and at sea during Austere Challenge and Steadfast Cobalt exercises.

Standing up a Mission Enclave (ME) on a DoD secure system can take years and millions of dollars. With Trace Systems' M-DRIVE, you can rapidly share secure information, access DoD applications, join an enduring ME, or create an episodic ME within hours in any CJADC2 environment.

Leveraging terrestrial, satellite, or line of sight communications, M-DRIVE ensures US and Mission Partners can securely share critical information and conduct command and control during exercises, contingency operations, or combat operations.

M-DRIVE is based on Software Defined Data Center (SDDC) concepts and technologies, providing increased performance and simplified management through automation and orchestration.

KEY CAPABILITIES

Secure

✔ Secure data at rest.

✔ UEFI secure boot.

✔ Application whitelisting.

✔ Isolated logical and physical encrypted connections for each enclave.

✔ Advanced monitoring with dashboard capabilities.

✔ RBAC utilization.

✔ Highly Resilient Solution.

Flexible
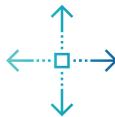
✔ Pre-integrated HCI nodes provide deployable pre-integrated solution.

✔ Optimized to deliver high-performance compute, storage-efficiency, and application workload density in a compact solution.

✔ Rapidly transition between multiple MEs without reconfiguring resources in a single platform.

Fast

✔ Multi-tier architecture with integrated NVMe flash meets performance and response time requirements of demanding workloads.

✔ Intelligence Engine prioritizes resources to critical workloads automatically to deliver guaranteed performance.

✔ High-performance internal networking with 40GB, 10GB*, or 1GB connectivity options.

*Base configuration configurable to different speeds.

QUALITY STANDARDS

CMMIDEV/3℠
Exp. 2021-10-26 / Appraisal #1508

ISO
ISO/IEC 27001:2013

bsi ISO/IEC 20000-1 Service Management CERTIFIED

bsi ISO 9001 Quality Management Systems CERTIFIED

CMMIDEV/3SM Appraisal #25544   ISO/IEC 27001:2013 Certified: IS 612627   ISO/IEC 20000-1:2018 Certified: ITMS 600254   ISO 9001:2008 Certified: FS 612629

For more information, please contact Trace Systems:
mdrive@tracesystems.com

TRACE SYSTEMS