



PacStar Modular Data Center

with NVMe® and Remote Management

PacStar Modular Data Center with NVMe and remote management (MDC-NR) provides high reliability compute and storage in a small size, weight and power (SWaP) form factor

PacStar MDC-NR enables tactical and expeditionary teams to access data and compute resources, using state-of-the-art cloud, virtualization, and containerization, even in disconnected, intermittent, and limited (DIL) environments, where WAN connectivity is not assured.

PacStar MDC-NR provides converged compute/storage/networking at the edge of the network, supporting a diverse array of use cases in DIL environments including:

- hosting situational awareness, mission command and control (C2) applications
- supporting SIGINT, HUMINT and IMINT data gathering and analytics workloads
- supporting emerging IoT and sensor fusion-based applications
- hosting compute and storage-intensive networking, cybersecurity and VDI solutions

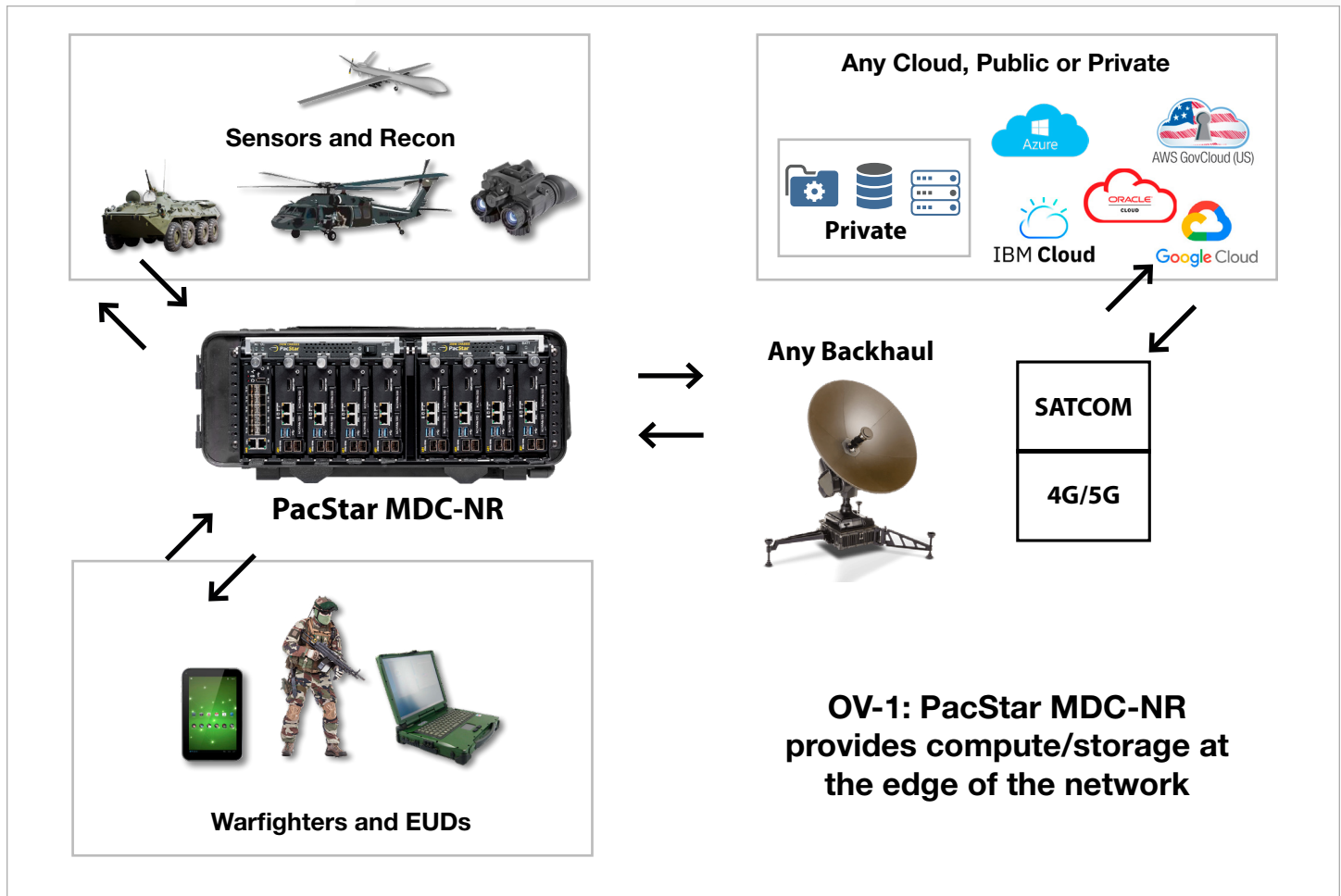
PacStar MDC-NR uses the PacStar 400-Series modular platform designed to maximize capabilities with the smallest SWaP possible – enabling high amounts of compute, storage and RAM at the edge without sacrificing mobility. PacStar MDC-NR adds to the PacStar MDC series of integrated solutions, utilizing PacStar 451-NR servers – supporting high-speed NVMe storage and remote management via IPMI.

PacStar MDC-NR core components have been tested with many applications and virtualized network functions and are ideally suited to provide a platform for cloud infrastructure and replication, workload management, or storage software compatible with Intel-based processors. PacStar ensures compatibility with major software infrastructure providers.

Combined with leading Hyperconverged Infrastructure (HCI) software, PacStar MDC-NR supports seamless interoperability with the major public and private cloud providers.

Key Features

- High density compute, storage and networking capable of handling large loads with industry-leading SWaP reduction
- Advanced computing infrastructure ready supporting leading hyper-converged infrastructure, cloud replication, virtualization and containerization
- Expandable/modular system may be customized with added networking or alternative component technologies
- Based on rugged, MIL-STD tested, PacStar 400-Series modules and packages ideal for fly-away, command post, ground vehicle and aircraft-mounted use cases
- Managed by PacStar IQ-Core® Network Communications Manager (NCM), providing network and server management capabilities for the tactical communicator



The PacStar 400-Series platform is widely deployed in the U.S. Army and U.S. Marine Corps, having been selected and deployed by the U.S. Army PM TN, T2C2, SFAB, and ESB-E programs and the U.S. Marines NOTM program. Additional customization is possible with other PacStar 400-Series modules.

PacStar 400-Series Modules

Key Features

- Dimensions: 5.3" x 7.1" x 1.6" each
- Weight: ~2.5 lbs. (Each, depending on model)
- Operational temperature -20C to 60C
- Extensively tested: MIL-STD 810 / 461.
- Wide range DC input, 10-35 V DC
- World-wide AC power input (with adapter cable)
- Power draw: Nominal 20-55 watts per module (depending on module type)

Solution Overview

The hardware configuration for PacStar MDC-NR includes:

- (8) PacStar 451-NR Xeon D servers with up to 16 cores 128 GB RAM, dual 4 TB NVMe drives with 240GB boot drive, and with (2) SFP+ 10 GigE ports
- (1) PacStar 448 10 GbE Switch: (10) Ports Total
- (2) PacStar Smart Chassis: 1x 5 slot, 1x 4 slot, with integrated UPS
- (1) PacStar TSA-compliant (airline carry-on size) Carbon Fiber Transit Case: 22" x 14" x 9"
- (1) PacStar removable rackmount bracket, compatible with industry standard 19" equipment racks

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