



Smarter Networks, Stronger Missions:

Enabling DoD Operations with AI and Secure, Adaptive Networks



The Modern Battlefield Demands a New Kind of Network

The Department of Defense operates in an era defined by near-peer threats, persistent cyber warfare, and the growing complexity of joint and coalition operations. As the battlespace expands into cyberspace and multi-domain environments, legacy infrastructure and conventional network strategies are no longer sufficient.

To maintain strategic and tactical superiority, DoD leaders are rethinking how networks are architected, secured and operated—especially under denied, degraded, intermittent or limited (DDIL) conditions.

Key Federal Challenges:

- + **Cyber Dominance:** Ensuring freedom of maneuver in cyberspace while denying it to adversaries.
- + **Joint and Coalition Interoperability:** Networks must securely interconnect across branches, partners and domains.
- + **Operational Agility:** Communications and application delivery must persist, even during degraded connectivity or cyber disruption.
- + **Contested Environments:** Warfighters need a network that is resilient by design and intelligent by default.



The Opportunity: Mission-First Networking for Modern Warfare

The mission-first approach to networking redefines how the Department of Defense prepares for and engages in operations. Instead of retrofitting traditional architectures, this strategy embraces AI-driven, software-defined, session-aware technologies that deliver:

- **Agility** to adapt network behavior to mission needs in real-time
- **Resilience** to maintain operations despite infrastructure degradation
- **Security** to enable Zero Trust and resist evolving cyber threats

At Red River, we understand that modern defense missions require more than reliable connectivity; they require a strategic network advantage. That's why we deliver mission-first capabilities powered by industry leaders like Juniper Networks.



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Mission-First Networking with Juniper and Red River

Juniper's mission-first architecture—anchored by the Session Smart Router and the Mist AI-native networking platform—provides the adaptability, situational awareness and secure performance required in defense operations.

Combined with Red River's networking and defense expertise, this platform empowers DoD leaders to command the information environment.

Juniper is prioritizing IL5 authorization to ensure DoD users can confidently operate in a secure, compliant AI-driven environment.

Why It Works for Defense:

Designed for DDIL

Maintains full operational capabilities, even when disconnected from orchestration layers

Tunnel-Free Architecture

Reduces overhead, increases efficiency and obfuscates routes for greater security

Session-Aware Routing

Routes based on mission context, not just IP destination

Secure Vector Routing (SVR)

Eliminates IPSec encapsulation to create harder-to-detect, policy-driven traffic flows

Zero Trust Principles Architecturally Enforced

Integrated access controls, IDP, encrypted traffic flows and micro segmentation are built into the network fabric

Core Capabilities:

Marvis Virtual Network Assistant (VNA)

Uses AI to detect anomalies, resolve issues and support network autonomy

Session Smart Routing

Enables ultra-resilient, high-performance routing without tunnels or overlays

Mission-Adaptive Policies

Align network behavior to planner intent with software-defined controls

Premium Analytics & Situational Awareness

Real-time insights into traffic, application performance and user/device activity

Indoor Location Services

vBLE-based indoor location services enhance base logistics and security in garrison and command post environments



Red River + Juniper: Force Multipliers for Mission Assurance

Red River brings battle-tested IT integration, AI and cybersecurity leadership to DoD environments. We don't just deploy technologies, we operationalize them to deliver outcomes that matter.

Our DoD Value Add:

AI and Autonomy in the Fight

Implement intelligent automation to reduce manual configuration and increase tempo

Mission Assurance Services

Deliver cloud, data and networking solutions aligned with Zero Trust alignment, NGC2, DODIN, JADC2 and C2ISR needs

Cybersecurity by Design

Accelerate Zero Trust adoption and ensure full compliance with DoD cyber frameworks

Rapid Edge Deployment

Extend secure communications to the tactical edge with containerized or virtualized routers

Continued Innovation

Juniper's upcoming SSR400 enhances tactical communications with Band 14 support for public safety and interagency response

Field-Proven Results:

Federal agencies using Juniper Mist are already seeing transformation:



Cut Bandwidth Use by 15–50%

Tunnel-free architecture is ideal for contested or bandwidth-constrained ops



Reduce Reconfig Time from Weeks to Minutes

Self-driving networks close the gap between intent and execution



Resilient Comms in the Field

Session-aware routing keeps C2 links alive—even during disruption or compromise

Lead with Confidence. Modernize with Purpose.

The future of warfare is multi-domain, contested, and connected. A mission-first network is not just an upgrade—it's an operational imperative.

Red River + Juniper provide the DoD with the network edge to dominate in cyberspace and across the physical battlespace—powered by AI, designed for agility and secured for mission assurance.

For more information on Juniper Mist Government Cloud, contact us info@redriver.com.

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ABOUT RED RIVER

Red River brings together the ideal combination of talent, partners and products to disrupt the status quo in technology and drive success for business and government in ways previously unattainable. Red River serves organizations well beyond traditional technology integration, bringing more than 25 years of experience and mission-critical expertise in managed services, AI, cybersecurity, modern infrastructure, collaboration and cloud solutions.

Learn more at redriver.com.