Accelerating Naval Superiority: Software for Mission-Ready Systems

Navigating the Challenges of Modern Naval Warfare

Modern naval defense systems demand seamless integration of software, sensors, and platforms across surface, subsurface, and unmanned maritime operations. As technology advances, the challenge is not just building these systems, but ensuring they operate securely, reliably, and efficiently in dynamic and high-threat environments where every second counts.

RTI delivers mission-proven software that enables real-time, secure, and efficient data sharing across naval platforms, from fleet operations to undersea warfare. Our technology ensures interoperability, accelerates development, and reduces deployment risks in the world's most advanced maritime defense programs.

RTI empowers leading naval defense organizations to innovate, integrate, and succeed — whether enhancing autonomous maritime systems, enabling AI-driven situational awareness, or modernizing legacy shipboard and combat systems.

UNLOCK THE POWER OF MISSION-CRITICAL DATA

When it comes to mission-critical naval defense systems, software is the backbone of secure, real-time, and scalable connectivity across the fleet. However, selecting the right solution isn't just about functionality — it's about ensuring reliability, performance, and long-term operational success. Here's how RTI Connext stands out from alternatives.

DDS REAL-TIME DATABUS

Sensors | Command & Control | Effectors

Real-Time, Reliable Connectivity

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Seamless Interoperability & Scalability

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Faster, Smarter Decision-Making

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Zero-Trust Security for Mission Resilience

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TRL 9-Proven, Tested, and Trusted in Critical Missions

Autonomy

Secure Data Connectivity

Real-Time Sensor Fusion

Surface Warfare
Enabling real-time, secure data exchange across surface combatants enhances situational awareness, fleet coordination, and multi-domain interoperability.

Integrated Combat & Defense Systems
Data-centric connectivity drives advanced naval combat systems, ensuring rapid threat detection, electronic warfare capabilities, and seamless system integration.

Undersea Warfare (USW)
Reliable, low-latency communication supports seamless integration of undersea sensors, submarine systems, and unmanned undersea vehicles.

Unmanned & Autonomous Maritime Systems
Real-time data fusion and AI-driven decision-making accelerate the deployment of autonomous surface and undersea platforms for persistent domain awareness and mission success.

**PROVEN EXPERTISE.
TRUSTED WORLDWIDE**

RTI is the backbone of mission-critical defense and aerospace systems worldwide. With decades of experience, our technology powers some of the most advanced and secure operations across military, autonomous, and aviation applications.

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Trusted by 45 of the top 50 defense contractors worldwide

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Running $1T of real-world smart systems

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Supporting 2,000+ systems and 500+ defense programs of record

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Deployed in 300+ autonomous vehicle designs across domains

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Operational on most U.S. Navy ships, enhancing maritime defense systems

The Need for Speed

Traditional development cycles, which once spanned years, are now obsolete as adversaries rapidly iterate and deploy new technologies. To maintain a tactical advantage, defense organizations must adopt a software-first mindset — prioritizing speed, agility, and adaptability.

ACCELERATE

Reduce development time and streamline system design while minimizing risk with real-time simulations and modeling.

DEPLOY

Speed up deployment with ready-to-use software stacks, edge-to-cloud connectivity, and parallel testing environments.

INTEGRATE

Simplify interoperability with plug-and-play modularity, secure real-time data sharing, and seamless software compatibility.

EVOLVE

Future-proof systems with continuous updates that maintain agility and mission readiness without requiring hardware requalification.

ABOUT RTI

Real-Time Innovations (RTI) is the infrastructure software company for smart-world systems. Across industries, RTI Connext® is the leading software framework for intelligent distributed systems. RTI runs a smarter world.

RTI is the market leader in products compliant with the Data Distribution Service (DDS™) standard. RTI is privately held and headquartered in Silicon Valley with regional offices in Colorado, Spain, and Singapore.