



DATASHEET

RTI in Aerospace and Defense

ACCELERATING SUCCESSFUL ADOPTION OF OPEN ARCHITECTURES

HIGHLIGHTS

Unparalleled Expertise

Architecting for maintainability and extensibility

Achieving performance and scalability objectives

Meeting security, resilience and safety requirements

Migrating from and integrating with legacy systems

Supporting FACE, UCS, OMS, SOSA, GVA and more

Leading DDS Implementation

Open Architectures (OA) improve system affordability by reducing integration, maintenance and upgrade costs, while promoting reuse and competition. With its interoperability, portability, loose coupling and real-time Quality of Service (QoS), the Data Distribution Service (DDS) standard is the preeminent foundation for mission-critical OA systems. RTI is the leading supplier of DDS software for successful OA adoption.

RTI CONNEXT DDS® IN REAL-WORLD APPLICATIONS

RTI's software and architectural expertise has helped hundreds of the world's leading defense agencies, systems integrators and suppliers adopt an OA based on the Object Management Group (OMG) DDS Standard for Real-Time Systems.

"RTI Connex DDS was pivotal in enabling us to implement our Interoperability Data Model for FICAPS [Future Interoperability of Camp Protection Systems]. Its combination of open standards compliance, robustness, performance, and most importantly scalability, allowed our program to focus on its functional objectives."

Daniel Klein, Senior Armaments Cooperation Officer,
European Defence Agency (EDA)

"We are successfully using RTI Connex DDS for our inter-process and inter-subsystem communications, recording, and in our DO-178C automated test environment... Having the RTI Connex DDS Cert product available allows us to move forward with our certification efforts, with system development scheduled in 2016!"

Greg Polhamus, Software Engineering Manager,
SRC, Inc.

"RTI's software with Ada integration is helping our developers build complex applications that require real-time data availability and response across large distributed systems. A major advantage of this approach is our ability to support and develop applications in a heterogeneous COTS-based environment requiring simple and straightforward integration of legacy code with newly developed systems."

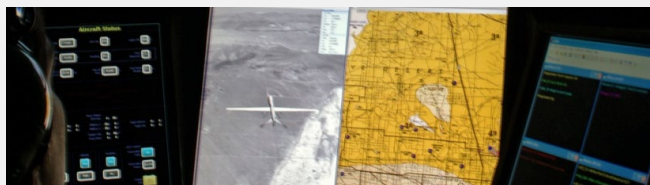
Thomas Jungfeldt, Senior Systems Engineer Saab Systems,
Naval Systems Division

PROVEN IN MORE THAN 1,000 UNIQUE DESIGNS**Massive Application Scalability****Zumwalt DDG 1000**

RTI Connex DDG software coordinates and manages complex, diverse onboard hardware and software systems. These include hundreds of computers, thousands of applications and more than 10 million publish-subscribe pairs.

Ground-Air Cooperative Control**General Atomics Aeronautical Systems, Inc.**

General Atomics' Advanced Cockpit Ground Control Stations deliver enhanced situational awareness for unmanned aircraft systems, such as the Predator® and Reaper®. RTI's software accelerated the development process and the solution was delivered in less than 14 months, significantly faster than with alternative software or in-house development.

**Large Scale Asset Tracking****U.S. Army Blue Force Tracker**

The U.S. Army's Joint Battle Command-Platform (JBC-P) system tracks the positions of friendly and hostile forces on the battlefield, requiring hundreds of thousands of tracked updates per second. A redesign using RTI's Connex DDG resulted in a fully redundant system able to handle an order of magnitude more tracks, with an order of magnitude fewer CPU cores.

System of Systems Integration**General Dynamics Littoral Combat Ship (LCS)**

RTI's software connects disparate systems, interoperates across multiple programming languages and operating systems, and handles disadvantaged links and legacy interfaces for the US Navy LCS.

Easy Technology Upgrade**Boeing AWACS Airborne Surveillance Command & Control**

The Boeing AWACS upgrade design is more open and supportable. DDS provides a foundation for lowering ongoing maintenance and upgrade costs.

Critical Real-Time Communication**US Navy**

The Ship Self Defense System (SSDS) is the "last line of defense" coordinating high-speed, radars, targeting defensive missiles and directing 1000+ rounds/second at incoming cruise missiles. RTI Connex DDG delivers these critical messages in real-time.

**Non-Stop Reliability****Raytheon Ship-Wide Area Network (SWAN)**

The SWAN on the US Navy LPD-17 runs machinery, damage control, steering, magnetic signature, mission control, navigation and communications. RTI Connex DDG supports redundant networks, data and sensors without servers.

**Guaranteeing No Single Point of Failure****Airbus**

RTI Connex DDG enables the rapid development and integration of mission-critical sub-systems into Airbus' Ground Control Station (GCS), meeting the dual objectives of delivering high performance while guaranteeing no single points of failure.

ABOUT RTI

Real-Time Innovations (RTI) is the Industrial Internet of Things (IIoT) connectivity company. The RTI Connex® Databus is a software framework that shares information in real time, making applications work together as one, integrated system. It connects across field, fog and cloud. Its reliability, security, performance and scalability are proven in the most demanding industrial systems. Deployed systems include medical devices and imaging; wind, hydro and solar power; autonomous planes, trains and cars; traffic control; Oil and Gas; robotics, ships, and defense.

RTI lives at the intersection of functional artificial intelligence and pervasive networkingSM.

RTI is the largest vendor of products based on the Object Management Group (OMG) Data Distribution Service™ (DDS) standard. RTI is privately held and headquartered in Sunnyvale, Calif.

Download a free 30-day trial of the latest, fully-functional Connex DDG software today: <https://www.rti.com/downloads>.

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