

DATASHEET

# **RTI** Monitor

REAL-TIME VISIBILITY INTO YOUR COMPLEX SYSTEM

## **HIGHLIGHTS**

Full display of Quality of Service parameters

Complete display of middleware configuration

Detailed statistics on traffic, errors, and resource usage

Automatic connection and configuration analysis

Detailed system topology display

Configurable alerts and thresholds

Distributed log analysis

You build complex distributed systems from many parts — how do you know if all the parts are working correctly and communicating as you expect? RTI Monitor provides you with a deep understanding of all component interactions. It shows every configuration and QoS setting — as they really are, not as claimed.

#### **OVERVIEW**

RTI Monitor, a component of RTI Connext Messaging, provides an intuitive window into your system. It gives you a detailed, easy-to-use graphical view into your entire application. Designed for both developers and operators, RTI Monitor:

- · Eases application integration and testing
- Aids in diagnosing unusual behavior
- Reduces risk associated with connection problems and network usage
- Provides ongoing insight into your system and components

RTI Monitor eases application design, development, integration and deployment. It is an indispensable tool to ease your work.

#### **VERIFY YOUR DESIGN**

RTI Monitor identifies problems early — during design and initial integration.

For instance, RTI Monitor displays the Quality of Service (QoS) parameters for every DDS entity in the system. It points out QoS errors caused by programming errors, design flaws, or even simply loading an old file. RTI Monitor even automatically detects the most common errors, such as mismatched type codes for the same topic.

### **TUNE PERFORMANCE**

RTI Monitor collects deep statistics on every aspect of the middleware's operation. You can examine, for instance, traffic information such as messages per second and throughput, protocol activity like heartbeats and repairs, and resource usage such as queue size, overflow and fill status.

It can flexibly aggregate statistics, showing for example, the flow for a particular entity, the overall flow on a topic, or the total traffic through a node. DATASHEET • RTI MONITOR

#### **OPTIMIZE INTEGRATION**

When integrating the system, RTI Monitor helps optimize the overall design. Use it to answer questions like:

- · Should I use multicast?
- · Which nodes are using the most bandwidth?
- · Can I better filter the traffic?
- · Why is that CPU overloaded?

RTI Monitor shows activity for every topic, reader, writer, application, and node. It is indispensable for systems developed by many teams; it verifies each module's operation singly and in the system.

## MONITOR OPERATION

When your application is deployed, RTI Monitor is a "dashboard" for real-time visualization. It shows traffic patterns, errors and lost samples, and node or application failures.

#### **ANALYZE LOG INFORMATION**

RTI Monitor supports Distributed Logger to collect and analyze log information from distributed applications. It enables you to log messages through existing logging infrastructure and be notified in real-time when error or warning conditions occur in an application. The messages can be centrally collected and stored to disk for later analysis and troubleshooting.



Figure 1. RTI Monitor shows you the configuration, connections, and operation of your application. It is the key to easy troubleshooting and integration.



Figure 2. Collect and analyze log information easily from distributed applications using Distributed Logger.

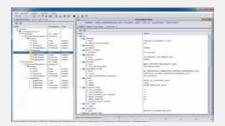


Figure 3. View QoS settings and identify incompatibilities. Verify every aspect of the design.



Figure 4. Create a dashboard to monitor your live application. Watch for hardware failures, memory leaks, and performance issues.



Figure 5. Track statistics for every entity. See flows between nodes, on topics, and even between specific endpoints.

#### **ABOUT RTI**

Real-Time Innovations (RTI) is the largest software framework provider for smart machines and real-world systems. The company's RTI Connext® product enables intelligent architecture by sharing information in real time, making large applications work together as one.

With over 1,500 deployments, RTI software runs the largest power plants in North America, connects perception to control in vehicles, coordinates combat management on US Navy ships, drives a new generation of medical robotics, controls hyperloop and flying cars, and provides 24/7 medical intelligence for hospital patients and emergency victims.

RTI is the best in the world at connecting intelligent, distributed systems. These systems improve medical care, make our roads safer, improve energy use, and protect our freedom.

RTI is the leading vendor of products compliant with the Object Management Group® (OMG) Data Distribution Service™ (DDS) standard. RTI is privately held and headquartered in Sunnyvale, California with regional headquarters in Spain and Singapore.

Download a free 30-day trial of the latest, fully-functional Connext DDS software today: <a href="https://www.rti.com/downloads">https://www.rti.com/downloads</a>.

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