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. It details the message flow between nodes. It shows application resource usage, queue overflows, memory status and CPU demand. It lays out the connection topology and shows flows between every point. Ultimately, RTI Monitor gives you the total system picture you need to integrate and manage your applications successfully.

**RTI Monitor**

Real-Time Visibility Into Your Complex System

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**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
- Graphical point and click interface

**Benefits:**
- Monitor your mission-critical application
- Understand how Connext runs your system
- Track and tune performance
- Identify and zoom in on issues and faults
- Trace connections
- Detect unusual behavior and diagnose problems
- Analyze load and network usage

**Understand Your System**

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.
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.

About RTI

Real-Time Innovations (RTI) is the Industrial Internet of Things (IIoT) connectivity company. The RTI Connext® 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 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, California.