Real-Time Messaging and SOA

Extreme performance at a low cost of ownership

BENEFITS

- Eliminates servers
- Ultra low latency
- High throughput
- Extremely scalable
- Fully fault tolerant
- Highly secure
- Easily embedded
- No system administration required

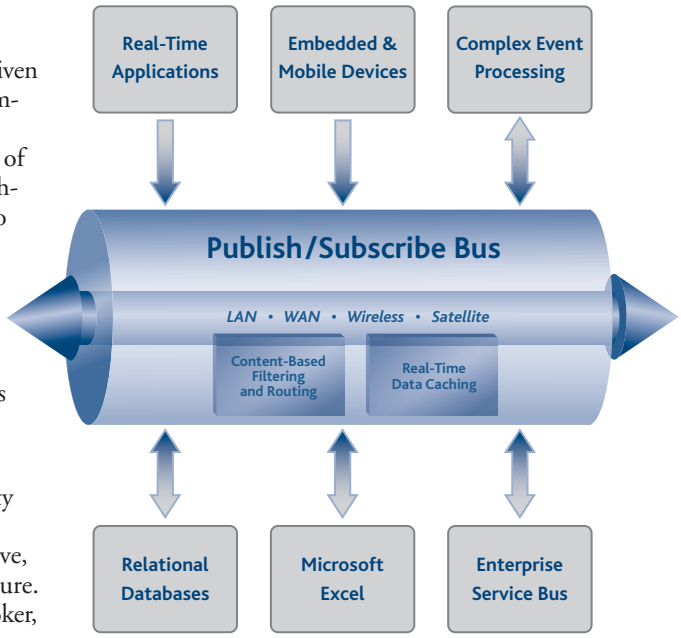
FEATURES

- True peer-to-peer architecture
- No message servers, brokers, daemons or ESB required
- Reliable multicast for efficient, broad data distribution
- Pluggable transport interface supports wireless, satellite and non-IP networks
- Languages: C, C++, Java, .NET
- Operating systems: Windows, Linux, Unix, embedded, mobile, real-time

INTERFACES AND ADAPTERS

- Data Distribution Service (DDS)
- Java Message Service (JMS)
- Real-Time Publish-Subscribe (RTPS) wire interoperability protocol
- SQL databases
- Microsoft Excel
- Complex Event Processing (CEP) engines
- Dashboard builders
- Market data feed handlers

RTI's high-performance messaging and SOA infrastructure provides event-driven and high-performance computing (HPC) applications with unprecedented levels of responsiveness and throughput. Performance is tens to thousands of times higher than that of traditional enterprise middleware, with latency in the tens of microseconds and throughput in the millions of messages per second.

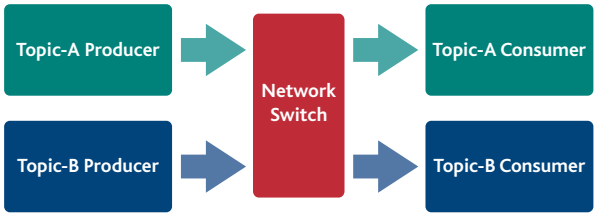


RTI breaks through the performance and scalability barrier imposed by other solutions with an innovative, true peer-to-peer architecture. No centralized message broker, server or Enterprise Service Bus (ESB) is required—eliminating choke points. Messages and data are sent directly from producers to consumers without passing through any intermediary; the required infrastructure is wholly contained within libraries linked into client applications. Moreover, communicating applications automatically discover each other without the need for a naming or directory server.

In addition to slashing latency and unleashing capacity, RTI's architecture and implementation provide a number of significant benefits:

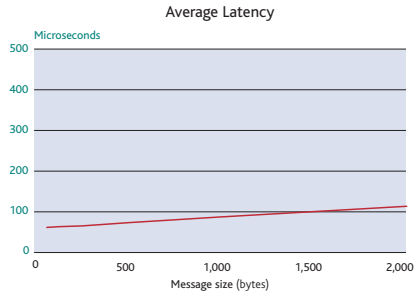
- Cost of ownership is dramatically reduced: far fewer servers are required, network overhead is cut at least in half, and no system administration is needed.
- There is no single point of failure, providing extremely high fault tolerance and availability. Automatic failover is also supported between primary and backup producers.
- There is no central point of vulnerability, resulting in very high security. This is augmented by OpenSSL support for authentication and encryption and by integration with Security Enhanced Linux (SELinux) and MILS separation kernels for high assurance.
- It is well-suited for dynamic and ad hoc environments, including those in which dependence on servers or system administration is unfeasible. Applications can frequently enter and leave a system without disrupting overall operation.
- It is easily embedded in applications and devices that will be redistributed. No administration or external software—such as brokers, ESBs or directory servers—are required.

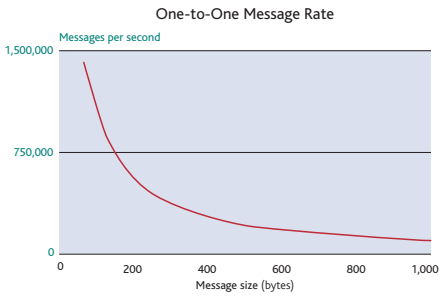
RTI middleware provides an ideal foundation for a real-time Service-Oriented Architecture (SOA). Extensive controls over real-time Quality of Service (QoS) allow stringent performance requirements to be satisfied, publish/subscribe interface deliver loose coupling, and applications are fully interoperable across programming languages and platforms.



With RTI's decentralized peer-to-peer architecture, messages are not routed through any intermediate brokers or server. The network switch is the only point through which all messages pass. As a result, latency is minimized and system-wide capacity is limited only by the switching fabric.

RTI's technology is mature and field proven. It has been used for over 12 years in hundreds of the world's most demanding systems, including military combat systems, financial trading applications, medical equipment and Supervisory Control and Data Acquisition (SCADA) systems. Products are backed by RTI's professional services organization, whose engineers have extensive experience designing, developing and deploying high performance, large scale and mission-critical applications. The quality of RTI's products, support and services has lead to a superior customer satisfaction rating: 98% of RTI customers say that they would recommend RTI to others.





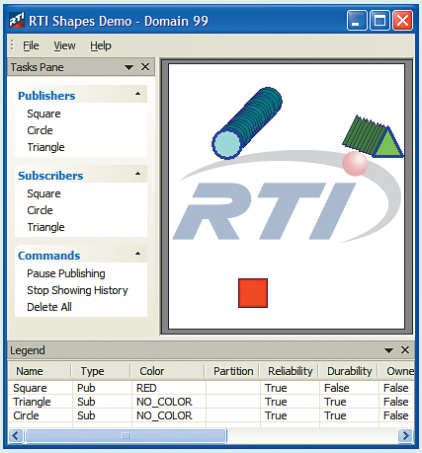
See more benchmarks and configuration details at ***http://www.rti.com/products***

LEARN MORE

RTI Shapes Demo

RTI Shapes Demo is a free download that illustrates RTI's powerful real-time messaging and application integration capabilities. These include data-centric publish/subscribe, real-time Quality of Service (QoS), fault tolerance and automatic discovery. RTI Shapes Demo is a turnkey, graphical application and does not require any programming.

http://www.rti.com/downloads/



Free Product Trials

Experience firsthand the performance, integration and cost of ownership benefits of RTI middleware. Download a fully functional, free product trial today.

RTI Data Distribution Service

The world's leading implementation of the Object Management Group (OMG) Data Distribution Service for Real-Time Systems standard (DDS). DDS dramatically reduces the cost of integrating mission-critical real-time systems by providing a loosely-coupled, standards-compliant integration infrastructure that meets demanding performance and operational requirements.

http://www.rti.com/downloads/dds.html

RTI Message Service

The highest-performance Java Message Service (JMS) publish/subscribe messaging solution for distributed real-time Java applications.

http://www.rti.com/downloads/jms.html

Free Licenses

RTI provides free licenses for pre-commercial development, research and universities.

http://www.rti.com/downloads/dds-research.html

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