

Integrated CORBA and DDS

Software, Support, Training and Engineering Services

BENEFITS

- **Reduced Risk**
 Combines leading DDS and CORBA implementations with the assurance that they have been thoroughly tested together
- **Industry-Leading Expertise**
 RTI leads the market for DDS and, by partnering with OCI, gives you access to domain expertise by a leading real-time CORBA provider
- **World-Class Support and Services**
 One point of contact for support and services from the leading real-time middleware provider
- **Convenience**
 Everything you need—software, support, training and engineering services—from a single vendor

Real-Time Innovations (RTI) offers a complete software and services solution for applications that take advantage of both the CORBA and DDS middleware standards. RTI's integrated DDS and CORBA software simplifies the development of applications that support both standards while RTI's unified services offering reduces the cost, complexity and risk associated with the use of multiple vendors or sources.

Integrating Best-in-Class DDS and CORBA Technologies

RTI's solution integrates leading, field-proven DDS and CORBA implementations, providing you with today's best technologies.

RTI Data Distribution Service (formerly NDDS) is the most widely used implementation of the Object Management Group's (OMG) Data Distribution Service for Real-Time Systems (DDS) standard. RTI Data Distribution Service has been proven in many time-critical and mission-critical applications such as combat systems, air traffic management, railway control, industrial automation, traffic monitoring, and financial systems.

TAO (the ACE ORB) is a high-performance and highly configurable open-source implementation of the OMG's Common Object Request Broker Architecture (CORBA) standard. TAO is particularly well-suited for real-time and embedded applications, with a flexible, portable architecture and a reduced memory footprint.

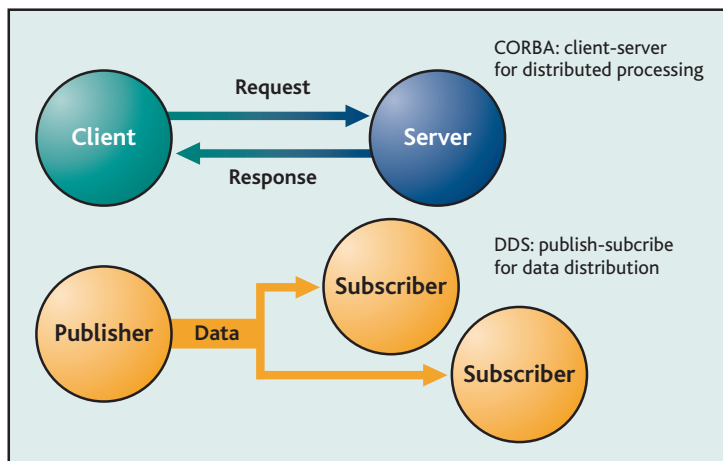
Integrated Software and Support

To support the simultaneous use of DDS and CORBA, RTI allows data types generated by the TAO IDL Compiler to be used by RTI Data Distribution Service. This enables data to be shared seamlessly between portions of an application that use DDS and those that use CORBA. Without this integration, custom software would be required to translate and copy data between the different types generated by decoupled CORBA and DDS implementations. With RTI, the same type is used by each. This also has the benefit of eliminating name conflicts.

In addition to software integration, RTI acts as a single point of contact for DDS and CORBA support. Users can now conveniently obtain the software and services they need from a single vendor.

Industry-Leading Expertise in Distributed Applications

RTI is the industry leader in real-time communications middleware and has been involved in the design and development of distributed real-time systems for more than 15 years. RTI was a principal author of the DDS standard and RTI Data Distribution Service was one of the first commercial implementations. Our software, support and consulting teams have decades of experience in the implementation of distributed real-time applications, in areas ranging from military and aerospace to transportation and communications.



Many applications take advantage of both client-server (CORBA) and publish-subscribe (DDS) approaches to data and process distribution.



OCI Partnership

RTI is offering TAO through a partnership with OCI, the premier provider of supported open source CORBA solutions. OCI provides an implementation of TAO that is fully tested and supported and is in use in hundreds of commercial applications today. OCI has over a decade of experience enhancing and supporting enterprise infrastructure and object-oriented software that is integrated, open and interoperable.

Complementary Standards

CORBA and DDS are complementary middleware standards published by the OMG.

The CORBA standard is used to distribute processing across multiple computers. CORBA is based on the client-server architecture and is best-suited to applications in which one software component (the server) is supplying a service to one or more other components (clients).

The DDS standard is used to share data across multiple computers. DDS is based on the publish-subscribe architecture and is best suited to applications in which one or more data sources (publishers) need to communicate information to one or more data users (subscribers). Because publishers and subscribers require no knowledge of

SHARED ADVANTAGES OF CORBA AND DDS

CORBA and DDS both enable the development of heterogeneous distributed systems. Because of this, they are often used together in large, multi-vendor projects and in applications that run on diverse hardware—ranging from servers to embedded systems. Shared benefits include:

- Broad operating system support
- Broad hardware support, including both enterprise and embedded systems
- Integrated real-time capabilities
- Support for multiple programming languages
- Easy integration of software from multiple vendors

each other, DDS provides a powerful integration framework for large or dynamic distributed systems. With DDS, new components can be added (as publishers and/or subscribers) without any changes to the rest of the system.

Because many applications distribute both processing and data, an integrated CORBA and DDS solution allows each requirement to be met with the best-suited middleware technology.

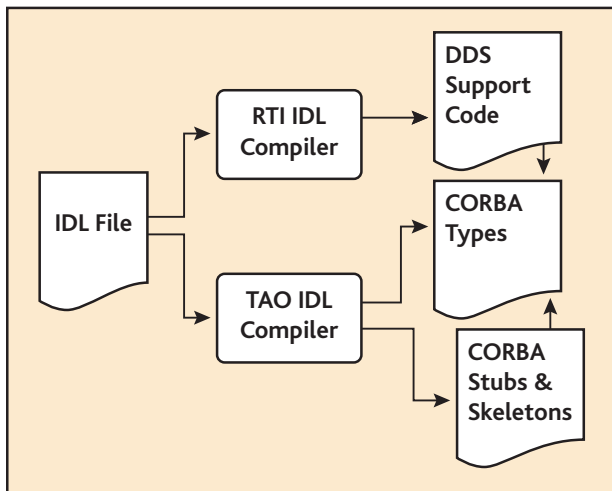
Availability

RTI Data Distribution Service and TAO CORBA distribution are available for a broad range of operating systems, including:

- Microsoft Windows
- Red Hat Linux and others
- Sun Solaris
- Wind River Systems VxWorks
- LynuxWorks LynxOS
- Green Hills Software INTEGRITY

Contact Us

To find out more, please email sales@rti.com, or call us at +1-408-990-7400.



CORBA and DDS both take advantage of OMG Interface Definition Language (IDL) to define data types in a language-independent way. RTI allows you to use a common IDL file and language mapping for both CORBA and DDS applications, eliminating name conflicts and the need for data copying.

About RTI

RTI supplies middleware and distributed data management solutions for real-time systems. With innovative technology and deep expertise in distributed applications, RTI provides an unequalled competitive advantage to customers developing systems that benefit from high-performance access to time-critical data. RTI solutions have been deployed in a broad range of applications including command and control, intelligence, surveillance, data fusion, simulation, industrial control, air traffic management, railway management, roadway traffic monitoring and multimedia communications. Founded in 1991, RTI is privately held and headquartered in Sunnyvale, California.