The Industrial Internet of Things (IIoT) demands an innovative data integration approach. Legacy architectures and connectivity technologies simply cannot cope with the diversity of modern applications, volume of data and pace of change it requires. With RTI® Database Integration Service, you can overcome these challenges. A next-generation connectivity fabric, it helps you store IoT data in your existing relational database management system (RDBMS) and get database updates to any application in real time.

RTI DATABASE INTEGRATION SERVICE

The RTI Database Integration Service provides a bi-directional integration between RTI Connext DDS and a relational database management system (RDBMS) to store published data and to publish database updates to subscriber applications.

The RTI Database Integration Service also allows embedded systems to store data in a remote database. Embedded applications that use RTI Connext DDS can establish a real-time connectivity link with an existing remote database through the RTI Database Integration Service.

RTI Database Integration Service does not require a dedicated database instance. Any existing supported database in your environment can be re-purposed for persistent storage to disk or in-memory storage option for fast data access. The integration enables:

- Capturing real-time data in a relational database and using it for data processing and analysis at runtime
- Effective, reliable and scalable distribution of centrally managed systems configuration information
- Delivery of real-time notification of database updates to IoT devices and applications
- Adding advanced real-time database replication scenarios for business continuity and high-availability, with robust and flexible options for fine-tuning Quality of Service (QoS)

CAPTURING REAL-TIME DATA IN A RDBMS

The RTI Database Integration Service captures real-time data streams published via Connext DDS and stores the data to the corresponding database table.

REMOTE REAL-TIME NOTIFICATION OF TABLE CHANGES

The RTI Database Integration Service notifies remote devices and applications of time-critical changes in the database by automatically sending notification with new table values inside the payloads.
REAL-TIME DATABASE REPLICATION

RTI Database Integration Service performs table replication between distributed databases with minimal latency – even with high update rates. Changes in one table can be replicated across any number of tables, across multiple database types.

SCALABILITY AND HIGH AVAILABILITY

The RTI Database Integration Service uses a multi-threaded architecture to leverage modern multicore processor capabilities.

Multiple instances of the Database Integration Service can run in parallel on different hosts. Depending on configuration, multiple instances can share the load, or each instance can handle discrete set of messages and data.

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.