

RTI[®] Database Integration Service



Bi-directional integration between RTI Connex[®] DDS and RDBMS



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.

Highlights:

Bi-directional integration

- Real-time data capture in a RDBMS

- Real-time notifications of table changes

- Caching of high-rate data streams before storage

- Heterogeneous database replication

Supported RDBMS

- Oracle Database

- Oracle TimesTen

- MySQL Enterprise Edition

- Microsoft SQL Server

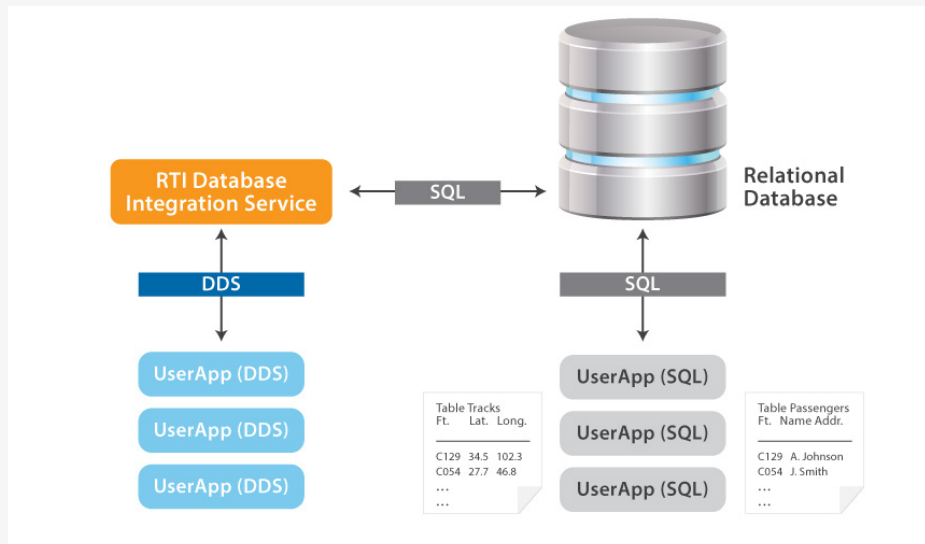
The RTI Database Integration Service provides a bi-directional integration between RTI Connex[®] DDS and a relational database management system (RDBMS) to store published data and to publish database updates to subscriber applications.

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

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 QoS fine tuning options

A Single Platform for Connectivity and Data Integration



Capturing Real-Time Data in a RDBMS

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

Remote Real-Time Notification of Table Changes

The RTI Database Integration Service notifies remote devices and applications of time-critical changes in the RDBMS 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 RDBMS types. For example, changes in an Oracle Database table can be replicated to Microsoft SQL Server and MySQL tables.

Scalability and High Availability

The RTI Database Integration Service uses a multithreaded 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

RTI provides the connectivity platform for the Industrial Internet of Things.

Our RTI Connexx[®] messaging software forms the core nervous system for smart, distributed applications. RTI Connexx allows devices to intelligently share information and work together as one integrated system. RTI was named "The Most Influential Industrial Internet of Things Company" in 2014 by Appinions and published in Forbes.

Our customers span the breadth of the Internet of Things, including medical, energy, mining, air traffic control, trading, automotive, unmanned systems, industrial SCADA, naval systems, air and missile defense, ground stations, and science. The total value of system designs that trust RTI for their fundamental architecture exceeds \$1 trillion.

RTI is committed to open standards, open community source and open architecture. RTI provides the leading implementation of the Object Management Group (OMG) Data Distribution Service (DDS) standard.

RTI is the world's largest embedded middleware provider, privately held and headquartered in Sunnyvale, California.



Your systems. Working as one.

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