

DATASHEET

# RTI ConnexT TSS

FACE CERTIFIED CONFORMANT TSS BASED UPON RTI CONNEXT DDS

## HIGHLIGHTS

Certified conformance to the FACE Technical Standard, Edition 2.1

Included IDL compiler generates type-specific C++ interfaces from the Platform Data Model

Includes portable source-code for run-time components

Runs on a wide variety of operating systems and CPUs

Customizable to meet system-specific requirements

Expeditious path to DO-178C Level A certification

The Future Airborne Capability Environment (FACE™) technical and business standards promote software reuse across disparate airborne platforms, both manned and unmanned. Within the FACE architecture, the Transport Services Segment (TSS) provides the APIs and capabilities that portable components use to exchange data. RTI ConnexT® TSS provides an off-the-shelf TSS solution that accelerates component development and integration.

### FACE CERTIFIED CONFORMANT TSS

RTI ConnexT TSS conforms to the FACE Technical Specification Transport Services Segment (TSS). ConnexT TSS makes it easy for component developers and systems integrators to take advantage of both the FACE Technical Standard and the Object Management Group (OMG®) Data Distribution Service (DDS) standard. ConnexT TSS maps the FACE Transport Services APIs to DDS APIs supported by RTI ConnexT DDS.

ConnexT TSS is available as an add-on for RTI customers with a license to RTI ConnexT DDS. In addition, RTI offers the following services to expedite your development and integration.

### CONNEXT TSS SUPPORT PACKAGE

Provides your team direct access to the expertise necessary to effectively leverage ConnexT TSS and seamlessly integrate it into your new or existing infrastructure.

### CONNEXT TSS DESIGN SERVICES

Provides customization, feature acceleration and additional conformance testing required to meet your system-specific TSS requirements.

### LEVERAGE THE POWER OF CONNEXT DDS

ConnexT TSS provides loose coupling between portable components. This minimizes integration, maintenance and upgrade costs. FACE connections are mapped to DDS publish/subscribe topics. Components communicate by simply publishing the data they produce and subscribing to the data they consume. They require no knowledge of other components. DDS automatically handles discovery and message routing.

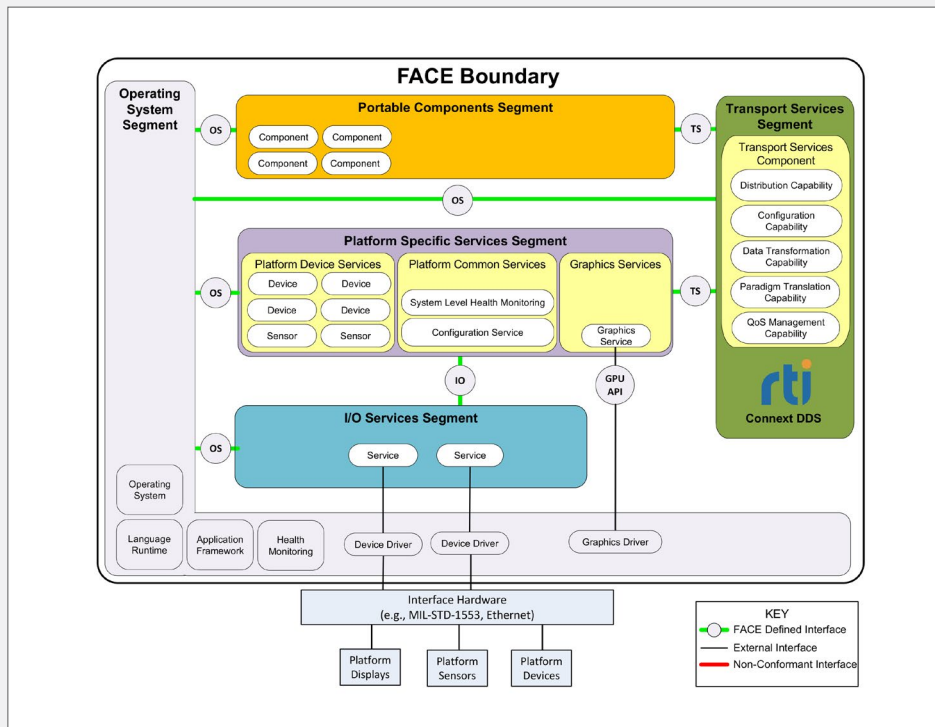
ConnexT TSS runs over any ConnexT DDS product. It supports the FACE Safety Base Profile when used with ConnexT DDS Micro and ConnexT DDS Cert. With a few minor changes to the included source code, it can also support the Security Profile. Since ConnexT DDS Cert is

certifiable to DO-178C Design Assurance Level (DAL) A, ConnexT TSS provides a fast and low-risk solution for safety-critical systems.

All ConnexT DDS products deliver the power of the DDS standard to FACE developers and integrators.

- Decentralized architecture with peer-to-peer communication for low latency and no single point of failure (no brokers or servers required)
- Efficient and scalable real-time data distribution, including over multicast

- Optimized intra-process, inter-process, inter-partition and inter-node communication
- Physical communication mechanism(s) configurable at integration time (e.g., shared memory or network sockets)
- Comprehensive control over Quality of Service (QoS), including reliability, deadlines, fault tolerance, access to historical data and resource utilization



## 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 lives at the intersection of functional artificial intelligence and pervasive networking<sup>SM</sup>.

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, Calif.

Download a free 30-day trial of the latest, fully-functional ConnexT DDS software today: <https://www.rti.com/downloads>.

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