

Press release

RTI Announces Connex Drive 3.0, bringing Functional Safety and Flexibility to Software-Defined Vehicle Development

RTI introduces the first platform-independent, ASIL-D certified communications framework for automotive, bridging the gap between AUTOSAR and DDS

SUNNYVALE (USA)/London – November 9, 2023 – [Real-Time Innovations \(RTI\)](https://www.rti.com), the largest software framework company for autonomous systems, today announced RTI [Connex Drive® 3.0](https://www.rti.com): The flexible, future-proof, and data-centric communication framework for software-defined vehicles (SDVs). It expedites time to market by providing the first platform-independent adherence to the highest functional safety standard, ISO26262 ASIL D and bridges the platform gap between DDS, AUTOSAR Classic, AUTOSAR Adaptive and ROS 2. With Connex Drive 3.0, OEMs can get their next-generation vehicle to market faster by using the same framework from prototype to production. Its unmatched architectural versatility minimizes the amount of custom communication and integration code users have to develop.

Based on the [Data Distribution Service \(DDS™\)](https://www.rti.com) standard, Connex Drive 3.0 delivers on the promise of safer, more flexible and adaptable automotive systems by forging a pathway between functional safety and innovation. In automotive, RTI works with more than 25 companies who use Connex to accelerate their software-defined programs.

"There's a growing need for auto manufacturers to reduce risk and accelerate production-readiness through safety-certified software," said Andrew Longhurst, Managing Director at WITTENSTEIN high integrity systems. "We see how the release of Connex Drive 3.0 can meet these requirements at the highest level, as it now includes a platform-independent footprint with ASIL-D compliance that facilitates the integration with SAFERTOS®, our safety critical real-time operating system. Connex Drive, running alongside SAFERTOS®,

provides OEMs with the rigorous performance and safety needed for their production vehicles worldwide.”

"Based on our rigorous and approved ISO26262 verification processes, Verocel has demonstrated that the latest version of RTI Connex Cert within Connex Drive 3.0 complies with ISO 26262 ASIL-D requirements," said Jim Chelini, President and CEO at Verocel. "Over the course of several months, our teams conducted thorough code reviews, analysis, documentation and testing, and were able to generate full traceability mapping between all related lifecycle artifacts. Automotive software architects can confidently leverage Connex Drive 3.0 to clear regulatory hurdles for their embedded safety-critical automotive applications."

The latest version of Connex Drive 3.0 includes:

- **Functional Safety:** Connex Drive 3.0 is the first DDS-based communications framework that adheres to the highest functional safety standards (ISO26262 ASIL D).
- **A flexible, accelerated path to Certification:** Connex Drive is the first platform-independent ASIL-D TUV SUD certified software; it eliminates the need for recertification if the vehicle operating system or network interfaces change.
- **A Solution to Bridge the Platforms Gap:** RTI Connex Integration Toolkit for AUTOSAR seamlessly connects between DDS and AUTOSAR Classic/AUTOSAR Adaptive without custom code.

"Connex Drive 3.0 enables manufacturers to create safer, more flexible and adaptable communication architectures with less risk," said Pedro Lopez Estepa, Director of Automotive at RTI. "Our customers now have an optimal way to enable vehicle communication as their platform evolves because of our latest platform-independent solution. The communication is not limited to DDS, as Connex Drive provides interoperable solutions with AUTOSAR Classic, AUTOSAR Adaptive and ROS. Connex Drive paves the way for the next generation of software-defined vehicles and empowers manufacturers to innovate fearlessly while accelerating success."

For more information on Connex Drive 3.0 and a full list of new features, please visit: www.rti.com/drive.

Availability and Pricing

Connex Drive 3.0 is available today. For pricing and licensing, please contact drive@rti.com.

Image (Source: Shutterstock-11708388677):



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About RTI (www.rti.com):

Real-Time Innovations (RTI) is the largest software framework company for autonomous systems. RTI Connex[®] is the world's leading architecture for developing intelligent distributed systems. Uniquely, Connex shares data directly, connecting AI algorithms to real-time networks of devices to build autonomous systems.

RTI is the best in the world at ensuring our customers' success in deploying production systems. With over 2,000 designs, RTI software runs over 250 autonomous vehicle programs, controls the largest power plants in North America, coordinates combat management on U.S. Navy ships, drives a new generation of medical robotics, enables flying cars, and provides 24/7 intelligence for hospital and emergency medicine. RTI runs a smarter world. 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 offices in Colorado, Spain and Singapore.

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