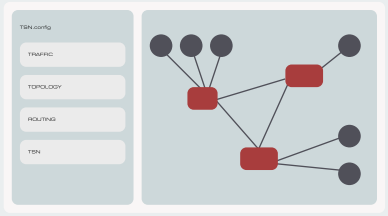
TSN.CONFIGURaTOR

POWERED BY RTaW RealTime-at-Work

TSN.configurator is a comprehensive tool for **designing, verifying, and configuring** TSN-compliant devices — ensuring the required timing and reliability QoS.

TSN.configurator automates **Time-Sensitive Ethernet** network setup, from routing to advanced features like **scheduling and redundancy**. It ensures compliance through mathematically verified configurations and supports seamless multi-vendor integration.

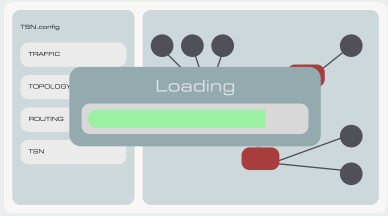
01



MODELLING

Define network topology and streams in the IDE or via an API.

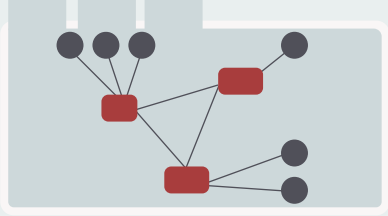
02



CONFIGURATION

The configuration of the devices is generated.

03



NETWORK DEPLOYMENT

The configuration is deployed e.g. over NETCONF.

KEY FEATURES

- **“Push-button”** approach and user-friendly interface to simplify and speed-up network configuration,
- **Comprehensive Traffic Flow Modeling:** Wizards guide users through the detailed definition and characterization of traffic flows and their specific requirements,
- **Automated Network Configuration:** Produces deployment-ready configurations that prevent resource over-provisioning,
- **Provides firm guarantees** that packets timing constraints are met: latencies, delays and throughput,
- **Enables proper buffer dimensioning** to prevent data loss,
- **Support for TSN QoS Mechanisms:** Includes automated configuration for IEEE standards such as 802.1AS, 802.1ASdm, 802.1Qav, 802.1Qbv, 802.1Qbu, 802.1Qci, and 802.1CB,
- **Support for legacy Ethernet** traffic and network devices,
- **Support for multi-vendor equipment** and device specific constraints via a hardware description language,
- **Support for IEEE and IETF YANG standards,** and deployment of configuration files over NETCONF,
- **API availability:** functionalities are also available through a Java library for integration into your own programs.

Automated and Verified TSN Configuration

Automated configuration deployment

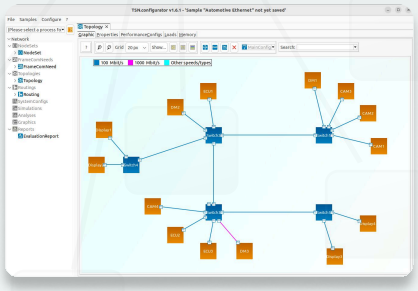
TSN.configurator generates XML configuration files that fully comply with the standardized TSN YANG models, and automatically deploys them to the hardware via the NETCONF protocol.

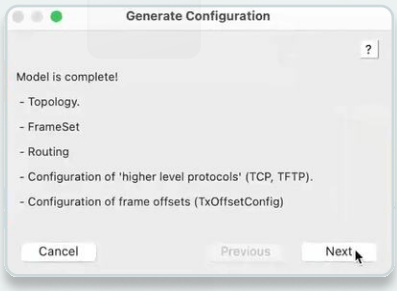
Proven in use

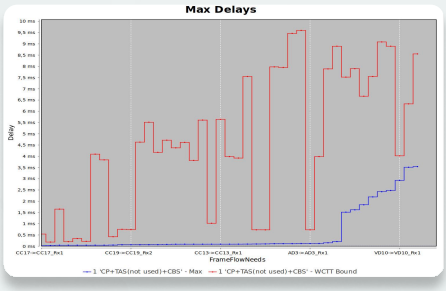
A specialized edition of TSN.configurator, tailored to the devices of our **partner SOC-E**, has been in production since 2021. TSN.configurator leverages the field-proven technologies behind RTaW-Pegase®, the industry-leading network performance evaluation tool for automotive and aerospace TSN networks.

Comprehensive TSN Support

- Traffic Prioritization (IEEE 802.1p)
- Time Synchronization (IEEE 802.1AS & 802.1ASdm)
- Credit Based Shaper (IEEE 802.1Qav)
- Scheduled Traffic (IEEE 802.1Qbv)
- Frame Preemption (IEEE 802.1Qbu & 802.3br)
- Per-Stream Filtering and Policing (IEEE 802.1Qci)
- Frame Replication and Elimination for Reliability (IEEE 802.1CB)
- YANG datamodels (IEEE 802.1Qcp, 802.1Qcw, 802.1CBcv, 802.1ASdn, 802.1Qdx)







Licensing terms

- Two licensing models:
  - Single-computer single-login license: the software is used on a single user account (i.e., login) on a single computer.
  - Floating license: allows multiple users on a network to share the same license, with no restriction on the number of different users.
- Includes perpetual license, 12 months of support and maintenance, and initial training.

Technical requirements

- Windows (64bit, Win10 and Win11), Linux (64bit, Debian 9 and Ubuntu 16.04 and later), and OS X (64bit, v10.11 and later)
- Java21 or above
- At least a 4-core CPU and 8GB of RAM

Get in touch with our experts now!
And ask for demo or a free evaluation period

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www.realtimeatwork.com