

Time Critical Networks AB (TCN) develops [TCN TimeAnalysis™](#) for digital twin modeling and simulation of primarily automotive electrical architectures and networks that incorporate [Time-Sensitive Networking \(TSN\)](#), the new IEEE standards for making traditional Ethernet networks more deterministic and robust with regards to time-sensitive data streams.

Target users of the tool are found, for example, within the automotive industry, using the software for designing the upcoming autonomous driving communication systems, in-vehicle as well as outside the vehicle (V2V/V2X).

TSN networks are Ethernet networks that provide QoS guarantees for high critical traffic in terms of latency, jitter and bandwidth. In order to do that, the configuration of TSN elements (switches and endpoints) needs to be optimized and properly tested.

In this project, the objective is to