

TERMINAL OPERATIONAL ENVIRONMENT SIMULATOR (TOES)

Multi-terminal network simulator providing a scalable software emulation of a Link 16 network

TOES leverages current L3Harris Link 16 development efforts including software for the Small Tactical Terminal (STT), the Amalgamated Remote Management System (ARMS) and the Link 16 Navigation Test Set.

PRODUCT DESCRIPTION

TOES ELIMINATES THE NEED FOR MULTIPLE LINK 16 TERMINALS

Use TOES to:

- > Platform Host Development and Integration
- > Test and validate network designs
- > Send tactical data through multiple units from a single interface for use with 3rd party battlespace simulator tools
- > Evaluate new data exchanges including stacked nets
- > Create a test environment for network monitoring and management systems
- > Replicate or simulate an operational environment for Link 16 training

PRODUCT HIGHLIGHTS

- > CMN, CCR and CMI capable
- > Emulates STT and BATS-D/E Platform-J, JTRS Platform-I Ethernet, and JTRS Platform-A 1553
- > Available in Windows® 11 and Linux®

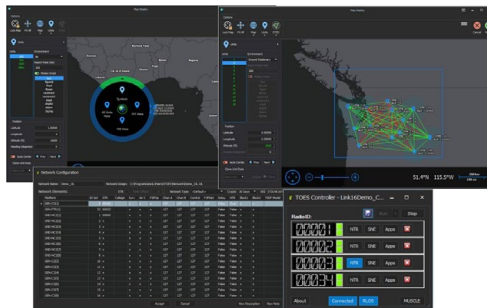
SOFTWARE ARCHITECTURE

> TOES User Interface

User selects network design (.jxl, .jnl, .inde) and assigns platform loads and JU numbers to simulated terminals. User configures initial positions and simulated motion and defines host connection parameters. User, or third party software, commands simulated terminals to enter the net.

> TOES Engine Control

Simulated terminals are automatically created and initialized. Terminal assigned as Network Time Reference (NTR) starts net entry. Third party applications control a simple, well-defined User Datagram Protocol (UDP) interface. Active terminals transmit and receive host-generated messages per their individual initialization loads. During each time slot, TOES determines which slot transaction (transmit or receive) each simulated terminal performs.

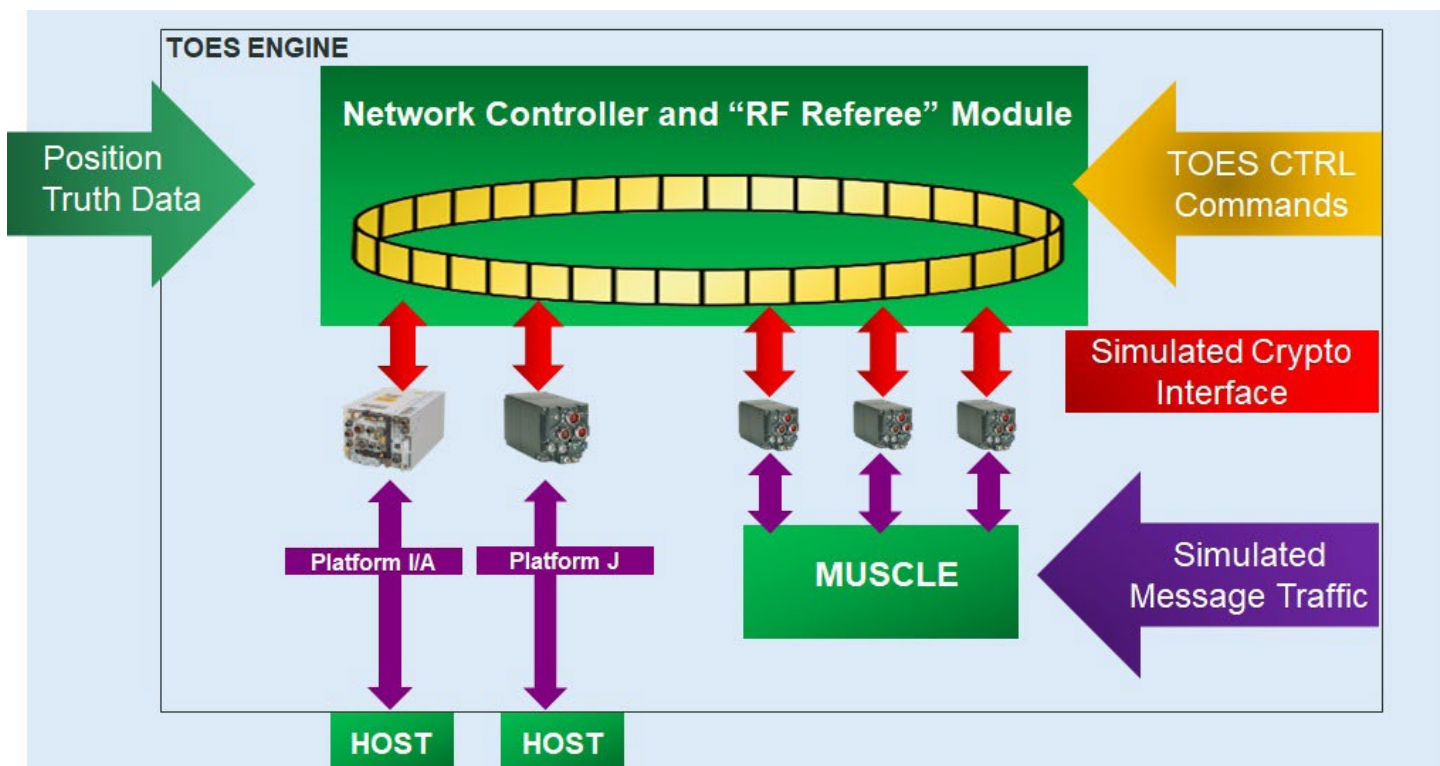


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Eliminate the Need for Multiple Link 16 Terminals

KEY FEATURES

- > TOES leverages same Link 16 Core Software (LCS) as STT
- > Simulates multiple Link 16 terminals and networks
- > Employs actual network designs and platform loads
- > Regulates bandwidth and provides accurate time slot usage
- > Supports stacked nets and contention access
- > Implements paired slot relay
- > Simulates simple RF Line-of-Sight (LOS) between terminals
- > Provides JTRS, STT and BATS host interface for each simulated terminal
- > Simulates terminal latency
- > Simulates Time-of-Arrival (range) delay between pairs of hosts



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