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Tactical Data Link Integration Exerciser (TIGER)

Multi-Link Test, Training and Simulation

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TIGER — Multi-Link Test, Training and Simulation

TIGER generates Tactical Data Link (TDL) messages and network traffic, simulating a complete tactical exercise to facilitate system testing and training. TIGER is used by the Navy, Air Force, Department of Defense contractors and joint test organizations to test conformance with tactical data link standards and interoperability certification requirements. TIGER's message processor interacts with a variety of TDL terminals and networks to test interoperability in accordance with the latest military specifications.

Provides Test Visibility, Analysis and Interaction

The TIGER Tactical Situation Display (TSD) provides the user with a map display of the test area overlaid with the positions of live and simulated tracks and units using standard symbology. The Message Monitor allows the user to observe network traffic on all TDLs, filterable by TDL, message type, transmitting terminal, or other parameters. Within these displays, the user can select a track/unit or a message and drill down for detailed information. A Track Creation tool allows the user to quickly create and inject simulated Link 16, Link 11, or Link 22 units and/or tracks.

TIGER records all data exchanged — including messages, scenario data, operator commands, and system alerts — for offline review. Data can be stored in readable text, octal, and binary formats, enabling data reduction programs to provide a more detailed analysis.

Flexible Scripting Supports Easy Creation of Test Scenarios

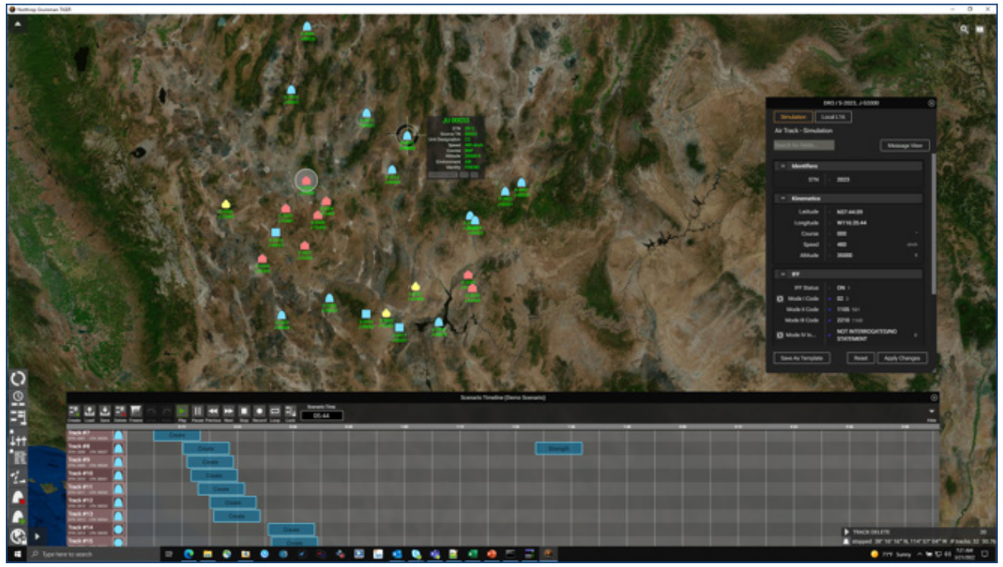
The TIGER scenario developer allows the user to script reusable scenarios to increase the speed and fidelity of testing. TIGER can simulate the most common units, including Link 11A participating units (PUs), Link 22 NILE units (NUs), and Link 16 Joint Tactical Information Distribution System (JTIDS) units (JUs).

Interoperable with TDL Test Tools for Extended Network Stimulation and Analysis Capabilities

The TIGER test tool also provides seamless integration with third-party TDL test tools, including Message Analysis and Data Reduction for the Integration of Links (MANDRIL).

TIGER can be networked for distributed testing and training using Northrop Grumman's Gateway Manager. Gateway Manager routes tactical data to connect geographically separated networks.

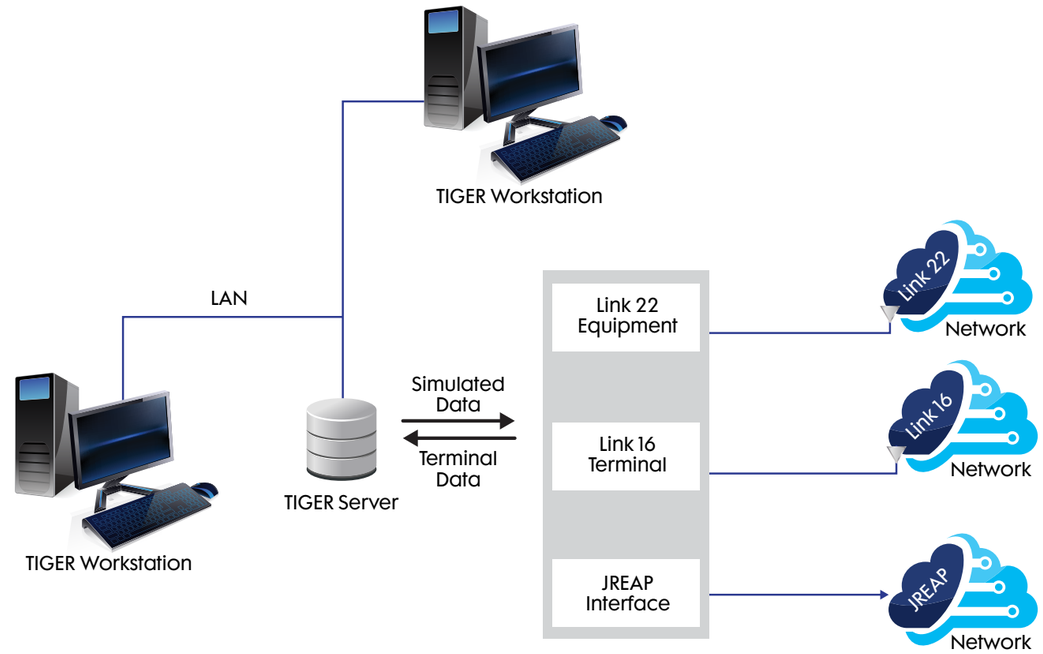
To achieve a wraparound, closed-loop test configuration for system integration and qualification, TIGER also communicates with Northrop Grumman's Distributed Sensor Sim/Stim (DS3), which adds powerful tools enabling simulation of sensors within the test networks.



The Tactical Situation Display shows filterable track symbology. During test the user can switch between this window and the Message Monitor. The Message Monitor displays tactical messages, as well as scenario and operator-initiated events, in an organized, user-readable format.

Features & Benefits

- Injects realistic tactical messages and network traffic for software development, system development, and platform integration and testing
- Supports Link 16/11/22, DIS, JREAP, and SIMPLE
- Enables testing under pre-scripted conditions for fast, efficient, and repeatable testing
- Enables ad hoc message injection, such as adding units and unit responses
- Provides the ability to easily develop scenario files emulating various tactical scenarios
- Provides overall test visibility via a situational awareness display
- Provides message monitoring
- Records network traffic and user commands for post-test analysis
- Emulates Link 16 terminals to facilitate host development and testing



The above configuration can be used to inject simulated data, either ad hoc or via pre-scripted scenarios, from any TIGER workstation to any of the connected test networks. TIGER supports most TDLs, including Link 16/11/22, DIS, JREAP, and SIMPLE. All messages on the test networks, as well as the test Tactical Situation Display, are viewable on any TIGER workstation.

The Proven Standard for Tactical Data Link (TDL) Testing and Training