At A Glance

The GMSEC Environment Diagnostic Analysis Tool provides a visual representation of a GMSEC system.

Features

- Visual notification of component, computer, or bus failure
- Animation of spacecraft pass, telemetry status, and alert paging
- Plots computer resources such as network bandwidth, CPU, memory, and disk utilization
- Configurable to user preferences

Benefits

- Provides a quick overview of the configuration and status of a GMSEC system

NASA's GMSEC Environment Diagnostic Analysis Tool

Summary

The GMSEC Environment Diagnostic Tool (GEDAT) provides a visual representation of the GMSEC environment. It identifies and tracks all components performing message-based publish/subscribe communications over a GMSEC message bus. GEDAT alerts the user to various error conditions including component and bus failover. Key events, such as a spacecraft pass, telemetry downlink, and alert paging can optionally be animated.

Features

GEDAT utilizes a hierarchical ordering scheme to display detailed information about each component of a GMSEC system. For large-scale environments the user can customize the view by filtering components based on a number of different search criteria. The user can select a computer node to view its memory, CPU, and disk utilization values plotted over time. Animations of certain key events are controlled by directive messages published by another component, such as, GMSEC’s Criteria Action Table (CAT). GEDAT provides programmable message buttons that allow the user to publish a message at the click of a button. This feature could be used in concert with other components, for instance, to send a directive to a telemetry and command system to start a script.