EPOCH® Triggers Service™

KRATOS®

Overview

The EPOCH® Triggers Service™ provides an automated detection/action capability to allow ground system and spacecraft system conditions to be detected and actions to be initiated. The Triggers Service can interface to any number of EPOCH T&C Servers to monitor telemetry data, ground equipment data, events, and other system conditions. The Triggers Service can automatically initiate user specified actions based on the detected condition and notify system operators when these events occur. Multiple satellites can be monitored as well as any ground equipment under EPOCH control. The Triggers Service is designed as a Client/Server architecture where the clients provide system operators with a complete view of all triggers active in the system. Multiple Triggers Clients can connect to one or more Triggers Servers to monitor and setup trigger conditions. The Triggers Server can be configured for redundancy providing reliable operations and confidence that critical satellite or system conditions are detected and acted upon.

Applications/Usage

The EPOCH Triggers Service provides reliable automated monitoring of satellite and ground system conditions, freeing operators from manually detecting and responding to these events. Compatible with EPOCH T&C®, the Triggers Service can initiate EPOCH procedures and user applications in response to these events. The Triggers Service comes with a robust set of conditions and actions including:

Conditions		
Telemetry or ground point value =, >, <, >, <	Telemetry or ground point state/status	Event message detection
Hysteresis may be applied to conditions	Auto restart of condition checking after condition is satisfied	Disable condition checking after a specified number of conditions detected
Actions		
Start EPOCH procedure	Issue EPOCH directive	Send page via e-mail service
Send system event	Start system script or program	Start or stop a processing node
Send e-mail identifying trigger condition. Include optional attachments		

An Integrated Solution

The EPOCH Triggers Service is completely integrated with EPOCH T&C, providing automated end-to-end operations from detection of satellite or ground system conditions to the execution of EPOCH procedures or directives. Whether the condition detected is on the ground or in orbit, the Triggers Service provides the reliable mechanism for detecting, notifying, and executing the desired response.

Features
- *Fully integrated with EPOCH T&C Server*
- *EPOCH processing node monitoring and control capability*
- *Multiple satellite monitoring capability*
- *Robust set of conditions and actions*
- *Redundancy capability Server*

Benefits
- *Allows execution of EPOCH procedures or directives as actions*
- *Allows monitoring of any satellite or ground system data point or event*
- *Provides plug and play compatibility with existing EPOCH installations*
- *Allows for fault detection and failover transitioning providing high reliability*
- *Provides for monitoring of all satellites in the fleet from a single server and GUI*
- *Allows automated monitoring for a wide variety of possible conditions*
- *Up to ten system actions may be initiated as the detected condition warrants*
- *Allows user or third party application programs to be invoked as actions*
- *Provides reliable detection and action capability for critical satellite or system events*

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