EPOCH Database®
Spacecraft and Ground System Data Configuration

EPOCH Integrated Product Suite

KRATOS

Overview

The EPOCH Database® product from Kratos Integral Systems International, Inc., is an easy-to-use, comprehensive solution for maintaining all mission-specific information used to configure the suite of EPOCH IPS™ software components. It is designed to support the needs of an individual mission, as well as those of an entire fleet or constellation.

EPOCH Database supports all phases of the satellite and ground segment life cycle- from payload and satellite integration and test, through prelaunch, launch, early orbit, and mission operations. In addition, the EPOCH Database is your solution for accommodating different satellites and ground equipment from any manufacturer.

The system defines all satellite telemetry, commanding, and ground status characteristics, including context-sensitive definitions of telemetry stream locations, engineering conversions, limits, and textual states. The system is equally versatile for commanding. EPOCH Database enables various types of command and telemetry verification, command stream characteristics, and individual command syntax to be defined entirely within the database. Even packetized methods, such as CCSDS standards, are supported directly.

EPOCH Database features:

EPOCH T&C® and ABE® Compatible	Oracle Database Engine	Web-based implementation
User-Friendly Forms	Hierarchical Organization	Flat-File Real-Time System interface
Extensive Data Entry Validation	Comprehensive Reports	Assign User Access and Privileges

Applications/Usage

EPOCH Database is part of Kratos Integral Systems Internationals' fully integrated EPOCH IPS product line. It provides satellite operators and test engineers the tools they need to define and maintain the command and telemetry definitions and user access privileges for each operating and test scenario, regardless of the type of satellite, payload, or ground/test equipment.

Benefits

- Provides seamless integration with the EPOCH T&C® and ABE® products
- Provides flexible and extensive data manipulation and examination that file based systems cannot support without extensive programming
- Simple, fill-in-the-blank forms allow operators to develop and maintain their system configuration database without requiring a knowledge of Oracle
- No matter the support scenario, diversity of satellites and ground equipment, or number of satellites, EPOCH Database can handle it
- Eliminates unnecessary and costly real-time database queries. Ensures the best performance of your command and control system while providing traceability and accountability
- Detects problems "up front," before the database is provided to the real-time system for testing or operations
- Provides comprehensive and diverse views of the database, enabling analysis of telemetry point distributions by data type, commands that use incorrect telemetry points for telemetry verification, and telemetry points with overlapping locations within the telemetry stream, to name a few
- You decide how you want to operate and who has privileges to perform critical functions on the real-time system