

# EPOCH® Client™

## Visualization and Analysis

**KRATOS**



### Overview

The EPOCH® Client™ provides complete operations capability for real-time monitoring and control of all satellite and ground equipment systems and functions. The EPOCH Client uses Kratos ISI's EPOCH T&C front-end server to provide the most powerful satellite operations platform in the industry.

The EPOCH Client consists of a family of applications tailored to the needs of operators whose tasks include monitoring spacecraft health and safety, performing commanding, and executing memory management functions. Users will find instant familiarity with the software since the user interface follows the patterns common to applications developed for Microsoft Windows applications. Simple automatic installation and configuration complete the Client's commercial look and feel.

### Advanced Plotting

The EPOCH Client's advanced plotting capability can show smooth transition of data from archive into real time as well as compute statistics such as min, max, average, and std deviation as values are received. Additional features include: dual axis, multiple measurands per plot, limit bands overlay, ability to plot values (raw, EU and state), annotation, a comprehensive legend, data export and publication quality hardcopy. This and more make the EPOCH Client plotting package the best in the industry.

### Mimic

The EPOCH Client MIMICs integrate Microsoft VISIO diagrams of any complexity to depict electrical circuits, payloads and other systems in real time. Operators can actually see the path through an RF or electrical circuit rather than relying on tabular values. Image export and publication quality hardcopy enable the instant communication and documentation of spacecraft and ground equipment status.

### Features

- Allows any client workstation to connect to any or all EPOCH servers, providing multi-satellite connectivity and the most comprehensive monitor and control capability in the industry
- Allows low cost PCs running Windows to be used as client workstations
- Suite of user interface applications specialized for Telemetry, Events, Out of Limits, Database, Memory Management and Commanding
- Distributed nature of the EPOCH software allows any number of clients and servers to be added to the ground system
- Provides the most popular platform in the industry for integration of low cost, third party products such as Microsoft Office
- Simplifies operator control for multiple satellites
- Allows online and offline automation of system functions via developer's toolkit
- Help for any system function is available when you need it without searching

## Fleet Operations

The EPOCH Client allows you to mix and match telemetry from different satellites as well as with ground system parameters. The overall status of an entire fleet can be ascertained at any time.

## Local Procedures

The EPOCH Client supports the execution of multiple local procedures in Kratos ISI's STOL language as well as other industry standard procedure language flavors. Multiple procedure languages may be supported simultaneously.

## Integration

The EPOCH Client is designed for complete integration with Microsoft Office suite and other applications such as MATLAB. This allows real-time and archived telemetry to be fed to Excel spreadsheets and automated reports to be generated in Word format using Visual Basic as the procedure language. Analyzing archived data has never been easier with the Client's access to both the EPOCH T&C front-end and Microsoft Office.

## Extensibility and Automation

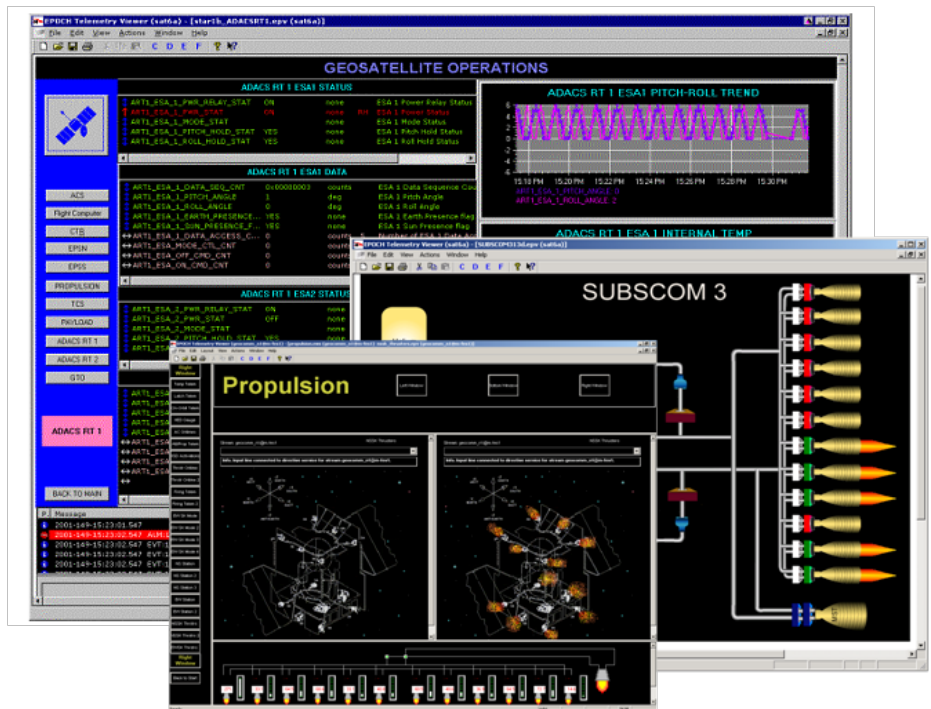
EPOCH Client's developer's toolkit provides traditional and scripted API's that permit integration with a wealth of user-developed or third-party applications. EPOCH Client applications themselves can also be driven programmatically to automate repetitive tasks. This scripting capability allows for extensive flexibility and automation, making it ideal for integration and test applications environments or to cover unique customer requirements.

## Applications and Usage

The EPOCH Client is the user interface software for the EPOCH T&C Servers and is used by satellite operators to control single satellites, fleets of satellites, and ground system equipment. With a built-in fleet management capability, the EPOCH Client scales to the size of your satellite operations needs. The EPOCH Client contains all the features you would expect from a satellite control system, plus features not provided by any other manufacturer.

## An Integrated Solution

The EPOCH Client and EPOCH T&C Servers provide complete control capabilities for individual satellites or fleets of satellites. The EPOCH Client is compatible with the entire Microsoft Office suite and other third-party applications compatible with Microsoft Windows. Integration with the entire line of EPOCH IPS command and control products provides the industry's most comprehensive solution for satellite monitoring and control.



▲ The EPOCH Client consists of a family of applications tailored to the needs of operators whose tasks include monitoring spacecraft health and safety, performing commanding, and executing memory management functions.