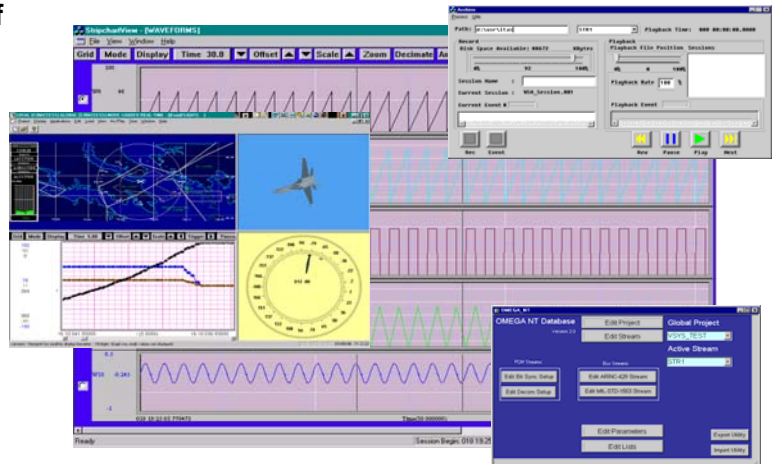


## OMEGA: Data Acquisition

### Features

- Acquires data from a wide variety of real-time and archived sources
- Supports various hardware modules, network data, and stored data
- Supports custom I/O modules
- Supports third-party hardware and software



### Data Input Types

- |                                     |                        |                 |
|-------------------------------------|------------------------|-----------------|
| • Standard PCM data (IRIG class II) | • Multiple bus support | • RS232/422     |
| • Nonstandard PCM (burst, message)  | • RF signals           | • ARINC-429/624 |
| • IRIG Chapter 8                    | • CCSDS                | • Ethernet      |
| • IRIG time                         | • Daniel 90            | • 1553 mil-bus  |
| • Analog (multichannel)             | • CE 83                | • ScramNet      |
| • Discrete digital signals          | • Custom third-party   | • Fiber         |

### Primary Data Acquisition Features

- Multiple simultaneous input sources
- Intuitive graphical user interface
- Module setup menus
- Automated project database management
- Custom interfacing with third-party hardware and software

**Automated Project Setup.** Each input module includes an intuitive menu for hardware setup and control. OMEGA automates project database management and front-end hardware setup in a file system. Opening a single project and executing the project load initiates the system setup with the predefined setup information.

**Supports Up to Eight Input Sources.** OMEGA/Series-3000 supports up to eight input data sources as a standard. VME system users requiring more can use the Series-30/IMUX VME chassis as a front-end multiplexer to the OMEGA software. This configuration allows for up to 60 input sources and up to 300 Mbps of aggregate input rate. For PCI-based systems beyond eight streams, users can configure multiple systems in a high-speed, distributed processing, networked ring configuration. OMEGA supports PCM data rates to 30 MHz per stream. Available modules include 5, 10, 15, 20, and 30 Mbps decommutators and 40 Mbps bit synchronizers.