InControl®
Satellite Command and Control Software for
On-Orbit | Factory Test | Ground System
Monitor & Control

Providing the World’s Most Advanced Fleet-Capable Command and Control Solutions
The software designed from the ground up to manage satellite constellations with one control center is now better than ever.

**KEY FEATURES**
- Multi-mission fleet capable
- Multi-vendor support
- Scalable
- Platform independent
- Ability to use same software application in satellite test and on-orbit operations
- Fully customizable using XML configuration
- Automation for risk and cost reduction
- Modern — designed, developed and deployed in this century

**TECHNICAL DETAILS**

<table>
<thead>
<tr>
<th>Operating Systems</th>
<th>32- or 64-bit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Windows®</td>
<td></td>
</tr>
<tr>
<td>Solaris®</td>
<td></td>
</tr>
<tr>
<td>Linux®</td>
<td></td>
</tr>
<tr>
<td>Inter-Process Communications</td>
<td>CORBA</td>
</tr>
<tr>
<td>Languages</td>
<td>Java, C++</td>
</tr>
<tr>
<td>Telemetry Rates</td>
<td>up to 10 Mb/s</td>
</tr>
<tr>
<td>Command Rates</td>
<td>up to 100 kb/s</td>
</tr>
<tr>
<td>Database Format</td>
<td>XML</td>
</tr>
<tr>
<td>Language-Independent Programming API</td>
<td></td>
</tr>
</tbody>
</table>
CORE CAPABILITIES:

DATA DISTRIBUTION — InControl™ offers an open architecture that provides multiple methods to distribute data to users and ingest data from other sources. This includes an API, custom user-written functions, Web access and open archive formats.

JAS SCRIPTING LANGUAGE — Powerful scripting language allows access to features of InControl through a scripted operations procedure. The JAS language is a superset that supports many industry-standard languages.

AUTOMATION — Combination of the integrated activity scheduler and the JAS scripting language provides for automation of operational and test procedures.

ARCHIVING — Configurable archiving facility for all project data, including raw and processed archives, command histories and event logs.

EVENT LOGGING — Records and maintains permanent log of all activities performed. Log viewing capabilities provide means to filter, review and comment the activity log.

DATA DISPLAYS — JADE™ is a user-friendly, drag-and-drop application to display and monitor parameters and missions. Users have access to alphanumeric displays, time charts and custom-animated graphics to create individual views and complete workbooks.

EQUIPMENT MONITOR AND CONTROL — Monitor and control of ground and test equipment is a logical extension of the capabilities provided by InControl.

DATA RETRIEVAL — A powerful tool is available to access archived data by time range. Data analysts can request all samples or summary data from long-term archives.

REPORT GENERATION — Tools are included to generate customizable reports, which can include graphics, tailored formats and as-run data.

LEGACY PROGRAM TRANSITION SUPPORT — InControl includes procedure interpretation of several existing spacecraft scripting languages and the ability to add more. Tools are also available for the translation of existing displays.

BUILT-IN SIMULATION CAPABILITIES — InControl has the ability to simulate telemetry and command verification responses for operator training, mission rehearsal and procedure development.

FAULT TOLERANCE / FAILOVER / REDUNDANCY — Built-in configurable capabilities are provided to design and enact customized fault resolution processes.

XTCE TRANSLATOR — A tool to translate from XTCE to the internal XML data representation.

ARCHITECTURE COMPATIBILITY — Easily fits into an architecture that includes SOA, message buses and other interoperable service architectures. Provides multiple methods for interfacing with external 3rd-party products and tools.

WEB-BASED — Using state-of-the-art Web 2.0 technologies, InControl includes powerful, robust client interfaces to provide seamless access to client functions via a Web browser. This also allows for centralized management of software configurations and easy sharing of data archives.