

SATELLITE COMMAND & CONTROL SOFTWARE

Satellite remote sensing, communications, and navigation systems enable real-time access to valuable information necessary to support science and Department of Defense operations. Because small satellites are being developed faster and for less money than their larger counterparts, the demand for small satellite technologies, including satellite command and control software, continues to increase.

To help fill this need, the Space Dynamics Laboratory (SDL) has developed satellite command and control software that includes a suite of operations tools and individual applications that run within a common web framework. The software includes a satellite planner, autonomous operations, data management and processing, alert system, and facility monitor. The extensible design enables users to employ the software development kit to write custom plugins for mission-specific needs.

FEATURES

- Rapid vehicle integration
- Extensible framework for mission-specific requirements
- User-friendly interface
- Autonomous control to enable lights-out operations
- External interface for mission partners, including vehicle task requests and data dissemination
- Vehicle scheduling and planning
- Integration with third-party applications to support vehicle simulation
- Ability to post-process telemetry and payload data
- Modern web architecture to support cloud deployment
- Ability to integrate with existing toolsets
- Integrated alert system
- Supports message-based architecture using the NASA GMSEC standard
- Free for Government use
- Compatible with Linux and Windows operating systems

