COMPASS™
MISSION PLANNING SOFTWARE

Compass is a mission planning software framework for a satellite constellation. It is composed of microservices that are designed to make satellite mission planning easier and more efficient. These extensible services provide solutions to various satellite bus, payload and communication problems. Compass provides a user interface to manage a constellation, and also includes a comprehensive REST API where a mission can inject their own logic.

USE CASES

Plan management for small and large constellations	Payload planning	Support for heterogeneous constellations
Real-time mission planning based on vehicle feedback	Automated communication planning	Orbital analysis and orbit determination

COMPONENTS

Core Components	Mission Components	Cloud Enabled
• Constellation-focused mission planning • Extensible, reusable core components • Role-based criteria authentication	• Easy to configure mission data tailored and adapted to any mission profile • Extension point to allow for augmentation and specific, complex CONOPS	• Standard based APIs • Containerized and cloud agnostic • Scalable for variable constellation sizes

KEY FEATURES

- Constellation management visualization
- Supports LEO, MEO, HEO and GEO
- Autonomous rules-based planning
- Orbit management
- Attitude planning, control and propagation
- Flexible and provider agnostic contact planning
- Open and standards-based APIs
- Scalable architecture

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