

SpOC in a Box

The AGI SSA Software Suite delivers space situational awareness (SSA) capabilities in a services-oriented architecture. This architecture is designed for scalability, reliable performance, full-database integration, secure operations and web-based user interactions.

The AGI SSA Software Suite is a comprehensive Space Operations Center (SpOC) in an integrated, off-the-shelf package.

- **Catalog Maintenance and Observation Processing**

Process sensor observations and perform observation association and orbit determination to generate precision state vectors and produce a High Definition Ephemeris (HiDEph) catalog.

- **Maneuver Processing**

Monitor observation data to identify deviations from anticipated trajectories and evaluate potential maneuver profiles.

- **Sensor Calibration**

Use observation data to calibrate sensors.

- **Sensor Tasking**

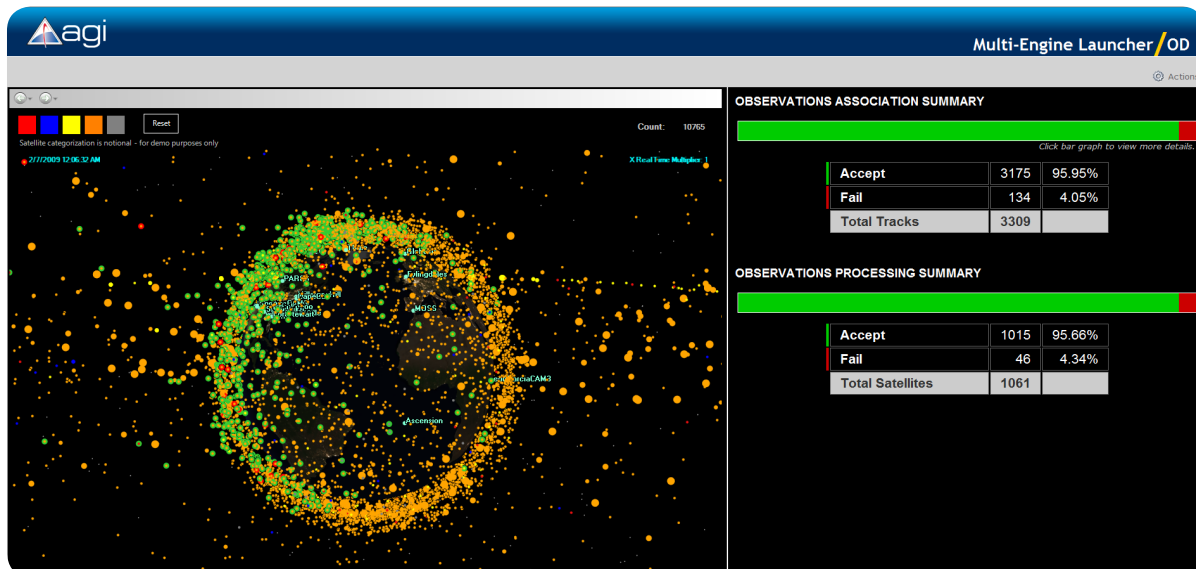
Develop sensor tasking plans to optimize observations for high-priority activities.

- **Conjunction Assessment**

Use all sources of ephemeris data to determine potential conjunctions for the entire space catalog.

- **User-Definable Operational Picture**

Integrate SSA capabilities in a web-based, network-centric infrastructure with integrated visualization.



The SSA Software Suite's orbit determination tool illustrates global situational awareness for the orbit-estimation state of the entire space catalog (left), and the progress and status of the observation-association and observation-processing tasks (right).