

Integrates all phases of the space situational awareness process, from initial observation collection and processing to actionable predictive analysis.

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

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

Key Sensor Network Administration

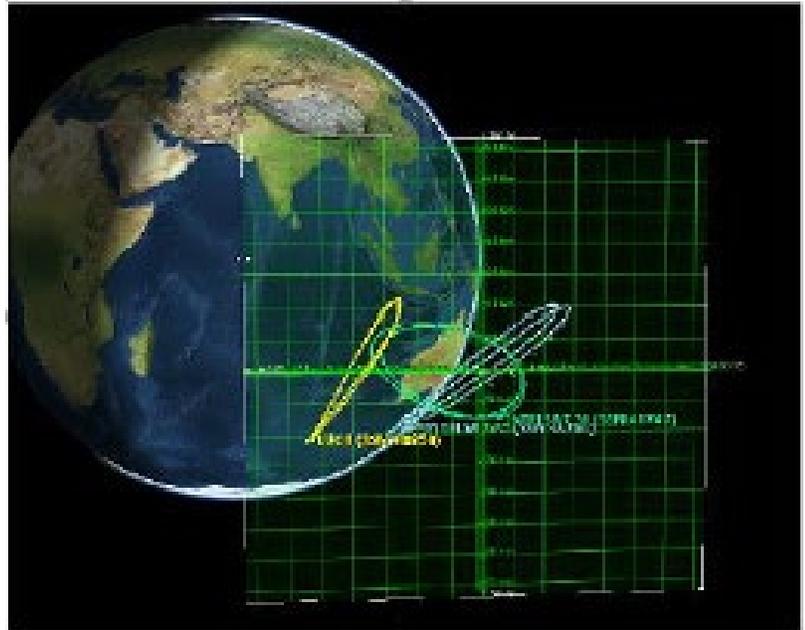
- Sensor data collection and health assessment
- Sensor tasking tailorable to specific collection requirements with dynamic re-planning for event-based tracking
- Consolidation and maintenance of sensor parameters and measurement statistics

Orbit Determination and Maneuver Processing

- Generation of high-accuracy state vectors and realistic covariance
- Detailed reconstruction of maneuver activity based on raw observation data
- Improved object custody by processing through maneuvers and refining predictive trajectories

Predictive, Actionable Analytics

- Statistically-grounded conjunction assessment with customizable reporting thresholds
- Early threat detection and identification resulting in greater planning and response time
- Decision support aids for planning and execution of defensive and offensive CONOPS and TTPs



Benefits of the SSA Software Suite

Proven, Mature Technology Prepared for Operations

- Highly automated with near real-time data processing
- Tested and certified in high availability environments
- Leveraged by the Commercial Space Operations Center (ComSpOC) in support of worldwide space operations

Designed for Awareness

- Status monitoring and behavioral analytics for accelerated anomaly detection
- Detailed analysis and intuitive visualizations for enhanced awareness of the space environment

Developed for Customized Interoperability

- Flexible data ingestion for evolving observation, maneuver and ephemeris processing
- Services-oriented architecture empowers users to build operations-specific applications and visualizations