

AGI software capabilities for Space Situational Awareness

Analytical Graphics, Inc. (AGI) offers commercial off-the-shelf software applications, engines and components that enhance space situational awareness (SSA) and allow users to maintain assured space protection. AGI software dramatically improves speed, accuracy and efficiency.

Capabilities include:

Catalog maintenance

Produce high-accuracy orbit information; perform ground- and space-based tracking; determine optimal mix of ground- or space-based tracking assets; and improve overall track association.

Maneuver detection

Accurately detect and calculate satellite maneuvers, identify deviations and reconstruct unknown maneuvers.

Resident space object tracking

Optimize sensor tasking, collection and scheduling opportunities for both ground- and space-based sensors.

Conjunction analysis

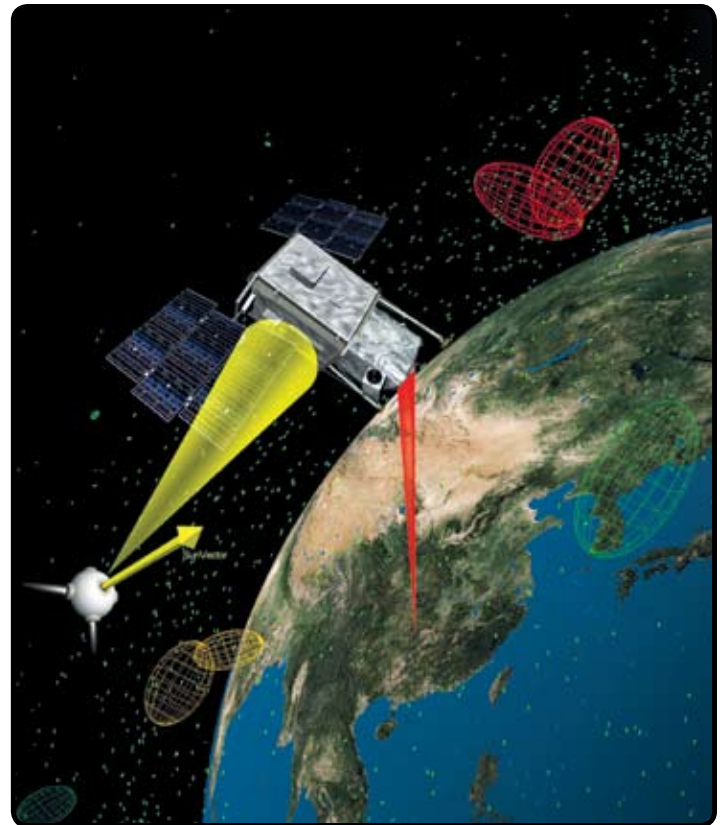
Rapidly process large volumes of tracked space objects for predictive conjunction assessments and mitigation.

Rendezvous and proximity operations

Design, plan and analyze far-field and near-field satellite rendezvous and proximity missions. Utilize closed-loop control laws to optimize and automate spacecraft missions.

Debris modeling

Predict debris populations by propagating custom- or user-provided breakup models; model and analyze the interaction of debris with operational orbit regimes.

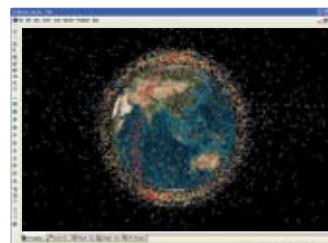
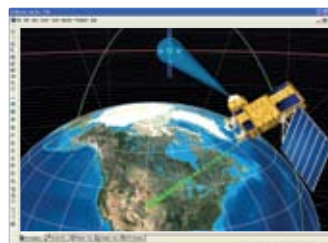
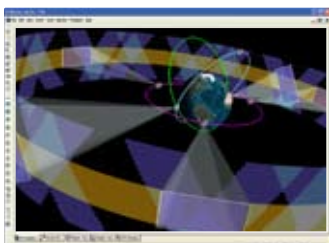


New Foreign Launch (NFL)

Rapidly provide nominal, real-time and post-event analysis to assess orbital trajectories and potential conjunctions. Incorporate near-real-time information to characterize nominal and anomalous mission events.

Direct Ascent Anti-Satellite (ASAT) analysis

Model and assess threats to satellites; utilize predictive modeling and simulation analysis to identify threatened assets, determine threat probability and develop mitigation strategies.



To learn more about AGI's use in space situational awareness, visit agi.com/SSA

Benefits of using AGI software capabilities for Space Situational Awareness

AGI software delivers technically accurate analysis and compelling visualization at a low total cost of ownership. Here's why:

Ready today

Using AGI's commercial software eliminates the time and cost of reinvention and increases productivity of existing resources. The software's open architecture easily integrates with existing infrastructure and serves as a basis for standardization.

Proven

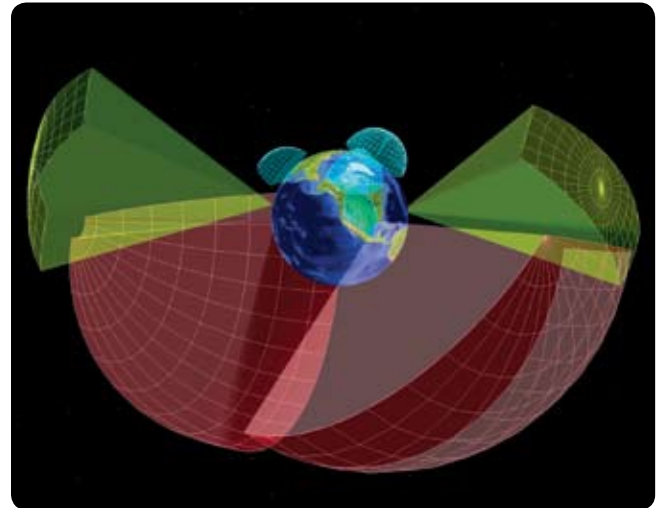
The software is independently validated and verified; used operationally in missions worldwide; installed and accredited on multiple defense and intelligence networks and tested daily by a dedicated AGI test team. Top defense, intelligence and space organizations have depended on it for 20 years in "can't-be-wrong" situations such as collision avoidance and manned space missions.

Flexible licensing and pricing

With AGI software, there are no unexpected fees or cost overruns. The product line is constructed so that users buy only what they need and add capabilities as required. Organizations and government programs can obtain unlimited, on-demand access to the entire product line, which comes as desktop applications, application engines and components—all with flexible licensing and pricing options as well as free entry points.

Reinvestment

Nearly 40,000 users benefit from AGI's 20-year commitment to innovation: Since its inception, the company has reinvested \$80



million in product research and development. The software's broad utilization ensures that development and upgrades are market driven and provides customers with a low-cost, immediate solution to their SSA problems.

Organizations using AGI software include:

- *United Kingdom MoD*
- *Royal Australian Air Force*
- *U.S. Air Force Space Command*
- *Joint Functional Component Command for Space (U.S.)*
- *EADS, Hitachi, Mitsubishi, Astrium, Fujitsu, Thales, Lockheed Martin, Boeing and Northrop Grumman.*

Summary benefits of AGI software

Quantitative *	Qualitative
More than 1.5x faster	Improved speed of information
4x more productive	Finish projects on time and within budget
50% cost reduction	Do more with less
50% ROI realized	RIGHT ANSWERS. RIGHT NOW.

* Minimum benefit to customers participating in Frost & Sullivan's report, "An Assessment of the Benefits Associated with Software by Analytical Graphics, Inc. (AGI)"

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