

NORAD Develops Advanced Visualization Tool Based On Integrated AGI Technologies

Homeland Security Solution Uses AGI Software to Advance Capabilities

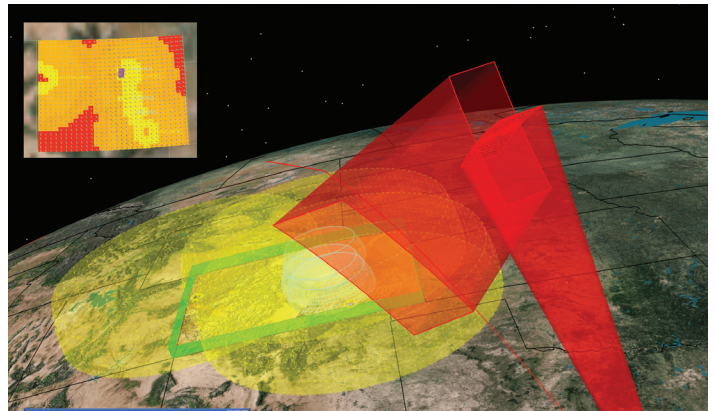
GROWING NEEDS: Addressing a need for greater options, the North American Aerospace Defense Command (NORAD) integrated AGI's STK Engine (previously known as 4DX) software product with an in-house tool to create the Advanced Visualization Tool (AVT).

The AVT solution was developed through SI International's Command, Control, Communications, Computer, Intelligence, Information, Technology, Surveillance, and Reconnaissance (C4I2TSR) contract.

MULTIPLE OPTIONS: AVT provides 3D analytical and graphical visualization of sensor systems against a wide range of air threats. Analysts choose the best system and plan the role sensor architecture will play.

The tool functions in two phases. Analysts first use a Technology Assessment Calculator (TAC) to assess a single sensor's capabilities. Those sensors with the best application-specific scores then move on to the second phase using STK Engine.

Current AGI software users, NORAD analysts integrated STK capabilities—particularly the ability to develop custom Figures of Merit—into AVT with STK Engine Embedded Technology. Combining pre-set templates and functionalities with AVT's ability to walk step-by-step through complex scenarios, analysts are now able to access common surveillance assets.



AGI's time dynamic 3-D environment allows analysis of geospatial requirements.



NORAD needed software to analyze and visualize sensor systems and families in 3D and determine an efficient way to convey both testing and ranking results to leadership. Integrating STK software from AGI advanced the organization's capabilities—increasing consistency in both trial and scenario-creation processes—while simplifying the creation of complex scenarios often repeated throughout an evaluation process. They can now do so without the need for time-consuming reconstruction.

EASY SHARING: NORAD analysts defined geospatial target requirements—area, volume, and point. Once the information is entered into AVT, STK provides a clear picture to quickly and cost-effectively assist with scenario creation. Results appear in a 3D visualized environment to mitigate risk and save time. AVT allows stored functionalities to be accessed in every scenario, increasing consistency. A step-by-step scenario-building tool has reduced training cost, time, and risk of error while increasing ease-of-use. STK creates AGI Visual Data Format (VDF) files from scenarios for easy information sharing.