

# A CASE STUDY: PROLOGIC DEVELOPS GLOBAL AWARENESS PRESENTATION SERVICES FOR USSTRATCOM

## Solution | Space Situational Awareness & ISR

### Challenge:

Create visually fused situational awareness services to support NIPRNET, SIPRNET and JWICS network-centric operations for the United States Air Force Electronic Systems Center 653rd ELSW, USSTRATCOM and the 8th Air Force.

### Solution:

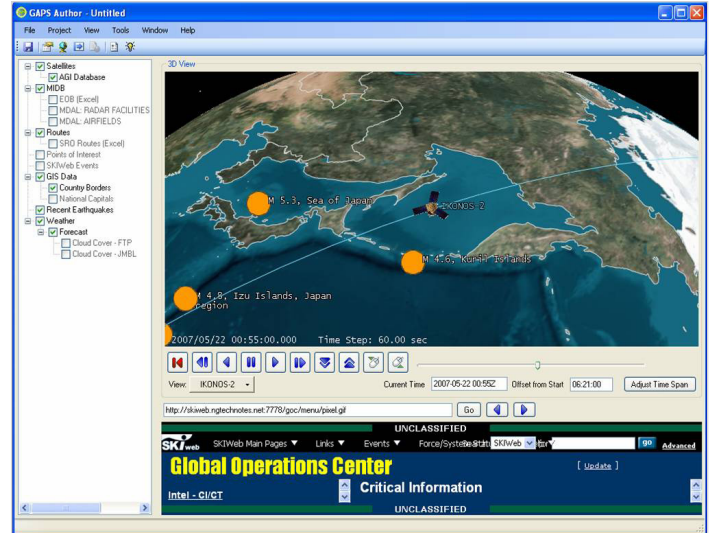
ProLogic built a system (Global Awareness Presentation Services – GAPS) using AGI software that allows users to create, visualize, augment, tailor and share a User-Defined Operational Picture (UDOP) capable of organizing disparate data sources in a distributed net-centric environment.

### Results:

GAPS is operational and available globally. It supports a variety of C2 and ISR activities and allows end users at USSTRATCOM, Nevada, and its Air Operations Center at Barksdale AFB, California, to evaluate mission planning options or assess mission effectiveness for “Force Status Events.”

Web services are a vital asset in today’s military environment, providing users across multiple networks the same up-to-date information for a true representation of the situational awareness picture. Global Awareness Presentation Services (GAPS) is an on-going research & development (R&D) project developed by AGI business partner ProLogic for the United States Air Force Electronic Systems Center 653rd ELSW, USSTRATCOM and the 8th Air Force. GAPS relies on AGI software to provide USSTRATCOM networks – including NIPRNET, SIPRNET and JWICS – access to varied data sources: weather, intelligence, satellites, geo-events, C2 assets, routes, ISR assets, air plans, and tracks.

The GAPS team, dubbed “Semper Fast” for its three-month “Capability Delivery” cycles, has developed a system in which users can create, visualize, augment, tailor, and ultimately share a User-Defined Operational Picture (UDOP) capable of organizing disparate data sources in a distributed net-centric environment. AGI technology was critical to the endeavor, providing a virtual 3D globe that pulls the element of time into the UDOP for a true “4D story” of the operational picture.



Users must be able to:

- Create UDOPs  
*(identify content to be included/excluded for the picture)*
- Visualize UDOPs  
*(specify how selected content should be presented)*
- Augment UDOPs  
*(derive added-value based on domain knowledge)*
- Tailor UDOPs  
*(adjust contents to address needs of user/echelon)*
- Share UDOPs  
*(conduct rich collaboration in a net-centric enterprise)*

The GAPS team employed various AGI products for the project. The GAPS Author based on AGI Components develops and publishes Visual Data Format (VDF) scenarios to user communities with access to AGI’s Viewer software. The Author dynamically pulls in data that users can hide, show, filter and play back in 3D before they publish back to the GAPS repository as a JPEG, movie, KML or VDF.

GAPS has already been proven on a number of USSTRATCOM systems, which consume GAPS Web services when information is updated. GAPS allows end users to evaluate mission planning options or assess mission effectiveness.

**“Our vision is a net-centric revolution. We hope that current and future programs will leverage this operational Web service,”**

— Jeremy Loomis, PROLOGIC



GENERAL INFO & SALES  
Phone: 1.800.220.4785 | 1.610.981.8000  
E-mail: info@agi.com

AGI delivers mission-proven software for timely and cost-effective development and deployment of advanced space, defense and intelligence applications. AGI products are used for modeling, engineering and operations in the areas of space, cyberspace, aircraft, missile defense, C4ISR and electronic systems. They can be purchased as ready-to-use applications, development tools or turnkey solutions.

www.agi.com | © 2010 ANALYTICAL GRAPHICS, INC.