

A CASE STUDY: INTEGRATING STK IN A MULTI-LEVEL SECURE ENVIRONMENT

Solution | C4ISR

Challenge:

It is often difficult to transfer STK data from a lower-level network to a higher one, and thus to maintain a synchronized common operating picture (COP) for all networks.

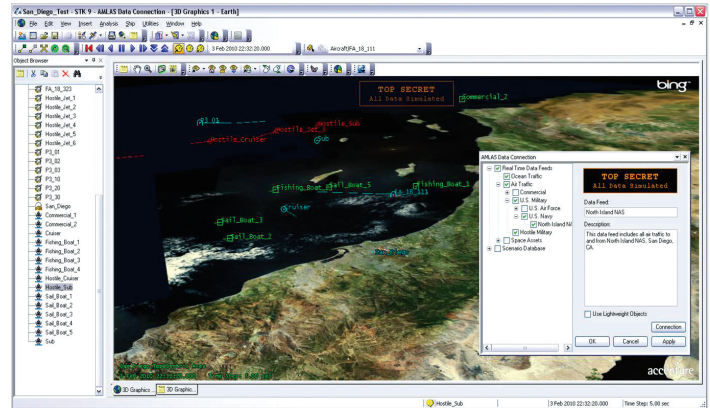
Solution:

Accenture used STK's plug-in capability to integrate the Accenture Multi-Level Access Solution (AMLAS - a Multi-Level Security data access server) with the STK GUI. AMLAS functionality is available directly through STK toolbars and context menus. Data connections are managed through GUI forms within STK and data is converted to STK objects using the STK Object Model application programming interface.

Results:

The new system allows STK users direct access to data at or below the classification of their network. Changes made at a lower level are instantly available to higher level users. Because the STK AMLAS client uses the STK Object Model, it will facilitate integration with custom applications developed on the STK Engine platform.

Often, STK user data is located across several different networks and at different security classification levels. Transferring data from a lower-level network to a higher one sometimes requires copying it to a CD to "sneaker-net" it to the higher-level network. This makes it difficult to maintain a synchronized common operating picture (COP) for all networks. Accenture is working to integrate STK with its Accenture Multi-Level Access Solution (AMLAS) to provide seamless access from the STK graphical user interface (GUI) to data spread across networks with different security classification levels. This would create a system of networks that work together as a single Multi-Level Security (MLS) data source, thus allowing an STK user direct access to data at or below the classification of the user's network. In this system, changes made at a lower level are instantly available to higher level users.



The Accenture solution relies heavily on off-the-shelf products: AMLAS and STK combined with custom plug-in functionality. AMLAS is an MLS data access server that can connect to multiple networks with different classification levels, and can manage all data access between the networks. Using STK's plug-in functionality, Accenture developed an AMLAS client that is seamlessly integrated with the STK graphical user interface (GUI). AMLAS functionality is available through STK toolbars and context menus. Data connections are managed through GUI forms within STK and data is converted to objects using the Object Model application programming interface.

The STK-AMLAS client will simplify maintaining a COP between networks. Data generated on one network will be instantly available to authorized networks, eliminating the "sneaker-net" data lag which can vary from an hour to days. The STK-AMLAS relies on non-proprietary Extensible Markup Language standards for data transfer, including Sensor Modeling Language and Geography Markup Language. This functionality is independent of AMLAS and allows general import and export of STK data. Because the STK-AMLAS client uses the STK Object Model, it will facilitate integration with custom applications developed with STK Engine.

The STK-AMLAS client is in the proof-of-concept phase, and a beta application is expected to be ready for demonstration at the 2011 AFCEA West conference in early 2011. Learn more by downloading Accenture's user presentation from the 2010 AGI Users' Conference Tour at uc.agi.com.



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Phone: 1.800.220.4785 | 1.610.981.8000
E-mail: info@agi.com



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