

Geographic Tools for Visualization & Collaboration

The Geographic Tool for Visualization and Collaboration (GTVC) is a Java-based client-server application that provides collaborative mission planning, rehearsal, recording, and playback capabilities. It allows multiple users in different locations to perform both real-time operations and exercise planning, and provides a live view of situational status when responding to an emergency or crisis situation. The GTVC is used to support the Georgia Office of Homeland Security and other first responders in Georgia, and is commercially licensed as a component of the National Emergency Management Network (NEMN). It has been adopted by the Florida Department of Emergency Management as well as other state and county agencies throughout the U.S.

The GTVC combines a powerful and flexible mapping engine with an easy to use interface for adding symbols, graphics, and text annotations to maps, imagery, or drawings to indicate planned actions. All actions and accompanying discussions are recorded and time-stamped for later retrieval and playback, thus capturing a complete plan or mission in addition to the final end state. A full accountability record of the actions performed by each user is continuously maintained by the system.

The GTVC retrieves maps and imagery from multiple commercial or private map servers, and provides extensive coverage at multiple scales and map types. All information is securely encrypted, and data permissions determine what information is seen by different categories of users. The GTVC utilizes a flexible network architecture scalable to large numbers of users.



Each client logs into a planning session using their user name and password. A map for any area is displayed on the client's screen, and graphic annotations and symbols are added to one or more independent overlays. Each overlay may be toggled on or off, and the number of clients and overlays is unlimited. All actions taken by any user appear on the displays of other users in real-time. A planning session may last for an indefinite period of time, and previous sessions can be used as the starting point for new planning sessions. Previous sessions can be reviewed through the use of a time-line control.

The latest versions of the software provide a customizable user interface, software auto-update, geographic searches, DHS-compliant symbols, NIMS compatibility, an integrated Incident Tracker, address-matching, secure messaging, and links to real-time databases and live electronic feeds.

The GTVC provides an extensible framework as:

- A top-down commanders'-level briefing, planning, and situational awareness system.
- A bottom-up tool for visualizing and integrating views of multiple lower-level plans and actions.
- A means for collaborating, analyzing and viewing real-time events on a flexible and customizable map display.

For more information

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