MACH

MACH (Mobile Architecture for Communications Handling) is a second generation 3CS (Collaborative Command & Control Software) application. MACH utilizes an innovative internet communications architecture that allows public safety agencies to share information for facilitating cooperation and organization during every day activities and emergency events.

Send/receive instant messages and attachments with other users.

View detailed information about each user, including online/offline status, speed, direction, and more.

Join chats, alerts, and other types of available sessions.

Monitor the exact location and status of entire fleets of vehicles on the latest detailed road maps powered by Google.
As a 3CS application, MACH contains all of the components you would expect and more including:

- Cross agency interoperability between federal, state, county, and local law enforcement, EMS, emergency rooms, fire, and DOT/highway.
- Instant messaging between users.
- Chat rooms.
- Alerts (amber, stolen vehicle, wanted person, weather, officer needs assistance, etc.)
- First Responder sessions (accident, crime, natural disaster, etc.)
- Command center operations.
- Communication center operations.
- Real time, in-car mapping of other user's locations using Google Maps.
- BOT support for external system interfaces (TraCS, NCIC/NLETS, Query Central, etc.)

MACH is a session based application. All activity happens in an established session. MACH contains five main session types and each main level can have as many sub-session types as needed.

- Instant Message - Allows two users to communicate with each other through text messages. Attachments are allowed.
- Chat - Allows groups of users to communicate with each other through text messages. Attachments are allowed.
- Alert - Allows instant notification of an event like an amber alert or a stolen vehicle alert. Once established, users in the session can communicate with each other through text messages. Attachments are allowed. Alert sub-session types could include amber alerts, stolen vehicle alerts, wanted person alerts, weather alerts, officer needs assistance alerts, etc.
- Broadcast - Is typically used for one way communication from the command or communication center. Broadcast sessions are usually used to announce an event or put out a reminder. Attachments are allowed.
- First Responder - Allows those directly involved in an incident to collaborate and share information with each other. A First Responder session is typically joined by resources from multiple agencies including law enforcement, EMS and fire so that the incident can be coordinated and handled in the most effective and efficient way. First Responder sub-session types could include accident, crime, natural disaster, etc.

Sessions can be user based or location based. If they are created as location based, any users within a defined radius of the location of the incident automatically get joined to the session. The location of Alert and First Responder sessions are always marked on the map with a pin.

Other MACH features include:

- User statuses, sub-statuses, transport types and status description for "at a glance" determination of the state of a resource.
- Communication center ability to change user statuses if the user is too busy to do so themselves.
• Buddy list so that the people you talk to the most are listed in one place.
• Message attachments including images, video clips, and location markers for plotting items on the map.
• Auto-detect of GPS receiver. No user setup required.
• Customizable user interface saved with user defaults so that MACH looks just like you left it regardless of which computer you log in from.
• Map filtering based on several different properties including geographical region (county, district, city limits, etc.), user attributes, and statuses.
• Advanced server and agency setup screens to assign permissions including request and approval of cross agency functionality.
• Complete logging of all activity including all messages for all sessions.

In the Field

MACH gives public safety personnel in the field the advantage of having all of the information they need to do their jobs and make on the spot judgment calls, all in one simple console. With a subset of the same information that the command or communication center has, including mapping, the field officer is empowered with the tools necessary to do their job well while keeping safe.

Command and Communications Center

MACH gives the command and communication center officials an arena-view of all resources including law enforcement, EMS, fire, and DOT/highway. Knowing exactly where all of the resources are that can be deployed to an incident from a visual representation, allows command decisions to be made efficiently and intelligently. Not only is the agency that the resource is from known, but the type of agency, type of vehicle, and the attributes of the user (such as HazMat certified, K9, CPR, CDL, etc.) are available, making it easy to determine who to send where based on current location and skill sets.

Security Features

MACH combines the most current technology and security protocols available to ensure that the application and data don’t get compromised.

• Meets or exceeds CJIS Security Policy 4.5 and FBI security guidelines.
• Strong password and password expiration rules.
• Dual factor authentication built in. No need for additional hardware or software.
• FIPS 140-2 compliant with 256 bit encryption.
• Client registration needed on server before application will work.
• Permission based functionality ensures only certain users can see and talk to other users within your agency or with outside agencies.
• Session based permissions allows all users to see and talk to all other users during an emergency incident. When the emergency is over and the session expires, normal permissions are automatically reestablished.