

IHTA - Intelligent HQ Assistant

IHTA - Intelligent HQ Assistant

Built on the same fundamentals as its mobile counterpart, TAC HQ offers a robust and modular architecture built around a high performance GIS Engine. The “C2IS” delivers all tactical data to the screens and overheads of the command staff in a modern tactical operations center. It offers a wide range of connectivity to various data networks, improves the command and control process and enhances situational awareness. helps gather and share information and present it in a most clear and understandable fashion. It features a high productivity, industry standard windows interface, which all users finds familiar.



Common operational picture (COP) include correlated blue force tracked friendly situation, neighbouring unknown, friendly and neutral situation, correlated and uncorrelated enemy picture, along with tactical graphics, statuses of units, and support for fire control. All this is presented on a digital map with NATO standardized 2525B symbology.



A

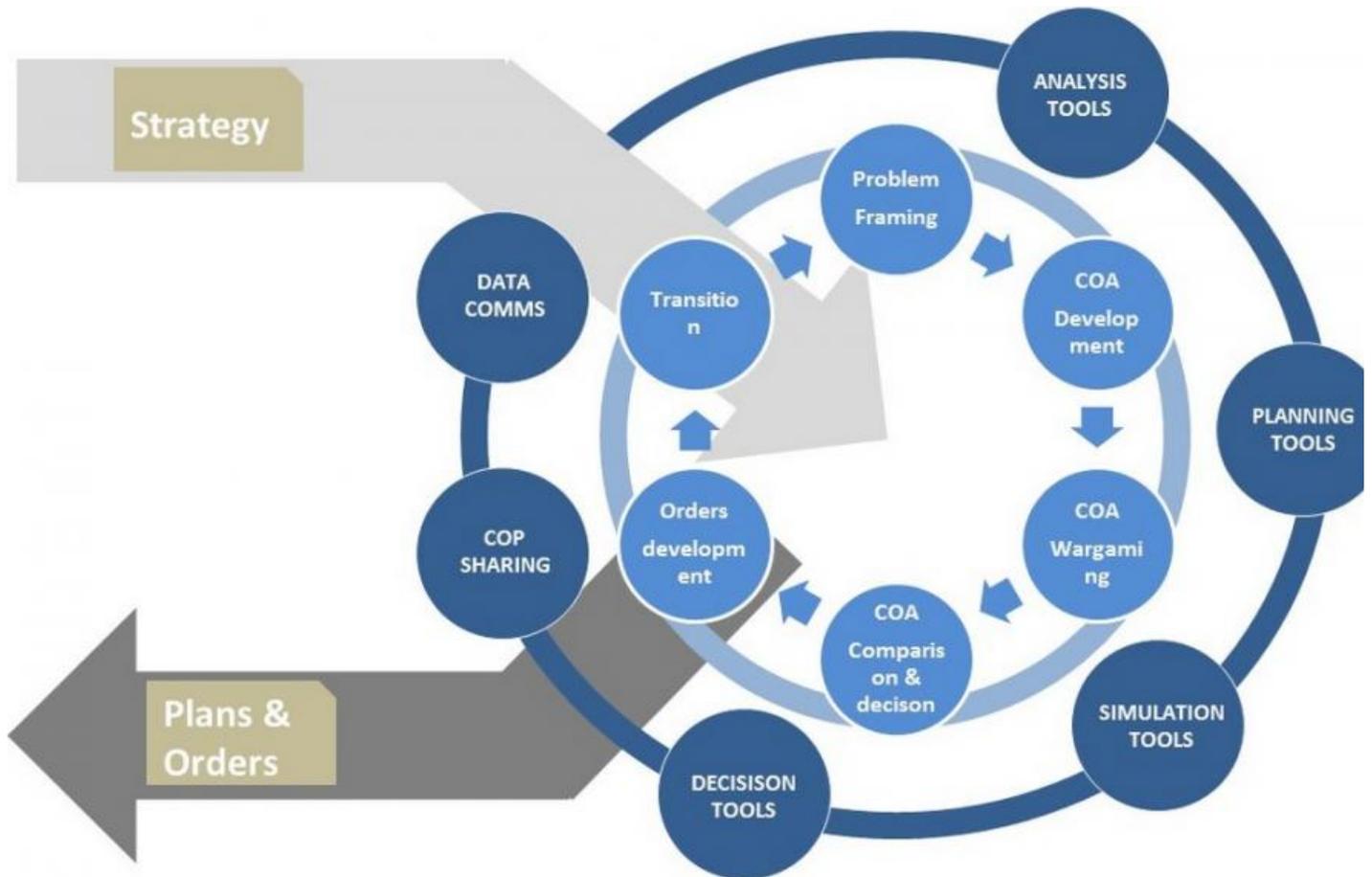
IHTA is a powerful tactical tool designed to meet the challenges faced when integrating complex military overlays in a Command and Control System. The data-driven visualisation and comprehensive symbol management ensure that the presentation is always kept up-to-date. With IHTA it is easy to deploy real-time situation command and control systems that include advanced symbology, mapping, mission planning and messaging.

Features highlight

<p>Situational Awareness State of the art, fast, GIS engine Multiple window interface Terrain LOS analysis MGRS/DMS/UTM grid display and conversions 2525B Symbology Full tactical graphics support Visual cue on combat readiness of units Navigation and Track display Configurable ORBAT display and declutter</p>	<p>Weapons and Sensors Inertial navigation sensors support Dedicated, shared or radio GPS Backup, Ad-Hoc GPS support CBRN sensor data display ROVER or other sensor video overlays Fire mission planning tools</p>
<p>Communications Radio type and make in depended Radio IP network MESHNET and MANET ASYNC radio with P2P or software MANET Optimized for low bandwidth VHF/HF links Automatic on the fly CNR reconfiguration User installable encryption User installable protocols (ACP142)</p>	<p>Messaging Standard formatted messaging Orders with delivery and wilco reports (ACK) Reports with delivery acknowledges Free text messages User configurable templates Tactical Chat ALERT high priority messages</p>
<p>Interoperability NFFI IP1 and IP2 protocol support Can act as a NFFI gateway or Hub MIP connectivity aDatP-3 formatted messaging Open API toward 3rd party systems Interconnectable on a single unit level</p>	<p>Logistics No installation needed, runs from USB Role based user interface and access Mass deployment over network Modular architecture (JTAC, CBRN addons) User configurable interface look & feel</p>

The planning

Is an orderly, analytical process, which consists of a set of logical steps to examine a mission; develop, analyze, and compare alternative COAs; select the best COA; and produce a plan or order. It provides a proven process to organize the work of the commander, staff, subordinate commanders, and other partners, to develop plans that will appropriately address the problem to be solved. It focuses on defining the military mission and development and synchronization of detailed plans to accomplish that mission Operational Art and Operational Design Interface with the Joint Operation.



IHTA System Architecture

It shares much of its functionality with BES, with emphasis on planning functions, rather than execution and weapon and sensor integration. It is designed as a multi window application, maximizing viewing capability in a tactical operations center environment. IHTA is not a monolithic application. It can be configured to customer needs, delivering unprecedented flexibility, adaptability, and integration.

Client – Server architecture is exposed to a bigger degree. Heart of IHTA is an industry standard GIS engine which shares its capabilities and map formats with the rest of MIL products. COP Server delivers operational data to clients connected. User interface is configurable and pre-tailored for most common TOC sections from S1 to S6.



COMMS2 is needed for operation over tactical radio network. IHTA takes full advantage of COMMS2 capabilities and integrates into a complete C4I Battle System solution.

BRIDGE component connects IHTA to other coalition system, thus enhancing overall situational awareness and enabling coalition integration on lower levels.

Why Client – Server architecture

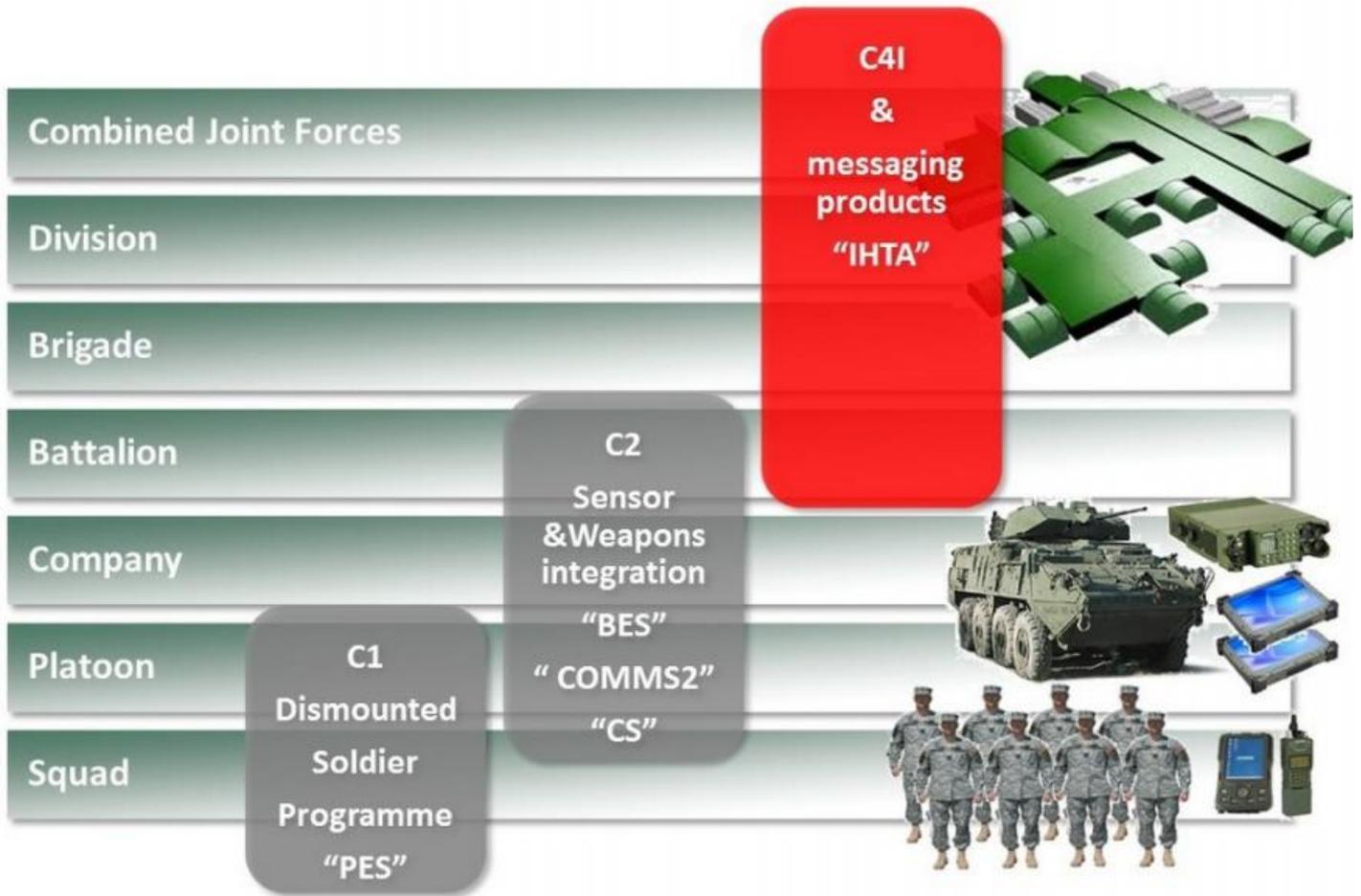
It is common practice for the military to operate mobile command posts, where clients are not connected to the server all the time, or are connected via narrow bandwidth radio link only. (example: Mobile battalion command post composed of 4 vehicles). In such environment WEB based or other thin client architecture will simply not work, and all benefits of thin client architecture will be lost.

IHTA is specifically designed for distributed environments with unstable or slow links between computers inside command post. This architecture enable users to continue their work “offline” while on the move, and synchronize larger volumes of data when interconnected by wire again in stationary setup.

IHTA features are automatically enabled and disabled based on available network bandwidth and service priority.

IHTA position in C4I schema

IHTA is a member of C4I suite. It is aimed toward planning level, and relies on BES (Battle Eye System) for execution in mobile units, and seamlessly integrate with PES (Personal Eye System) used by the dismounted troops or JTACS.



Integration and connectivity

It is best suited for the C4 mobile segment deployments in all types of mobile or stationary command posts used at Battalion level and up. It perfectly complements our C2 segment Battle Eye System and Dismounted Soldier Programme solution. IHTA also offers seamless integration with the joint level segment, and supports bi-directional data exchange with JOC SA, our own C4I level NEC software or other C4I systems.

IHTA - Intelligent HQ Assistant