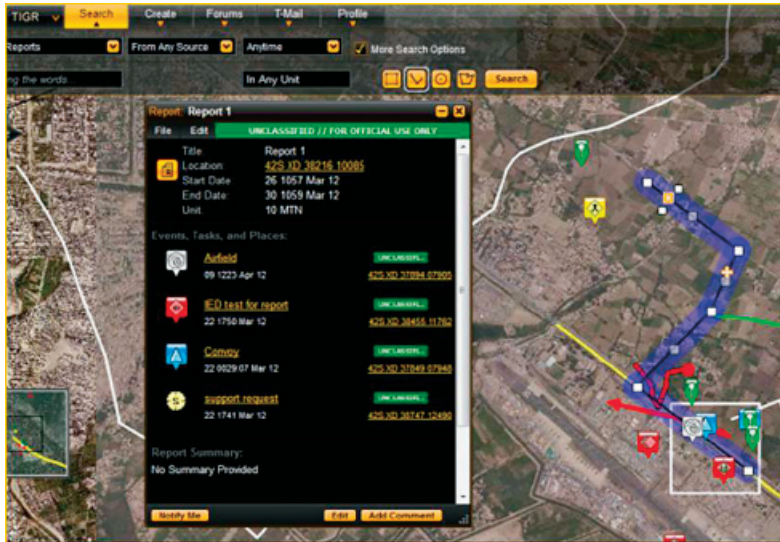


Tactical Ground Reporting (TIGR) System

Web-Based Information Management at the Lowest Tactical Level



General Dynamics C4 Systems, in partnership with Project Manager Joint Battle Command-Platform (JBC-P), is fielding the TIGR system. TIGR is an information-centric solution that empowers users to collect, share and analyze data using a Google® Earth like interface backed by network distribution that is resilient to the tactical network challenges. It was developed in line with what Soldiers operating at Company and below needed to increase combat effectiveness across the full spectrum of operations.

TIGR breaks from the traditional hierarchical, bottom-up filtered information flow of reporting, and instead builds on the successes of direct peer-to-peer collaboration. Its collaborative environment provides a unique multimedia solution using graphics, high resolution imagery, line of sight tools, and a searchable database to support the full spectrum of operations (plan, prepare, execute and assess). TIGR assists soldiers in planning and execution by providing:

- Network adaptability for information distribution on disparate tactical networks
- Situational awareness and shared visualization both across and within levels of command
- Web Mapping Service (WMS) compatible flexible mapping engine that supports external application access to high resolution graphics and an intuitive user interface
- Facilitation of the operations process through the capturing and recording of relevant combat operation information including multimedia in a searchable database for mission debriefing
- Collaboration tools that support both live and off-line collaboration

- Army C2 systems interoperability that includes data receipt and exchange with other Army Command and Control Systems such as CPOF, DCGS-A, and MarineLink, thus providing a holistic solution to assist the Company Command Post in visualizing, describing and directing the Company fight.
- Information Assurance (IA) and network compliance with the TIGR system security plan
- Personalized user experience which allows the user to set preferences
- Army operating system support for consistent capabilities across multiple platforms
- Enables 360 degree collaboration between patrol-level, Company-level and operations centers
- Provides an Ops/Intel information convergence at the lowest level of command
- Drag & Drop utilities and simple user interactions means users are proven effective within 30 minutes of training – sometimes without training at all; enables one-click support for storyboards & analysis

Since its initial fielding in November 2007 and with over 86,000 plus users worldwide, TIGR has not only strengthened information sharing between Company Commanders and platoon leaders, but has allowed a common operational picture to be shared between units on the ground. The TIGR footprint includes operations in Afghanistan, Kuwait, Horn of Africa, and Europe and requires little training time to learn how to use the application. It supports network awareness and policy flexibility by providing the ability to share and distribute data from geographically-dispersed Companies through an application overlay on to the tactical network.

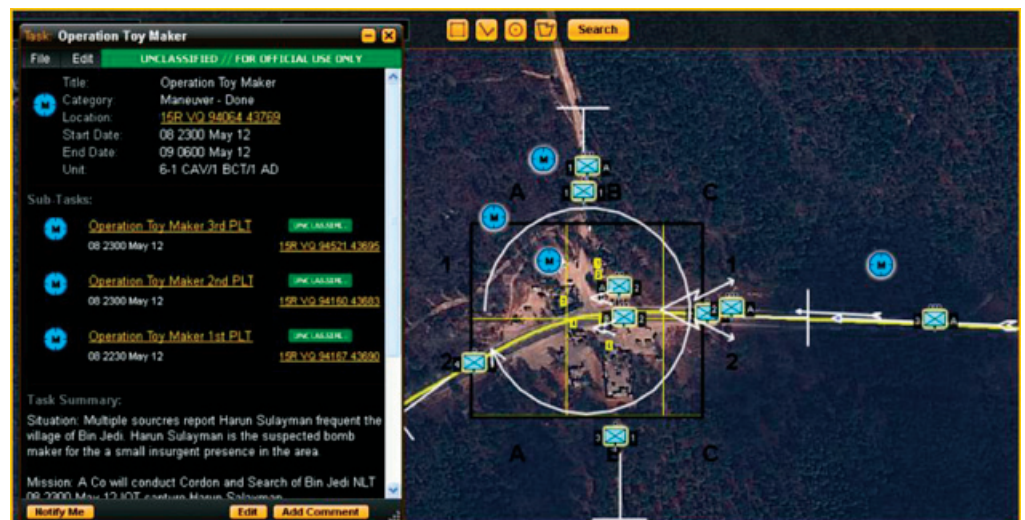
Tactical Ground Reporting (TIGR) System

Unique Characteristics and Benefits of TIGR

TIGR is the premier solution supporting the full spectrum of operations to the Warfighters at Company and below by collecting, storing and disseminating tactical information through the use of an intuitive, easy to use interface that is resilient to tactical network constraints providing Situational Awareness, Intelligence, Operations, Collaboration as well as providing information distribution supporting leadership at higher echelons

- Intuitive User interface designed for minimal training and accessible from multiple platforms
- Tactical Network Friendly cloud architecture minimizes bandwidth but maximizes delivery of content (events, people, tasks, reports, etc.) and multimedia SA to tactical edge users. The only cloud network proven to operate at the tactical edge
- Framework that supports 3rd party plug-ins and interfaces with existing Army Solutions
- Information collection that allows multi-media attachments, rich search and filtering of all TIGR content and Single button after action report generation
- Robust ATOM map engine supporting high resolution imagery, open access to this imagery for 3rd party applications and categorization of the map imagery to allow the Warfighter access to imagery of the same location from various sources
- Warfighter tools to support planning needs. Mission Planning tools with MILSTD 2525 and tactical graphics to leverage a single system to provide Intel and operationally relevant information. TIGR Data exportable to Microsoft Office® tool suite (including PowerPoint®, Word® and Excel®)
- PatrolView allowing soldiers to rehearse the mission as if they were on the ground
- Network management supporting information distribution across challenging tactical networks including automatic fail over operation when connected to multiple networks
- Network monitoring of the distribution network and solve problems before they are noticed by the Warfighter
- Forums to collect Warfighter feedback, new ideas and collaborate with other Warfighters on techniques
- In Theater support through Field Service Representatives and manned 24 hour help desk
- Agile development and TIGR version/patch rollout to be responsive to Warfighter needs

- Built for 3rd Party Extensibility Published Web Services (WSDL) and SDK allow for bi-direction data sharing. Information sharing with CPOF, CIDNE, DCGS, EYELID, BATS, MarineLink, BFT via PASS/DDS, Palantir
- 24/7 Support and easy-to-maintain. Web-based monitoring and maintenance allows remote network monitoring, soldier usage statistics collection, and configuration updates
- Complements Army Battle Command System (ABCS) architecture by operating in mission computing environments. TIGR has evolved into a Family of Systems (FoS) to better support distribution of data from geographically dispersed units using various platforms who require network awareness and policy flexibility. The TIGR FoS includes the following offerings:
 - **TIGR CP CE** – Supports the Command Post (CP) Computing Environment (CE) and interfaces with other Army systems
 - **TIGR Company CP** – Supports Warfighters in the Company on laptops with TIGR resident or client access to a TIGR system
 - **TIGR Mounted** – Supports vehicle platforms requiring only touch screen devices
 - **TIGR Supporting Joint Battle Command - Platform (JBC-P)** – Supports ASCOPE information on JBC-P platforms
 - **TIGR Co-hosted in Joint Capabilities Release (JCR) Vehicle** – Supports TIGR information on JCR platforms
- Enhancements to any current or future offering within the TIGR FoS is based on the following key tenants regardless of platform:
 - Warfighter-focused features, including monitoring of those features and enabling crowdsourcing improvements and new ideas
 - Interoperability with other Command and Control (C2) Systems
 - Ease of use across a variety of platforms (servers, desktops, laptops, mobile devices all with or without touch screens)
 - Information distribution over disadvantaged networks
 - Remote administration and maintainability



GENERAL DYNAMICS

C4 Systems

8201 E. McDowell Rd. • Scottsdale, AZ 85257

Phone: 480.441.3761 • Email: tigr@gdc4s.com • Website: www.gdc4s.com/tigr

© 2012 General Dynamics. All rights reserved. All product and service names are the property of their respective owners. ® Reg. U.S. Pat. & Tm. Off. Approved for Public Release, Distribution Unlimited.

