



**ATAK PLUGIN
DEVELOPMENT
OVERVIEW**

LEGION GROUP

WHO WE ARE

About Us

LG and partners specialize in three domains:
Situational Awareness Systems,
Weapon Systems, and Energetics

LG and partners develop and manufacture cutting-edge inertial sensor products, situational awareness software and related technology for weapon systems and precision navigation + timing applications.

Mission

Providing exceptional solutions to our customers by supplying them with innovative tools to help protect and serve.

Vision

To produce products that increase global security and save lives.



BACKGROUND

LG and partners and its employees have a history of developing hardware and software solutions for military, law enforcement, and commercial customers.

LG and partners have accomplished hardware and software engineers with a proven ability to invent, design, build, and integrate hardware and software solutions.

LG and partners have past performance of designing, implementing, and delivering plugins for the Android Team Awareness Kit (ATAK).

LG and partners have network, radio, and hardware integration experience.

LG and partners have the background, intellectual property, experience, and past performance to create your TAK Plugin



SMARTAK™ OVERVIEW

SmarTak™ is a technology advanced system that when paired to relative devices, enhances situational awareness and safety of its users during real world operations and training.

SmarTak™ seamlessly integrates electronics into modern firearms to create a real-time network of communication and coordination between the operations center, team, and individual users. This network provides up-to-date information and improves overall situational awareness, making it a valuable tool for military, law enforcement, and first responders.



SMARTAK™ API

The SmarTak™ API is an elegant, highly modular system designed for flexibility and the ability to enable communication between VK SIOS Platform and third-party software systems.

The SmarTak™ API defines several packets that will contain data from the VKIS SIOS Platform. Our ATAK plugin, SmarTak™ inForce, provides several tools to interact with the SIOS Platform including a built-in pair and connect feature, configuration, calibration, and more.

The SmarTak™ API characterizes communication packets including Bluetooth and an encrypted mesh network.



SMARTAK™ INFORCE



System Configuration



Plugin Settings



GPS Settings



Unique Plugin

- Shot location and direction
- Displays team status / information
- Collects data

Robust data packet broadcast

- Enhanced position location info (PLI+)
- Both user and weapon locations
- Weapon and ammo type



SIOS-C11BV2

The SIOS-C11Bv2 is a high-tech, electronic buttstock designed for use with any six-position buffer tubes and offers enhanced situational awareness by giving real-time information about the location and engagement direction of other team members.

- Provides awareness of team movement and shot direction.
- Improves after-action reporting for mission or training exercises.
- Easily integrates into the TAK Network and pairs with our SmarTak™ inForce Plug-in



SIOS-C11B v2

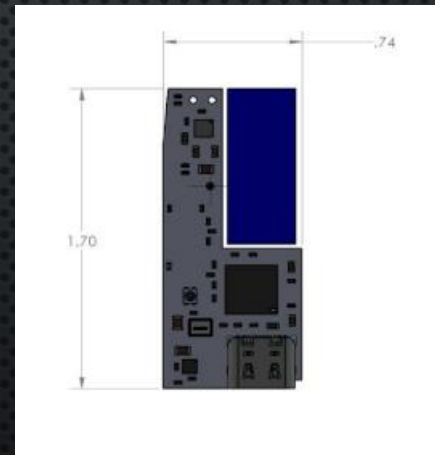
- Electronics
 - Dual Band (L1/L5) GPS, On Chip Ant.
 - Upgraded IMU
 - Higher resolution Microphone
 - Bluetooth Low Energy



VICE-100

The VICE-100 is a high-tech, electronic component designed for use with our VK320 Grip Module, or as a stand alone for integration with other hardware and electronic devices.

- Provides awareness of team movement and shot direction.
- Improves after-action reporting for mission or training exercises.
- Easily integrates into the TAK Network and pairs with our SmarTak™ inForce Plug-in.



CUSTOM TAK SERVERS

We Handle Server Hosting

- We take care of hosting your server so that you can concentrate on your mission without any worries.

Rapid Deployments

- Quickly connect your entire team with no technical setup.

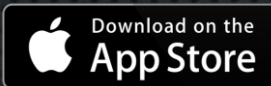


What we offer

- Streamlined delivery of TAK Servers
- Custom TAK Server stack
- Critical information management
- User management
- Mapping After-Action Review System (MARS)
- Video Streaming Capabilities



TAK STACK



TAK Stack is a mobile application for Android and iOS devices, that lets users have control of their TAK server management from the palm of their hand.

TAK Stack is the central location for all things TAK. Inside TAK Stack users can download the latest version of ATAK-CIV, MARS, latest Plugins, and Map Data from one application.

Features

- Review all user data collected from your TAK server from sat.vkintsys.com
- Latest versions of ATAK-CIV available for easy access
- Hub for downloading the latest ATAK plugins approved for VKIS release and map packages.

TEAM AWARENESS KIT



The Team Awareness Kit (TAK) is a geospatial collaboration platform developed by the United States Department of Defense (DoD) to support military operations.

It provides a suite of tools for situational awareness, communication, and coordination among team members in the field.

TAK enables users to share real-time location data, exchange messages, overlay maps, view, and update shared information, and conduct various other collaborative tasks, all within a secure environment.

CURRENT TAK PRODUCTS

ATAK

The flagship TAK product in MIL, GOV, Civ, and Partner flavors.

TAK Server

A modular data-brokering platform for cloud, on-prem, and edge.

WinTAK

The Windows app for Fires, Datalinks, and Common Operating Picture (COP).

TAKX

The marriage of RaptorX and ATAK for mounted mission planning use.

iTAK

A lightweight iOS product for blue force tracking and connected SA.

WebTAK

An extensible browser-based COP web application for cloud-based C2.

VR-TAK

A powerful Unreal Engine-based Virtual Operations Center capability.

TAK Tracker

A lightweight Android app for tracking personnel over TAK Server.

TAK.gov

The TAK community's central hub for product release and collaboration.



ATAK-CIV

The Android Team Awareness Kit (ATAK-CIV) offers matching capabilities to the ATAK-MIL baseline with minor changes from the military lexicon.

The primary difference between MIL & CIV is the baseline signing key that restricts military specific capability from being loaded through plugins.

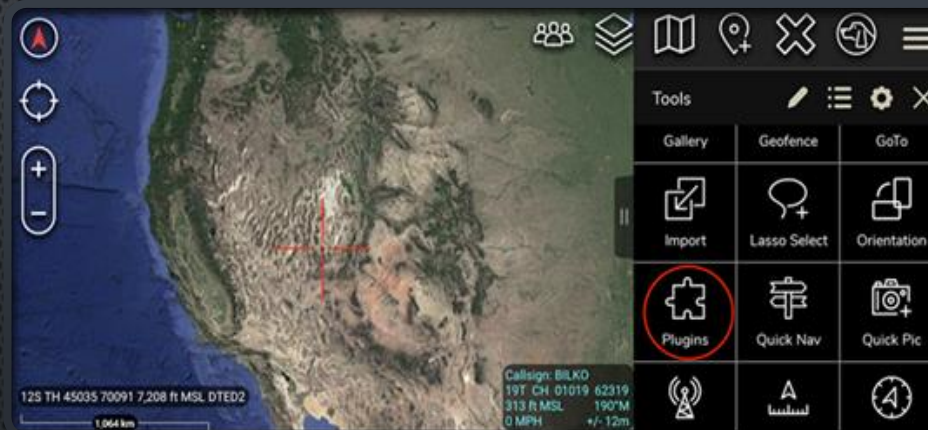
Just like ATAK-MIL, ATAK-CIV is network-agnostic and works with many tactical communication systems. ATAK-CIV supports DoD and commercial formatted maps, imagery, and overlays.



ATAK-CIV PLUGINS

Developing plugins for ATAK extends its functionality by adding new features or integrating with external systems and devices.

Plugins enable users to interact with hardware seamlessly on the TAK platform, enhancing situational awareness and operational effectiveness.



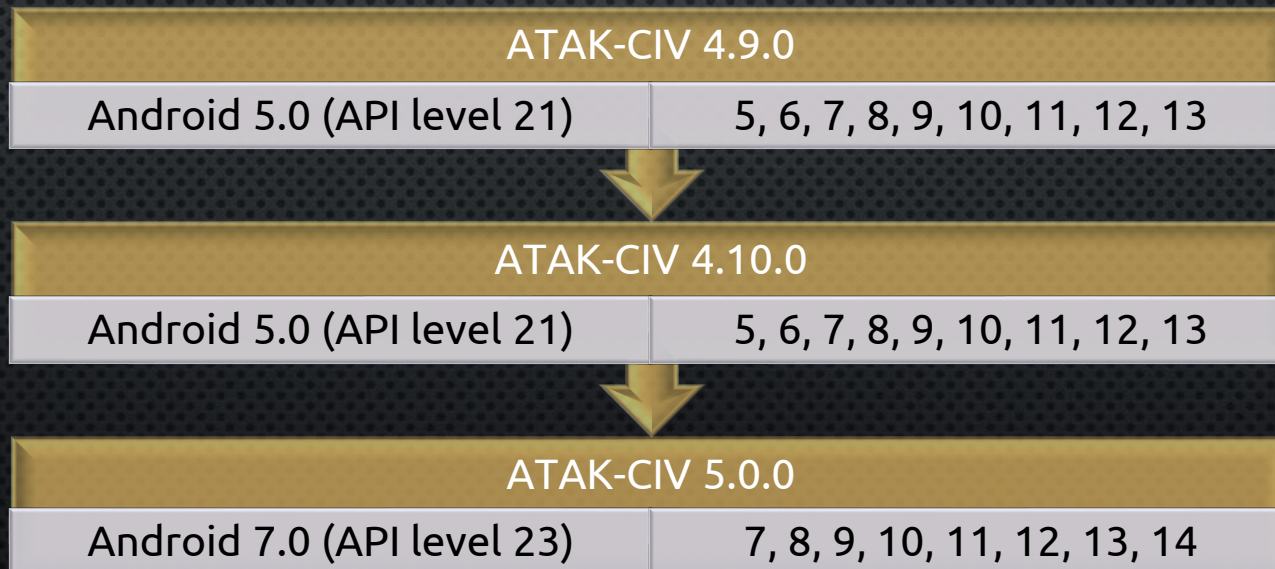
Integrating hardware with TAK and developing plugins to facilitate this integration can greatly expand the capabilities and versatility of the platform, making it more adaptable to a wide range of operational needs and scenarios.

CUSTOM ATAK-CIV PLUGINS

The LGs partner Engineering Team offers tailored plugin development ensuring seamless integration with your operational requirements.

Equipment / Software Required:

- ATAK-CIV requires a graphics processor that supports GLES 3.0
- ATAK-CIV does not have any specific requirements for storage, memory or processor, however, performance of the application will depend on the configuration
- ATAK-CIV of a supported version (see compatibility chart below)



DISCLAIMER

TAK-MIL is a restricted use product for United States Government military use only. NO distribution is authorized except through properly vetted Program Management Offices.

Testing of TAK is generally done across a range of Samsung devices since they are primarily what has been fielded. For a small phone style device, the Samsung S5 equivalent hardware or newer is required and for a tablet style device Samsung Tab S equivalent or newer.

It is recommended: for optimal experience, at least a Samsung S9 equivalent hardware or newer is used and for a tablet style device Samsung S2 equivalent or newer.



SCHEDULE

Projects cannot begin until the start payment (30%), requirements / Statement of Work (SOW), and hardware have been received.

Projects must start at the beginning of a quarter to guarantee prompt delivery. LG and partners works on a quarterly basis and books quarters in advance.

Each developer at LG and partners generates one “Development Slot” a quarter. If your project starts late, we cannot guarantee we can deliver on time because we will NOT start other customers’ projects late if they have all the required materials ready to go for their scheduled development slot.



SOURCE CODE

Should you have access to the civ/fvey/gov/mil release SDK from TAK.gov the plugin(s) can be built against that SDK. (This option requires a government sponsor.) Source code for the developer version will be delivered to a specified POC in the form of a zipped Android Studio project OR it can be committed to a git repository. A compiled developer version of the plugin and the matching developer version of ATAK will be delivered for convenience.

If you do not have access to the above SDK the project will be built against the public release open-source TAK project on Github. This SDK is identical to the other SDK in all ways that matter for 3rd party commercial developers. Source code for the open-source version will be delivered to a specified POC in the form of a zipped Android Studio project OR it can be committed to a git repository.

The result of either option is that you have a version of ATAK and a plugin that they can demonstrate to your employees, users, clients, and customers. The project source code will be closed source and the property of your company to the extent that one can own ATAK Source code. The TAK Project Management Center retains certain rights because ATAK is a government owned framework.



COMPATIBILITY

The latest version of ATAK accessible at the time of contract start will be developed on unless a specified version is requested.

LG and its partner do not certify, warrant, or make any guarantees that source code created for this project will be backward or forward compatible with past or future ATAK versions or past or future Android OS versions.

Further LG and partners do not certify, warrant, or make any guarantees that Android applications, ATAK, or ATAK Plugins will function as expected on devices other than phones and tablets produced by SAMSUNG.

Code Maintenance and plugin comparability with ATAK versions is a separate LG partner service. We offer a Service Level Agreement (SLA) which provides three (3) years of ten (10) hours annually for maintaining and updating software.

