

Tactical Assault Kit for Windows (WinTAK)

Version 5.5

Change Log

6 August 2025

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1 INTRODUCTION

This document represents the changes that have occurred in the Tactical Assault Kit for Windows (WinTAK) from version 5.4 to 5.5. For information on specific core functionality please refer to the WinTAK Software User's Guide or plug-in specific documentation.

1.1 Version Description

WinTAK Version 5.5 is a software release meant to enhance existing functionality and increase reliability. The WinTAK Application provides tactical maps and situational awareness (SA) for end users and mission planners.

WinTAK 4.9 represented a technological leap forward in how our users interact with the world. This latest version of WinTAK continues to refine that improvement. It is designed for scale, and delivers a whole new level of insight, allowing them to make the best decisions with the most information possible. Where before, a single shipping lane and its ships could be shown, now every shipping lane can be shown, with hundreds of thousands of ships, routes, ports, all able to be displayed at once in real-time.

WinTAK 5.5 provides a number of usability improvements and updates to maintain parity with ATAK.

A supplemental change log is maintained to highlight bug fixes made to the baseline post release. It can be found at: <https://wiki.tak.gov/display/DEV/Supplemental+Change+Log+for+WinTAK>.

1.2 August 2026 WinTAK .NET Version Update Notice and Plug-in Compatibility

Work is being started to update WinTAK from .NET Framework 4.8 to a newer supported version of .NET. The plan is for this to happen with the WinTAK release around August 2026, which will likely be WinTAK 5.8. Based on Microsoft's .NET release and support schedule, it is expected that WinTAK 5.8 will target .NET 10.

This change will require WinTAK plugins to move to the same version of .NET as WinTAK 5.8. Plugins that continue to target .NET Framework 4.8 will not work with WinTAK 5.8. Please watch tak.gov's Mattermost and Wiki for additional updates.

1.3 Added Features

The following subsections provide a brief overview of features that are new or have been enhanced in WinTAK 5.5. The focus for the development was more on improving stability and reliability and less on the introduction of new core features, so there are fewer forward-facing changes.

1.3.1 *Performance and Stability Improvements*

WinTAK 5.5 incorporates additional updates to the TAK Kernel and extends the capabilities of the new graphics engine. These improvements support the goal of moving to a common TAK engine across all products in the TAK suite.

1.3.2 *Clamp to Ground*

WinTAK has updated the clamp to ground feature based on user feedback. Clamp to Ground is now disabled by default. Users can enable it for a particular map object by selecting it from the object's radial.

A new preference has been added to control the default Clamp to Ground behavior, The setting is located at Settings > Control Preferences > Default Clamp to Ground Setting (Figure 1).

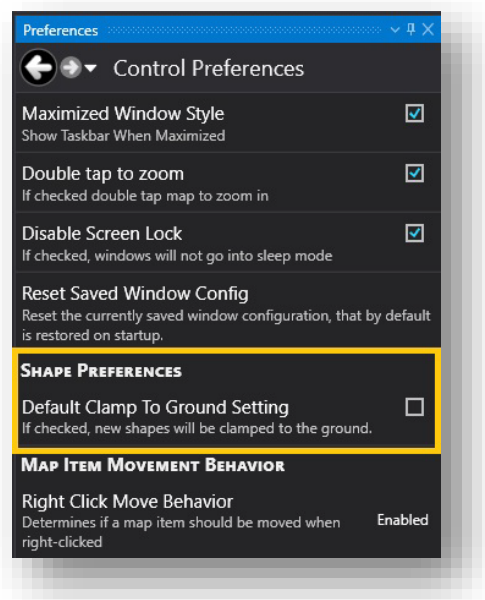


Figure 1 – Clamp to Ground Preference

1.3.3 *New 3D Control Option for Touch Screens*

WinTAK 5.5 now provides the ability to disable map tilt when running WinTAK in 3D mode on a touch screen device. This setting is available at Settings > Tool Preferences > WinTAK 3D Preferences > Map Tilt Using Touch (Figure 2). The setting is enabled by default.

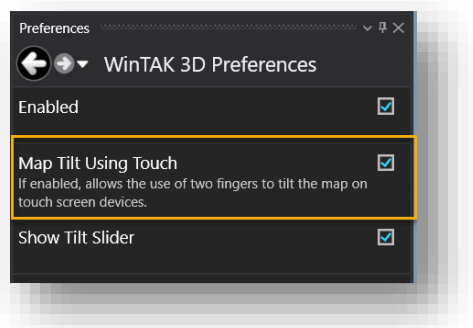


Figure 2 – 3D Preferences

1.3.4 *Support for AV1 Codec*

WinTAK 5.5 now supports playback of video files/streams encoded with the AV1 codec. Currently RTSP video streams are the only format supported.

1.3.5 *Improved Rendering Logic*

WinTAK now detects whether the system it is running on has a hardware GPU or not. On systems where a hardware GPU is not present, WinTAK will switch to software rendering from the default, hardware. This change is designed to help those instances where WinTAK is run in a virtualized environment where a hardware GPU is not present.

1.3.6 *Drawing Tools*

WinTAK 5.5 now allows editing of vertices for shapes, including rectangles, polylines, ellipses, and freeform. Access these features by selecting the edit option from the shape radial, then click on a vertex to display the edit options. Available options to move the vertices include fine adjust, edit coordinates, or edit MGRS easting/northing (Figure 3)



Figure 3 – Edit Vertices

1.3.7 *Route Elevation Profile*

WinTAK 5.5 updated the route elevation profile feature. The Route Elevation profile now displays elevation data using the users specified altitude unit (feet or meters), as depicted in Figures 4 and 54. Previously it was restricted to displaying altitude in feet.

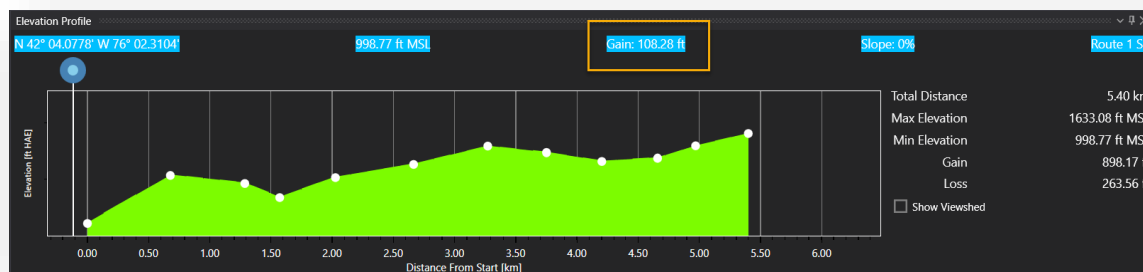


Figure 4 – Route Elevation – Feet



Figure 5 – Route Elevation - Meters

1.3.8 *Pan to Marker in DataSync feed*

WinTAK 5.5 now provides parity with ATAK when the user selects an image with a location marker attached in a datasync feed. The map pans to that location and marks the camera marker as selected.

1.3.9 *Support for Vehicle Block Models*

WinTAK now supports the display of vehicle block models. Block models must be copied to user\AppData\Roaming\WinTAK\tools\vehicle_blocks. The block files can then be selected using the Point Dropper tool (Figure 6).

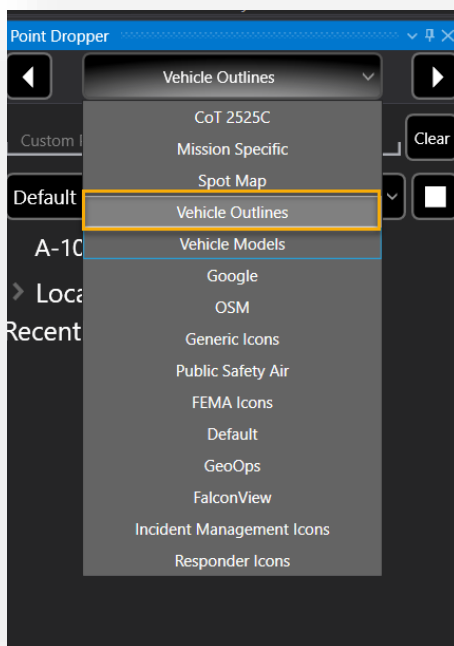


Figure 6 – Vehicle Block Selection

1.3.10 *Dead Reckoning – Drifter Tool*

WinTAK 5.5 has updated and renamed the Dead Reckoning tool to match the features of ATAK's Drifter plug-in. The Drifter tool is located on the Range and Bearing tab. Figure 7 shows the Drifter toolbar.

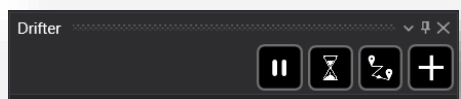


Figure 7 – Drifter Toolbar

The options are pause/play a drifter, simulate time delay, simulate a drifter on a route, Add drifter to a marker. Refer to the WinTAK User Manual for full details on the Drifter tool.

1.3.11 *GoTo Tool/Address Look Up Service*

Microsoft has disabled the basic GeoCoder service that WinTAK uses to resolve a coordinate location to a street address. It is now necessary to purchase a key and install it at Settings > Tool Preferences > Address Lookup Preferences. Once a provider has been enabled, the ADDR tab will be available with the GoTo tool.

1.3.12 *Chat Tool*

WinTAK 5.5 provides an option for the user to disable the display of the pre-programmed chat buttons. This option is located at Settings > Tool Preferences > Chat Preferences > Show Chat Buttons, as depicted in Figure 8). This option is enabled by default. This setting controls the buttons in both the core GeoChat feature, as well as the TakChat (XMPP).

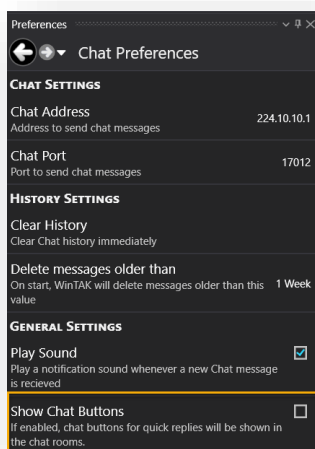


Figure 8 – Chat Buttons Preference

Figure 9 shows the chat window with the buttons disabled/absent as compared to the quick reply selections available by default.



Figure 9 – Chat Window with Buttons Disabled

1.3.13 Additional Feature Changes

WinTAK 5.5 also includes the following changes:

- WinTAK was updated to use CommoCommo 1.17.1 or later.
- WinTAK now supports adding custom detail to self-marker PLI.
- WinTAK/Tak Kernel updated to improve performance when importing large RPF data sets.
- The Sensor Configuration window now appears next to the marker details rather than underneath the details window.

1.4 Security Updates

WinTAK 5.5 includes the following security updates:

- Multiple Fortify identified issues resolved.

1.5 Bug Fixes

WinTAK 5.5 resolved the following issues:

- Resolved issue with panning to a Sensor marker from the details page
- Resolved issue with accessing Sensor marker details.

- Resolved issue where Sensor FOV was not being enabled on map display.
- Resolved issue with creating a Data Package.
- Resolved issue where it was not possible to open an image file received in a Data Package.
- Resolved issue where image sent as a CHAT attachment could not be opened
- Resolved issue where GRG Builder could not send via a TAK Server.
- Resolved issue where a saved GRG could not be sent.
- Resolved a crash that occurred when using a network GPS.
- Resolved issue with unclamping circles received from ATAK.
- Resolved issue where received extruded circles were not displaying with the correct extrusion.
- Resolved Manifest Maker update issue if clients were connected using different protocols (SSL and QUIC).
- Resolved issue with the GoTo tool using wrong coordinates.
- Resolved CASEVAC crash issue.
- Resolved CASEVAC issues HLZ and LZ locations being received incorrectly.
- CASEVACs now display a toast when received.
- Resolved issue with hashtag changes not being recognized for Range and Bearing items.
- Resolved issue where a Route could not be sent if an image was attached to it.
- Resolved issue where user was prompted for logon credentials twice, when manually configuring TAKServer connection.
- Resolved issue where the Telestration widget was not showing elevation data.
- Additional issues resolved as part of 5.5.X releases can be found in the supplemental WinTAK change Log. The supplemental log is available at <https://wiki.tak.gov/display/DEV/Supplemental+Change+Log+for+WinTAK>

1.6 SDK Improvements

The SDK received updated documentation, a general WinTAK Application Programming Interface (API) cleanup. In addition to this, documentation is continuing to be updated in wiki.tak.gov to assist third party developers. The developer community is also available in the TPC Mattermost server on the WinTAK channel.

- Added support for a "GeoChatDetailHandler" with the GeoChat service that gets invoked when any GeoChat messages are about to be sent. This allows a plugin to make modifications to the GeoChat prior to it being sent out. This feature provides parity with ATAK.
- Continued to mark API deprecations.

- The following changes were made to the WinTAK API:
 - Added WinTak.Common.Chat.IChatDockPane.CurrentChatContactId : string
 - Added WinTak.Common.Utills.InfoUtills.GetWinTakVariantLabel : string
 - Added to WinTak.CursorOnTarget.Placement.Model:
 - FindOutlineByName(string model) : VehicleBlock
 - Instance : VehicleBlockCache
 - Added WinTak.CursorOnTarget.Placement.IIconPlacementManager.ShouldAdd : bool
 - Added to WinTak.CursorOnTarget.Placement.Views:
 - EditVehicleView
 - SliderWidget
 - Added WinTak.CursorOnTarget.Routes.RouteType.Tertiary
 - Added WinTak.CursorOnTarget.Placement.Settings.
IMapSettings.DefaultClampToGround : bool
 - Added WinTak.Display.MapViewCamera.SwipeTiltEnabled : bool
 - Added to WinTak.Display.Controls.WheelMenuItem:
 - SubmenuClosed : EventHandler
 - SubmenuClosing : EventHandler
 - Added WinTak.Graphics.ShapeLabel.IgnoreZoomPref : string
 - Added WinTak.Graphics.Map.DefaultMapGroups.VehiclesKey : string
 - Added WinTak.Mapping.IWinTak3DPreferences.SwipeTiltEnabled : bool
 - Changed type of WinTak.Mapping.DockPanels.Marker from
Spyglass.Graphics.MapMarker to WinTak.Graphics.MapMarker
 - Added WinTak.Net.Chat.IAttachment.PackageUid : string
 - Added WinTak.Net.Chat.IGeoChatDetailHandler
 - Added WinTak.Net.Chat.IGeoChatService
 - Added to WinTak.UI.Themes.Icons:
 - BullseyeRadialMenuItemKey : string
 - CompassRadialMenuItemKey : string
 - EditMgrsRadialMenuItemKey : string
 - FAHRadialMenuItemKey : string
 - LaserBasketMenuItemKey : string

1.7 List of Available Plug-ins and Applications

More documentation and information that describes plug-ins is available for WinTAK on tak.gov or Confluence (<https://wiki.tak.gov/display/TPC/TAK+Plugins+Master+List>) from the TAK Product Center.