



MÄK Stealth 5.4 Release Notes

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Systems Supported and System Requirements

This section describes platform support and system requirements for the MÄK Stealth. For the most up-to-date information about systems supported, see the Product Versions page on the MÄK web site at: http://www.mak.com/product_version.htm.

The Stealth is available for the following operating systems:

- ♦ Microsoft Windows XP and 2000
- ♦ Red Hat Linux 8.0 running on Intel-compatible PCs.

Stealth for Windows

The Stealth for Windows requires the following:

- ♦ A Pentium-class PC (or higher) with minimum 1GHz processor
- ♦ An OpenGL 1.2-compliant graphics card.
- ♦ Windows 2000 SP2, Windows XP, or Red Hat Linux 8.0.
- ♦ 860 MB of disk space.
- ♦ 256 MB of RAM, 512 MB if you plan to use the complete dismounted infantry models.

Compiler Compatibility on Windows

MÄK provides versions of product releases that have been compiled with Microsoft Visual C++ 6.0 and 7.1. The HLA versions of the Stealth must run with an RTI compiled with Visual C++ 6.0.

Requirements for Creating Plug-Ins Using the Stealth Control Toolkit

To create a Stealth plug-in or use the Stealth Control Toolkit, you must install VR-Link 3.9.3 for Visual C++ 6.0. See the *VR-Link Release Notes* for compiler requirements for your operating system.

Vega Prime Compatibility

Stealth 5.4 was built with Vega Prime 1.2.2.

3D Video Boards Supported

In general, Stealth 5.4 should support any board that claims to support OpenGL 1.2. The Stealth has been tested with NVidia GeForce graphics cards.

Java Support for the Model Mapper

The Model Mapper is a Java application. To use it, you must install Java 1.4.1 or later.

Network Compatibility

HLA only

Stealth 5.4 was built against VR-Link 3.9.3 and is compliant with:

- ♦ RPR-FOM 1.0 and a subset of 2.0 (draft 6, 14, and 17)
- ♦ MÄK RTI 2.3.x
- ♦ DMSO RTI NG v6.

Stealth 5.4 is compatible with applications that use earlier versions of VR-Link if they support versions of the RPR FOM listed above.

DIS only

Stealth 5.4 supports DIS 2.0.4, IEEE 1278.1, 2.1.4, and IEEE 1278.1a, and can therefore interoperate with DIS applications of any of these versions.

FOM Support

Stealth 5.4 has built-in support for versions 0.5, 0.7, 0.8, 1.0, and 2.0, drafts 6, 14, and 17, of the RPR FOM. It also supports VR-Link's ability to support alternative FOMs through the FOM Mapper. By default, Stealth 5.4 uses RPR FOM 1.0.

The keywords for specifying different versions of the RPR FOM with the `-f` startup option are:

- ♦ RPR FOM 0.5: `v1RPR05`
- ♦ RPR FOM 0.7: `v1RPR07`
- ♦ RPR FOM 0.8: `v1RPR08`
- ♦ RPR FOM 1.0: `v1RPR10`
- ♦ RPR FOM 2.0 draft 6: `v1RPR20006`
- ♦ RPR FOM 2.0 draft 14: `v1RPR20014`
- ♦ RPR FOM 2.0 draft 17: `v1RPR20017`.

For information about FOM mapping and specifying the FOM version to use, see *MÄK Stealth User's Guide*.

New Features and Product Updates

Stealth 5.4 has the following new features and updates:

- ♦ Display of VR-Forces tactical graphics
- ♦ Ability to save and restore the GUI layout and preferences
- ♦ Ability to cluster entity models in StealthXR
- ♦ Ability to capture an image of the Stealth display
- ♦ New and changed startup options
 - Ability to load MetaFlight files from the command line
 - Ability to specify a RID file
 - `-ExaggeratedModeOff` replaced with `-xr`
 - Ability to specify a FED file
 - `-F` has been changed to `-full`
- ♦ Ability to specify offsets for geocentric terrain patches
- ♦ Stealth recording to Logger file
- ♦ Ability to set overlay color in GUI
- ♦ Ability to display frame rate
- ♦ Progress animation when loading databases
- ♦ Ability to filter the object hierarchy
- ♦ Reorganization of Preferences dialog box
- ♦ Ability to load Vega Prime scene binary (*.vsb*) terrains from the GUI and MTL files.

Display of VR-Forces Tactical Graphics

The Stealth can now display tactical graphics generated by VR-Forces. Tactical graphics are the routes, points, and areas drawn on the terrain or on overlays. You can enable or disable the display of all tactical graphics and of individual overlays. For details, see “Displaying Tactical Graphics,” on page 8-6, in *MÄK Stealth User’s Guide*.

Save and Restore of Layout and Preferences

The Stealth now automatically saves the layout of the Stealth window and toolbars and the settings in the Preferences dialog box, and restores them when you start the Stealth. For details, see “Saving the Stealth Layout,” on page 4-9 and “Saving Preferences,” on page 8-20, in *MÄK Stealth User’s Guide*.

Clustering Models in StealthXR

The Stealth now supports clustering of entity models in StealthXR. In StealthXR mode, the icons for entities that are close to each other can overlap, making it difficult to understand how many entities there are and what type they are. Clustering combines similar entities into one generic icon and, optionally, adds a label that displays the number of entities represented by the icon. You can configure options for clustering. For details, see “Decluttering the Display,” on page 9-6, in *MÄK Stealth User’s Guide*.

Screen Capture

You can now capture an image of the Stealth view from the Stealth GUI, rather than from a third-party screen capture tool. For details, see “Capturing an Image of the Stealth Display,” on page 4-15, in *MÄK Stealth User’s Guide*.

New and Changed Startup Options

The Stealth has the following new or changed startup options:

- You can now load Multigen-Paradigm MetaFlight files from the command line. Use the `-mft` startup option. MetaFlight files are supported by Vega Prime’s large area database management (LADBM) feature.
- The `XrExaggeratedModeOff` parameter has been removed.
- The `-xr` parameter specifies that the Stealth should start in StealthXR mode.
- You can now specify a RID file at startup using the `-rid` option.
- You can now specify a FED file at startup with the `-F` option.
- The startup option for full screen mode has been changed from `-F` to `-full`.

Specifying Offsets for Geocentric Terrain Patches

Previous versions of the Stealth let you specify an offset for geocentric databases at the database level. You can now specify an offset for individual terrain patches using `.info` files. For details, see “Specifying Offsets for Terrain Patches,” on page 4-14, in *MÄK Stealth User’s Guide*.

Stealth Recording

You can now capture changes to the Stealth view to a MÄK Data Logger file. You can then use Logger utilities to manipulate the file and create demonstration recordings similar to the ones shipped with the Stealth. For details, see “Creating Demonstration Recordings for the Stealth,” on page 4-17, in *MÄK Stealth User’s Guide*.

Setting the Overlay Color

You can now specify the overlay color through the GUI. Previously you could only change it by editing an MTL file. For details, see “Specifying the Overlay Color,” on page 8-5, in *MÄK Stealth User’s Guide*.

Displaying the Frame Rate

You can now display the Stealth frame rate in the overlay. For details, see “Displaying the Frame Rate,” on page 8-5, in *MÄK Stealth User’s Guide*.

Progress Animation when Loading Databases

The Stealth now displays an animation in the status bar while it loads a database.

Ability to Filter the Object Hierarchy

You can now filter the entity list in the Object Hierarchy toolbar. You can filter by entity type, such as friendly, opposing, land, surface, and so on. You can also filter by arbitrary text strings. For details, see “Filtering the Object Hierarchy Display,” on page 3-4, in *MÄK Stealth User’s Guide*.

You can also search the entity list based on arbitrary text strings. For details, see “Searching the Object Hierarchy,” on page 3-4, in *MÄK Stealth User’s Guide*.

Reorganization of Preferences Dialog Box

In addition to the new features added to the Preferences dialog box, some settings have been moved. Fog has been moved from the Rendering tab to the Environment tab and the infinite visibility option for fog has been removed. (For infinite visibility, disable fog.)

Documentation Updates

All new features are documented in the PDF version of *MÄK Stealth User’s Guide*. All changes visible in the GUI are documented in online help.

Fixed Bugs

This release fixes the following bugs or restrictions that were present in Stealth 5.3.1:

- ♦ You can now map any vpFx as a trailing effect from *trailMap.mtl*. In previous releases, only particle effects could be used.
- ♦ StealthXR interface elements are now translatable.
- ♦ Labels and trajectories no longer jitter for locations far from the origin.
- ♦ Saved views now work for HLA entities with spaces in their names.
- ♦ The Model Mapper preview works.
- ♦ Emitter systems are now stable in HLA.
- ♦ Right click menus no longer get stuck in the graphics area.
- ♦ View modes now snap to the extents of the FLT model.
- ♦ Right click pivot now works for Blueberry 3D terrains.
- ♦ The model now changes if an entity's type changes.
- ♦ For aggregate levels, true aggregates now have level 0, instead of level 1.
- ♦ You can now smooth attached entities.
- ♦ Clouds and sky dome are now supported in geocentric databases.

Known Problems and Product Restrictions

- ♦ If you have sound enabled and your PC does not have a sound card, the Stealth may crash. Under some circumstances, even with a sound card, enabling sound may cause instability.
- ♦ Tracked billboard models sometimes do not load.
- ♦ Inset views must be disabled to load LADBM. If the Stealth detects a MetaFlight database in its ACF file, it disables inset windows for entities.
- ♦ If you try to use *vaportrail.flt* or *dusttrail.flt*, they do not rotate properly. Entity trails configured in the ACF file work correctly.
- ♦ If you use a Blueberry 3D database, the Stealth crashes on exit.
- ♦ The Model Mapper does not support rotation and scale.
- ♦ You cannot select an emitter system from the 3D view.
- ♦ Sound is not supported on Linux.
- ♦ You cannot load OpenFlight files directly on Linux. You must load them through an MTL file.
- ♦ In the Plug-in API, RotOffset() is not supported in *DtModel*.
- ♦ If saved views become invalid, no errors are reported. Saved views may become invalid if the view's attached entities do not exist.
- ♦ Terrain may disappear when selecting a preset view. There are two possible causes for this problem: either the terrain's lowest LOD has no geometry or the terrain does not fit in the current viewing frustum. To work around the problem, try setting the LOD scale to something small (for example, 0.1) and try increasing the far clipping plane. Clouds and fog effects may hide the terrain when zoomed far out.
- ♦ Game controllers, such as joysticks, are not supported on Linux.

