



MÄK Stealth 5.1-ngc Release Notes

This document provides the following release-specific information for MÄK Stealth 5.1-ngc:

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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.

Stealth for PCs

The Stealth for PCs 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, Red Hat Linux 8.0.
- 800 MB of disk space. 550MB is for terrain databases, model files, and other data files.
- 256 MB of RAM, 512 MB if you plan to use the complete dismounted infantry models.

3D Video Boards Supported

In general, Stealth 5.1-ngc should support any board that claims to support OpenGL 1.2. The Stealth has been tested with NVidia GeForce graphics cards.

Java Support for Model Mapper

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

Online Help Browser Requirements

The online help system included with this release of the Stealth is an HTML-based system. To view online help, you must have a web browser installed that supports Javascript, which must be enabled.

Network Compatibility

HLA only

Stealth 5.1-ngc was built against VR-Link 3.8.1-ngc and is compliant with:

- ♦ RPR-FOM 1.0 and a subset of 2.0 (draft 6 and 14)
- ♦ MÄK RTI 2.0.3-ngc
- ♦ DMSO RTI NG v6.

Stealth 5.1-ngc is compatible with applications that use earlier versions of VR-Link if they support versions of the RPR FOM listed above.

DIS only

Stealth 5.1-ngc 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 5.1-ngc has built-in support for versions 0.5, 0.7, 0.8, 1.0, and 2.0 of the RPR FOM. It also supports VR-Link's ability to support alternative FOMs through the FOM Mapper. By default, Stealth 5.1-ngc 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`.

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

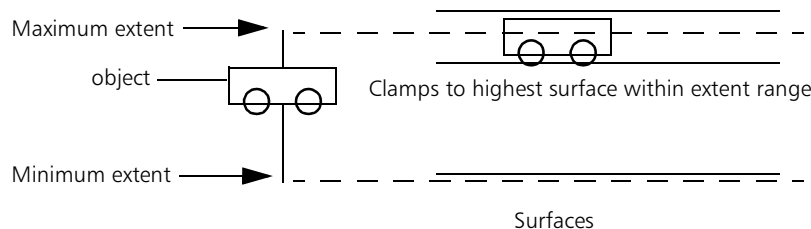
New Features and Product Updates

Stealth 5.1-ngc has the following updates and new features:

- Ground clamping intersection test thresholds are configurable
- Position and orientation thresholds are configurable for Stealth broadcast mode.
- Support for trajectory histories
- New GUI features:
 - Support for editing the database origin through the GUI
 - Popup menu for Full Screen and Show All options.
 - New options for setting the stepsize of navigation controls.
 - Support for setting the view floor.
- Support for loading terrain through an ACF file.
- Support for mapping Vega Prime special effects to entity trailing effects.
- The effect of the `StealthEntityIdentifier` parameter has changed.

Setting Ground Clamping Thresholds

The Stealth has two new configuration parameters, `setGroundClampingMinimumExtent` and `setGroundClampingMaximumExtent`. These parameters let you set the distance above and below on object that the Stealth uses when it ground clamps an object. The Stealth will clamp the object to the surface closest to the top of the extent range, as illustrated in the following figure.



Setting Thresholds for Broadcasting Position and Orientation (DIS Only)

You can set thresholds for broadcasting the eyepoint's position and orientation. The Stealth sends updates when values exceed the threshold. Use the `StealthTranslationThreshold` and `StealthRotationThreshold` parameters in *params.mtl*.

Trajectory Histories

Trajectory histories are now supported as documented in *MÄK Stealth User's Guide*.

New GUI Features

Editing the Database Origin through the GUI

To edit the database origin:

1. Chose File → Edit Database Origin. The Edit Database Origin dialog box opens.
2. Enter the coordinates for the database origin.

Setting the Stepsize of Navigation Controls

You can set the translation and rotation stepsize for navigation controls in the following new ways:

- ♦ Set them in the Preferences dialog box on the new Movement Controls tab
- ♦ Spin the mouse wheel while you are changing the eyepoint with the mouse.

Setting the View Floor

To set the view floor:

1. In the Preferences dialog box, select the View Modes tab.
2. In the View Floor group box check Enabled to enable view floor. Clear Enabled to disable the view floor.
3. In the Height Above Terrain box, enter the height above the terrain for the view floor, in database units (as specified in the database.)

Support for Popup Menus

The Stealth has a new context-sensitive (popup) menu that lets you change to Full Screen mode and to hide or display all toolbars.

Loading Terrain through the ACF File

In Lynx Prime, you can specify initialization objects in the default ACF file. The terrain database is one of the objects that you can specify.

Mapping Vega Prime Special Effects to Entity Trailing Effects

You can map Vega Prime special effects to entity trailing effects. Configure the effects in the Stealth's ACF file; then map them in *trailMap.mtl* using the effect's name.

StealthEntityIdentifier Parameter

The `StealthEntityIdentifier` parameter is used exactly as it is specified in the *params.mtl* file. You must ensure that it matches the application and site ID of the exercise. (Previously the Stealth forced the entity identifier to match the site ID and application number.)

Fixed Bugs

This release fixes the following bugs or restrictions that were present in Stealth 5.0-ngc:

- Vapor trails are supported.
- Vehicles were getting ground-clamped to the tops of buildings. The ground-clamping thresholds are now configurable to eliminate this problem.
- When ground clamping was enabled, trailing effects and the view mode eyepoint were not offset properly.
- When an entity leaves an exercise and then rejoins it, its emitter system no longer disappears.
- Startup parameters for emitter systems and aggregates now work correctly for all systems and aggregates.
- Sounds for detonations and fire events now work.
- If an entity is destroyed, it no longer continues to have the sound effects of a functioning entity.
- Aggregate icons are now displayed correctly in all cases.
- Setting the map datum now works correctly.
- The models in *makInfantryModels* now work properly.
- The `StealthEntityIdentifier` parameter was named incorrectly in *params.mtl*. It is now correct.
- MÄK Stealth User's Guide states that you can move the eyepoint by clicking the positional controls in the Navigation toolbar. This was not implemented in release 5.0. It is supported in 5.1.

Known Problems and Product Restrictions

- ♦ If you hold down the mouse button and drag the cursor near an entity in the display, the Stealth attaches to the entity.
- ♦ If you have sound enabled and your PC does not have a sound card, the Stealth may crash.
- ♦ Billboard trails do not always rotate correctly.
- ♦ Group mode does not always work when entities are far apart.
- ♦ Ground clamping does not work with Blueberry 3D terrain databases.
- ♦ Sometimes an error dialog box is displayed stating that the Stealth cannot load a terrain database, even though it has successfully loaded the database.
- ♦ If you try to use *vaportrail.flt* or *dusttrail.flt*, they do not rotate properly. Event trails configured in the ACF file work correctly.

