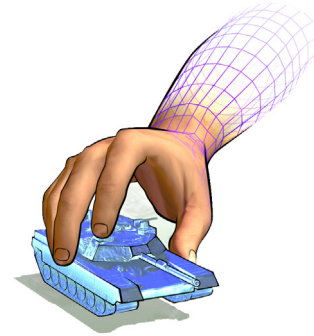




B-HAVE Module 2.0 Release Notes

This release note contains the following release-specific information for B-HAVE Module Release 2.0 for VR-Forces 4.0.1:

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Systems Supported

B-HAVE Module 2.0 for VR-Forces 4.0.1 is available for Windows XP, Vista, and Windows 7, with the same compiler support as VR-Forces. Other platforms will become available as VR-Forces is released on them.

For complete system requirements, please see *VR-Forces 4.0.1 Release Notes*.

MÄK Product Compatibility

The B-HAVE Module is compatible only with the version of VR-Forces for which it was built. It has the same compatibility with simulation protocols and versions and third party libraries as the version of VR-Forces for which it was built.

Licensing

The B-HAVE Module uses the same licensing mechanism as VR-Forces. For details, please refer to *VR-Forces Users Guide*.

New Features and Updates

The B-HAVE Module 2.0 is a complete update with significant changes in features, as follows:

- Built on Kynapse 7.0, with a resulting change in the underlying AI technology.
- PathData configuration and generation has been dramatically simplified. PathData is now generated in the VR-Forces front-end. The TDB Tool is no longer used. The PathData generation process is now up to 60 times faster than in B-HAVE 1.x.
- Supports more realistic background pedestrian and vehicular traffic. Rather than relying on the Wander task, entities are created at spawn points and travel to sink points, where they are deleted. For details, please see Section 2.6, “[Traffic Generation](#)”, in *B-HAVE Module for VR-Forces Users Guide*.
- Lua scripting has been greatly streamlined and now mimics the VR-Forces architecture. Scripts are much easier to read and write, but they still include all of the power that the previous LUA architecture provided. In addition to being easier to use, Lua scripts have greater access to entity state data. (Lua scripts written with the B-HAVE Module 1.x are not compatible with the B-HAVE Module 2.0.) For complete details, please see Chapter 5, [Writing B-HAVE Module Scripts](#) and Appendix A, [Lua Functions for the B-HAVE Module](#), in *B-HAVE Module for VR-Forces Users Guide*.

Documentation Updates

B-HAVE Module for VR-Forces Users Guide has been updated for this release. Online help has been added.

Known Problems

B-HAVE Module Release 2.0 has the following known problems:

- ♦ Vehicles are not configured to use B-HAVE path planning by default. There are known issues involving road driving when B-HAVE is used for vehicles, which will be fixed in a future version. You can use spawn points for vehicles if vector road features exist in the terrain database.

If you want to use B-HAVE path planning for vehicles, copy the *.sysdef* files from: *./data/simulationModelSets/default/vrfSim/systems/movement/b-have-ground-movement* up one directory to *./data/simulationModelSets/default/vrfSim/systems/movement*, to replace the files with the same names.

- ♦ Civilian lifeforms are not configured by default to spot other civilians, only armed entities. This is done for performance reasons, but can be changed in the OPE files. Edit the visual-sensor detection-types parameter to change what types of entities are spotted.
- ♦ When a vehicle enters a road, it might make a slight jump if it has to make a very sharp turn. When a vehicle leaves a road it might run over obstacles that are very close to the exit point. 45548
- ♦ If you have a large obstacle, entities might travel through it. If this happens, it is recommended that you make smaller obstacles. 45549
- ♦ The road driving logic in B-HAVE does not take into account obstacles more than 0.5 kilometers away. If you assign a task that involves a vehicle getting on a road that has a distant obstacle, the vehicle might ignore the obstacle, get on the blocked road and go right through. 45697
- ♦ After generating pathdata, if you load a new terrain it might look all white. To display the terrain correctly, you must restart the front end. The generated pathdata should not be affected. 45795
- ♦ B-Have overwrites some configuration files on installation. When uninstalling B-Have, those files are not restored. Thus some features will not work. It is recommended that you reinstall VR-Forces after uninstalling B-Have in order to get the old configuration files back. 43691

