



VR-Vantage 3.0.3 Release Notes

This release note contains the following release-specific information for VR-Vantage 3.0.3.

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Document ID: VRV-3.0.3-3-230517

Systems Supported and System Requirements

For information about platform and system support, see the Product Specifications & Dependencies page on the MAK website at: <https://www.mak.com/mak-one/support/help/specs>.

For hardware requirements, see <https://www.mak.com/mak-one/support/help/hardware-recommendations>.

Compiler Compatibility on Windows

MAK provides versions of product releases that have been compiled with different versions of Microsoft Visual C++. MAK ONE products built with VC 14 and later are binary compatible and will work together. Products compiled with VC 12 and earlier can experience instability when used in conjunction with products built with different compiler versions. When you run MAK ONE products together on the same computer, for example, VR-Vantage and VR-Forces, we strongly recommend that you run versions compiled with the same compiler or binary compatible compilers..

Disk Space Requirements

A full installation of VR-Vantage requires approximately 6.3 GB of disk space and an additional 50 GB for the complete MAK data package, including the supplemental data.

The makData Package

VR-Vantage 3.0.3 is compatible with the makData 16 package. MAK applications can share the same data package. For instructions on installing the data, see "The makData Package" in the VR-Vantage Users Guide.



The MAK data package contains data that VR-Vantage requires. See the *Installing VR-Vantage* chapter of the users guide

License Manager

VR-Vantage 3.0.3 uses FLEXlm 11.17.1. You must install the license management software to run VR-Vantage.

The MAK License Manager files are not part of the VR-Vantage installer. You can download them from the MAK ONE Product Downloads page (<https://www.mak.com/mak-one-downloads>).

Installation of the license manager is covered in the *MAK ONE Installation Guide*, available online at <https://mak.com/mak-one-installation-guide>. Support is also available at <https://www.mak.com/mak-one/support/portal>.

Major Updates

VR-Vantage 3.0.3 has the following updates.

- Users are now encouraged to install PDBs. If the application crashes, a "mini-dumper" generates a callstack.log file that is useful for debugging the crash. For more information, see "Installing VR-Vantage PDB Files for Debugging Purposes" in the *Installing VR-Vantage and SensorFX* chapter of the *VR-Vantage Users Guide* or online help.
- When you use the 3D compass, the default behavior is for it to show the cardinal and intercardinal direction indicators (N, NE, S, SW, and so on). You can now change the definition such that they do not display as the current heading. (They continue to display elsewhere on the compass "tape".)

If you want to change the setting:

1. Add a model definition, 3dViewCompass, to the Channel3dViewCompass schema in the Model Definition Editor.
2. Add the parameter isExactHeadingAlwaysShown and change the value to true.
3. Save your changes.

For more information, see the [Model Definitions](#) chapter of the *Adding Content to MAK ONE Applications Reference Manual* or the VR-Vantage online help.

- To use Bing map imagery, configure your terrain to access the Bing Maps API. You now must create a Bing Maps account, generate a key, and then add it to the `./SharedData/16/latest/TerrainData/TerrainConfiguration/imagery.worldwide.BingMaps.online.xml` file.

— Insert the MAK Bing imagery layer:

```
{% include imagery.worldwide.BingMaps.online.xml %}
```

— Create your own Bing imagery layer:

```
<BingImage name="Bing Imagery">
  <key>your-key</key>
  <imagery_set>Aerial</imagery_set>
</BingImage>
```

For information on the features and fixes included in 3.0, 3.0.1, and 3.0.2, see the [VR-Vantage 3.0 Release Notes](#), [VR-Vantage 3.0.1 Release Notes](#), and [VR-Vantage 3.0.2 Release Notes](#) (found in the `./doc` folder of the installation).

Table 1. Fixed Bugs

Key	Summary	Release Notes	Fix Version/s
VRV-4087	TG Visualizer definitions override first network packet.	Tactical graphic visualizers now check for a value set on the listener before using them. They also now access and set these values after the visualizer definition values have been loaded. The listener values take priority over the visualizer definition values. This ensures that values set in VR-Vantage take precedence over those set in the application it's connected to, such as VR-Forces.	VRV-3.1, VRV-IPB16, VRV-3.0.2a
VRV-4587	CDB loads are slow because of repeated osg driver loads, non-multithreaded getElevations()	Improved the CDB initial load speed by multithreading the osgEarth getElevations() call and preloading the OSG drivers for FLT, RGB, RGBA, MEDF, MEIF, and CDBFLT.	VRV-3.1, VRV-2.8i, VRV-3.0.2a
VRV-4618	VR-Vantage not showing the correct moon phase	Fixed an issue where the moon's phase was forced to be full all of the time.	VRV-3.1, VRV-3.0.2a
VRV-4620	VRV Crashing when opening/closing/using multiple windows (related to multiple contexts and driver version > 527.56)	Fixed a crash caused by a driver bug released for NVIDIA drivers after November 2022. The crash was related to the use of multiple graphics contexts and showed up when using multiple windows in VR-Vantage-based applications. NVIDIA plans to fix the driver but has not yet released a fix, therefore we developed a workaround for the problem in our own code.	VRV-3.0.3
VRV-4628	CDB load GT/GS models sometimes seem to hang and sometimes takes time to shutdown	Intersections can be very slow. You can now disable intersections for certain model layers, as described in VRV-4653.	VRV-3.1, VRV-3.0.2b, VRV-3.0.3
VRV-4652	Crash when loading CDB in VR-Forces GUI	Added a fix to remove sections that are not thread safe.	VRV-3.1, VRV-3.0.2b, VRV-3.0.3
VRV-4653	Enable users to disable intersections with certain layers on CDB terrains	In CDB terrains, intersections can be very slow. You can now disable intersections for certain model layers: This addresses a problem where it can take a long time for simulation objects to appear after they are placed. If you do not need to intersect with certain layers, enter <enable_intersections>false</enable_intersections> in the <model> block for that layer. This applies to geotypical as well as geospecific layers.	VRV-3.1, VRV-3.0.2b, VRV-3.0.3
VRV-4742	API level control for attached gimbaled sensor missing information in overlay HUD	Fixed the rendering so that the compass appears with multiple channels. Increased the font size to make it more readable.	VRV-3.0.2d, VRV-3.0.3

Table 1. Fixed Bugs (continued)

Key	Summary	Release Notes	Fix Version/s
VRV-4750	XR Model set does not support particle systems	When the observer is in XR mode, you can now see smoke plumes, flames, and other particle systems.	VRV-3.1, VRV-3.0.2e, VRV-3.0.3
VRV-4764	Channels flicker when swapping to a SensorFX observer mode	Fixed the logic for initializing a channel sensor to prevent flickering in channels when the user selects a SensorFX observer mode for any of the existing channels.	VRV-3.0.2c, VRV-3.0.3
VRV-4766	Compress and Shared Memory Video Streaming broken	Fixed an issue that caused a crash when streaming video using Compressed and Shared Memory using the GPU encoding method and the compression type of JPG, PNG, or BMP.	VRV-3.1, VRV-IPB17, VRV-3.0.2e, VRV-3.0.3
VRV-4830	Gimbaled Sensor Window Overlay Information incorrect for camera boresight position	Corrected the display to show the boresight information in the lower right-hand corner. Previously it displayed the ownship information.	VRV-3.1, VRV-3.0.2f, VRV-3.0.3
VRV-4837	Gimbaled Sensor Window Overlay incorrect heading and azimuth scale	Corrected the numbers that display on the horizontal bar at the top of the window. The numbers on the horizontal bar that are associated with the arrow now show where the sensor is looking relative to the entity.	VRV-3.1, VRV-3.0.2f, VRV-3.0.3
VRV-4899	Crash on Loading NTC online terrain and clicking NTC Medina Wasl Overwatch	Fixed a crash caused by the application incorrectly parsing data on terrain models with switch nodes.	VRV-3.0.3
VRV-4905	Crash in scenario with launchers on DIS	Fixed a crash that could sometimes occur with named DI-Guys.	VRV-3.1, VRV-3.0.3, VRV-IPB18
VRV-4908	When HDR streaks are disabled, visual artifacts can appear in sensor views	Fixed an issue that could cause rendering artifacts in sensor views when the Enable Streaks option in High Dynamic Range Settings is initially disabled.	VRV-3.1, VRV-3.0.3, VRV-IPB18
VRV-4909	Craters do not always reset	Fixed an issue where all craters would be reset in the sim engine but some were not cleared from the GUI.	VRV-3.0.3

Table 1. Fixed Bugs (continued)

Key	Summary	Release Notes	Fix Version/s
VRV-4914	GUI: symbol missing for disembarked aggregate-level units	Corrected the order in which embarked flags were set to ensure that the icons for disembarked units display correctly in the window.	VRV-3.0.3
VRV-4922	VR-Vantage does not start correctly with Pitch pRTI when using MAK-VRLExt-1_evolved.xml	The default connection for HLA Evolved now uses the new MAK-VRLExt-2_evolved.xml. Previously, it used MAK-VRLExt-1_evolved.xml, but this caused crashes for users of the Pitch pRTI. The new file resolves that issue.	VRV-3.0.3

Known Problems

Problems can arise with any product. MAK has a knowledge base of the problems that we know about, which is always changing as new problems are identified and new solutions are found. To learn how to address known problems with VR-Vantage and other MAK ONE products, click the Knowledge Base link on the Self Help Resources page: <https://www.mak.com/mak-one/support/help>.

If the problem you are experiencing is not addressed in the knowledge base, contact support for assistance: <https://www.mak.com/mak-one/support/portal>.