



SensorFX 2.1 Release Notes

This release note contains the following release-specific information for SensorFX Release 2.1:

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Systems Supported

SensorFX 2.1 is available for all platforms supported by VR-Vantage.

For complete system requirements, please see *VR-Vantage 2.1 Release Notes*.

MÄK Product Compatibility

SensorFX is compatible only with the version of VR-Vantage for which it was built. It has the same compatibility with simulation protocols and versions and third party libraries as the version of VR-Vantage for which it was built.

Licensing

SensorFX is licensed separately from VR-Vantage. To request a license, contact keys@mak.com.

New Features and Updates

SensorFX has the following updates and new features:

- ♦ SensorFX 2.1 is updated to work with VR-Vantage 2.1.
- ♦ mftTool now supports generation of emat textures for materially classified databases. The `--processEmats` command line parameter will cause mftTool to look for emat virtual textures and generate the appropriate emat textures.
- ♦ Added initial support for materially classified TerraPage and MetaFlight databases. SensorFX will now load emats for paging textures and models. The whole database needs to use the same material system file (.ms).
- ♦ SensorFX now works with other VR-Vantage post processors including depth of field and any custom post processors. It also allows the creation of a post processor that gets the output texture from SensorFX for other uses.
- ♦ SensorFX now supports material classification of osgEarth procedural terrain.
- ♦ Added support for streaming imagery to work with sensorFX. For details, please see [“Support for Sensorized Versions of Streaming Imagery,”](#) on page 3.

Support for Sensorized Versions of Streaming Imagery

SensorFX supports streaming imagery. It is set up through the earth file. Create an image section with a name that contains `emat`. For example:

```
<image name="streaming emat2" driver="gdal" lod_blending="true"
  shared="true" visible="false">
  <shared_sampler>jrmuSensorTex2</shared_sampler>
  <shared_matrix>jrmuSensorTexMatrix2</shared_matrix>
  <url>../../Data/Terrain/DATABASENAME/imagery/emat2</url>
</image>

<image name="streaming emat3" driver="gdal" lod_blending="true"
  shared="true" visible="false">
  <shared_sampler>jrmuSensorTex3</shared_sampler>
  <shared_matrix>jrmuSensorTexMatrix3</shared_matrix>
  <url>../../Data/Terrain/DATABASENAME/imagery/emat3</url>
</image>
```

Emat2 and emat3 should be in separate directories. They need to be geoTiff versions of the emat textures so that osgEarth has the location information to correctly place the textures.

To specify an ms file, do the following:

```
<external>
  <msfile>../../Data/Terrain/DATABASENAME/databaseEmat.ms</msfile>
</external>
```

This ms file can be used with streaming imagery, MCODE, or osgEarth terrains that are not material classified at all.

The example *HawaiiTifExample* has a sample earth file called *HawaiiTifExample.earth* and an *.mtf* file called *HawaiiTifExample.mtf*. It shows how to set up the earth file and the terrain directory for using geotiff's directly.

Documentation Updates

SensorFX terrains use much more texture memory than non-sensorFX terrains. If the amount of memory your terrain requires exceeds the capability of your video card, performance can drop dramatically. You can check the performance of your video card by enabling VR-Vantage's performance statistics display.

SensorFX Users Guide now includes instructions for adding files generated by GenesisMC.

SensorFX does not support geocentric terrains if they are part of a terrain that does not include an osgEarth terrain patch.

Fixed Bugs

This release fixes the following problems:

- ♦ 3D lines did not render. 55975
- ♦ External references were not completely removed when a terrain was closed. 56430
- ♦ Smoke was black. 55664
- ♦ Restoring factory settings caused all sensors to be removed. 55048