

Volumetric Grid | V-RayVolumeGrid

This page introduces the V-RayVolumeGrid node.

Overview

V-RayVolumeGrid is a special kind of volumetric effect that works with grid-based cache formats. Compare with [Environment Fog](#) which is a general purpose volumetric effect. The Volumetric Grid reads its data from an input file which supports grid-based representation of the volume.

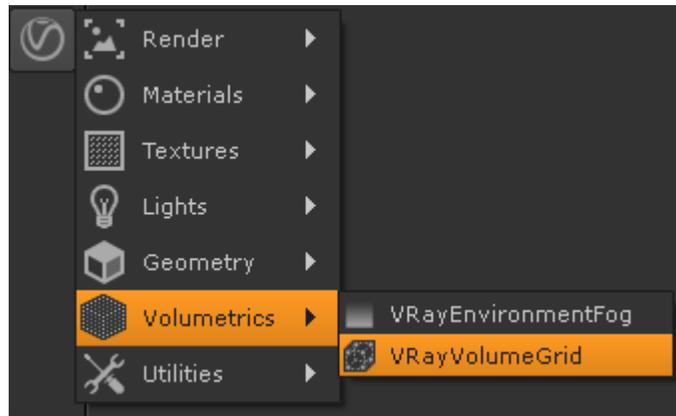
Currently V-RayVolumeGrid supports three volume formats:

- **OpenVDB** (.vdb) - Supported by Houdini[®], FumeFX[®] and RealFlow[®]
- **Field3D** (.f3d) - Supported FumeFX[®] and Maya[®] (using 3rd party plugins)
- **PhoenixFD** (.aur) - Phoenix FD[®] native volume format

Immediately after the V-RayVolumeGrid node is created, a properties dialog appears with a field for selecting the input file. A number of options are then available to fine-tune and customize the volume.



UI Path: ||Toolbar|| > **V-Ray Menu icon** > **Volumetrics** > **V-RayVolumeGrid**



Inputs

mtl - Connection to apply a material to the V-Ray Volume Grid. It is necessary for the Volume Grid to be in [Mesh mode](#), the Surface channel needs to be set and an appropriate Isosurface Level must be chosen from this section.

dsp - When [Displacement](#) is enabled it will be based on the values of the connected texture map.

tr - The smoke opacity will be based on the values of the connected texture map if **Based on** is set to **Texture**.

dif - The smoke color will be based on the values of the connected texture map if **Based on** is set to **Texture**.

Volume Grid Options

The following options are provided for modifying the appearance and rendering of the volume grid. For more information, see the [Volumetric Grid Properties](#) page.

- [Input tab](#) - Provides controls for multiple frame input, timing of frames, and blending/smoothing of frames.
- [Preview tab](#) - Provides controls for how the volume grid effect is displayed in the viewport.
- [Rendering tab](#) - Provides controls for how the volume grid effect is rendered.
- [Fire tab](#) - Provides volumetric shader controls for the emissive color (fire) and the light emitted by the volume grid.
- [Smoke tab](#) - Provides volumetric shader controls for the diffuse (smoke) color and opacity.