# VRayProxy

This page provides information on the .vrmesh format in V-Ray for Unreal.

Overview

VRayProxy imports geometry from an external file at render time only. The *vrmesh* contains all geometric information for a mesh – vertices and face topology as well as texture channels, face material IDs, smoothing groups, normals – in short, everything that is needed to render the mesh. In addition, the mesh is preprocessed and subdivided into chunks for easier access. The file also contains a simplified version of the mesh used for preview purposes in the viewports.

Unreal breaks the *.vrmesh* to its Face IDs, making the different elements of the mesh available for material assignment.

Viewport
VFB
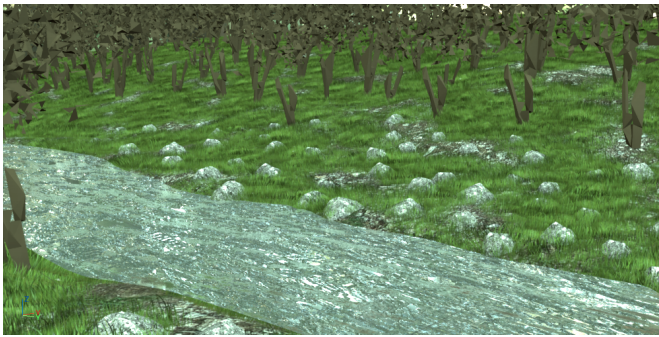
.vrmesh

The *.vrmesh* can be imported from the **Content Browser** > **Import** button.

You can assign V-Ray supported materials to the *.vrmesh* can via the **Static Mesh Editor**, or per instance via the **Material** category of the **Details** tab of the selected Actor.

A directly imported proxy is always represented as a high-poly mesh in the viewport.

Animated vrmeshes cannot have their animation represented in Unreal, only the first frame pose will be represented. However the animation will be used and rendered out in a sequencer animation.
You can use the *.vrmesh* in Unreal's Foliage Scatter system.

Usage Example

Foliage Use

In this short example, a *.vrscene* file, containing a number of *.vrmesh* trees, is loaded.

You can preview each proxy in the StaticMesh Editor, but it is only a representation and the full geometry is revealed only when you render.

Using the Paint method, you can select a *.vrmesh* to scatter with around the scene.

Render to see the final result.

Bake Use

Normally, a proxy is not baked during a bake light process.

However, it is possible to import a proxy and bake it with a light map, provided the mesh has correct UV mapping.

Select the proxy and go to **Static Mesh** > **Import Settings** rollout. Press the **Reset to Default** button, which converts the proxy to a static mesh. The static mesh can now be baked.