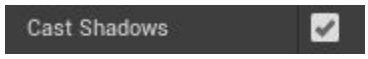
Unreal Engine 4 Volumetric Lighting Overview

How to enable volumetric lighting at UE4? You should have at least one light and one postprocessing volume at the world. Then making the following changes:

Light Component

1. Directional light, spot light and point light are supported.
2. Check 

and 

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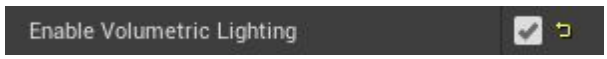
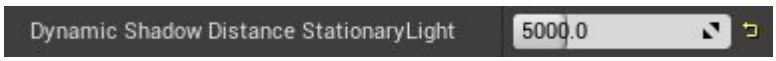
3. Check 

4. NOTE:
    a. The dynamic shadows are requested, so you had 2 options for the directional light
        i. Movable light
        ii. Stationary light with
        

        iii.
    b. Only the movable light was allowed for the spot and point light.

Postprocessing Volume

1. Check the volume covering the light or Check


2. Design the medium combination, if you didn't know about the medium, check **MediumDesign.pdf**
    a. Set the color and transmittance both.
    b. Support 2 conditions
        i. Simple scattering: [Rayleigh] + [Mie]
        ii. Three parameter scattering: [Rayleigh] + [Isotropic] + [Henyey-Greenstein]

World Settings

You could change the performance and the anti-aliasing by selecting the different modes there.

VR Rendering

Volumetric Lighting supports VR rendering by default.
If you wanted it working with **Nvidia VRWorks UE4 branch**, enable the macro **VRWORKS_SUPPORT** at NVVolumetricLightingRendering.cpp.

Console Commands

r.NvVl

Read-only. Add or remove the volumetric lighting feature. Restart required.

r.NvVl.Enable

Enable/Disable the volumetric lighting rendering.

r.NvVl.DebugMode

Debug mode: 0 - no debug, 1 - wireframe mode, 2 - the volumetric lighting without the scene color

r.NvVl.ScatterScale

Scale all the density of the medium phases. Default 1.0.

r.NvVl.Fog

Enable/Disable the fog (if have) on the scattering

r.NvVl.SPS

Enable/Disable Single-Pass Stereo (if you had Pascal GPU) for the volumetric lighting