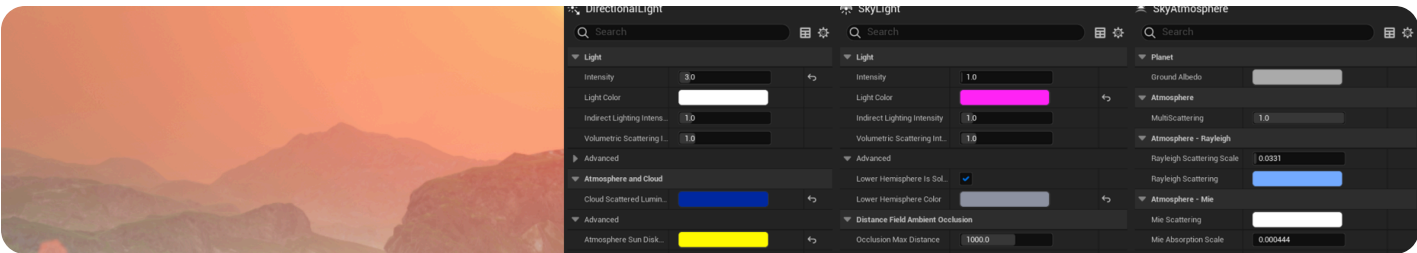


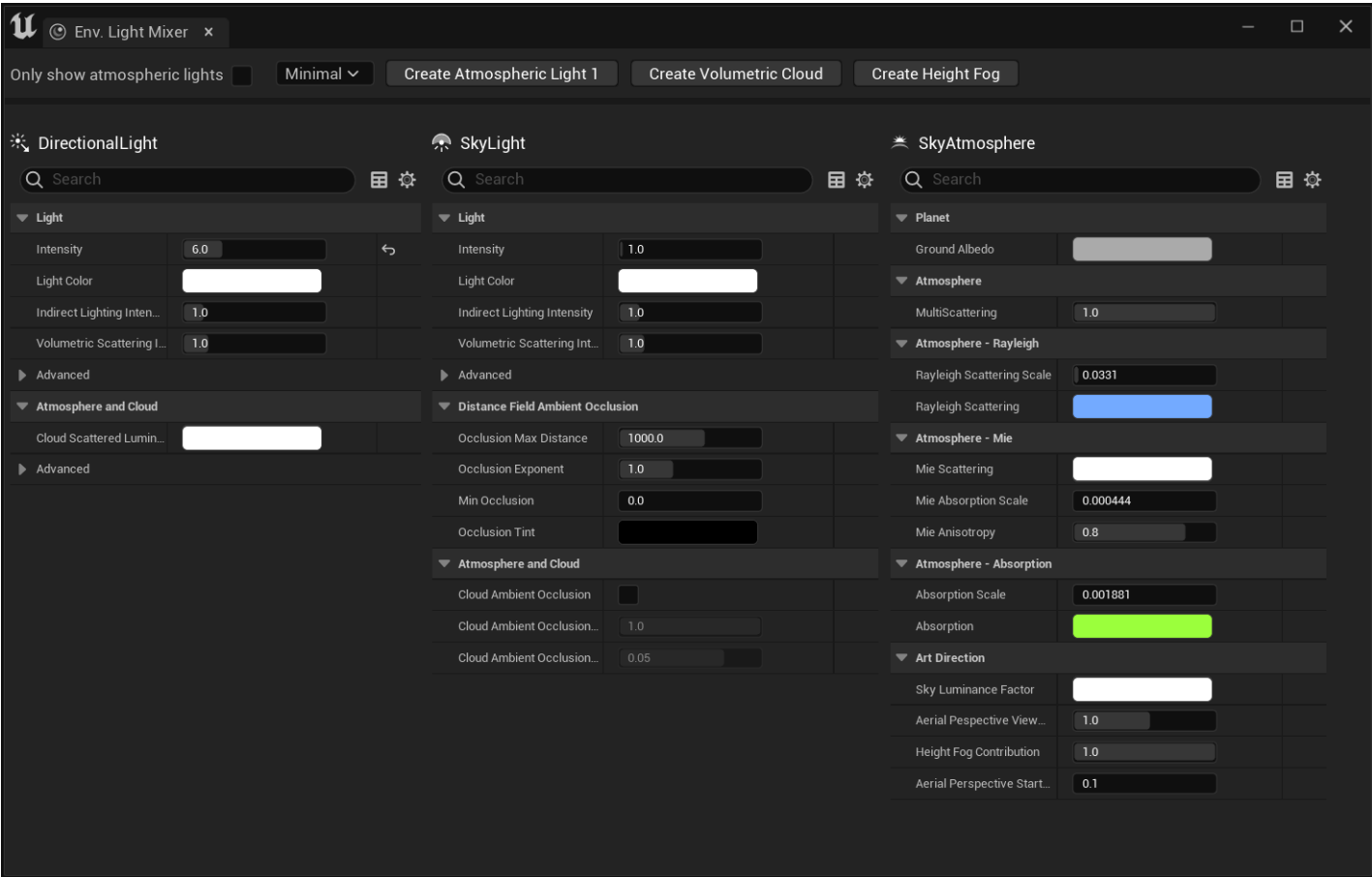
- Developer
- / Documentation
- / Unreal Engine ▾
- / Unreal Engine 5.4 Documentation
- / Building Virtual Worlds
- / Lighting the Environment
- / Environmental Light with Fog, Clouds, Sky and Atmosphere
- / Environment Light Mixer

Environment Light Mixer

An editor window that combines common atmospheric lighting components in one place where they can be created and edited for a Level.



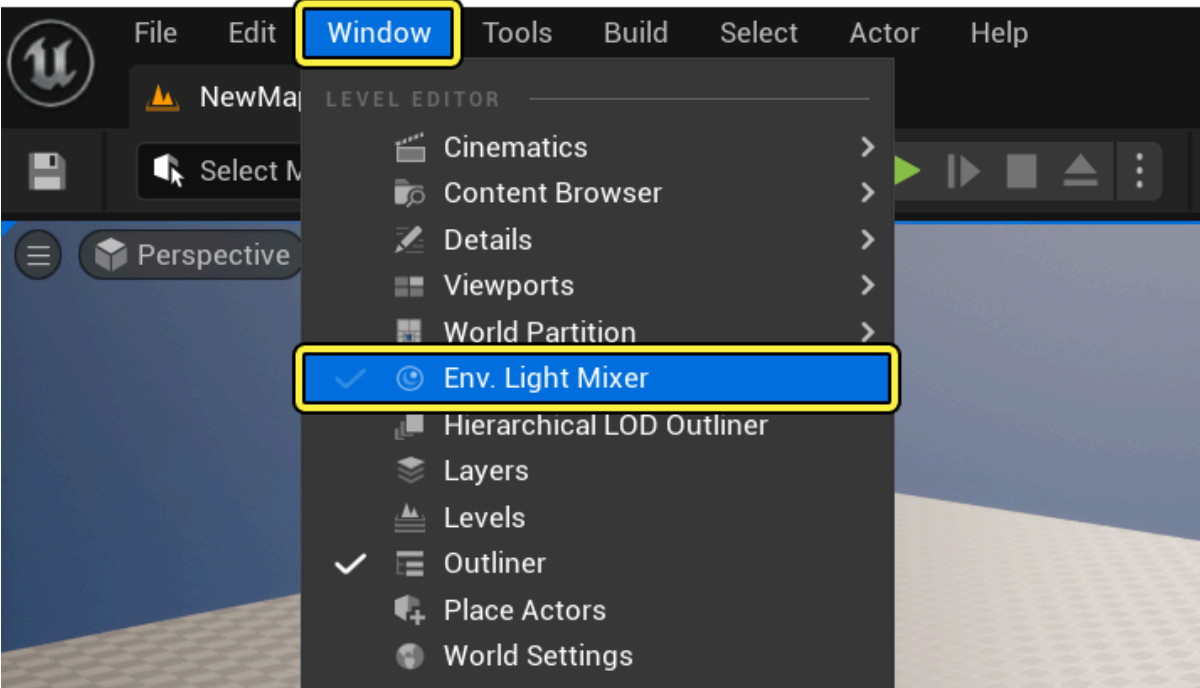
The **Environment Light Mixer** is an editor window where you can create and edit a Level's environment lighting components for sky, clouds, atmosphere lights, and sky lighting. For designers and artists, it's a single window that enables you to edit these components quickly and choose the amount of properties detail you want access to.



Click image for full size.

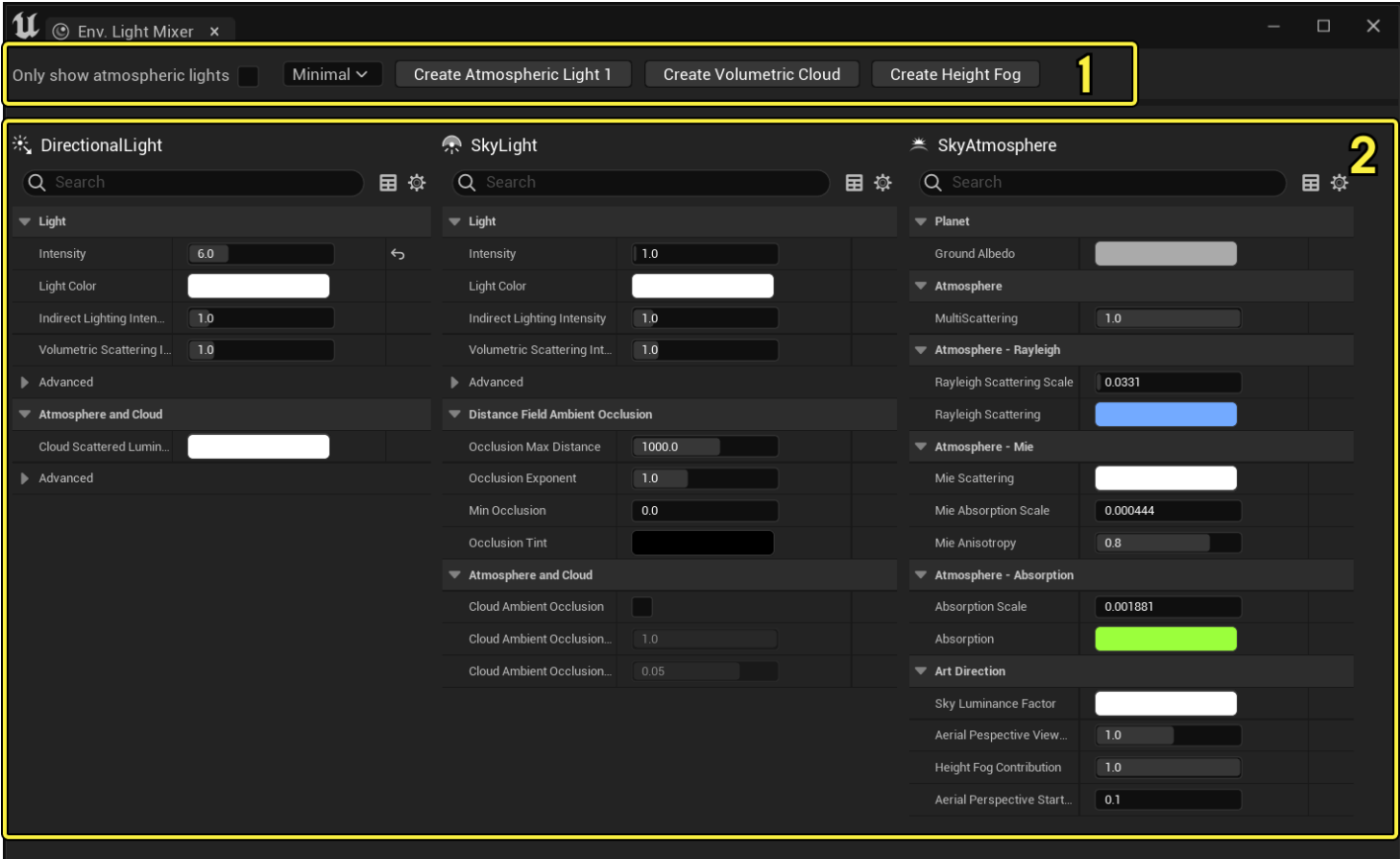
Opening the Environment Light Mixer

Open the Environment Light Mixer from the **Main Menu** by selecting **Window > Env. Light Mixer**.



Environment Light Mixer Interface

The Environment Light Mixer's interface is comprised of two primary elements:

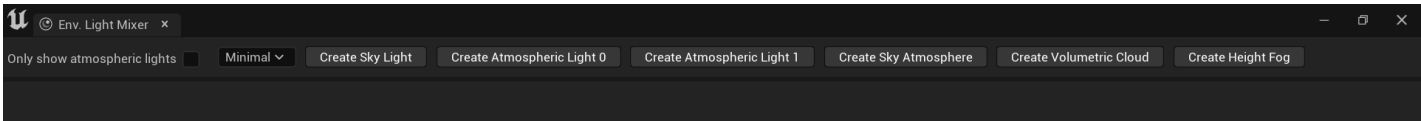


Click image for full size.

- 1. [Toolbar](#)
- 2. [Components Panels](#)

Toolbar

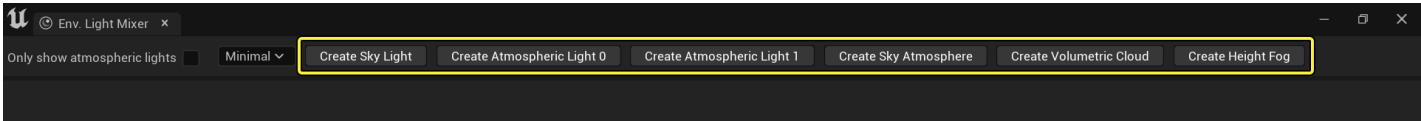
The **Toolbar** is where you'll add and configure the level of properties detail that is visible in the Components Panels.



Click image for full size.

Adding Scene Components

When you open the Environment Light Mixer window, if you are starting from an empty Level, you will find the following components listed:



Click image for full size.

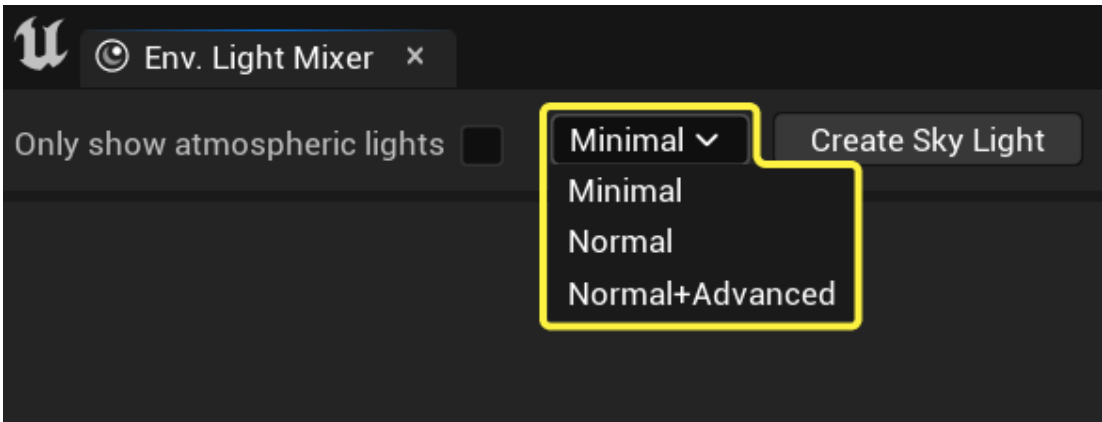
1. [Sky Light](#)
2. [Atmosphere Lights \(2x Directional Lights for sun and moon, or two suns representation\)](#)
3. [Sky Atmosphere](#)
4. [Volumetric Cloud](#)

If any of these components is added from the Place Actors panel or already exists in the scene, the list will automatically reflect what is not currently added. Likewise, when you remove a component from the scene, the create button becomes available again in the toolbar.

Controlling the Amount of Properties Detail

When one of the available components is referenced in your Level – whether you added it through the Environment Light Mixer, or it already exists – the component's properties are added to the Components Panel where you can adjust and edit various properties for each of them.

For those that want maximum control over editing of their components, you can change the amount of properties shown using the **Property Details** dropdown:



1. **Minimal** provides the bare essentials for components.
2. **Normal** provides the common properties for components.
3. **Normal+Advanced** provides common and advanced properties for components.

Below are examples of the amount of properties shown for the Directional Light using each detail amount:

DirectionalLight

Q Search

Light

Intensity10.0

Light Color

Indirect Lighting Intensity1.0

Volumetric Scattering Intensity1.0

Advanced

Atmosphere and Cloud

Cloud Scattered Luminance Scale

Advanced

DirectionalLight

Q Search

Light

Source Angle0.5357

Source Soft Angle0.0

Use Temperature

Temperature6500.0

Intensity10.0

Light Color

Affects World

Cast Shadows

Indirect Lighting Intensity1.0

Volumetric Scattering Intensity1.0

Light Shafts

Light Shaft Occlusion

Occlusion Mask Darkness0.05

Occlusion Depth Range100000.0

Light Shaft Bloom

Bloom Scale0.2

Bloom Threshold0.0

Bloom Max Brightness100.0

Bloom Tint

Cascaded Shadow Maps

Dynamic Shadow Distance MovableLight40000.0

Dynamic Shadow Distance StationaryLight0.0

Num Dynamic Shadow Cascades4

Distribution Exponent3.0

Transition Fraction0.1

Distance Fadeout Fraction0.1

Distance Field Shadows

DistanceField Shadow Distance51200.0

Distance Field Shadows

Ray Tracing

Shadow Source Angle Factor1.0

Samples Per Pixel1

Atmosphere and Cloud

Atmosphere Sun Light

Cast Shadows on Clouds

Cast Shadows on Atmosphere

Cast Cloud Shadows

Cloud Scattered Luminance Scale

Performance

Max Draw Distance0.0

Max Distance Fade Range0.0

Light Function

Light Function MaterialNoneNone

Light Function Scale1024.01024.01024.0

Fade Distance100000.0

Disabled Brightness0.5

DirectionalLight

Q Search

Light

Source Angle0.5357

Source Soft Angle0.0

Use Temperature

Temperature6500.0

Intensity10.0

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Occlusion Depth Range100000.0

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Advanced

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Max Draw Distance0.0

Max Distance Fade Range0.0

Light Function

Light Function MaterialNoneNone

Light Function Scale1024.01024.01024.0

Fade Distance100000.0

Disabled Brightness0.5

MinimalNormalNormal+Advanced

Click images for full size

Components Panels

The **Components Panels** lists any of the components available in the Toolbar to add to your scene. It includes components for Sky Atmosphere, Volumetric Clouds, up to two Directional Lights, and a Sky Light.

By Default, the properties displayed for each component is limited to its **Minimal** set but can be extended to show more using the [Property Details](#) dropdown in the toolbar.

Env. Light Mixer

Only show atmospheric lightsMinimalCreate Atmospheric Light 1Create Volumetric CloudCreate Height Fog

DirectionalLight

Search

Light

Intensity10.0Light ColorIndirect Lighting Intensity1.0Volumetric Scattering Intensity1.0

Advanced

Atmosphere and Cloud

Cloud Scattered Luminance Scale

Advanced

SkyLight

Search

Light

Intensity1.0Light ColorIndirect Lighting Intensity1.0Volumetric Scattering Int...1.0

Advanced

Distance Field Ambient Occlusion

Occlusion Max Distance1000.0Occlusion Exponent1.0Min Occlusion0.0Occlusion Tint

Atmosphere and Cloud

Cloud Ambient OcclusionCloud Ambient Occlusion...1.0Cloud Ambient Occlusion...0.05

SkyAtmosphere

Search

Planet

Ground Albedo

Atmosphere

MultiScattering1.0

Atmosphere - Rayleigh

Rayleigh Scattering Scale0.0331Rayleigh Scattering

Atmosphere - Mie

Mie ScatteringMie Absorption Scale0.000444Mie Anisotropy0.8

Atmosphere - Absorption

Absorption Scale0.001881Absorption

Art Direction

Sky Luminance FactorAerial Perspective View...1.0Height Fog Contribution1.0Aerial Perspective Start...0.1