

Welcome to Sky Engine!

A Day-Night &
Weather Toolkit!

What is Sky Engine?

Sky Engine is a lightweight Unity toolkit that lets you bring a full day/night cycle to your game world – effortlessly.

But that's not all! It also supports dynamic weather, including:

- Clear skies
- Low and high cloud layers
- Rain and transitions in-between

The system is built to be:

- Clean and minimal lines of codes
- Easy to understand
- Fully extendable with your own custom logic
- Custom Inspectors for clear and nice interfaces



Let's first start with a quick tutorial!

Setup the world

To start using Sky Engine, follow these simple steps:

1. Set the Skybox

Set your scene's skybox material to `SkyboxEngine` by drag and drop.

This material uses a custom shader that allows you to smoothly blend the top and bottom sky colors based on time.

2. Add the Sky Engine Prefab

Drag and drop the Sky Engine prefab into your scene.

This prefab contains all the core systems you need.

Feel free to customize anything — it's designed to be flexible and easy to extend.

That's it for setup!

Next, let's dive into how the core of the system works: the `SkyCore` script.

SkyCore.cs

The heart of Sky Engine is the SkyCore script – designed to be clean, small, and easy to understand, so you can tweak or expand it however you like.

Here's what it handles:

Celestial Rotation

- Smoothly rotates the sun and moon across the sky
- Handles proper light direction for each

Stars

- Rotating star field that appears only during night time

Dynamic Weather

- Supports clear skies, cloudy, and raining weather
- Includes cloud layers and rain particle effects

SkyCore.cs

Lighting

- Separate sunlight and moonlight with independent intensities
- Sky colors are blended using top & bottom gradients

Fog Control

- Adjustable fog density for day and night separately

Time System

- Customizable day speed and day length

Realtime variables:

- Current day number
- Current time of day (0 to 1)

`public void SetWeather(int value)`

`0 = Clear`

`1 = Low Clouds`

`2 = High Clouds`

`3 = Rain`

WorldTimeEvent.cs

WorldTimeEvent is a special script that lets you trigger actions at a specific day and time in your game world.

💡 How It Works

- It's automatically included with the SkyCore prefab.
- You can easily:
 - Add a new event
 - Give it a name
 - Set the day and time
 - Assign actions using UnityEvents (like spawning enemies, playing audio, etc.)

WorldTimeEvent.cs

Auto Naming

Next to each event's name,
you'll see a small "A" button.

This stands for Auto Name – clicking it will
auto-fill the name like:

"Day 0 - At the Morning"

This keeps things clean and organized,
especially when you have many events.

Use Case Examples

- Spawn a boss on a specific day
- Show a special message or trigger a cutscene
- Start or stop weather or music transitions

Sky Engine

thanks for purchasing
Sky Engine !

if you face any issue or glitch you could
contact me at:

ultraboltstudio@gmail.com

if you like Sky Engine unity package i'll
be greatful if you leave a review in the
asset store.

Thanks again and i hope you have a
fantastic day!