RealSky

User Manual

Thank you for purchasing RealSky.
Below you will find all the information you need for getting the best out of the package.

If you have any questions or comments, just jump onto
http://blackraininteractive.weebly.com/about-us.html and fill out the contact form.
Alternatively, you can contact us directly at contact.blackraininteractive@gmail.com.

Step 01: Setting up

The setting up process is pretty much the same as any other Unity asset.

First, you need to import your skybox/skysphere model into Unity and place it into the scene view.

If you do not have one already, you can use the skybox that comes with the package.
You can find it under "RealSky/Sample/Models".

Next, you need to go into the "Source" folder and attach the RealSky shader onto your sky.
Once that it is done, you should see something like this:
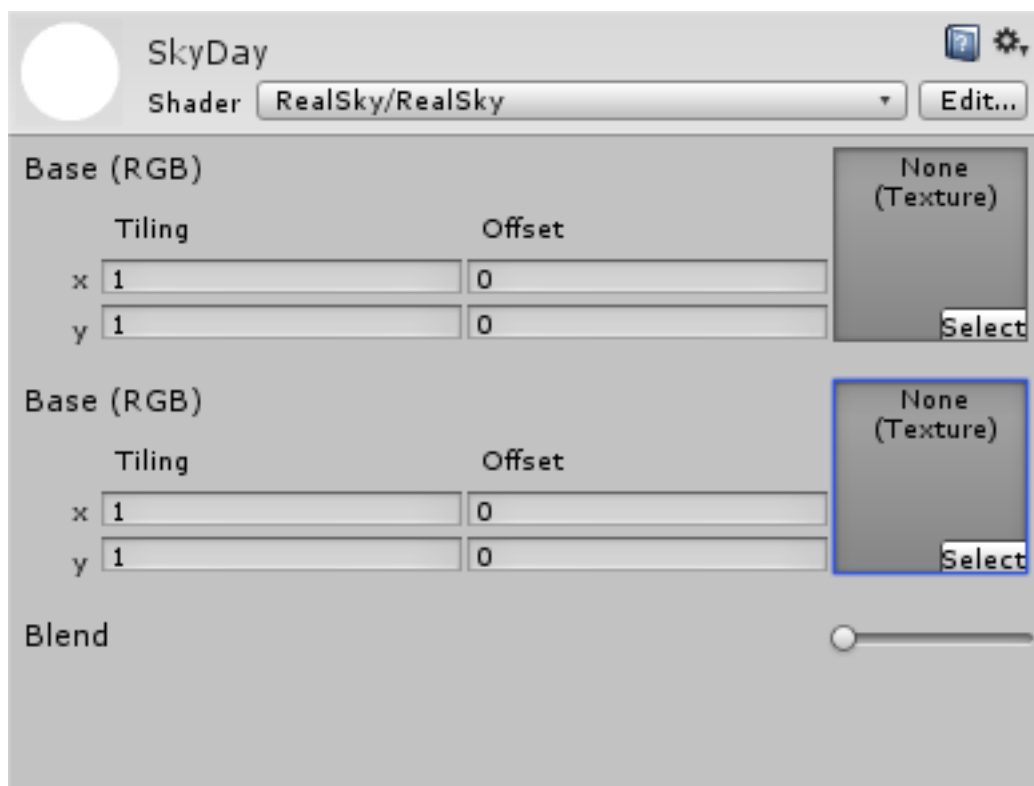
You can drag your textures into the slots if you wish. However, it is not necessary.

Once that is done, you need to attach the RealSky script onto the sky.

There are two versions of the script.
One is written in C# (RealSky.cs), and the other is written in JavaScript/UnityScript (RealSkyJS.js). Both of the scripts are identical in terms of functionality and usage.

RealSky Version 1.0 (newer versions may look different) looks something like this:
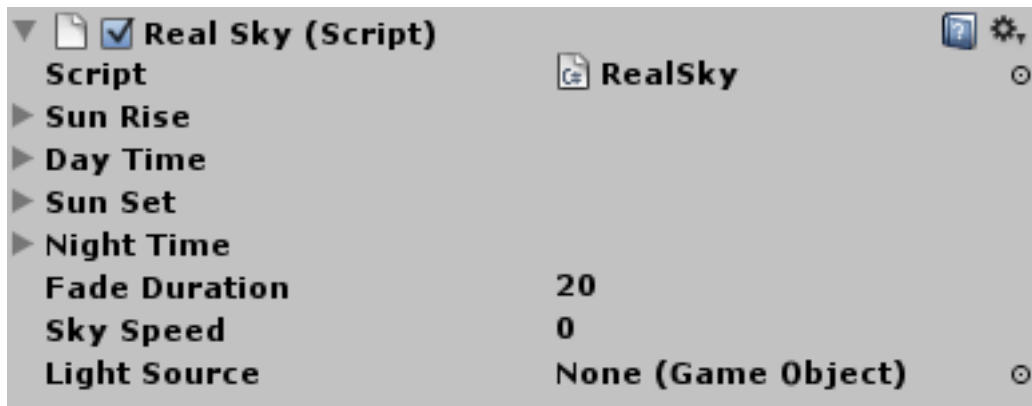
The first four variables are where you put your textures. Because the textures are placed into an array, you can have as many sky textures as you want, and the script will randomly switch between them at runtime.

The next variable is how long you want it to take to fade from one texture to another. In the above image, it is set to 20 seconds.

The Sky Speed variable allows you to slowly rotate the sky to give the impression of moving clouds. To achieve a realistic effect, you normally want to have that value somewhere between 0.25 and 1.0.

The last variable is an important one for achieving a convincing day-night cycle. What it does is change the intensity of the selected light to suit the time of day in game.

Step 02: Assigning The Textures

Now that the hard part is done, you are ready to assign the textures.

This is straightforward. All you have to do is click on the arrow next to the texture variables, adjust the size value depending on how many textures you want to use, and then drag them into the slots.

Step 3: Changing The Fade Duration

This part is really easy. All you have to do is click the box next to the "Fade Duration" variable, and change the default number to whatever you wish it to be.

▼ 🗋 ☑ **Real Sky (Script)**	🔲 ⚙,
Script	🗋 **RealSky** ⊙
▼ **Sun Rise**	
Size	1
Element 0	➕ **SkyRise** ⊙
▼ **Day Time**	
Size	1
Element 0	**SkyDay01** ⊙
▼ **Sun Set**	
Size	1
Element 0	➕ **SkyRise** ⊙
▼ **Night Time**	
Size	1
Element 0	➕ **SkyNight** ⊙
Fade Duration	20
Sky Speed	0
Light Source	**None (Game Object)** ⊙

Step 04: Changing The Sky Speed

This step is pretty much the same as the previous one. Except you have to change the "Sky Speed" variable.
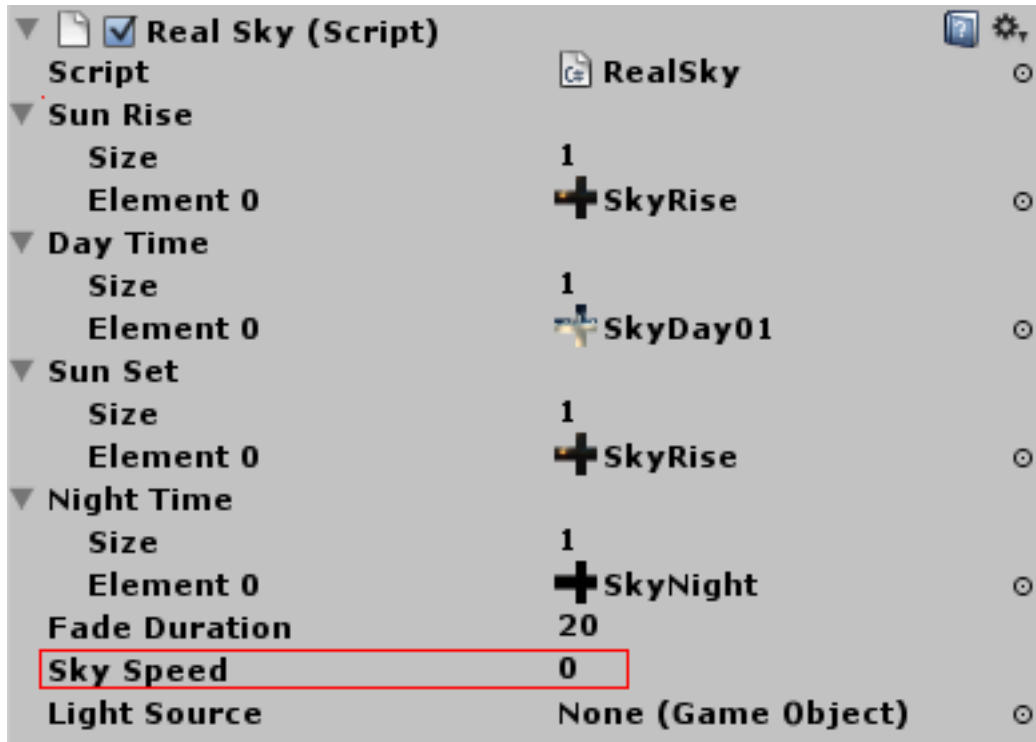
As stated before, the recommended value is between 0.25 and 1.0. If you want to use a different value, by all means do so.

Step 05: Assigning A Light

The fifth and final step is to add a light into your scene. This will allow the script to change the light colour at runtime.

First, you need to add a light source into you scene if you do not have one already.

As this package is designed for outdoor scenes, it is recommended you use a directional light. However, any light will work.

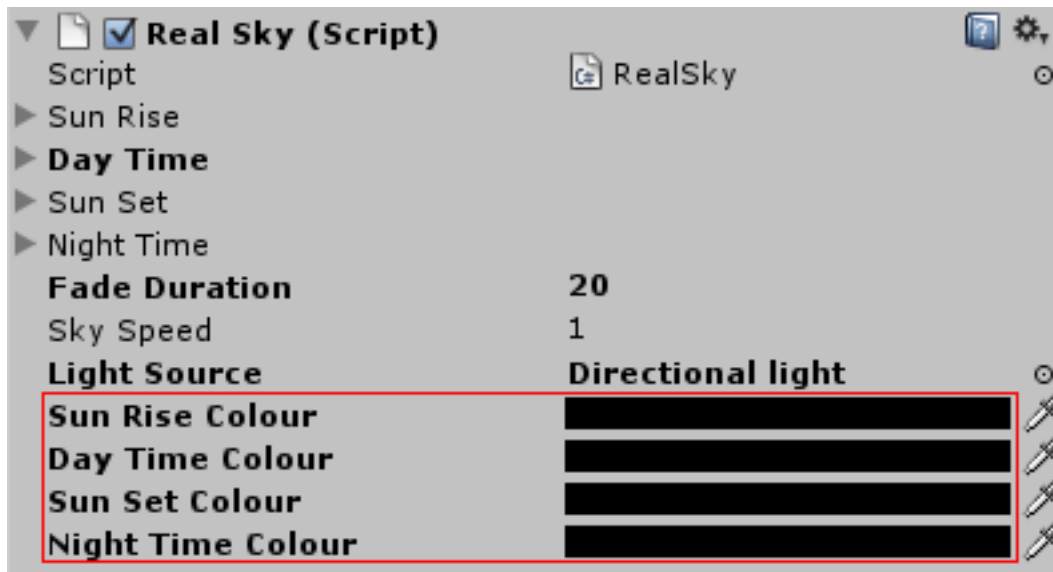Then you need to drag the light from the Hierarchy view, and drop it onto the last variable.
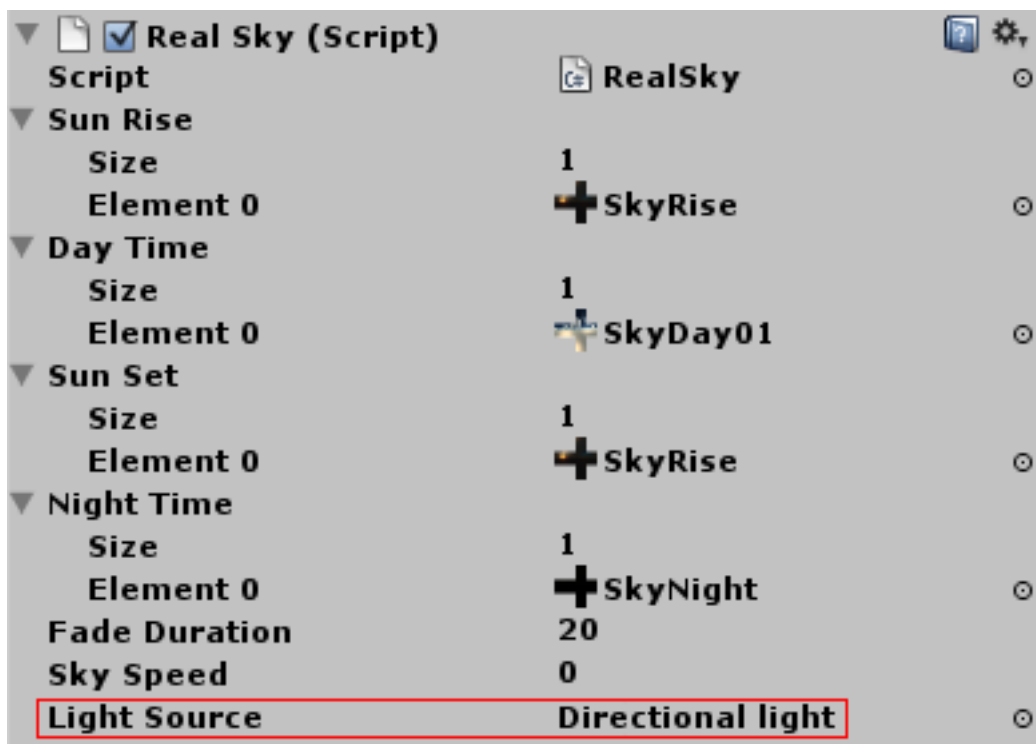
Update 1.1

There is a new feature that allows you to change the colour of your light during the day/night cycle.

For example, you might want to have a blue light for night time, an orange light for sunrise/sunset, and a white light for the day time.

The new feature looks like so:

Using the feature is as simple as changing the colours in the four boxes.

Edit: As of update 1.3, the colours are also used to change the brightness of the light. For a darker light, simply use a darker colour.
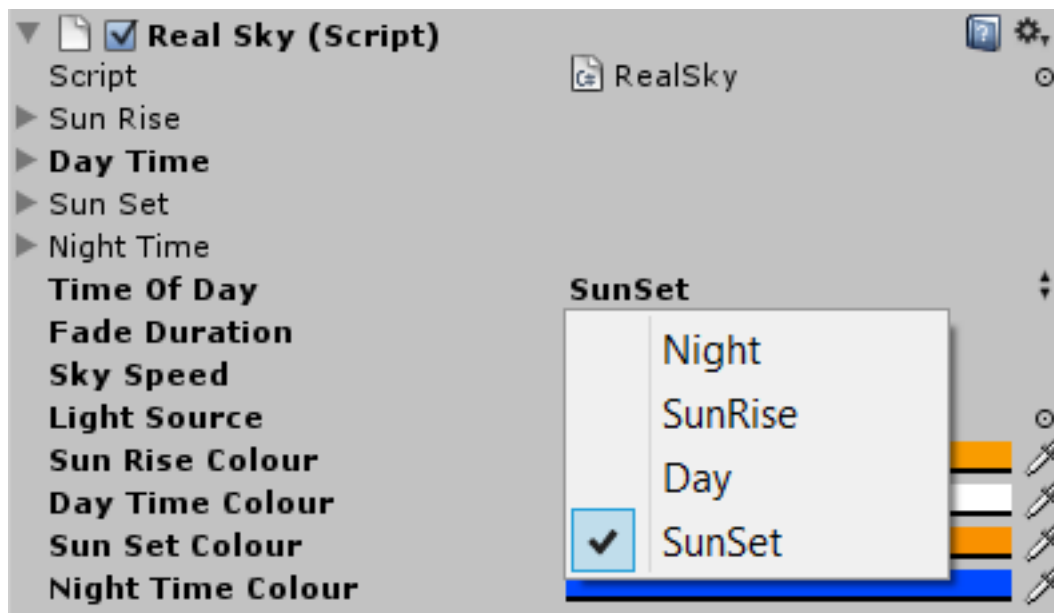
Update 1.2

As of version 1.2, there is a new feature that allows you to set what the time of day is at start up (instead of it defaulting to night time).
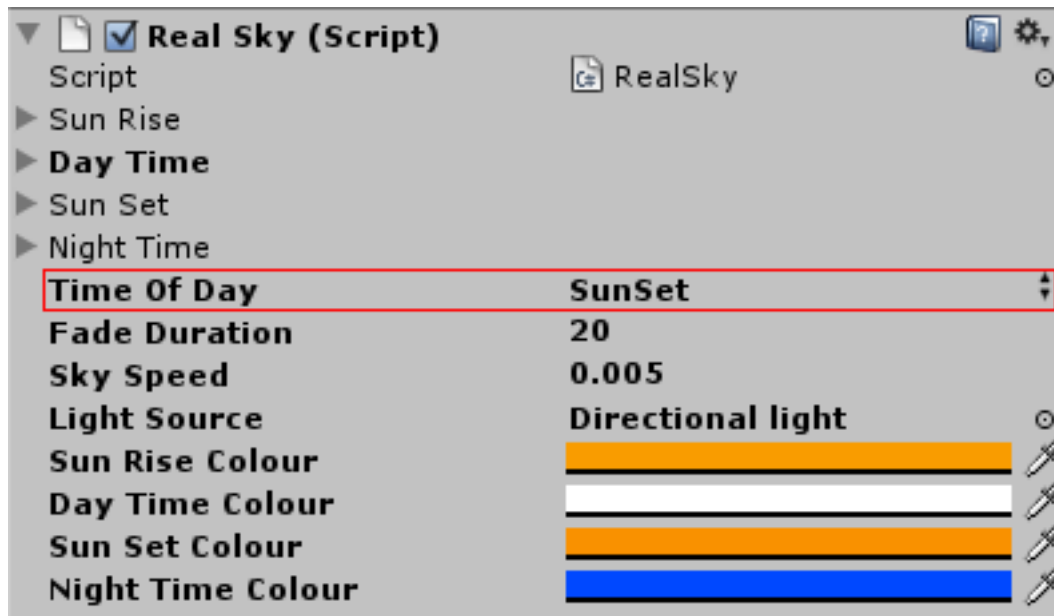
This feature is simple to use.

If you click on the drop down box shown above, you will be presented with the following options:

Then you just click on the time of day you would like it to be when your game starts.

Update 1.3

As of version 1.3, there are three new options available.

What these values allow you to do is pause the sky simulation after every transition.

For example: After the sky has gone from sun set to night time, you can then choose to stay on night time for a period of time. After that period is over, the sky will complete the next transition, and then it will pause again etc.

This allows you to create a much more convincing day/night cycle.

Update 1.4

As of update 1.4, an infinite sky feature is now available.

What this update allows the skybox to do is behave in a very similar fashion to the standard Unity skybox system.

With the built in Unity skybox system, not matter how far you move within the game world you will never reach the skybox. So essentially, you have an infinite sky.
RealSky 1.4 also has this ability.
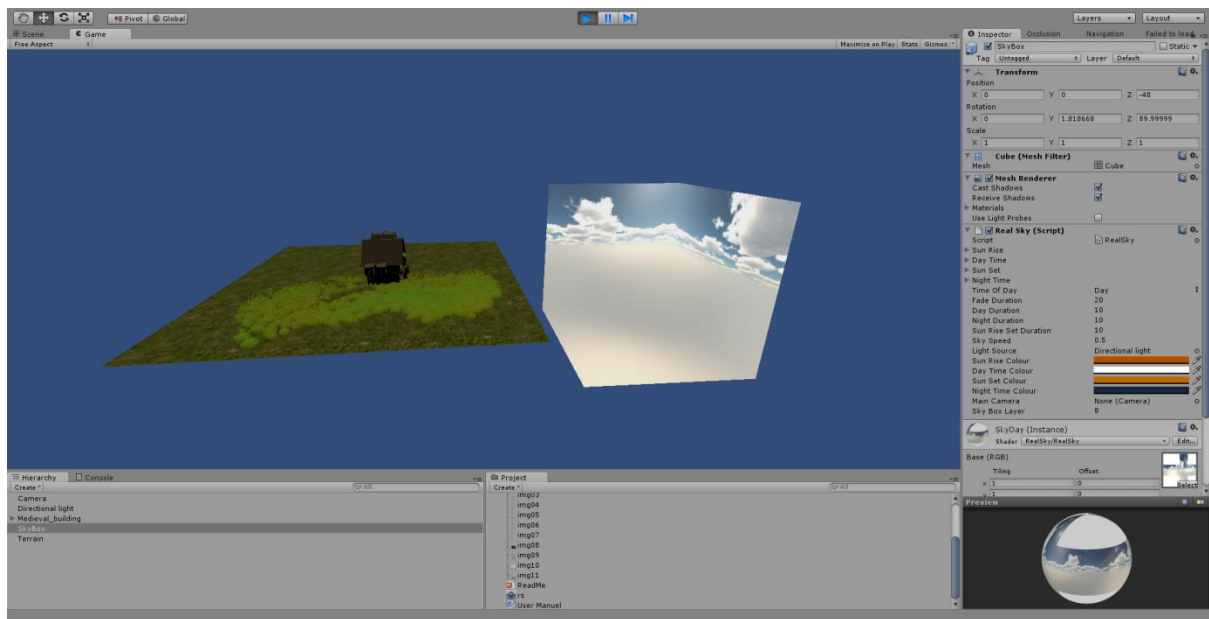
Scene with feature disabled
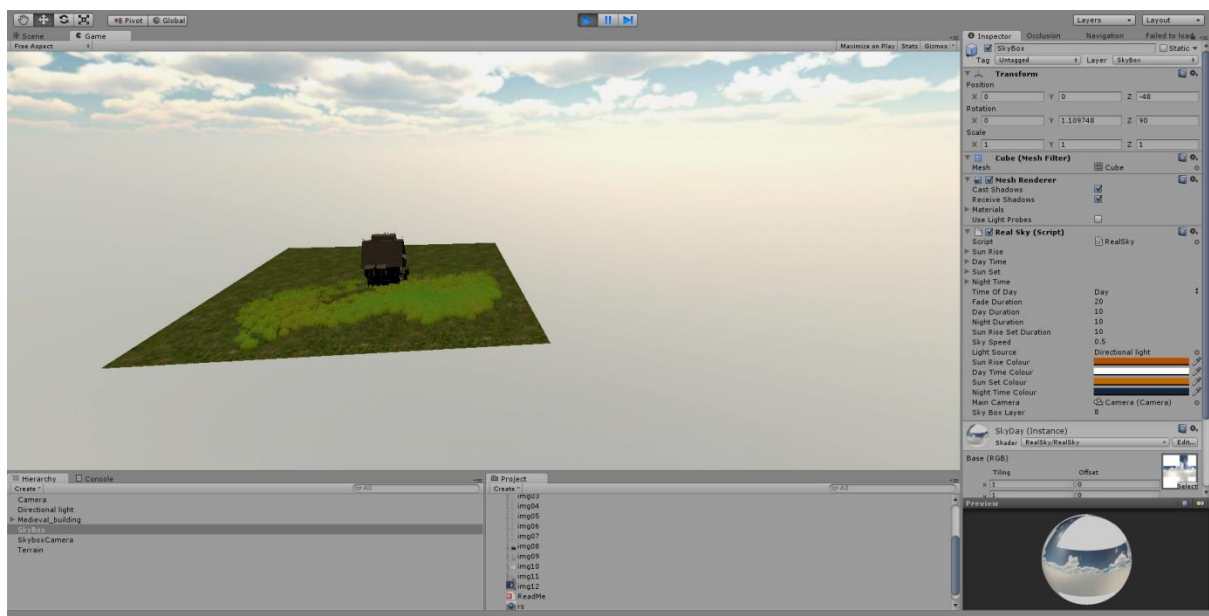
Scene with feature enabled

Using this feature is very simple.

The first variable lets RealSky know which camera is the main camera. This is essential if you want to use the infinite sky feature. Leaving it blank will disable the feature.

The second variable tells RealSky which layer you want the skybox to be on. It is recommended that you have this value somewhere between 8 and 31. Having the value outside this range may stop the feature from functioning as expected.

Once those two variables are set, RealSky will take care of the rest.

That is all there is to it.
You are now ready to play your game and watch the sky come to life!