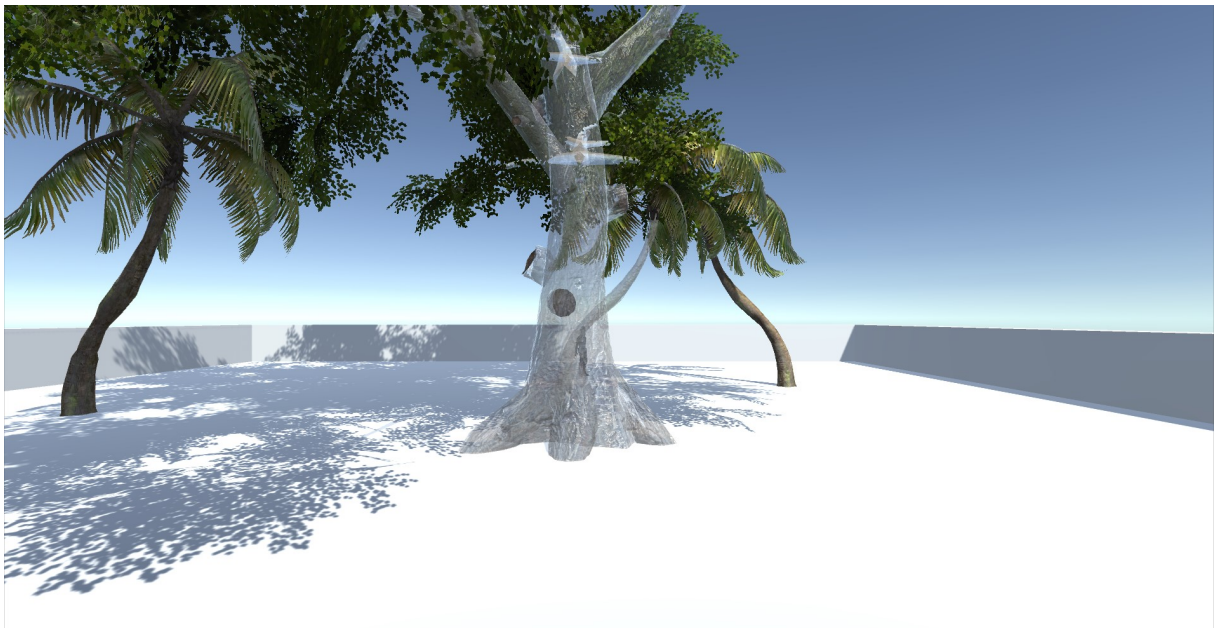
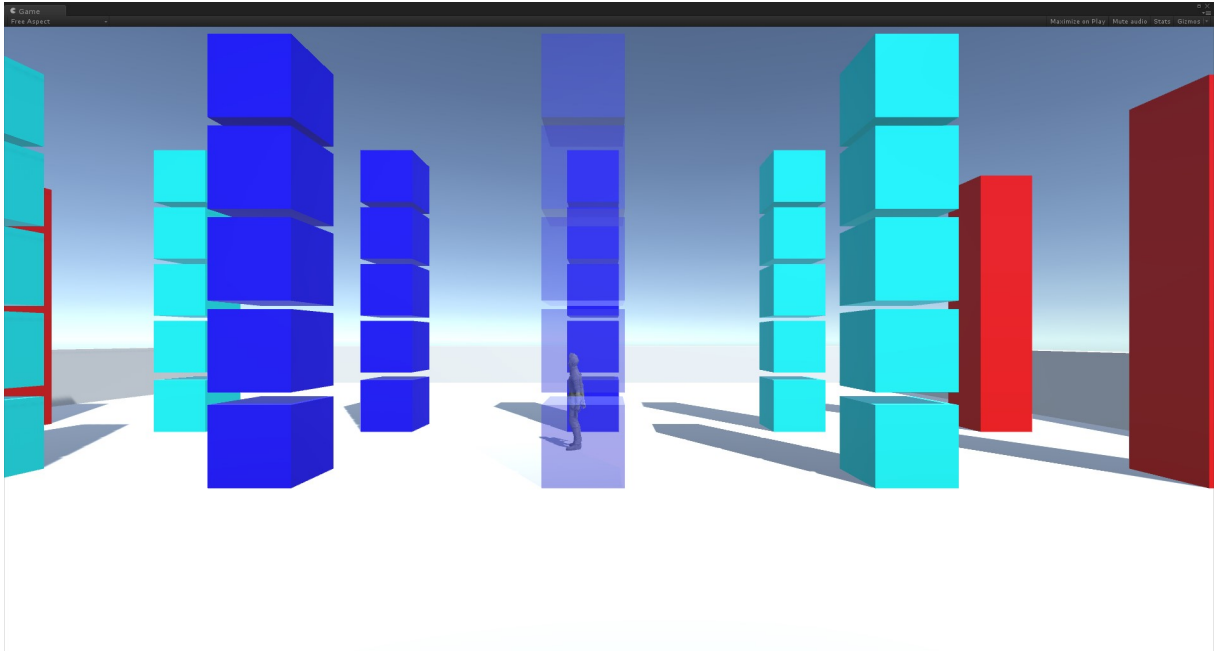


See Through Manual



Version 1.0

November 2015

Thank you for buying the See Through asset. This asset allows you to fade away objects that are obscuring the line of sight between a source (mostly a camera) and a target.

See Through allows you to fade objects when they are in line of sight the camera (or any other object) and its target.

Works with all kind of assets including SpeedTree and legacy trees. Objects can be linked together so an uniform fading is accomplished even if only one part of a complex object is obscuring the line of sight.

When playing 3th person games (like Diablo, Assasins Creed, etc) you'll notice that when the player gets obscured by any other object those are fading away so you will always see what happens to your game character. As I'm building a game Thyr which has that special camera setup I build the See Through system to allow my players never to lose their characters and can see whatever action is going on. Some screenshots and a part of the video do show the See Through asset in action while running in Thyr, those assets are NOT included in this package.

I'm hoping this asset will be of any value and save you (and your team) some effort allowing you to focus on your actual gameplay mecanics.

In case of any question, trouble and/or feature request please contact me at support@cygnusprojects.com.

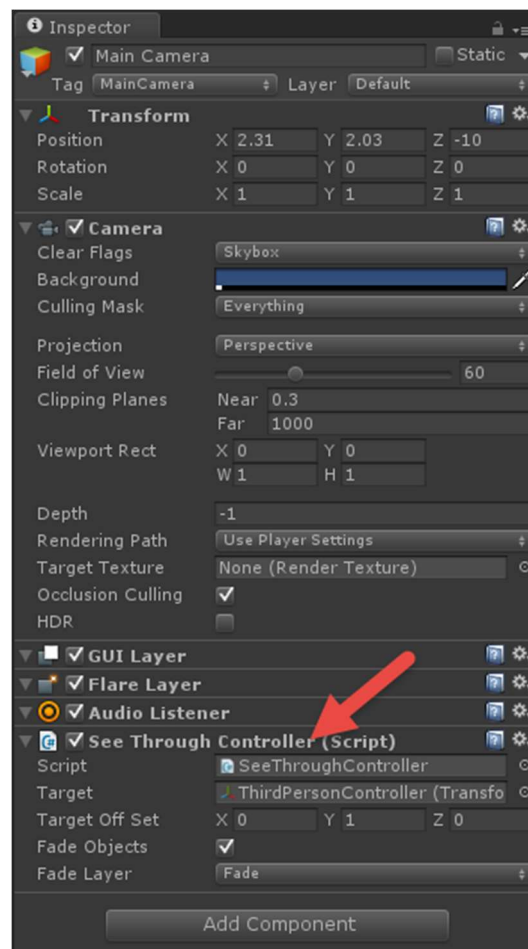
How to set up the system

Specify a layer you want to use for determining which object you want to see through.



Make sure you assign this Layer to the game objects you want to be part of the see through system.

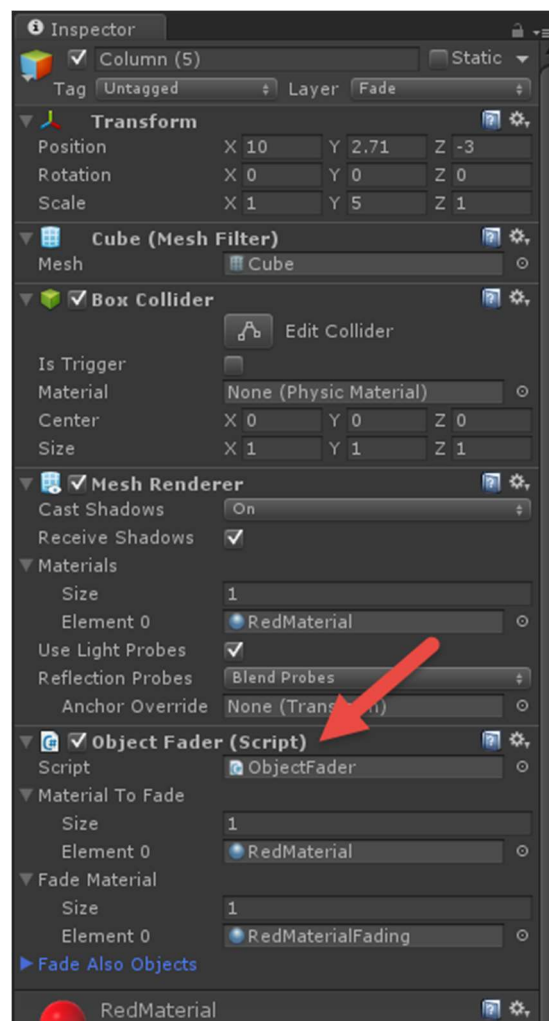
Add the see through controller script to your camera.



Assign the target object to the Target field of the component, in this case the standard ThirdPersonController. As the target will probably be the feed position of the character you can set a Target Offset. In this case we used a Y-value of 1 meter (the hips of the character).

The Fade Object flag must be checked to perform the actual See Through calculations. Also make sure you assign the newly created Layer to the Fade Layer field.

For the system to work you need to assign the Object Fader script to any object you want to be able to fade. Make sure those game object do have a collider component as well.

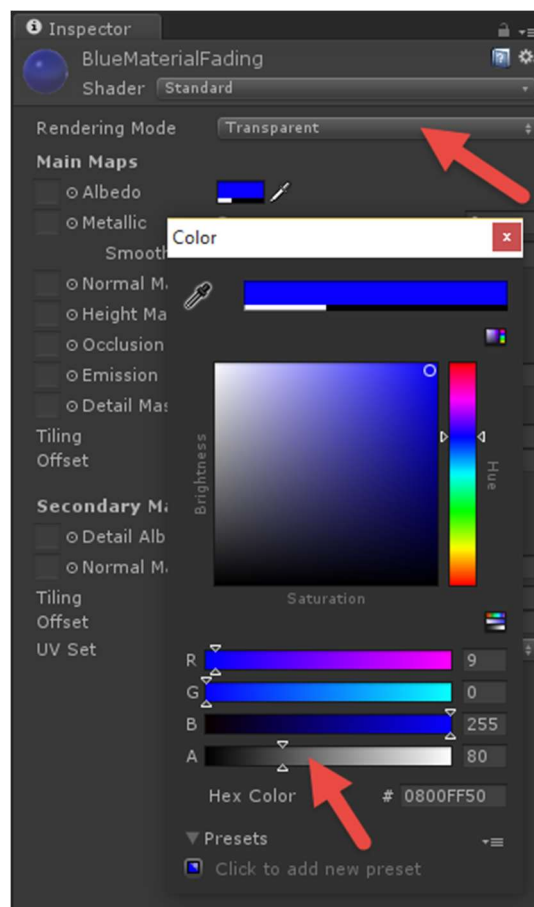


The actual fading works by swapping out materials with their replacement materials. This allows you have full control on how things are looking when you look through them. In the Material To Fade section you specify the materials of the asset you want to be replaced. Within the Fade Material you assign their corresponding fading (see through) material.

Let's look at the materials first. Here you see a common Unity 5 material (used within our demo)

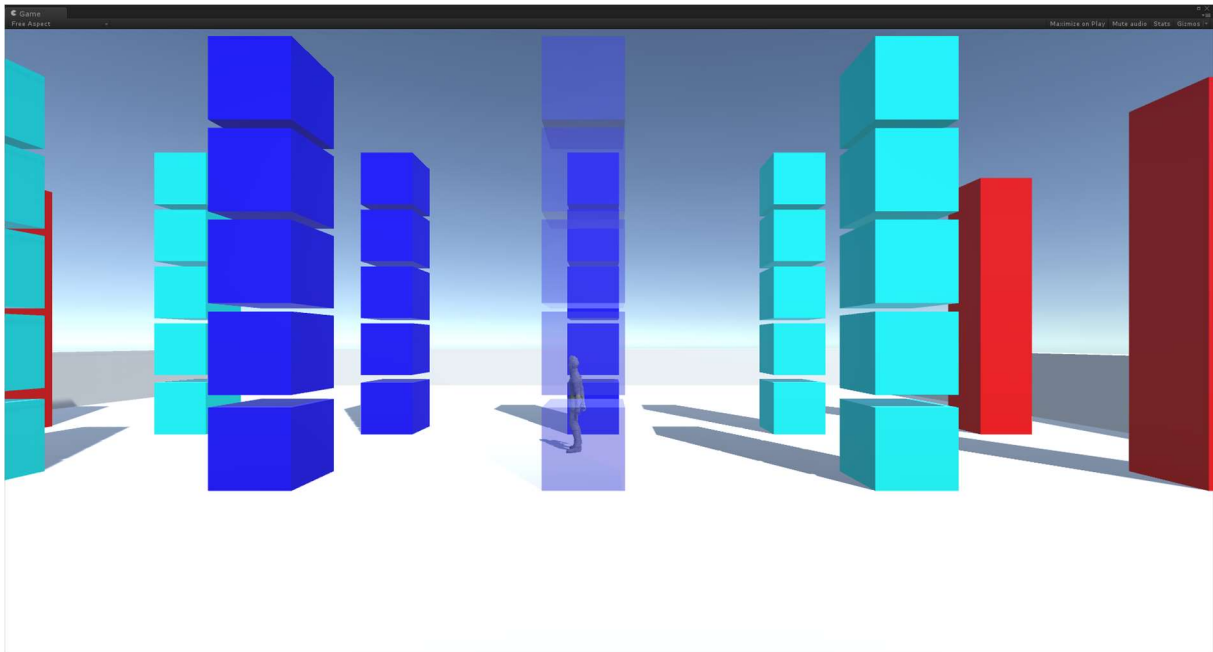


The common workflow we use is to duplicate the material and set its Rendering Mode to Transparent and the alfa setting for the Albedo color/texture.



As you can see it is very easy to set up this system. When you run a scene using the above workflow you will notice any game object that is obscuring the line of sight will have its material replaced.

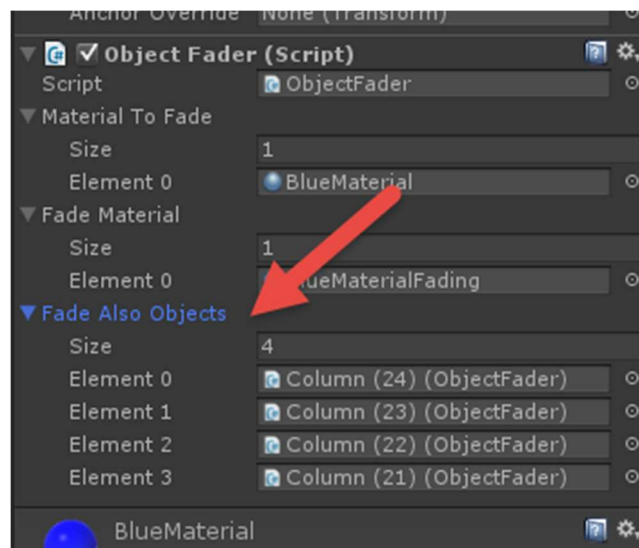
Linked Objects



In some case you want some other parts of your scene get the same treatment as the actual game object that is in the line of sight. This can be achieved by linking object together.

As you can see in the picture although Ethan is only obscured by the lower part of the column the full column is transparent.

Looking at one of the game object making up the column you will notice this kind of setup:

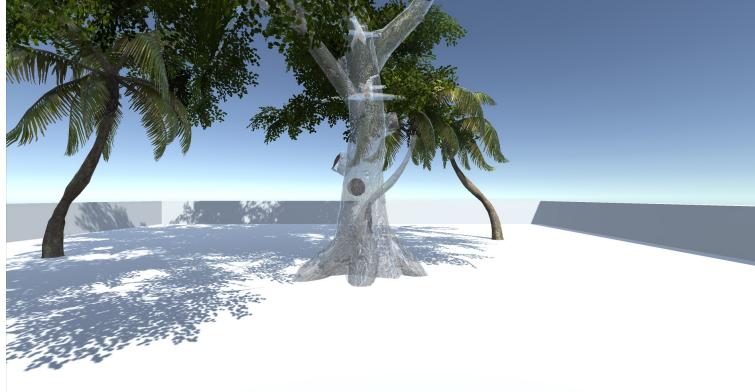


To make this work you first must have assigned all game objects with an Object Fader script and specified their material sections.

For each of those game object you have to drag and drop its linked objects within the Fade Also Objects section. Make sure you don't specify the current game object here. And that's it, your objects will be linked together.

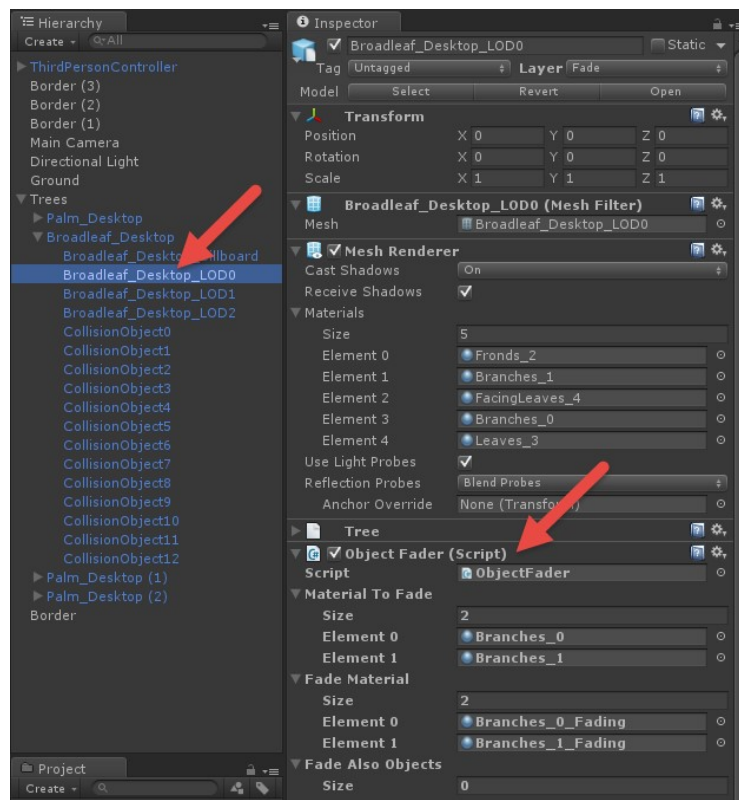
Special cases

SpeedTree assets.

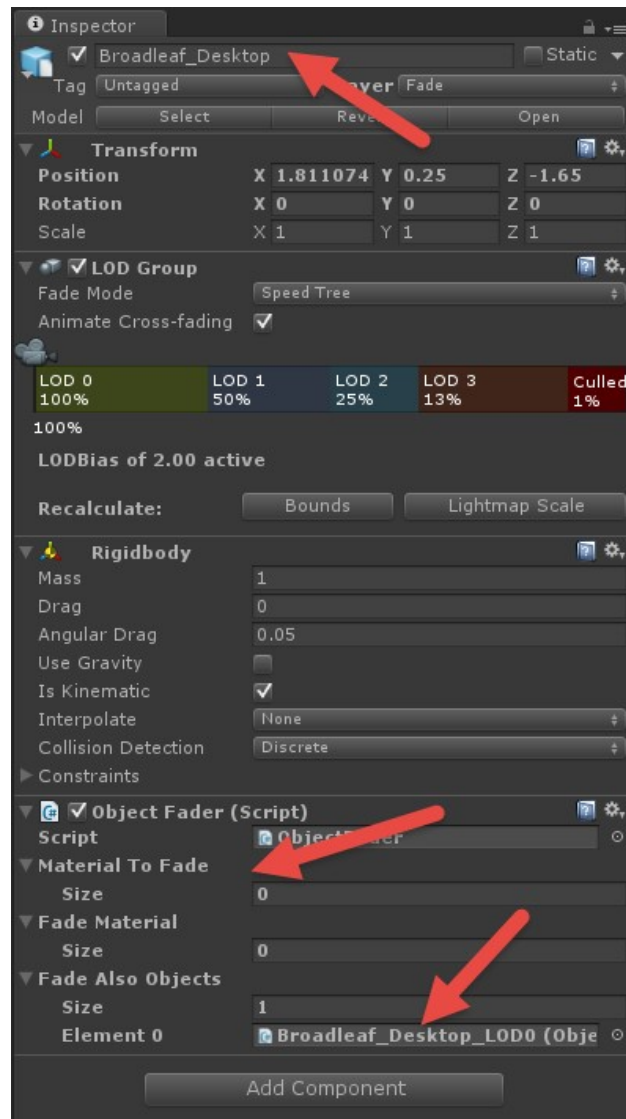


In case you want your Speedtree assets to fade when in line of sight you have to use a special approach.

Firstly add an Object Fader script to the LOD0 component of your Speedtree. Setup the material sections like before. In case you want to know how to create a fade material see please read further.



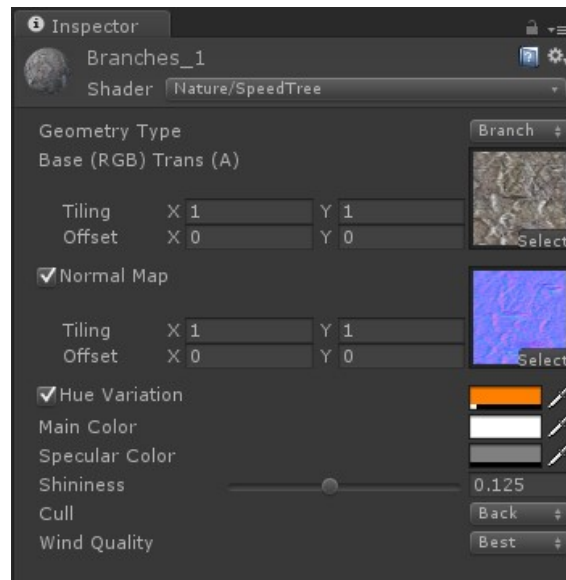
Secondly add an Object Fader script to the root of the Speedtree asset. Important is to leave the material sections empty and link the LOD0 gameobject within the Fade Also Objects sections. This will pass the fade request of the SpeedTree collisions to the LOD0 object.



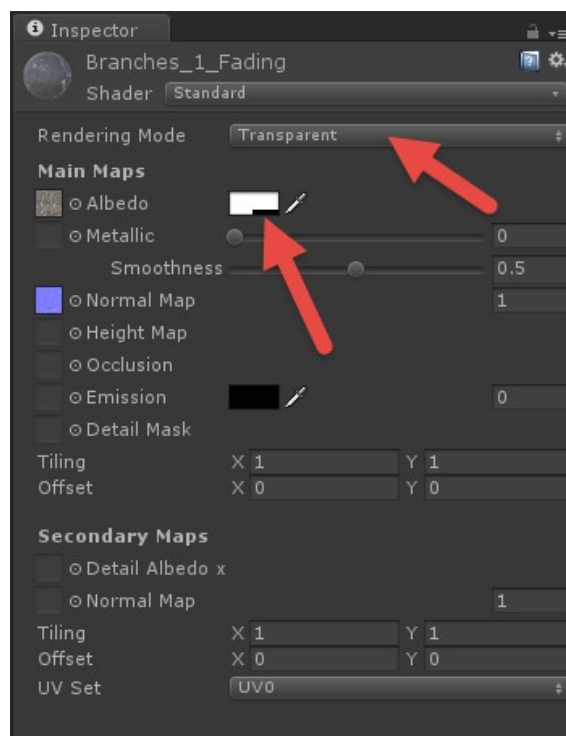
Don't forget to assign your complete tree (root and underlying objects) to the proper layer.

How to create a fade material for SpeedTree.

When you want to create a special fade material for SpeedTree you first have to import the actual tree into your scene. Goto the LOD0 object and click on the material within the mesh renderer. Unity will guide you to the location of that specific material. For instance:

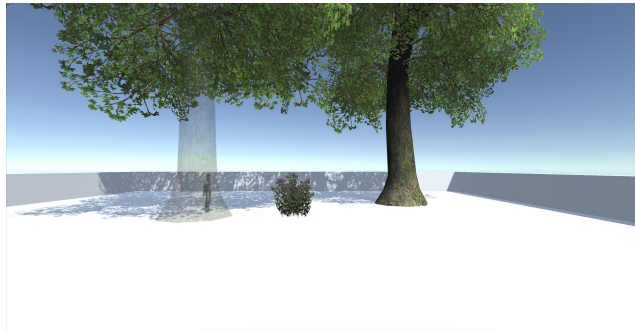


Duplicate this material and change it to a standard Unity material asset:



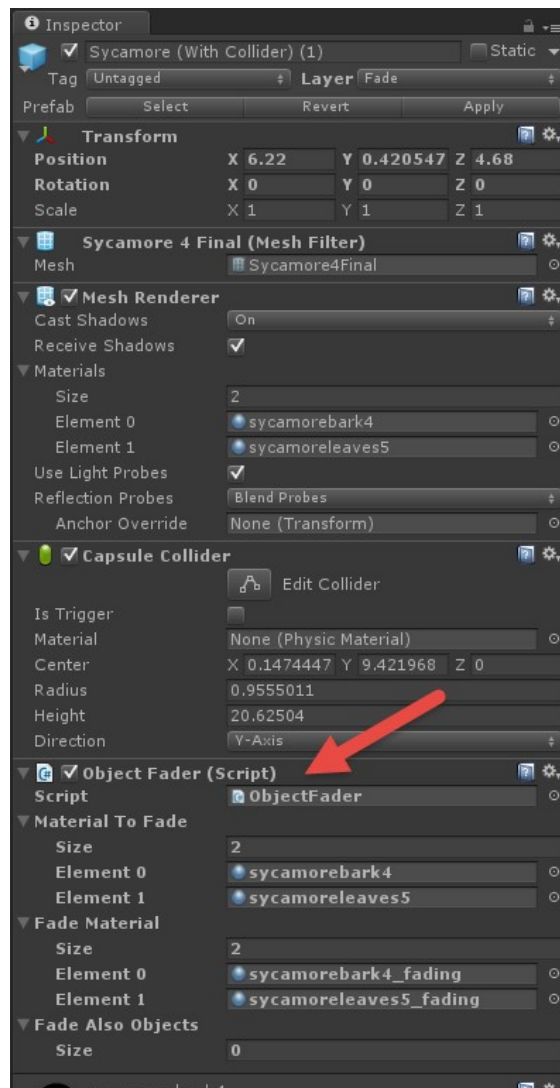
Now you can use this newly created material as fade material for your SpeedTree.

Legacy Trees



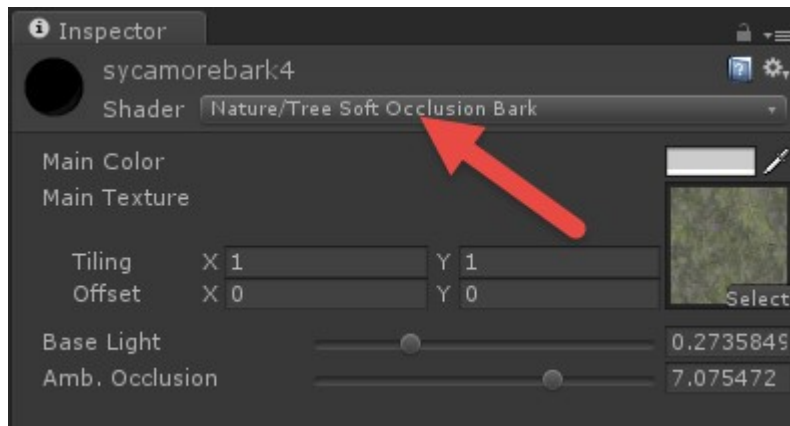
When dealing with legacy trees you can use the same approach as stipulated within the SpeedTree section.

The only difference is that you don't have any underlying game objects for LODs. Add an Object Fader script to your tree asset and assign the materials (also make sure you assign the proper Layer).

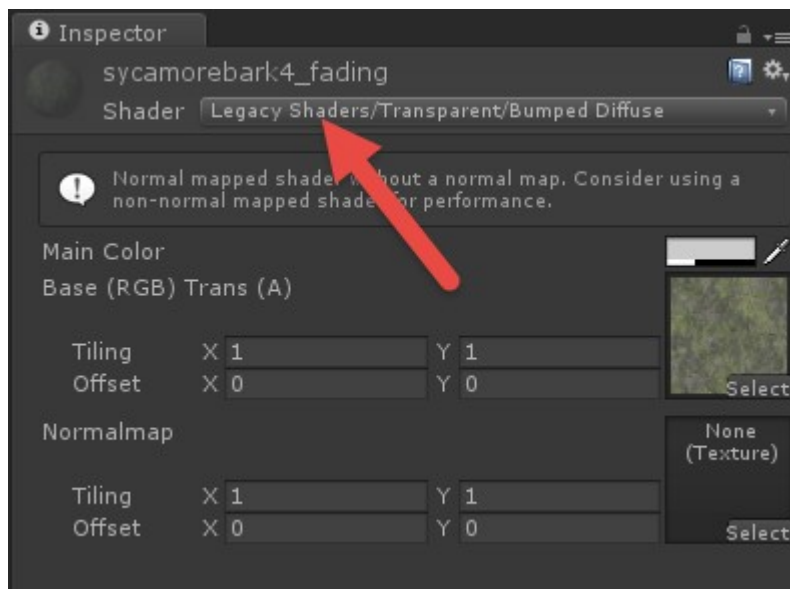


How to create a fade material for legacy trees.

Bring your tree within your scene and select the material within the mesh renderer.



Duplicate the material and change it to a default Unity material:



Needless to say you can choose however whatever shader you want.

Trouble shooting

No material is swapped when in the line of sight. What can be wrong?

- Make sure the game object has a collider assigned
- Make sure you have specified a special layer and assigned that layer to the game object and to the See Through Controller script.
- Is the Fade Objects checkbox checked within the See Through Controller script?
- Does the game object have the Material To Fade and Fade Materials sections assigned? And do the materials match up? Same amount of materials in both sections? Also make sure the place within those sections do match up so a Solid material on the first place has its corresponding fading material on the first place in the Fade materials section.

Can't get it right?

- Please contact us at support@cygnusprojects.com explaining all steps you have done so we can try to get it reproduced and help you the most in get it fixed.