Description

Dynamic Occlusion is a tool that will allow you to run your game with a smooth game experience and focused on dynamic objects. although served in all cases

How to use: Simply add the script Dynamic Occlusion.cs on your camera. You must assign the item to a Tag intended to dynamic Occlusion and this object must not be static before the execution of the game.

Now implement a Singleton pattern for easy access from any script, if you want to access variables and methods use the following line of code.

Singletons.Get<DynamicOcclusionSystem>();

for more information read the instructions Singletons Square PI Studios on folder Plugins

You can optionally add dynamic LOD to put the items you want higher performance. The advantage of Dynamic LOD is that it automatically calculates the limits if desired, generates fewer objects in the scene saving more memory and allowing make cleaner scenes. This script call Dynamic Occlusion and configure automatically based in the game objects of the scene

Occlusion culling 100% dynamic + System detail levels for unity + Dynamic Quality Changer integrated

- No need baking time
- 100% Compatible with procedural scenes.
- Use two occlusion systems intelligently
- works with all renderers unity.
- Occlusion lights and Lens Flares
- Occlusion audio sources
- supports real-time shadows
- Compatible with dynamic batching
- Compatible with Unity 4.5 and 4.6 free and pro
- Compatible with Unity 5

Notes:

Dynamic Occlusion is quick and easy to use and implement, its power is noticeable in objects that are moving or have been generated at runtime, by default it does not take objects static or already are part of the static batch

in unity 4 free Dynamic Occlusion can be extremely effective because you do not have static Batch or static Occlusion of umbra.
In Unity 4 Pro and Unity 5 Dynamic Occlusion handles the elements found in movement or that have been generated during the execution after Awake () method.

How does it work?

Dynamic Occlusion System makes the Game Objects a list containing the scene renderers, Audiosources and lights.

Renderers need that are not part of a Static Batching and have a Tag that can be used for dynamic Occlusion to be hidden from the field of view of the camera.

For Audio Sources. must the Spatial Blend has value 1 in Unity 5.

lighting, Dynamic Occlusion select only those that are Spot type or type Point, the Lens Flares no need to configure anything extra.

The graphic quality is automatically selected by Dynamic Occlusion also the details of the plot are adjusted to ensure that the game runs above the FPS you want or below that you want.

Dynamic LOD automatically determines the distance if desired, and the level of detail of the object, according to the volume of the Mesh, the position of the GameObject and the visual quality of the game

Dynamic LOD limits recalculated every second, in case the object changes position unexpectedly. also does not interfere with Static Batch, you can leave LOD0 unassigned as this object directly taking just load the scene. Its advantage over LOD Groups is that you need fewer configurations as the rest do it automatically and thus leave less GameObjects in the hierarchy because they are loaded directly from the project.

How to Use

Dynamic Occlusion System contains three scripts but Dynamic LOD is optional for your project:

just create a new layer in the inspector and assigns the objects you want . that are occluded

adds Dynamic occlusion to any GameObject and assigns a camera and the Tags that you want to be occluded and set options

Dynamic LOD: You can add it to any gameobject.

add to each of the prefabs requiring control the level of detail

Class Extensions: it contains methods that are called from other scripts, just leave it in your project

Dynamic Occlusion System

Tags: Tags to be It is prepared for control of Dynamic Occlusion.

Cam: Select the camera where you want the occlusion occurs, does not support using this script in separate Cameras. If you do not select any camera, is automatically assigned the Main Camera

Auto Quality: Allows this script automatically manage the graphics quality in works of FPS. if this is turned off at runtime will be the initial quality you've made in the Start() method.

Terrain Quality: Handles the details of the terrain according to current FPS to take effect Auto Quality you must have previously enabled

Fast Method: Disable renderers without preserving the shadows, perfect for scenes that have already baked lightmaps or does not require the use of activated shadows .Thus Is automatically activated when the quality falls below

note
To change this property at runtime must disable this script and change the property and turn it back on again.

Renderers Occlusion: Allow control Dynamic renderers, Apply Renderers Occlusion

Lights Occlusion: Allow control on Point Light and Spotlight on the scene, Apply Light Occlusion

AudioSource Occlusion: Allows control on Audio Sources with Spatial Blend = 1, Apply AudioSource Occlusion

Lens Flare Occlusion: Hide Lens Flares not see the camera, Apply Flares Occlusion

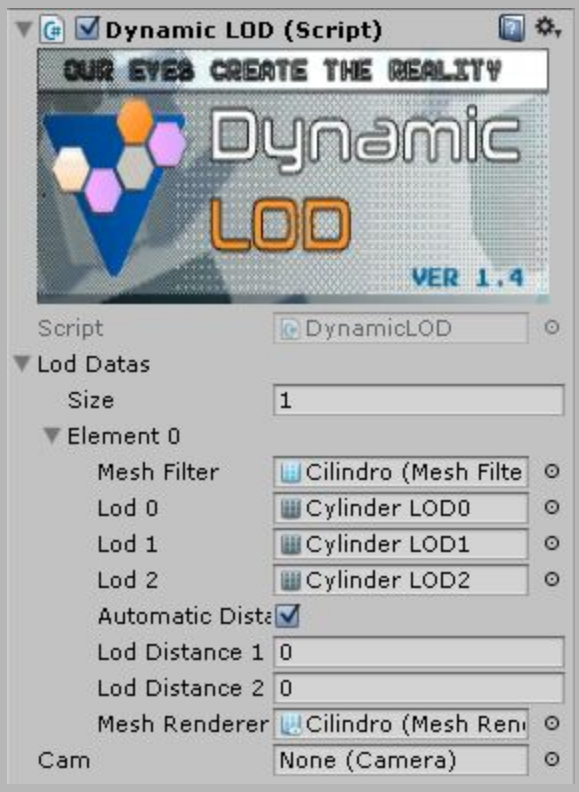
disable Game Objects: Disable GameObjects already too far and activate when the camera is close to them, enables or disables Game Objects to the distance

Min FPS: If the fps drops below this, the level of low quality also

MaxFPS: Whether fps rises above this, the quality level also rises. to take effect Auto Quality must be enabled.

Hide Behind: generate a Ray for each object visible from frustum camera and define if an object is behind of other object for hide, it's no accuracy due that no physics based else in renderer bounds than more faster

DynamicLOD



LODs

LOD 0: Mesh greater detail (it is recommended not to assign nothing here)

LOD 1: mesh median geometry

LOD 2: mesh low geometry.

Distances

Lod Distance 1: is the distance at which switches between LOD0 and LOD1

Lod Distance 21: is the changeover between LOD1 and LOD2

Automatic Distances : if this is activated automatically calculate the distances based on the volume renderer Distances ignoring values

Support and contact:

Updates will be posted on the following website: http://brlme1616.wix.com/darkcomtech

also I receive questions and suggestions in the next post.

http://forum.unity3d.com/threads/dynamic-occlusion-system.340182/

I'll be happy to answer your questions.