

Nanolod 1.2 Manual

What is Nanolod

Nanolod is a 100% FREE tool to generate LODs (Levels of Details) within Unity!
This will help you to achieve better performance in your games.

Features

- Generate LODs in prefab mode
- Generate LODs at project level from the model inspector
- Generate LODs at scene level from the LODGroup component
- Target polycount is reached globally instead of per-mesh
- Manages mesh instances (does not create duplicates for a mesh instanced more than once)
- Preserves animations (bones weights)
- Preserves normals
- Preserves UVs (channel 0 for textures and 1 for lightmaps)
- Preserves borders
- Preserves vertex colors
- Also works at runtime !

Current limitations / Known issues

- There is no parametrization for generated LODs. The polycount ratio for a given LOD is the LOD threshold (eg: LOD at 50% has 50% polycount)
- Tangents are not kept (but recomputed from normals)
- For now computation is single-threaded

How to use

There are several ways to generate LODs:

Generate LODs for a prefab

This is **the recommended way** to use Nanolod, because it is often the easiest and most flexible way.

The downside is that if the model asset is changed, you'll need to regenerate LODs (it's one click, but it won't be automatic). You can always generate LODs a project level instead from the model if this is an issue for you.

In order to generate LODs on a prefab, first open the prefab in prefab mode (double click), then add an LODGroup component, and finally, click Auto Generate LODs from the menu (Figure 1)

Generated meshes will be saved within the prefab itself. If you prefer to save the mesh assets in a separate folder, you can do that by changing the Nanolod preferences from the Preferences / Nanolod menu.

Generate LODs at project level from the model inspector

In order to generate LODs from the model asset itself, click the asset, open the "Model" tab in the Inspector window, and then enable "Create LODs" (Figure 2). Finally, set LOD thresholds however you like it and click apply at the bottom of the Inspector to both import the model and generate LODs automatically.

Generate LODs at scene level from the LODGroup component

In order to generate LODs for a scene GameObject, first select the GameObject, then add an LODGroup component, and finally, click Auto Generate LODs from the menu (Figure 1)

Generated meshes will be saved within the scene itself. If you prefer to save the mesh assets in a separate folder (so that you can reuse them for instance), you can do that by changing the Nanolod preferences from the Preferences / Nanolod menu.

Generate LODs from script

Checkout the two samples to see the plugin in action !



