# **Runtime Mesh Baker Manual**











#### Introduction:

Help you to combine meshes waterials and textures to reduce draw calls in runtime! Got less draw calls than static and dynamic batching. Got more resource saving than non-runtime baking.

- Very simple to use, learn in 1 minutes
- · Works with any material and shader
- The most effective solution of combination
- Automaticly chek and configure the shaders
- Runtime combine quickly
- · Runtime auto garbage recyling.
- Undo Supported, friendly Uls.

Version: v1.0.0

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## Usage:

- 1. Get your GameObjects ready for baking, just put them into one tree nodes, all GameObjects have the same top parent.
- 2. Select the top parent, then select the menu "Window/Rumtime Mesh Baker/Add MildBaker" or "Window/Rumtime Mesh Baker/Add DeepBaker".

At runtime, you can do it in you code:

```
gameObject.AddComponent<BAT_DeepBaker>();
//or
gameObject.AddComponent<BAT_DeepBaker>();
```

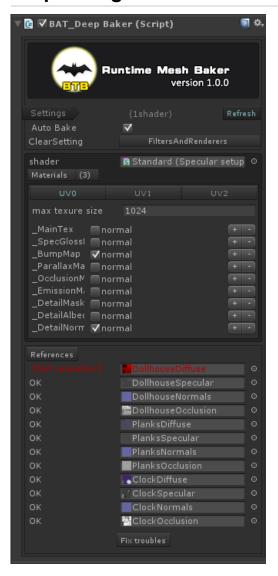
3. It's ok. let's run it. Auto baking would be excuted.

## Mild Baking:



- · Auto Bake: wheter do baking automatically
- ClearSetting: after baking, it would do some clearing operation.

### **Deep Baking:**



- · Auto Bake: wheter do baking automatically
- · ClearSetting: after baking, it would do some clearing operation.
- · Refresh button: refresh the configurations of baking.
- Shader: the group basis of meshes is the shader.
- · Materials: materials use the same shader.
- UV configure- max texture size: max texture size could be when baking.
- . UV configure- texture items: list all texture varient names of current shader to combine.you don't need to modify the items by default.
- · References: list all the textures referenced. If any red item is shown, you can fix them by the "Fix troubles" button on the bottom.

#### **Baking Process:**

- 1. Search the target gameobject, check all MeshFilters and MeshRenderers.
- 2. Find out all meshes and materials, and seperate the meshes into diffrent groups by materials(Mild Baking) or Shaders(Deep Baking).
- 3. Deep baking need to combine textures and generate new material. Mild baking will just use the original material.
- 4. Create a new baking node and start mesh baking by groups, if group's mesh vertex count is overflow, then bake to new one mesh.
- 5. Set the MeshFilters by new created mesh,and set MeshRenderers by the material of current group.
- 6. Do clearing, it would remove the original MeshFilters and MeshRenderers by default.

### Diffrence of two baking method:

	Basis	Texture Combination	Mesh Combination	Draw calls
Mild	material	not needed	needed	less
Deep	shader	needed	needed	least

### **Troubleshooting**

If Baking error eccours, check these items:

- 1. Make sure your Game Objects are not set static flags when deep baking.
- 2. The texutes should be readable and set the right format when deep baking. You can fix this by "Fix troubles" button.
- 3. If your material has set Tiling parameters(not 1), then the material can't not do deep baking. You could seperate these GameObject out of the baking tree.

#### **Future Version**

- · to support skinned meshes
- · to deal with tiling textures
- · to support lightmapping