

## Quick Start Guide

1. Install **Mesh God 3000** via the Package Manager.
2. Navigate to **MeshGod3000 → Scenes** and open the **Demo Scene**.
3. In the Scene Tools, click the dropdown icon (triangle) and enable **Mesh God 3000**.  
(Alternatively, go to **Tools → Mesh God 3000**.)
4. Dock the newly opened **Mesh God 3000** tab for convenient access.
5. In the **Hierarchy** tab, select the **Baricade\_6** GameObject.
6. Press **TAB** to lock the selection to the **Baricade\_6** GameObject.
7. The asset is now ready for you to work with your mesh.

## Assign Own Shortcut to Mesh Operations

Each mesh operation comes with a default shortcut, but you can customize these to your preference. To assign your own shortcut:

1. Navigate to **MeshGod3000 → Resources → MeshOperations**.
2. Select the mesh operation whose shortcut you want to change.
3. Edit the shortcut key as desired.

## Mesh Operations Description

### Separate Selected

Creates a new mesh object from the currently selected triangles, separating them from the original mesh.

The original mesh is updated to exclude the separated triangles, and the new object inherits the original's transform and materials. Useful for splitting parts of a mesh into distinct objects for editing or organization.

### Separate By Loose Parts

Splits the selected triangles of a mesh into multiple new objects based on disconnected (loose) parts. Each loose part becomes a separate GameObject, while the original mesh is updated with one part. Useful for breaking complex meshes into logical sub-meshes for easier editing or optimization.

### Pivot to Bottom

Moves the pivot point of the selected mesh to the bottom-center of the model. This is useful for placing objects correctly on the ground, aligning models in a scene, or preparing assets for snapping and physics interactions.

### Pivot to Center

Moves the pivot point of the selected mesh to its geometric center. Useful for symmetrical object placement, precise rotations, and balancing models within the scene.

## Pivot to Selection

Moves the pivot point of the mesh to the average center of the currently selected triangles. Ideal for fine-tuning pivot placement based on specific mesh areas or modeling focus zones.

## Save as FBX

Exports the selected mesh object as a standalone FBX file into the project's MeshGod3000/Saved Files/FBX folder.

Useful for saving edited meshes for use in other scenes, projects, or external tools like Blender or Maya.

**Requires:** UnityEditor.Formats.Fbx.Exporter, and the FBX Exporter package installed via Unity Package Manager.

## Save Mesh

Saves the selected mesh as a `.asset` file inside the project's MeshGod3000/Saved Files/Mesh folder.

Automatically creates a unique asset name and updates the MeshFilter to use the saved mesh. Useful for preserving mesh edits within the Unity project.

## Select All

Selects all triangles of the current mesh. Useful for applying operations to the entire mesh at once.

## Select Invert

Inverts the current selection of triangles on the mesh. Useful for quickly switching between selected and unselected areas.

## Select Linked

Selects all triangles connected to the triangle nearest to the mouse cursor, expanding the selection to linked geometry. Useful for quickly selecting connected parts of a mesh based on topology.

## Select Invert Linked

Flood-fills the linked triangles starting from the triangle nearest the mouse cursor, then inverts the selection of those connected triangles. Useful for quickly deselecting connected parts of a mesh based on topology.

## Select More

Expands the current selection by adding all triangles that share vertices with the already selected triangles. This grows the selection outward, including connected triangles to help you select larger contiguous mesh areas quickly.

## Select Less

Shrinks the current selection by removing triangles that are on the boundary of the selected area. A triangle is deselected if any of its vertices are shared with an unselected triangle, effectively trimming the selection inward. This helps refine and tighten the selection to smaller, more focused mesh regions.