



# Fabgrid Documentation

Thank you for choosing Fabgrid! This document will help you get started with Fabgrid and give you a complete understanding of how to use the tool.


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## Getting Started

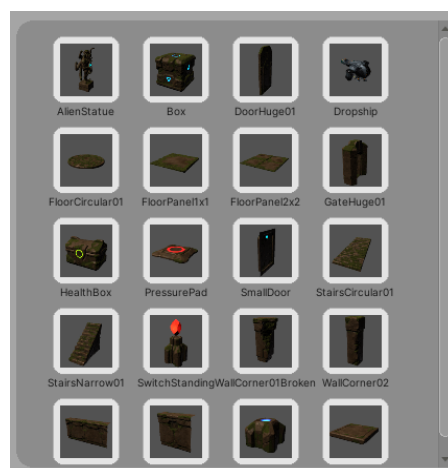
This section will show you how you can get started with building levels the quickest way possible.

### Instructions

1. Create a new GameObject.
2. Add a *Tilemap3D* component to the new GameObject. This is the only component that Fabgrid contains. It will store your level and give you access to various tools to help you build your level.
3. Navigate to the *Add Tile* panel by clicking on .
4. Set the add option to *Multiple*. The add option lets you control how Fabgrid will import prefabs to your collection. The option *Single* lets you import one prefab at a time while *Multiple* allows you to import multiple prefabs from a specified folder.
5. Set the path to *Fabgrid/Demo/Prefabs* and make sure that the size calculation option is set to *Mesh*.

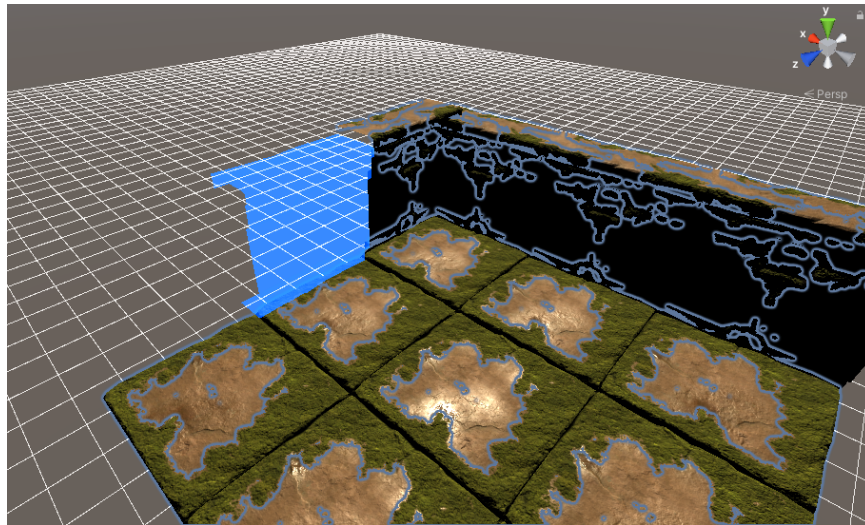


6. Navigate to the *Paint* panel by clicking on . You should now see a collection of prefabs.



7. Go to the *Configuration* panel and make sure the snap option is set to *Adaptive*.

8. Go back to the *Paint* panel, select the *Brush* tool, and start painting on the grid displayed in the scene view.



**Fabgrid offers various keyboard shortcuts. To maximize your workflow, you can edit the keyboard shortcuts in the *Configuration* panel.**

## The Panels

This section will give through all the panels in Fabgrid along with their purpose and functionality.



### The Paint Panel

This panel lets you create your level(s) by offering you various tools and the collection of tiles you have added. The top panel displays your current tool and lets you change it. If the tool contains any related settings, they will be displayed at the bottom of the same panel.

The middle sub panel contains your collection of tiles. In order to paint, you need to select one of the tiles by clicking on it in the collection. Now, if you move your mouse to the scene view, you will see a transparent blue preview of the tile. After you have selected a tile, you can remove it by clicking the *Remove* button located underneath the panel.

The bottom sub panel contains the layers. Here you can add layers using the *Add* button. You can also show and hide layers using the checkbox found on each layer. Layers can be removed using the button *X* button found on each layer.

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At the bottom of the paint panel, you can control the level of the floor. The floor makes it easy to place out tiles because it controls where your tiles will snap on the global Y-axis. *You can also control the floor level using keyboard shortcuts. You can see and change the keyboard shortcuts in the Configuration panel.*

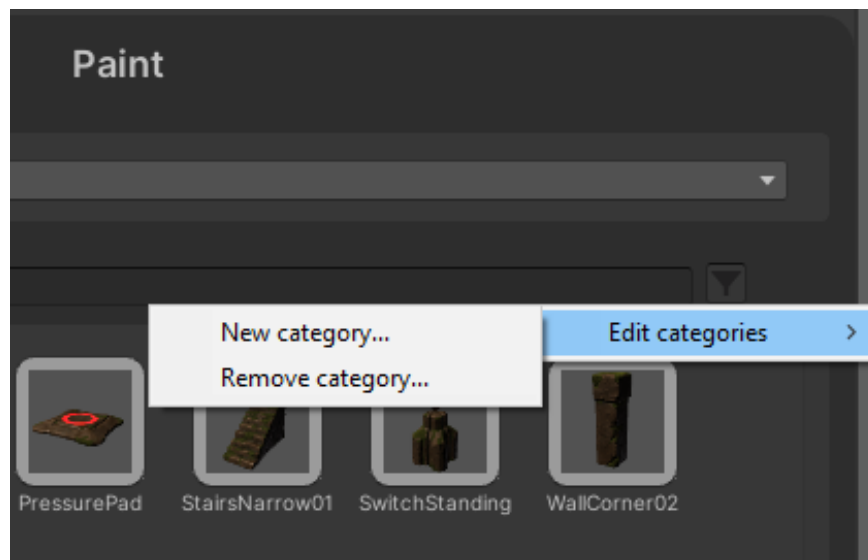
In the scene view, a grid is displayed which makes it easier to visualize where your tiles will be positioned.

## Maya Style Navigation

The paint panel supports *Maya style navigation*. You can hold down the left control button while left-clicking on a GameObject to focus on it. You can orbit around the GameObject by holding down the left alt button while dragging with the left mouse button. You can also pan the scene view by holding down the left control button and the left alt button while dragging with the left mouse button.

## Categories

It is possible to organize your tiles into different categories. Categories can be created by pressing the filter button. Each category has a name and an associated color. The color of the category will affect the tint of the tile buttons seen in the paint panel.



Once categories have been created, you can use the filter button to choose to only see tiles of a certain category.



## The Add Tile Panel

Here you can add tiles to your collection. There are two ways to add tiles. The first option *Single* lets you add one prefab at a time using the prefab field. The second option *Multiple* lets you add multiple tiles from a specified folder. The path you specify needs to be relative to the *Assets* folder. For example, if you want to add the prefabs from *Assets/Fabgrid/Demo/Prefabs*, you only need to input *Fabgrid/Demo/Prefabs*.

The size calculation option allows you to control how the tiles will be placed out on the level. The option *Mesh* will treat the mesh as the bounds of the tile. The option *Collider* is similar but treats the collider as the bounds of the tile. The last option *Custom* lets you specify a custom size. The *Offset* option will displace the tile globally when it is placed out when painting.

The *Save Tile Set* button lets you save the tiles of your *Tilemap3D* component into a *TileSet* asset. All the information about your tiles will be stored in the *TileSet* asset such as the prefabs and offsets. Conversely, the *Load Tile Set* button can be used to load tiles from a *TileSet* asset into a *Tilemap3D* component. If you try to load a *TileSet* into a *Tilemap3D* component that already contains tiles, you will be prompted if you want to replace the existing tiles or add them to the existing tiles. *TileSets* lets you reuse your tiles between different *TileMap3D* components by simply saving and loading them.

It is also possible to choose which category the added tiles will have by clicking on the button that says *Select a category...*



## The Configuration Panel

The configuration panel gives you a set of settings to configure the tool. Some settings (e.g. the grid color) are purely cosmetic while other settings (e.g. snap options) can have a significant impact on how the tool works.

The first panel contains settings related to the grid. The grid spacing determines the size of the grid cells and changes the precision of the tile placement.

The second panel contains general settings like the floor spacing and the snap option. The floor spacing defines the distance between each consecutive floor level. The snap option determines how the tiles will be placed out when painting.

The third panel holds all the keyboard shortcuts available. These can be tailored for your needs. If you want to disable a keyboard shortcut, you can set the key value to *None*.

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## The Snap Options

It is important to get a good understanding of how each snap option works. There exists four types of snap options:

- ☐ **Adaptive** where the tile snaps to the grid if there is no mesh underneath the cursor. If there is a mesh underneath the cursor, the tile will snap to the position over the mesh along the Y-axis and also snap to the grid along the floor plane.
- ☐ **Floor** where the tile will only snap to the floor along the Y-axis.
- ☐ **Mesh** where the tile will snap to the mesh the cursor is currently hovering over.
- ☐ **Grid** where the tile snaps to the grid on all axes.



## The Help Panel

Similar to this document, this panel contains useful information to know about the tool. It is useful if you want to look up something quickly. You can think of it as a cheat sheet.

## The Tools

Fabgrid offers four types of tools and if you have experience in software similar to Fabgrid, they will most likely be self-explanatory.

### Brush

Place out tiles one at a time when clicking the left mouse button. Useful when placing out non-repetitive items like chests and doors.

If a layer has been selected, the tiles will be placed under that layer in the hierarchy. If no layer is selected, the tiles will be placed under GameObject containing the *Tilemap3D* component.

### Eraser

Erases tiles one at a time when clicking the left mouse button. This tool is most effective if you only want to remove a few items and need greater precision.

### Rectangle Tool

The rectangle tool lets you place out multiple tiles by dragging the cursor using the left mouse button. It is useful for placing out repetitive items like floors and walls. This tool has two different

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modes. *Relative* mode will offset each tile based on the size of the selected tile itself. In *Grid* mode, the tiles will instead be offset based on the grid spacing.

If a layer has been selected, the tiles will be placed under that layer in the hierarchy. If no layer is selected, the tiles will be placed under GameObject containing the *Tilemap3D* component.

## Selection Box

This works the same as any selection box and lets you delete multiple tiles at the same time. Hold the left mouse button while dragging over tiles to select them. It will only select tiles that belong to the given 3D tilemap. Selected GameObjects will be highlighted in yellow. To delete the selected tiles, press the Delete key.

## Upgrading Fabgrid

When upgrading to a newer version of Fabgrid, it is important to always make a backup of your Unity project first in case breaking changes would occur. Newer versions are designed with backwards compatibility in mind so please report a bug if you notice any issues when upgrading your version.

## FAQ

### Why are the tile preview icons pink when opening the demo scene?

This is believed to happen when Unity updates their shaders for newer versions. This can be resolved by navigating to the folder where demo prefabs are located, right-clicking in the Project view and pressing *Reimport*.

## Contact

If you notice any bugs or have any feature requests, you can reach us on:  
[studiocikoria@gmail.com](mailto:studiocikoria@gmail.com).

## Bug Reporting

When reporting a bug, you can send us a message describing the bug and where it occurred. It would also be really helpful if you also included the editor log. You can access the editor log by right-clicking on the *Console* tab and clicking *Open Editor Log*.