Dungeon Builder

Mac Manual
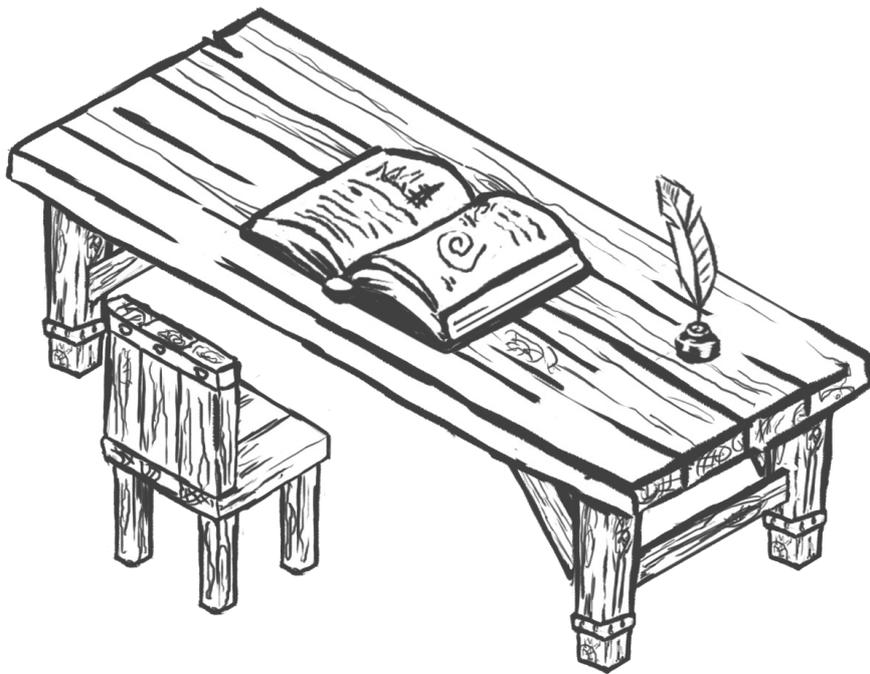
v. 1.4.0

Introduction

Thank you so much for downloading Dungeon Builder for Mac. If you follow the very short guide in [Getting Started](#), you'll be building your first dungeon within a minute or two.

Should you run into any problems getting started, you can always contact us on support@hobbyte.net. If you happen upon an issue or if you have an improvement suggestion, please report it in our [issue tracker](#).

Whether you're trying our demo for the first time, enriching your private games with isometric maps, or using a [commercial license](#) to add depth to your products, I hope you'll have a great time with Dungeon Builder!

Kim from Hobbyte

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Getting Started

To get started using Dungeon Builder, extract the downloaded archive file (if you haven't already done so) and move the DungeonBuilder application file to Applications.
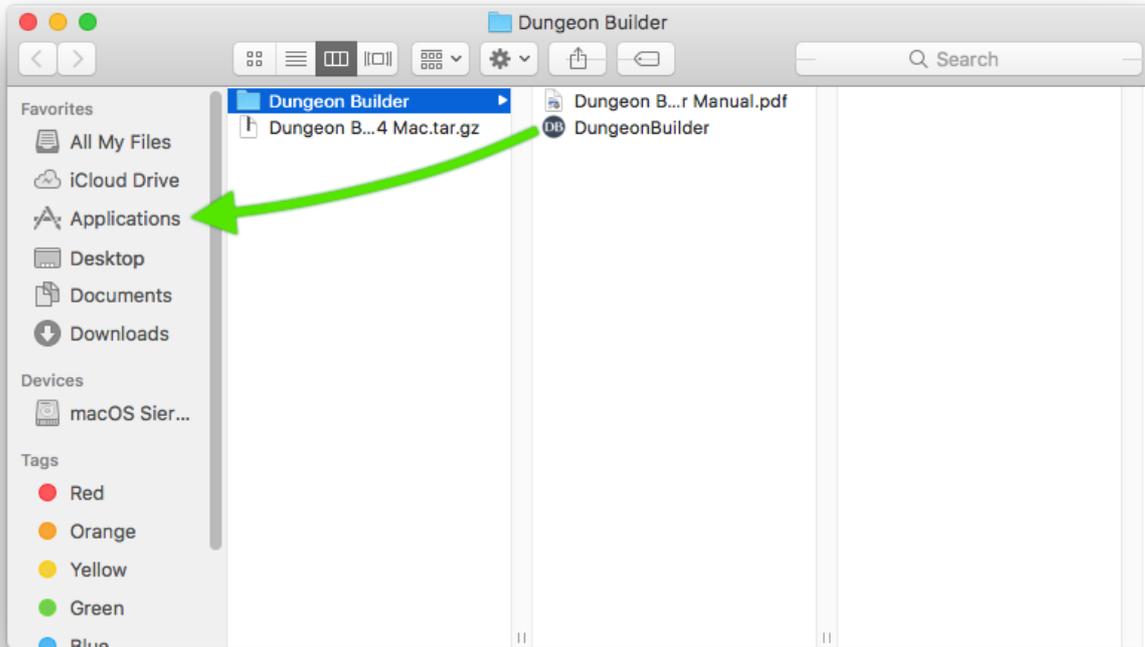
When this is done, start Dungeon Builder from Applications. The first time you do so, you may get a confirmation dialog, asking if you are sure you want to run the application. Click Open to launch Dungeon Builder.

Please note: Depending on your security settings, your Mac may instead tell you that the application cannot be opened. If this happens, control-click the DungeonBuilder application file and select Open. In the dialog that appears, click Open to launch Dungeon Builder.

Dungeon Builder is now launching and the "installation" is finished. From now on you can run the application like any other.

After loading for a short while, Dungeon Builder will present you with a login screen. If you have a Hobbyte username and password, simply type those in and click Log In. If you are simply looking to try our free demo, just write "demo" (without the quotes) as the username and password instead.

Please note: You will need an Internet connection for your first login. After you've succesfully logged in, Dungeon Builder caches your credentials for two weeks, allowing you to use the application while offline.

When you've logged in, you're ready to begin using Dungeon Builder.

Troubleshooting

Below are a few tips for troubleshooting common problems that may arise while you're getting started. If the suggestions below do not solve your problem, or if you run into a problem that isn't described, please do not hesitate to contact us on support@hobbyte.net.

Dungeon Builder doesn't start

If Dungeon Builder doesn't start, even after control-clicking and selecting Open, something may have gone wrong when you extracted the application from the downloaded archive file. Users who have experienced similar problems have solved this by simply deleting the downloaded files and DungeonBuilder.app, and starting over with a fresh download from our downloads page. If a fresh download does not solve your problems, please write us, and we'll do our best to help you get up and running.

Problems logging in

If have problems logging in to Dungeon Builder, the following may help:

- **Check your firewall:** If you internet works properly, but you're still getting a connection error message, your firewall may be blocking Dungeon Builder. Add an exception for Dungeon Builder in your firewall's settings and then try logging in again.
- **Reset your password:** If you've forgotten your password, you can reset it on Hobbyte.net/requestpasswordreset. If you type the wrong password in the login dialog, a reset password link will also appear there.

Improving your Dungeon Builder setup

There are a number of small things you can do to improve your Dungeon Builder setup.

Edit your Configuration

Dungeon Builder has a configuration file, which can be used to fine tune some of Dungeon Builder's settings. On Mac, your Configuration file is located in the same folder as your Manual. To easily find it, click the Manual & Custom Folder button in Dungeon Builder's menu. Note that changes to dungeonbuilder_system.cfg are lost with each application update, so to keep your settings, set them to dungeonbuilder.cfg instead. If a setting is missing from dungeonbuilder.cfg you can always copy the setting from dungeonbuilder_system.cfg.

Here are a couple of examples of what you can manage in the configuration file.

- **UI Scaling:** If your UI feels too large or too small, you can change the scale by changing the OverrideUIScale setting. 1 is the default scale on most systems, so setting OverrideUIScale to 0.5 will make your UI smaller, while setting it to 2 will make it larger. Any positive decimal number is allowed, but if you make the UI too large, it will probably look terrible.
- **Customize your Save or Export directory:** In the configuration, you can set CustomSavePath and CustomExportPath to change the location of your save and export files. This is great for sharing maps between computers using Dropbox, Google Drive, etc.
- **Disable Play Mode features:** If you never use our Play Mode's Player Sight feature, then it's possible to turn off this feature entirely, improving performance overall. If you dislike aspects of how player sight works (such as fog of war, automatic hiding of walls, etc.) that can be tweaked in the configuration as well
  You can always change your mind and turn features back on. If you do, they will be enabled after restarting Dungeon Builder. All the Play Mode settings are available in the Play Mode Settings part of the configuration file.
- **Tweak your Export Image size:** If Dungeon Builder's export function fails or crashes your application, you can adjust the export image size from your configuration. If you increase the MaxExportSizeDivisor, your exported maps will be devided into smaller sizes which will solve the problem.
- **Override cached login:** In order to be as unintrusive as possible, our login function automatically logs you in if your password has been cached. In some rare cases, this can be a problem e.g. if you need to switch users and don't feel like finding and deleting the cache file. To override the cached username or password, simply add "Username: YOUR_USERNAME" or "Password: YOUR_PASSWORD" to your configuration file. To stay secure, don't forget to delete these settings again after successfully logging

in.

Install ImageMagick to improve your exports

Unity3D (the game engine we've used for Dungeon Builder) is great but it has some limitations when it comes to exporting huge images. Due to these limitations, large maps are sliced into smaller images when exported from Dungeon Builder. If you install the free and brilliant [ImageMagick](#) application, Dungeon Builder will use ImageMagick to *automagically* stitch those map pieces together for you. ImageMagick is also used to set your exported images' encoded DPI (dots per inch) to 300, which lets editing software know that your maps are at print quality density.

> **TIP:** ImageMagick is an expert tool and their installation guide is written with experts in mind. Brew a cup of coffee or tea before going to their downloads page, then find the heading for you OS and take your time with the instructions - it's really not as complicated as it looks.

Use PosteRazor to print large maps on your home printer

Dungeon Builder maps are often much larger than what a home printer can manage. The free and clever [PosteRazor](#) can help you split huge maps into paper sized chunks ready for printing on any printer.

Download some mods!

Dungeon Builder was made for personalized content, and we've got a growing modding community over on [NexusMods](#). We really recommmend adding some extra options to your Dungeon Builder palette by installing some of the great mods already available.
If you [make something neat yourself](#), we'd love to see your art on there as well!

Use the Cheat Sheet

We've included a [Cheat Sheet](#) on the next page. It contains all of the hot keys and shortcuts in Dungeon Builder, and it's sure to improve your workflow considerably.

Cheat Sheet

Build or Summon tab: F1

Decorate or Roll tab: F2

Adjust tab: F3

Toggle Play Mode: F5

Open Manual: F10

Toggle Main Menu: F12

Save: CMD + S

Save As: CMD + SHIFT+S

Cut: CMD + X

Copy: CMD + C

Paste: CMD + V

Undo: CMD + Z

Redo: CMD + Y

Zoom In: CMD + Mouse Scroll Up or
CMD + Plus

Zoom Out: CMD + Mouse Scroll Down or
CMD + Minus

Place On Top: Hold SHIFT *while placing items*

Place At Back: Hold ALT *while placing items*

Ignore Snapping: Hold SHIFT *while moving items*

Normal Selection Mode: A

Isometric Selection Mode: S

Add to Selection: Hold CMD *while selecting*

Subtract from Selection: Hold ALT *while selecting*

Toggle Respect Groups: D

Mirror / Rotate: M or R

Delete: Delete or Backspace

Bring Forward: Page Up

Send Backwards: Page Down

Bring To Front: Home

**Send To Back:** End

Group Items: CMD + G

Ungroup: CMD + SHIFT + G

TIP: All shortcuts using the Command key also works with Control instead.

Adding Your Own Art to Dungeon Builder

Adding new art to Dungeon Builder is quite simple. The process has two steps: Make a drawing then add a definition. Depending on your artistic and logical skills, you may find one less easy than the other, but overall the process is still simple enough for everyone to go through.

The art in Dungeon Builder is just PNG (image) files. Where the drawing blocks the view, the background is white and where it doesn't it's transparent. The line isn't black black, but rather a dark grey (#404040), allowing it to become tinted a bit by the paper colour in the application.
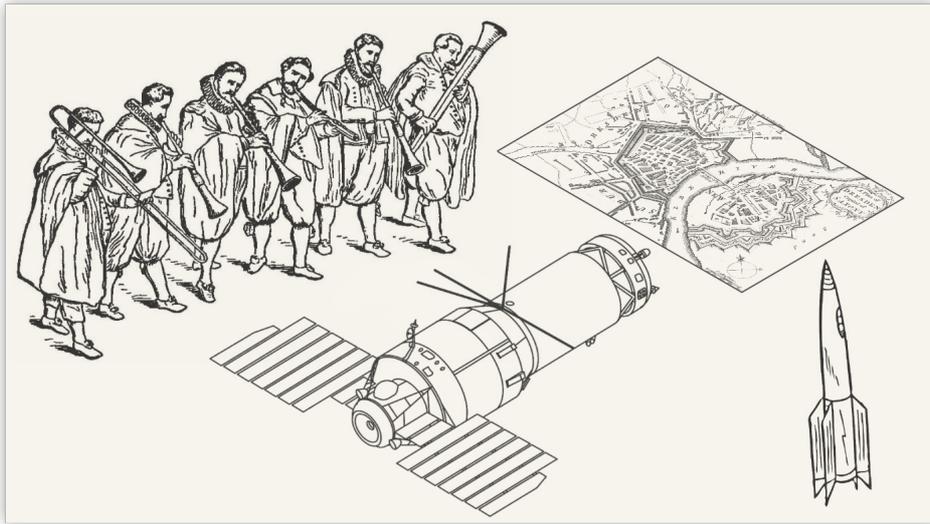
In order to get enough detail into your drawings, we recommend drawing at 400% scale and then scaling down before adding the drawing to Dungeon Builder. You can find a grid at 400% scale in your Custom folder.

If you're working from scans, photos etc. make sure to get rid of any noise or jitter in the sections of the image that is supposed to be transparent. Not only will the jitter make your maps look less good, but there's also a risk that it seriously affects the performance of your asset or even completely prevents the asset from being selected.

Please note: Images with a height and/or width above 4096 pixels are not supported. Some computers may even struggle with images that are more than 2048 pixels high or wide.

To navigate to your Custom folder on Mac, click the Manual & Custom Folder button in Dungeon Builder's menu.

Once you've made your drawing, it's time to make an XML definition file for it. This goes into the Art Definitions folder found in your Custom folder, and could be called something like "GoblinWall.xml" or "Asset Collection.xml".

> **TIP:** The built-in text editor on your Mac is not a good choice for editing XML. We recommend using TextMate or Brackets instead.

The Art Definitions folder has a subfolder for Build and Decorate assets, respectively. Apart from that, assets for these categories are defined in exactly the same way. In both the Build and Decorate folder is a Hobbyte folder, containing all of our public definitions and art. We recommend that you create your own folder with your definitions to keep things as separate and shareable as possible.

> TIP: You can copy our definition files to use as a base for your own assets.

Please note: In order for your assets to work on Linux, it is important the all the Art sub folders as well as the image file name itself are all lower case e.g. "art/zero cool/mywall.png" and not "art/Zero cool/MyWall.PNG".

The Anatomy of a Definition File

In order to provide some context for the discussion of definition files, an example is included below. Don't worry if you don't understand everything on your first read through - we'll explain everything right after the example.

```xml
<?xml version="1.0" encoding="utf-8"?>
<Settings>

  <SharedSettings>
    <Setting Key="Artist" Value="Aage Jørgensen, ArtByAage" />
    <Setting Key="ArtistURL" Value="http://artbyaage.blogspot.com/" />
    <Setting Key="ConceptCreator" Value="Oscar Muñoz" />
  </SharedSettings>

  <Placeable Name="Spiral Stairs 2">
    <Setting Key="ImagePath" Value="Art/Build/Hobbyte/Stairs/Stone Spiral Stairs 2.png" />

    <Setting Key="Category" Value="Stairs" />
    <Setting Key="SnapType" Value="Center" />
    <Setting Key="PlacementType" Value="Single" />

    <Setting Key="DrawingOffsetX" Value="-9" />
    <Setting Key="DrawingOffsetY" Value="-41" />
    <Setting Key="DrawingOffsetZ" Value="-5" />

    <Setting Key="CornerOffsetX" Value="0" />
    <Setting Key="CornerOffsetY" Value="90" />

    <Setting Key="StacksWithRelativeIsoPositions" Value="2,1;1,1" />
    <Setting Key="StacksWithImages" Value="Spiral Stairs 1;Spiral Stairs ("Flat") 1" />
  </Placeable>

</Settings>
```

The file begins with an XML header, describing that this is an UFT-8 encoded XML file. Below that is a **<Settings>** block - this just lets the Dungeon Builder know that we're looking at an asset settings file.

Next, we have the **<SharedSettings>** block. This contains default values for all placeables defined in the file. This is really handy for supplying the same artist or concept creator, as seen above, but it can be used for any shared settings. If you have a file with ten slight variations of the same placeable, you can put everything except the Image Path into the shared settings and save yourself a lot of work.

Everything that is unique to a placeable is defined in the **<Placeable>** block - except for the Placeable's name which is defined as an attribute within the opening Placeable tag. A definition file can contain any

number of Placeables. Each `<Setting>` tag within the Placeable block defines a setting for the placeable in question:

- **ImagePath:** This is the path to the image used for the placeable, relative to the Custom folder.
- **Category:** This describes the placeable's placement in the Category dropdown. If you write a category that is not defined yet, a new category will appear in Dungeon Builder.
- **Type:** This field is used by the application to determine what kind of placeable we're defining. The types currently supported are **Wall** and **None**, the latter of which is the default.
- **SnapType:** Describes whether the placeable snaps to the center, edges or corners of the grid. The types currently supported are **Center**, **Edge**, **Corner**, and **None**, the latter of which is the default. All the Snap Types refer to the edges, corners and centers of the built in isometric tiles, which are best made visible by placing floor tiles on the map.
- **PlacementType:** This field defines how the asset is placed. Chose between Line, Rectangle or Single.
- **DrawingOffsetX and Y:** This offset helps you shift the drawing from it's default placement with it's centre over the cursor to a more natural position. Negative values move the asset up and left, while positive values move the asset down and right, respectively. All of the built in assets are offset so they are placed so the mouse cursor points to the middle of the asset's perceived bottom when placing the asset.
- **DrawingOffsetZ:** This lets you send your asset further to the back or front of the drawing when placing it. This is useful for making sure that floors are drawn behind furniture etc.
- **CornerOffsetX and Y:** These settings should contain the offset from the placement location (defined with the drawing offset) to the lower right corner of the placeable. This is used for calculating the drawing order of assets.

If you've read the points above, you know enough to make an ordinary decoration asset. Before you read on, you should consider using your new knowledge for making a small asset.

> **TIP:** Setting **ShowPlaceableDebugInfo: True** in your configuration makes debugging offsets easier. The configuration file is called DungeonBuilder.cfg and is located in the same folder as your Custom folder. You can open the configuration file with any text editor.

The remaining asset settings are described below.

- **Artist:** The name or nickname of the asset artist.
- **ArtistURL:** A web address for the asset artist. Not currently displayed anywhere in the application.
- **Creator:** As Artist but for the sset creator (if different from the artist).
- **CreatorURL:** As ArtistURL but for the asset creator (if different from the artist).
- **ConceptCreator:** As Artist but for the asset's concept creator (if different from the artist).
- **ConceptCreatorURL:** As ArtistURL but for the asset's concept creator (if different from the artist).
- **ImageScale:** If you need to create an asset that is larger than the allowed image size, you can use ImageScale to scale an item. The default is "1.0", so to double the size of an image, set this setting to "2.0"; to halve it, set it to 0.5.

- **ImageScaleX and Y:** If you need to squeeze or stretch an image, you can use ImageScaleX and ImageScaleY instead of ImageScale. By setting the X and Y axis seperately, you can freely resize the image beyond its normal aspect ratio.
- **ColorTint:** You can set ColorTint to force a tint on an item. This way, you can prevent an image from being tinted by the map paper colour (by forcing a white tint) or you can create a coloured version of an existing asset. Allowed values are all hex colour codes with six hex values e.g. "#FFFFFF".
- **Opacity:** You can set Opacity to make an image more or less opaque. Values range from "0.0" to "1.0", so to turn an image half transparent, set the opacity to "0.5". Note that turning walls transparent is not recommended, since this will expose the wall Joints to the end user.
- **ImageScaleX and Y:** If you need to squeeze or stretch an image, you can use ImageScaleX and ImageScaleY instead of ImageScale. By setting the X and Y axis seperately, you can freely resize the image beyond its normal aspect ratio.
- **StacksWithRelativeIsoPositions:** The StacksWith settings can be used to ensure that an item always goes on top of another item. Of the built in items our low walls and our stairs use this. The StacksWithRelativeIsoPositions setting contains a semicolon-separated list of isometric offsets describing where to look for specific items that our item should be placed on top of e.g. "1,1;0,1". An increase on the isometric X axis moves down and right, while an increase in Y moves down and left, so 1,1 refers to the tile directly below the current, and 0,1 refers to the one on the lower left of the current. Repeating the same relative position is allowed if needed.
  An example of relative isometric positions is included just below this list.
- **StacksWithImages:** This setting contains semicolon-separated list of item names to check for at the corresponding relative isometric positions e.g. "Goblin Wall 1;Stone Floor". In this example, Goblin Wall 1 corresponds to the first relative isometric position and Stone Floor to the second. Repeating the same item name is allowed if needed.
- **Joints:** These settings are unique to walls and thus not shown in the example. Joints contain the image paths to drawings that make up the corners and middle sections of walls, allowing your walls to seamlessly fit together. If you decide to make your own wall it is highly recommended to copy one of our walls and working from there.
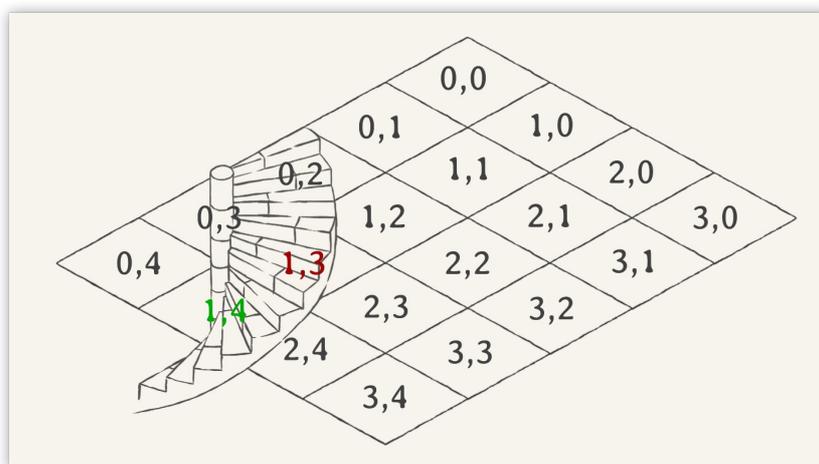
Relative Isometric Positions: The upper stairs on the coordinate 1,3 stacks with the the lower stairs on 1,4. The relative isometric position is difference between the green "target" and the red "source": 0,1.

Consider sharing your mods

Once you've followed the steps above, you've effectively created a Dungeon Builder Mod. We'd love to see your work, so if you're up for it, create a zip file with your Definition file(s) and art, go to NexusMods.com/dungeonbuilder and share your work with the rest of the Dungeon Builder community.