



Manual, revision 4

# Contents

1	Introduction	3
2	Terrain	3
2.1	Fractal Walls	3
2.2	Edge Painting	3
2.3	Keyboard Shortcuts	4
3	Icons	4
4	Light & Special Effects	4
4.1	Wall Light	5
4.2	White Walls	5
5	Export & Print	5
6	ASCII Import	5
7	User Imported Images	6
7.1	Import Icons	6
7.1.1	Icons Attributes	7
7.2	Import Terrains	7
7.2.1	Terrain Attributes	7
8	Workshop	8
9	Mod Creation	8
9.1	Mod Publishing	8
10	Start Options	9
11	Random Dungeons	9

## 1 Introduction

Illwinter's Floorplan Generator or IFG for short, is both a tool to create random dungeons and to draw battle maps with squares or hexes for role playing games. This manual will only explain the manual creation of floorplans, so press "Create Dungeon Floorplan" in the main menu to get started.



**Figure 1** The map editor where you design your maps.

## 2 Terrain

The main part of creating a floorplan will be to determine the correct terrain for all squares. It's quite simple, you click on a square to paint it with the currently selected terrain type. To change terrain type you can either right click on a square to pick up that terrain or you can press 't' to select terrain from a menu.

The easiest way to scroll the map so you can paint it all is to hold down the middle mouse button (or the scroll wheel). Another way is to use the arrow keys.

## 2.1 Fractal Walls

Whenever a rugged wall like a cave wall is adjacent to a natural terrain like a cave floor the wall will become jagged. If we use a man made wall or a smooth marble floor instead, the edge will be straight and smooth. Fractals are used automatically to create the transitions between terrain, you can press 'l' to rerandomize the fractals and thus alter the random part of the dungeon.

It is also possible to cut off square corners to create diagonal walls or just less square corners. By pressing 'v' on a square that square will be turned into a cut off square. The cut off attribute can be removed by pressing 'v' again.



**Figure 2** A cave floor automatically gives a rugged look to nearby cave walls and the marble floor results in straight cave walls instead. The cobblestones in the middle gives walls that are somewhat in between.

## 2.2 Edge Painting

Edge painting is useful when you want narrow walls between squares. Press '0' to switch to edge painting mode, '1' - '3' will switch back to normal painting mode with differently sized

brushes.

To remove painted edges you press 'd' while holding the mouse cursor above the edge you want to remove.

## 2.3 Keyboard Shortcuts

d	delete edge under cursor
e	edge painting
t	select terrain
G	show/hide grid
i	select icon
v	cut off corners
shift+b	bucket fill
0-4	brush size (0=edge paint)
ctrl+e	toggle 'wall light'
ctrl+l	load floorplan
ctrl+n	new room
ctrl+p	export/print menu
ctrl+s	save floorplan
ctrl+w	toggle 'white walls'
ctrl+z	undo
alt+b	summon bush
alt+d	summon door
alt+t	summon tree
F11	hide/show interface
delete	delete icon under cursor

**Table 1** Keyboard shortcuts

There are many keyboard shortcuts to

speed up things. The most important ones are listed in table 1. You can press '?' in the map editor to see them all.

## 3 Icons

When the terrain is completed you might want to place some icons on the map to represent furniture, doors, trees and other objects. To select an icon press 'i' and click on one of the icons. Most icons will be placed under walls by default, so you will have to click on a floor part of the map to place an icon in a visible spot.

There are many ways to modify an icon before placing it, read all the options on the left part of the screen when you have an icon selected. The most important shortcut is probably 'x' that will rotate the icon 90 degrees. To remove an icon, hold the mouse over it and press 'Delete'. By holding down Ctrl and right clicking on an icon, you will pick it up so it can be moved or modified in other ways.

## 4 Light & Special Effects

Press ctrl+o to open the settings menu, from which you can set up the desired light effects. Shadows default to dungeon shadows, this means that shadows are created in all directions which gives a suitable appearance for cave dungeons and similar settings. Outdoor shadows have the light from a single direction and walls and objects will only cast shadow in a single

direction.

The Shadows Strength setting can be changed if you want the shadows to be more or less prominent, the default value is 65.

## 4.1 Wall Light

The wall light option adds some light to the walls that are close to ground tiles. You can toggle this option by pressing ctrl-e in the editor.

## 4.2 White Walls

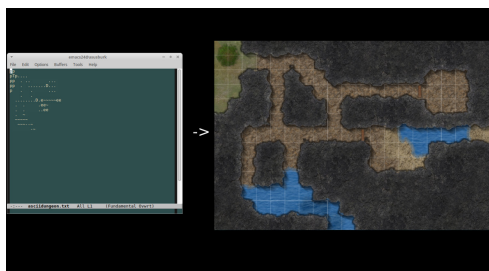
There is also an option to draw all walls as white that can be toggled by pressing ctrl-w in the editor. This is a printer ink saving feature that will turn all thick walls white, because they are unlikely to be part of the play area anyway.

## 5 Export & Print

When the dungeon is complete you will probably want to export it, either to a pdf or to an image file. Press ctrl-p to export the image and choose if you want it to go to your pdf reader or your paint program. Use the pdf-reader to print it and the paint program to save it as a file. You can also use the paint program to add in finishing touches before saving it or reimporting it and then creating a pdf with the modified dungeon.

## 6 ASCII Import

It is possible to import a dungeon layout from a simple text file (ASCII) where one character represents one square in the dungeon. This could be helpful for people developing their own dungeon creating scripts or when converting a dungeon from some other format.



**Figure 3** Importing a dungeon from a text file (ASCII import).

To import a dungeon from a text file, go to the File Menu and click on Import ASCII Dungeon. Another way to do this that is suitable for scripting, is to call IFG with the following start option:

```
--importascii=mydungeon.txt
```

The following table shows which text character corresponds to which terrain type or icon. If an icon is selected instead of a terrain, then IFG will guess what terrain would be suitable in that square depending on the surrounding terrain.

p	Plains
y	Shadeland
v	Savanna

d	Desert
w	Wasteland
a	Ash
s	Snow
~	Water
-	Deep Water
^	Black Sea
r	River
=	Frozen Water
#	Cave Wall
l	Lava
.	Cave Floor
M	Marble Floor
C	Chess Floor
c	Clouds
f	Flames
!	Void
S	Sewer
U	Murky Water
W	Stone Wall
f	Wooden Floor
e	Earth
O	Wood Wall
R	Air
l	Cliff
F	Fields
—	White
1	Wall
2	Cave Wall
3	Water
4	Fire
g	Dark Grass
b	Blank
5	Dotted Area
6	Striped Area
7	Debris
L	Cobblestones
H	Hexfloor
m	Muddy Snow
k	Wall
K	Floor

8	Wall
9	Floor
0	White Wall
G	Granite Floor
:	Stone Floor
space	Cave Wall
D	Door
B	Bush
T	Tree

## 7 User Imported Images

It is possible to create your own icons and terrain squares by creating a PNG image and saving it in the correct location. See the following chapters for details.

### 7.1 Import Icons

It is possible to import your own icons into IFG. To do so open ``File Menu'' / ``Import New Icons''. Here you can click on ``Open User Icons Directory'' to open a file browser showing directories that you can place new icons in.

If you want to create new categories for your icons, you can create new directories here and put the icons in those instead.

Usually putting the image file in one of the directories is all that is needed. An icon that should take up one square should be 64\*64 pixels large. A 128x64 large icon would be 2 squares wide. Icons can have any size and cover fractions of squares.

The file format of the image must be TGA (24- or 32-bit, uncompressed or

RLE) or PNG (not interlaced and not indexed colors).

### 7.1.1 Icons Attributes

It is also possible to give icons special attributes by giving them a special ending to the filename. This ending should be two underscores (\_\_) followed by one or more attributes. See table 2 for the attributes available. E.g. mynewstatue\_\_h.png would be a new icon that casts long shadows.

l	low, casts no shadows
h	high, casts longer shadows
d	door, drawn on top of walls

**Table 2** Icon Attributes

## 7.2 Import Terrains

It is possible to import your own terrain types into IFG. To do so open ``File Menu'' / ``Import New Terrains''. Here you can click on ``Open User Terrain Directory'' to open a file browser showing directories that you can place new terrain images in.

If you want to create new categories for your terrains, you can create new directories here and put the icons in those instead.

Usually putting the image file in one of the directories is all that is needed. A terrain image should be 64\*64, 128\*128, 256\*256 or 512\*512 pixels large. The image should probably be seamless as well, or you'll be able to

see where it repeats itself. The size of one square is 64\*64 pixels.

The file format of the image must be TGA (24- or 32-bit, uncompressed or RLE) or PNG (not interlaced and not indexed colors).

### 7.2.1 Terrain Attributes

It is also possible to give terrains special attributes by giving them a special ending to the filename. This ending should be two underscores (\_\_) followed by one or more attributes. See table 3 for the attributes available. E.g. goldwall\_\_w36.png would be a new terrain that is a very straight wall with no fuzziness.

w	wall
1	straightness 0 (default)
2	straightness 1
3	straightness 2
4	straightness 3 (completely straight)
5	fuzziness 0
6	fuzziness 1 (default)
7	fuzziness 2
8	fuzziness 3
b	black border
s	never shaded
S	don't cast shadows
n	reduced wall shade

**Table 3** Terrain Attributes

Straightness determines how jagged

the terrain will be, cave walls have straightness 0 and a space ship iron wall should have straightness 3. Fuzziness determines how it blends with surrounding terrains, walls usually have low fuzziness and natural ground terrains have fuzziness 2. Fuzziness 3 should normally not be used as it will be fuzzy with all adjacent terrains, regardless of their fuzziness.

Terrains with black borders (b) should also have fuzziness 0 (5) to get the correct look.

## 8 Workshop

From IFG's workshop page on steam you can subscribe to mods that adds user created content to IFG. Mods that are subscribed will be downloaded automatically after IFG has started from steam and the mods can be enabled or disabled by entering the Mods menu from the main menu.

Subscribed mods will be downloaded in the background, so an extra restart of IFG might be required after the mod has been downloaded.

Anyone can make mods and have them available on the steam workshop, see the Mod Creation chapter for details on how.

## 9 Mod Creation

Mod can be used to add a collection of icons in a way that is easy to share with other people. Sharing using steam's workshop can be configured to share with no one, friends or

everyone.

Creating a mod is easy as long as you already have the icons you want to include. Start by opening the mod folder by clicking *Mods/Open Mod Folder* from the main menu. There you should download and put the example mod called bwsecrets. It can be found on Illwinter's web page <http://www.illwinter.com/floorplan>. Unzip it so there is a single folder called bwsecrets there that in turn contains illfloormod.txt and a few other files.

This example mod will show you the necessary contents in a mod.

You'll find the illfloormod.txt among the files. It contains the meta data for the mod, including the mod's name and description.

You will also find a file called banner.png. It is the image that will be associated with your mod. It must exist and be a 128\*128 pixels large png file.

There will also be an icons directory. Create subdirectories in the icons directory and place your icon files there.

### 9.1 Mod Publishing

You can publish the mod on steam workshop so other users can subscribe to it. To do this go to the Mods menu and right click on your Mod. There will be a button labeled 'Publish Mod On Steam Workshop'.

After publishing a mod on steam the file illmod\_pfid will be created in the mods folder. It contains the steam workshop Id for the mod. Do not



delete this file, or you won't be able to update the mod later on.

## 10 Start Options

To be written

## 11 Random Dungeons

To be written