



Hello! In this part of the documentation you will find the most important informations, which allow you to create (or edit existing) level.

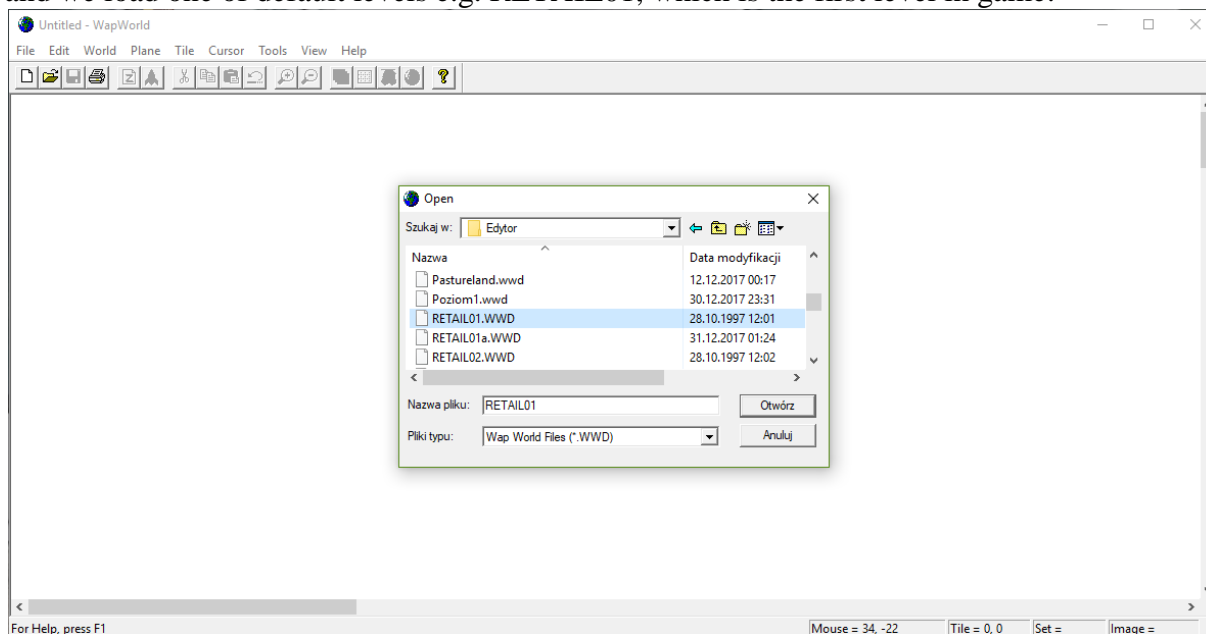
version: final, author: Pejti

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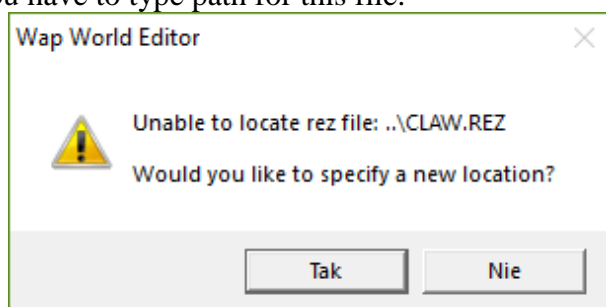
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## 1. Creating levels - informations

To create or edit level we will use WapWorld editor. Editor was made by Monolith Productions. You can create level from zero by setting everything step by step or you can edit existing level. I will show you second option because it is faster way. We open WapWorld and we load one of default levels e.g. RETAIL01, which is the first level in game.



This is exemplary screenshot where you can see loading of level. Remember that the levels (files) have .WWD extension. Click "Open" and you should see opened level. However in many cases when you want to open level, editor will inform you that it cannot localize CLAW.REZ file. It is normal editor behaviour. This file is in the game directory (Claw: version 1.0-1.3) and you have to type path for this file.



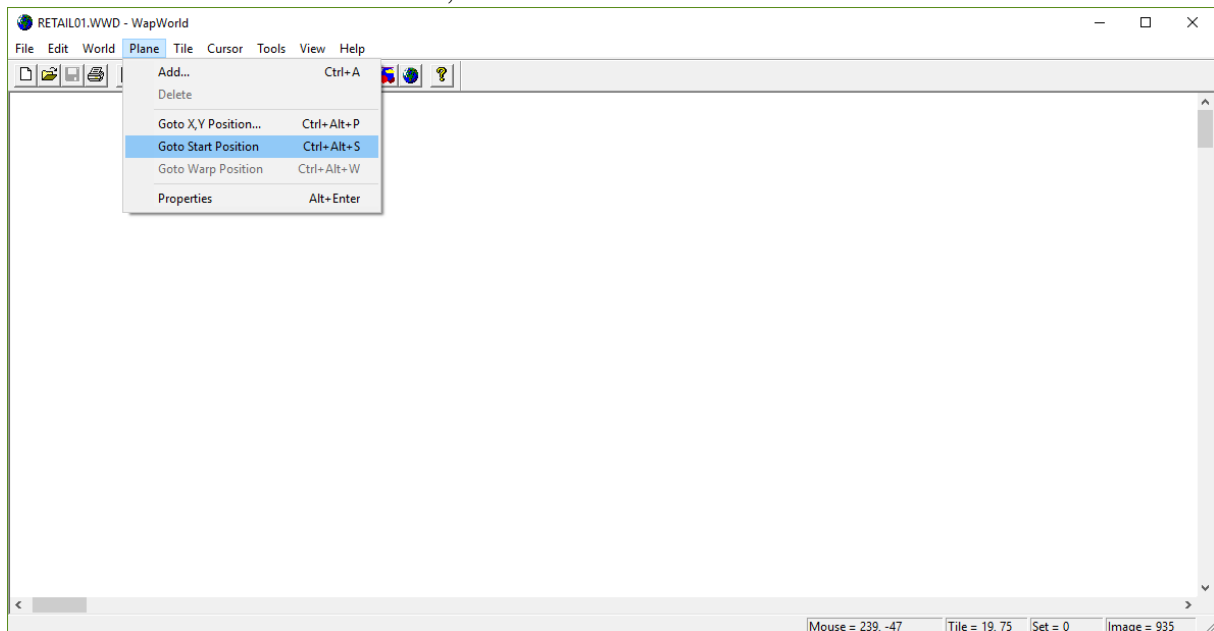
We click "Yes" and where there are "dots", we paste (or type) path for CLAW.REZ file. In red border there are marked fields with "dots". If path for file is: D:\GAMES\CLAW\CLAW.REZ, you need to copy only D:\GAMES\CLAW or you can copy whole path but then you will need delete everything in field Rez File: . The same analogy in field Launch App: . We copy D:\GAMES\CLAW and we paste instead "dots" or we copy D:\GAMES\CLAW\CLAW.EXE and we paste instead everything in this field. On the next page you can see where to paste path (screenshot).

**World Properties**

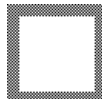
<b>Info</b> Name: <input type="text" value="Claw - Level 1"/> Author: <input type="text" value="Monolith Productions Inc."/> Birth: <input type="text" value="October 28, 1997"/>		<b>Resources</b> Rez File: <input type="text" value="..\CLAW.REZ"/> Image Dir: <input type="text" value="LEVEL1\TILES"/> Pal Rez: <input type="text" value="LEVEL1\PALETTES\"/>									
<b>Position</b> Start X: <input type="text" value="689"/> Start Y: <input type="text" value="4723"/>		<b>Flags</b> <input checked="" type="checkbox"/> Use Z Coords <input checked="" type="checkbox"/> Compress									
<b>Image Sets</b> <table border="1"> <tr> <td>Image Set 1: <input type="text" value="LEVEL1\IMAGES"/></td> <td>Prefix 1: <input type="text" value="LEVEL"/></td> </tr> <tr> <td>Image Set 2: <input type="text" value="GAME\IMAGES"/></td> <td>Prefix 2: <input type="text" value="GAME"/></td> </tr> <tr> <td>Image Set 3: <input type="text"/></td> <td>Prefix 3: <input type="text"/></td> </tr> <tr> <td>Image Set 4: <input type="text"/></td> <td>Prefix 4: <input type="text"/></td> </tr> </table>				Image Set 1: <input type="text" value="LEVEL1\IMAGES"/>	Prefix 1: <input type="text" value="LEVEL"/>	Image Set 2: <input type="text" value="GAME\IMAGES"/>	Prefix 2: <input type="text" value="GAME"/>	Image Set 3: <input type="text"/>	Prefix 3: <input type="text"/>	Image Set 4: <input type="text"/>	Prefix 4: <input type="text"/>
Image Set 1: <input type="text" value="LEVEL1\IMAGES"/>	Prefix 1: <input type="text" value="LEVEL"/>										
Image Set 2: <input type="text" value="GAME\IMAGES"/>	Prefix 2: <input type="text" value="GAME"/>										
Image Set 3: <input type="text"/>	Prefix 3: <input type="text"/>										
Image Set 4: <input type="text"/>	Prefix 4: <input type="text"/>										
<b>Misc</b> Launch App: <input type="text" value="..\CLAW.EXE"/>		Number of Planes: <input type="text" value="0"/> Number of Objects: <input type="text"/>									

OK Cancel

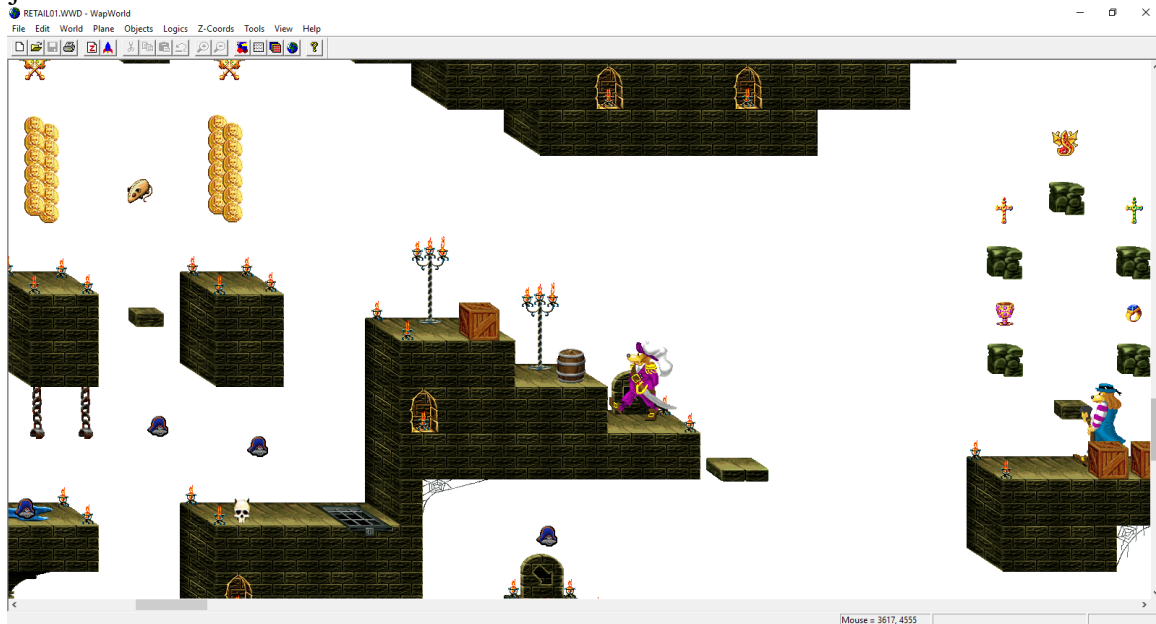
After this process we click "OK". We have opened level and from now we can edit level, save etc. Go to the starting position of level using CTRL+ALT+S shortcut. Also we can select from Menu bookmark Plane, then Goto Start Position:



Starting position is a place where you start your level. We focus on objects and tiles. If you see flashing grey square that means you are in Tile Mode. In this mode you can add tiles which are used to stand, climb (ladder) or death tiles.



You can quickly switch Tile Mode to Object Mode using CTRL+M shortcut. So switch to object mode and look at level.



### a) Objects

As you can see in screenshot above, we can add different objects. Treasures, opponents, elevators - there are just only some of all. To select object use LMB. If you use RMB you will see window of object with many options (screenshot below):

The most important fields are Logic: and Image Set: . First field is an object's logic - we set for every object one logic otherwise object will not work properly. In second field we set an object's image. In many logics image is an important part of object e.g. TreasurePowerup - one logic for every treasure but the image determines e.g. GAME\_TREASURE\_GOLDBARS (gold bar) how many points we will get.

In screenshot above (previous page) we can see window of object - coin. In gameplay coins do not have secondary "glitter" animation, so this treasure use GlitterlessPowerup logic, and below there is image for coin - GAME\_TREASURE\_COINS.

Every object has own place in level. X: , Y: Coordinates, also Z: value (you do not have to change this value if you create your first level, if you will have enough basic knowledge, then use it) are responsible for object place in level. In I: field default value is -1 and this value leave in this field.

In some objects the necessary fields are Logic:, Image Set: and coordinates. In rest objects we have to also type additional values in fields in Attributes part:

Attributes		
Score: 0	Points: 0	Smarts: 0
Powerup: 0	Damage: 0	Health: 0
Speed X: 0	Speed Y: 0	Face Dir: 0
<input type="checkbox"/> X Min: 0	X Max: 0	Direction: 0
<input type="checkbox"/> Y Min: 0	Y Max: 0	Speed: 0

As you can see above, for coin (treasure) you do not need to type values in other fields. When you will look into other objects properties e.g. Officer, you will see typed values in XMin: , XMax: fields (area for opponent patrol) and in field Powerup: often typed value for treasure, which is responsible for treasure which opponent has (if you want to add more treasures, you have to click on Rects..., and type values in User1 Rect User2 Rect fields).

Okay, it is time to add new object. You can do it in many ways:

- click double LMB, the new window will open with empty Logic: field and Image Set: field, which you will need to fill, then click "OK"
- you can copy object and paste there where is cursor

Added object can be moved in editor. If you want move object by one pixel use CTRL+→/←/↑/↓ shortcut (keyboard keys with arrows).

If you want move object by 10 pixels use SHIFT+→/←/↑/↓ shortcut.

These options you can find also in this bookmark Objects :

- Nudge Up/Left/Right/Down - move by one pixel
- Shove Up/Left/Right/Down - move by 10 pixels

We can also type own values in X: and Y: , you need to know that object with typed coordinates has to be in level area. Example - if your level has dimensions: 100x40 tiles (you have to multiply 100\*64 and 40\*64) - 6400x2400 pixels, it will not be properly to type coordinates e.g. X: 6450, Y: 100.

Good, you know how to add new object and you know which fields are important. Copy/cut object and paste object is simple, you can also use CTRL+C/CTRL+X -> CTRL+V shortcuts. If you want to delete object, just click on object and press "Delete" key, then confirm it.

It is good to mention about Z: value for object. You can use this value to hide object behind other or using object to cover another. When you look at the objects (especially in original game level) you can see that some objects have typed default Z value.

In simple words, object which has typed Z: value - 5000 will cover object which has typed Z: value - 1000, and this object will cover another object which has typed Z: value - 0, etc. It is important when you want to add decorations in level. Some decorations should have lower Z value than Claw, others higher Z value than Claw.

**All logics are described in third part of documentation.**

## **b) Tiles**

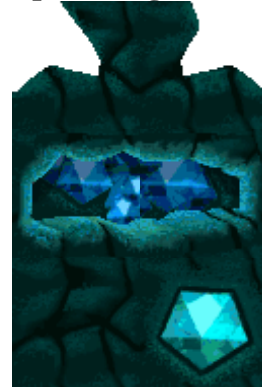
There are 5 types of tiles in game:

- Clear - tiles which are decoration or background in some levels

**Sample decoration tiles**



**Sample background tiles**

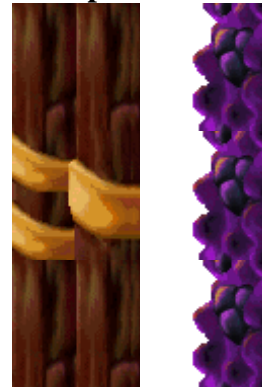


- Solid - Claw can stand on them or they can be used as wall, you cannot pass through these tiles

**Sample solid tiles**



**Sample wall tiles**



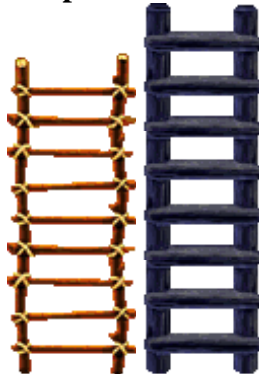
- Ground - Claw can stand on them and he can jump onto these tiles from below

**Sample *Ground* tiles**

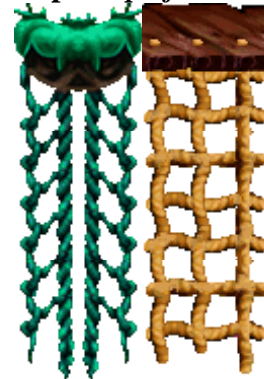


- Climb - tiles used as ladders etc

**Sample *ladders* tiles**



**Sample *rope/flora* tiles**



- Death - spikes or water/lava etc, these tiles will kill Claw

**Sample *spikes* tiles**



**Sample *lava* tiles**



Okay, you know types of tiles. I will show you how to add tiles to level. When you are in Object Mode, use again CTRL+M shortcut or you can click on icon (third from the left on



image) which is at the top, under Menu:

**Tile Mode**

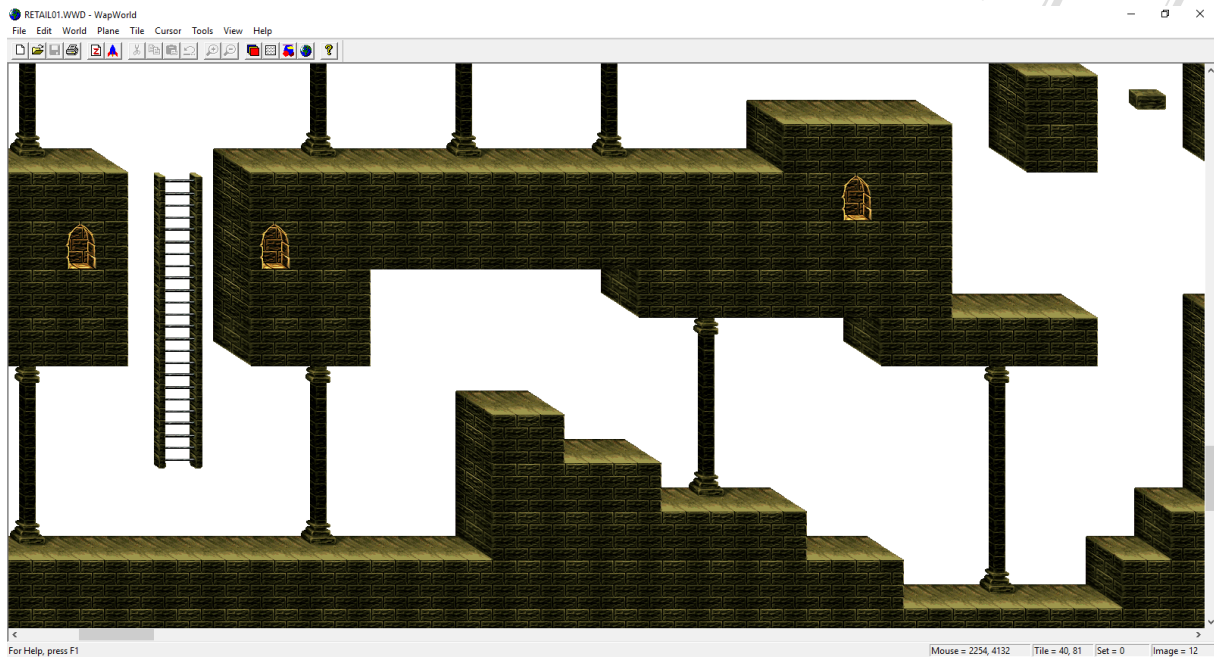
you can switch to Object Mode using the same shortcut or click again third icon from the left:



**Object Mode**

When you are in Tile Mode you should see that all objects are invisible. If in your plans is create level using scheme, you should switch sometimes between modes and check is everything is alright. On the next page you can see Tile Mode.





As you can see above, added tiles create scheme/framework of level. You can click on tile and add new or use *Delete* key on tile. It is good to open window where you can see available tiles. Just use CTRL+T shortcut or select **Selection Window** **Ctrl+T** in Tile bookmark.



Not only image but you can also see tile number (ID) in this window. You can decrease or increase images. Use minus "-" or plus "+". Screenshot above shows highest available size of images.

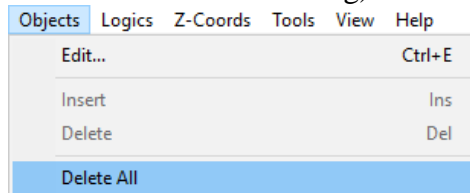
Select tile and add to level. You can do it in 4 ways. Click somewhere in level and check do you see grey, flashing square. First way - double click LMB on selected tile e.g. tile with ID = 12. Second way - use *Space* key. You can add tile not only from window but also using plus (next tile) and minus (previous tile).

Next way - type tile number but remember to use numbers keys which are above letters keys. Typing ID by using num keys do not work. Last way - use RMB. Second and last way inserts recently selected tile.

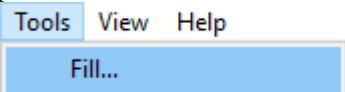


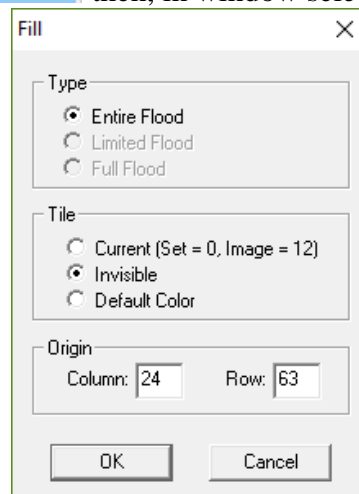
### c) Creating level from zero

When you will master with level editing using Tiles and objects, try to create level from zero. Just do some simple steps. Go to Object Mode. Delete all objects using option "Delete All" in Objects bookmark (you have to confirm deleting):



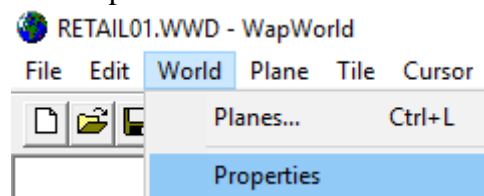
Next step, delete all tiles. Go to the second Mode and choose option "Fill..." from Tools

bookmark:  then, in window select Invisible option:



This option will fill whole level with "invisible tiles" what is equal to delete all tiles.

Last step, set new starting position and type your name/nickname as author of level. These fields you can find in "Properties" option in World bookmark:



Window with level settings is shown on third page of this document. In Author: field type you name/nickname and in *P*osition part type X coordinate and Y coordinate. From now you can create your first level. If you want to read about all functions in WapWorld editor check first part of documentation.