Wonderland Adventures Editor Guide

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1. Getting Started

1.1. Introduction

For those of you who don't know me: Hello, I'm Emerald141, and I'm one of the adventure designers on the forum. If you've ever worked with the Return to Wonderland Editor, you'll know it as being stable and simple, easy to work with and beginner-friendly. The Wonderland Adventures Editor? Not so much. It's far more complicated and can be completely baffling to a new user.

Hopefully, this guide will help you learn the ins and outs of the Editor without getting too many headaches. It is recommend you read as much of this as possible, as you'll more than likely pick up some useful information you didn't know before.

If you stumble across something and you don't know what it does, experiment! Who knows, it might be something totally new and an interesting discovery. But if you've looked around and can't make heads nor tails of it, feel free to ask on the forum! I or someone else will try to help you as soon as possible.

It's always nice to see levels made by new Adventure designers on this forum, and I hope this guide inspires you to go create a masterpiece of your own. Have fun!

1.2. The Forum

The official forum is your first stop for guides, tips, trick, adventures, and more. Hope to see you online! http://www.pcpuzzle.com/forum

2. The WA Player

This is a guide about how to use the Wonderland Adventures Editor, not a guide about how to play Wonderland Adventures. Therefore, the Player portion of this guide is rather brief.

2.1. Creating Your Stinker

The first time you fire up the Player, click on the text at the bottom of the screen to create your profile. Once you type in your name or username, you'll be able to choose between one of five characters to play as: Stinky, Loof, Qookie, Peegue, and your own custom Stinker. If you're creating a character of your own, left-click to advance through the various physical traits and right-click to go backward through the list. Choose your Stinker wisely, as you'll be playing as him/her/it for all your adventures to come!

2.2. Downloading Adventures

Under the main Editor folder, you'll see a folder called "User Data". Under that folder, there's another folder called "Custom". Under that folder, there's another folder called "Downloads Inbox". This is where the .wa3 files you download should go. Once you start the Player, they'll be unpacked and ready to play. If you're wanting to install a Hub, there should be installation instructions in the Hub's forum thread. Generally, Hubs go in UserData\Custom\Hubs\NameOfTheHub\TheHub'sAdventureAndHubFolders.

2.3. Uploading Adventures and Hubs

Under UserData\Custom, there's another folder called Downloads Outbox. Once your level is compiled, there should be a copy of your adventure under whatever filename you chose. Upload that file to the forum so people can play your adventure! For uploading hubs, go to UserData\Custom\Hubs and zip up the Hub's folder along with any custom content it requires.

2.4. Playing Adventures and Hubs

After selecting "Play Custom Adventure", you'll see a list of all the Adventures you've downloaded. To play an adventure, click on it and press "Play" at the bottom of the screen. You can then play the adventure just like you would play one in the official games. "Play Custom Hub" works in a similar way.

2.5. Archiving and Deleting Adventures

Once you've clicked on an adventure, you'll also have the option to archive or delete it. If you choose the Archive function, you'll be given the option to put it into an archive directory- if the one you want to put it in doesn't exist yet, type it out and press ENTER. Once you remove the last Adventure from an archive, the archive disappears. To scroll between archives, click the "Show:" button at the bottom of the screen when you don't have an adventure selected.

If you choose to delete an Adventure, the game will ask you for confirmation. If you say "Yes, delete" again, the Adventure will be permanently removed from your files (although you can always download it again if you want to).

Hubs do not have Archives, and have to be deleted manually by deleting their folder in UserData\Custom\Hubs.

2.6. Player Options

Under the Options section of the main menu, you'll find four handy adjusters for your game. You can change your player at any time, you can turn the arrow keys on and off (it's a really good idea to have them on), you can adjust the volume of the sound and music, and you can change what background the dialog boxes have. The Player also lets you choose how big you want the window to be every time you start it up.

3. The Main Editor Screen

There isn't really much to this section, but it does contain some useful basic information about starting adventures. You'll also want to read the last section of this part, "Right-Clicking and the Shift Key," as it will certainly come in handy when making adventures.

3.1. Creating Your Username

The first time you launch the Editor, it will ask you what you want your username to be. All you have to do is type it in with the keyboard. I highly recommend that you use the same username as you use on this forum, as using a different username can make your levels difficult to find.

If you want to change your username, just click "(CHANGE)" on the bottom of the screen. This will bring you back to the screen you saw when you created your username, with one difference- your current username will be in the selection list. Currently, there is no way to delete usernames.

3.2. Creating, Archiving, and Deleting Adventures

When you're at the adventure selection screen, just type in the filename of the adventure you want to create. I recommend using something like [YOURNAME]0001, as it's a good idea to have your adventures organized by order of publication when you play them. Don't use the # key when creating the filename, as the Editor won't accept it.

When you click on an adventure in the main screen, you'll be given four options. If you click "Edit", you'll be able to edit the adventure, which we'll go into in the next few sections. If you click "Move to Archive", then the adventure will be moved into the Archive folder- you can still access it, but can't do anything with it except move it back if you so choose. If you click "Delete", the Editor will ask you for a confirmation message, then delete the adventure and all its contents. Clicking "Cancel" will return you to the selection screen.

3.3. Transferring Adventures from the Player

Occasionally, you may have to take an adventure from the Player and put it in the Editor to examine. The adventure you're looking for should be in User Data\ Custom\Adventures\. Find the folder with the adventure's filename (note: usually NOT the name of the actual adventure!) and copy it to UserData\Custom\Editing\ Current. Just make sure that you remove the # symbol when you're copying.

3.4. Title and Description

In the adventure editing screen, you'll be given the opportunity to select a title and description for your adventure (which will both appear when you start it up). Having a description is highly recommended (albeit not required). Having a title, however, is mandatory- you can't play the adventure without one. To edit these fields, just move your cursor over the row you want to edit and type.

3.5. Starting Coordinates

Once you've made your first area, you can set the starting coordinates of the adventure. To find out what the coordinates of the spot you want are, just mouse over the spot and look at the coordinates at the bottom of the screen.

The "Dir" coordinate is the rotation that the player Stinker will initially be facing. 180 (default) is south, 270 is west, 0 is north, and 90 is east.

The starting location is always in Level 01. There is no way to change this, it is hardcoded into the program.

3.6. Gates and Keys

The Editor allows you to choose whether you want to use the gates and keys from WA1, MoFI, or PotZ through this selection feature. This is a cosmetic change only; it doesn't affect gameplay at all.

Version 1 is the one left over from the WA1 Editor; in it, Colour 13 is Mushroom. Version 2 changes Colour 13 to Fabric, and makes all Colour 10 keys appear as lockpicks. Version 3 change Colour 13 to Spooky, and adds in Colour 14 as Gold.

3.7. Winning Condition

Click on the Winning Condition box to change the text in it. If you want your adventure to have a specific goal, change the condition to match that goal. You can still collect Gold Stars to win the adventure under any of these conditions.

3.8. Custom Icons

If you go to UserData\Custom\Icons, you'll see a few icon sets which can be used for "Custom" items. If you want to create your own custom items, take the 'Standard' file, slap your icons onto the end, and put it in the directory as 'icons [NAME]'. Click on the field on the Editor screen to change the icon set - if the file you're looking for doesn't exist, the Editor will just revert back to the standard set.

3.9. Hub Commands

If you end up featuring this adventure in a Hub project, you can use this panel to help it interact with the rest of the Hub. If the adventure is won, the player will be deposited at the coordinates specified in WonExit; if the adventure is lost, the player will come out at the LostExit coordinates instead. Additionally, when the adventure is won, up to three commands may be executed; unlike other commands, these can be executed in any hub level you want! "LV" is the level that the commands will be executed in, "C" is the command to be executed, and the four "D"s are, in order, Data1, Data2, Data3, and Data4.

3.10. Three Ways to Exit

Once you feel you're done for the day, exit out of the adventure with one of the buttons at the bottom. 'Cancel and Exit' will return you to the main screen without saving any changes you made to the adventure title, description, starting coordinates, winning condition, or custom icon set (changes to dialogs and levels will still be there). 'Save and Exit' will return you to the main screen AND save the changes Cancel doesn't save. 'Compile and Exit' is like 'Save and Exit', but you'll be able to play the most recent version of that adventure in the Player.

3.11. Right-Clicking and the Shift Key

This doesn't really belong here, but I thought this was the best place for it. By right-clicking on a field, you can usually make it less than it was. Right-clicking on a space in the Editor screen will also 'pick up' whatever object or tile is currently there. By holding the Shift key while clicking on something, it will usually go much faster (this also includes camera controls). Use these keys strategically and you'll be able to do stuff much more easily!

4. Level Making: General Settings

The next three chapters are about the level making screen. This one is about the general settings on the right and bottom, the next one is about tiles, and the one after that is about objects.

4.1. Camera Controls

The main controls you'll need to use are just the arrow keys; however, there are some other controls that you can use to move the camera as well. They're just like the Alt-X controls in RTW, except you don't need to press Alt-X while using them. Specific keypad keys also fulfill the same purpose.

These are the numpad and keyboard keys to move the camera:
1/Z tilts the camera down (frog-view).
2/X moves the camera south/down.
3/C zooms the camera in.
4/A moves the camera left/west.
6/D moves the camera right/east.
7/Q tilts the camera up (bird-view).
8/W moves the camera up/north.
9/E zooms the camera out.
The key 2 (not on the numpad) tilts the level left.
The key 3 (not on the numpad) tilts the level right.

4.2. Adjusting the Level Boundaries

In the very upper-right hand corner, you'll see the two variables for width and height of the level. Clicking on the left or right arrows of width will add tiles to the left or right of the level, respectively. Clicking on the left or right arrows of height will add tiles to the top or bottom of the level, respectively. You can also right-click on the arrows to subtract tiles from that side.

4.3. Blocking and Wiping

If you select the button "Block", you will be able to lay down multiple tiles at once in a rectangle (in a similar manner to the RTW Editor button Block). Wipe will replace all the tiles in the level with the one you have currently selected, although it will not give you a confirmation message. Wipes are best used at the beginning of levels, but Blocks can be used at any time.

4.4. Flipping X, Y, and XY

By selecting Flip X, the entire level and all its objects will perform a mirror-image flip across the Y axis (i.e. what was once at the left will now be at the right, and vice versa). Flip Y works the opposite way, taking the bottom and putting it at the top. Flip XY does both of them at once, although it's a little glitchy- anything outside the largest possible square will be "cut off" and turned into a Floor Basic Style 1, so I wouldn't recommend it.

There is also a glitch in the Editor known as the "Flipglitch". This glitch allows you to place more than one object on a tile at a time. To do the flipglitch, place one of the objects you want on the tile you want it on, and press "Flip X" (Flip Y also works!). The level should looked flipped around. Find the tile that you want the second object on, and place the second object on the tile. You should now have two objects on the same tile! Press "Flip X" again to return the level to its original state. Note: the flipglitch does not work with "Flip XY".

4.5. Toggling Logic and Level

If you click "Hide Logic" and turn it into "Show Logic", the individual logic of each tile will be shown. Red indicates a wall, indigo indicates water, cyan indicates any type of ice, and normal indicates a floor. To change it back, click the Logic button again.

If you click "Show Level" and turn it into "Hide Level", all the tiles will seem to disappear. The only thing left will be the water height, styles (blue, void, green, or rainbow), and the objects. Click the Level button again to change it back to normal.

4.6. Current and Duplicate Borders

The Border button affects which tiles will get placed when you expand the level. If it is set to Current, all new tiles will be whatever tile you currently have selected. However, if it is set to Duplicate, new tiles along one edge will be duplicates of the former border tile.

4.7. Weather

Directly underneath the dimensions adjustment box, you'll see another box with several variables inside it. The first variable is Weather. You can set the weather to Clear Sky, Light Snow, Heavy Snow, BlizzardRL (blows from right to left), BlizzardLR (blows from left to right), Rain, Weird (rapidly changes color, used mostly in Void-like areas), Thunderstorm, Alarm (like the one used in the Z-Bots' lair near the beginning of PotZ), Light Rise/Fall (causes small yellow particles to rise from or fall into the floor), Rainbow Rise/Fall (does the same thing with rainbow particles), Foggy, FoggyGreen, Leaves, SandStorm, or Abstract (used in Morklin's Flash Void in WA3).

4.8. Music

Under Weather is the music selection. You can set it to any of the tracks used in the three official games; the label will indicate what track you're using.

Advanced users may wish to use custom music. Instructions for doing so may be found in the Kooky's Music Pack thread: http://pcpuzzle.com/forum/viewtopic.php?t=21728

4.9. Level Textures

By left-clicking on LevelTex, you can choose between the available level textures: Abstract, Beach, Castle, Cave, Cave2, Cellar, Desert, Forest, Hills, Jaava (actually Uo), JTemple (Jungle Temple), Jungle, Lava, Snow, Spooky, Stars, Sundog, Techno, Temple, Town, and Uo (actually a bizarre rainbow cave texture). You can also right-click to select your own custom texture.

4.10. Custom Level and Water Textures

Custom textures must be placed in User Data\Custom\LevelTextures, and have three files: "backgroundtex [NAME]1", "backgroundtex [NAME]2", and "leveltex [NAME]" (where [NAME] is the texture name). Water textures must be divided into four columns and be named "watertex [NAME]". For further information, see the readme in that folder.

4.11. Flow, Transparency, and Glow

Underneath WaterTex you'll see three values: Fl, Tr, and Gl (short for Flow, Transparency, and Glow, respectively). These three values affect all the water in the area.

If Flow is set to 0, then the water is still. If it is set to 1 or higher, it moves (the higher the number, the faster it moves). If it is -1 or lower, it rocks back and forth (the lower the number, the more violently it rocks.

If Transparency is set to 1, the water is transparent, i.e. you can see through it, just like regular water. If it is set to 0, it is opaque and cannot be seen through.

If Glow is set to 1, the water has a minor luminescent quality. If it is set to 0, it does not.

4.12. Lighting

Under the word "Light", you'll see two sets of three numbers. The first set represents normal, directional light (brightens only certain sides of objects). The second set is ambient light (brightens all parts of objects equally). The first number of each set is red light, the second is green light, and the third is blue light. Keep in mind that you can always adjust lighting in-game with Command 6 (see section 8.6).

5. Level Making: Tiles

Tiles make up the "grid" of the level. If an Adventure is a play, then Tiles are the stage, and Objects are the actors. This section will cover Tiles briefly.

I should warn you in advance: not all tile attributes are visible in the Editor. For instance, you won't be able to tell if a tile's edges are smooth or jagged just by looking, since they'll always look smooth. The only way to be sure is to right-click on the tile you want to inspect.

5.1. The Default Tiles

If you click the "Category" button in tile mode, you'll see that there are four basic categories: floor, ice, walls, and water. This subsection covers each of them.

Floors: These come in basic styles 1, 2, and 3, although there are plenty more available. Basic Style 1 is probably the one you'll be using most often.

Ice: These come in Corner, Straight, and Wall. Corner is the only tile where the orientation of the top makes a difference in gameplay. For the wall, I suggest you change the wall top to be the same as the sides (see section 5.2) for appearance purposes.

Wall: Come in styles 1, 2, and 3, with four heights each. Style 1 you'll be using a lot. Style 2 you might be using sometimes. I wouldn't recommend using Style 3, as it looks very out of place and unnatural.

Water: Comes in three depths. Not really much to explain here.

5.2. Painting and Rotating Tiles

Click on the side or top of a tile to repaint it. Once you left-click on it, you'll be able to choose from 64 styles to put it down as (although not all of them have anything on them). Right-clicking will rotate through 8 position (four 90 degree rotations, repeated by the same rotations but mirror-imaged).

5.3. Water Height and Turbulence

Each tile has a certain amount of water in it, even if you can't see it. The default water height (noted as WHeight) is -0.2, that is, water begins one-fifth of a unit under the floor. The water height and Xtrude (see section 5.4) should always be at least 0.2 apart, otherwise you might get some very unusual appearances in-game. For your first adventure, I'd recommend just keeping the water height as -0.2.

Water Turbulence (noted as WTurb) is the height of the waves in the water. For calm lakes, put the WTurb low; for stormy seas, put it high.

5.4. Extrusion and Height

Extrusion (noted as Xtrude) is how tall, short, or deep the tile is. Xtrudes range between 5.0 and -10.0, where 5.0 is a wall of height 5 and -10.0 is a water tile/chasm of depth 10. Height raises the tops of the tiles without raising the sides, which can give the level a hilly, natural look.

5.5. Corners, Edges, and Random

Corners of tiles can be set to Round or Square. Edges can be set to Jagged (better used in outdoor scenes) or Smooth (better used in indoor scenes). You'll also notice a feature noted as Random, which creates a random small hump on the top of the tile. The value you put in is the maximum height of the hump. None of these features are visible in the Editor.

5.6. Tile Logic

In semi-rare circumstances, you may want to make tiles behave like other tiles. If you ever have one of these cases, click the Logic button near the top of the field. Here, you can make the tile behave like a Floor, Wall, Water, Ice, Ice Corner, or Ice Wall. Be careful not to overuse this, as it can lead to severe confusion if done incorrectly. Logic comes in handy with large objects, as you may need to make the tiles they occupy act like walls or floors. (This is also the only way you can make a lava tile.)

5.7. Crossing Out Factors

By pressing Enter while your cursor is over a field, a dashed line will appear above the field and the parameter will be "crossed out" (you can even do this with textures). Once this happens, the tile you place will simply ignore that part and leave it as it was with the previous tile. This can be incredibly helpful if you need to convert large sections of a level to having different corner or edge textures (which is pretty much all I use it for).

6. Level Making: Objects

While this guide assumes you know how to play Wonderland Adventures, recaps on what specific objects do may occasionally be necessary. This section of the guide covers all the categories of objects and part of what their contents do in-game. Brace yourself, though; this is the longest section in the guide.

Also, just like tiles, not all object properties show up in the Editor. Fortunately, you can right-click on objects to display all their attributes. If an object has more than one page of adjusters and you need to edit them, you can scroll to an object that has more than one page in the object window so that the "More" button appears, and then right click on the object you want to edit. This works best if you scroll to the same kind of object you're wanting to edit.

6.1. Common Object Modifiers

You'll need to know these, because quite a few objects use them and it wouldn't make sense for me to lay them out every time. Read carefully!

6.1.1. ID
All objects have an ID, or Identification number, so that they can be affected by certain commands listed in Section 8. If you don't need or want the object to be affected by commands, use ID -1. Also try to keep IDs below 500 (see section 6.1.5 for why).

6.1.2. Active
A large number of objects have this variable. It determines whether an object is active or not, i.e. does it appear in the level currently. An object's activity can be altered by Commands 1, 2, and 3 (see sections 8.1-8.3).

6.1.3. Colour and SubColour

Gates, teleporters, and some other objects have Colours and Subcolours that affect their appearance. The image below shows how the Colour values from 0 to 15 affect appearance for Gates/Keys Version 1:

You can alter some of the visual effects of the Color variable via the Gates/Keys option on the main screen (see section 3.6), although this won't have any impact on gameplay.

Each colour has five Subcolours: 0, 1, 2, 3, and 4. None of these have any effect visually, except for on Teleporters where subcolours 3 and 4 cause the teleporter to have a different animation.

You'll notice that objects with Colour and Subcolour rarely have an ID function; this is because these two values themselves determine their IDs. The formula for figuring out a colour object's ID: 500 + five times the colour + the subcolour. For example, a red gate with subcolour 0 would have ID 500, whereas a green gate with subcolour 3 would have ID 518.

6.1.4. YawAdjust, PitchAdjust, and RollAdjust

These three values change the orientation of the object. YawAdjust rotates the object along the XY plane (that is to say, normally), PitchAdjust rotates the object along the YZ plane, and RollAdjust rotates the object along the XZ plane.

6.1.5. ScaleAdjust, XScale, YScale, and ZScale

These properties determine how big or small the object is. XScale determines length, YScale determines width, and ZScale determines height. ScaleAdjust affects all three at once.

6.1.6. XAdjust, YAdjust, and ZAdjust

These can be used to make the object look like it's in a different place. XAdjust moves it west or east, YAdjust moves it north or south, and ZAdjust moves it up or down. Keep in mind that the game will still act as if the object was in its original position.

6.1.7. Timer and TimerMax1

Certain objects that do things at regular intervals have one or both of these two variables. Timer denotes how many frames pass before the action is first taken. TimerMax1 denotes how many frames pass between actions. There is also a TimerMax2, but only the Fire Trap has it (see section 6.19.2).

6.1.8. ActivationType and ActivationSpeed

ActivationType is the way an object activates or deactivates. For most objects, this will automatically be set to 0. If you change it to one of these five values, the animation will change:

1: GrowZ
2: GrowXYZ
3: GrowXY
11: Gate
21: Fade

ActivationSpeed is how long an object takes to activate or deactivate. It can be from 2 (slow) to 40 (fast), but only even numbers are available. If ActivationSpeed is set to 0, the object won't be activatable at all.

6.1.9. ActivateID

ActivateID denotes what objects can use that particular object. ActivateID can be set to Pla (only the player can use it), All, or a positive number (only objects with that ID can use it).

6.1.10. Particles

There are 64 particles in the game, represented by the numbers 0-63. Midnight Synergy has made a chart, with the top row of particles being 0-7, the second row being 8-15, and so on:

6.1.11. TextureName

Unlike other modifiers, TextureName accepts a string instead of a number. The Editor doesn't actually say "TextureName" in the adjustment panel; it just says what the TextureName is (the default is usually !None, in objects of CustomModel category default is Default that points to UserData\Custom\ Objecttextures\default.jpg).

If you want to apply a new texture to an object, there are two ways to do it. The first is the official method: placing the new texture in UserData\Custom\ Objecttextures and typing its filename without the extension into the TextureName field. So, for example, if the texture file was titled "blueduck.jpg", you would type "blueduck" (without the quotes) into the field. This method is nice because it actually allows you to see the texture in the Editor. Sadly, it has a drawback: the only file type supported is .jpg, which doesn't allow for very much picture quality.

In light of this, the preferred method is the unofficial one: creating a new folder called "Custom" in the root directory alongside Data and UserData, and placing all the textures in there. With this method, the TextureName field needs the whole file path starting from the root directory; so, for example, if your texture was titled "purpleduck.png", you would enter "Custom\purpleduck.png" (without the quotes) into the field. Remember to use a backslash instead of a regular slash! You will also have to add TextureName field manually to the object (see section 6.22.2).

6.2. Boxes

Boxes are stationary and static; the only way to interact with them is to destroy them or use Flash on them. The player can also walk around them diagonally.

6.2.1. Regular and TNT Barrel

When destroyed, regular barrels simply disappear in a shower of harmless white star particles. TNT barrels, however, let out fireballs in all eight directions when destroyed. This means that if you have a long chain of TNT barrels, you only need to destroy one of them in order to set off a chain reaction that will take out all of them.

6.2.2. Cuboid

If the adventure's winning condition is set to Destroy All Bricks, then all cuboids must be destroyed to complete the adventure. In addition, when a cuboid is destroyed, it can optionally execute a command, a feature that is new to the WA3 editor. Cuboids also give 100 points when destroyed, and can be visually adjusted with Colour. This is one of the few cases when Colour has no affect on ID.

6.3. Bridges

Not to be confused with the object that actually looks like a bridge, which is in the Houses category. Bridge is a general term, and here envelops several other objects as well.

6.3.1. Alternating Bridge

Alternating bridges move up and down at regular intervals. Apart from this and having two extra variables, they're just like regular bridges.

6.3.2. Collapsing and Regular Bridge

Collapsing bridges sink back into the water after being stepped off of. Regular bridges can be used indefinitely. All three bridge types have two special variables: ActivationType, which determines the style in which they activate/deactivate, and Sound, which determines what noise they make while doing so.

6.3.3. Conveyor

Conveyors consist of a Lead followed by one or more Tails. If the Lead's Logic is set to Move, the conveyor moves along automatically; if it's set to Step, it advances by one tile each time the player steps on a part of the conveyor. If Visual

Type is set to 4 instead of 3, conveyors appear as Star Trails.

All Conveyor Tails in the same conveyor must have the same Colour and SubColour as their Lead. This is to allow multiple Conveyors to exist in the same pool of water.

6.3.4. FlipBridge

Although it doesn't show in the Editor, Flip Bridges extend three tiles out from the center in both directions that they point. This means that if you're designing a pool that a FlipBridge can rotate freely in without collapsing, it needs to be a 7x7 square pool; the only tiles in this 7x7 area that can be floors are the corners.

6.3.5. Ice Float

Ice Floats can be slid across only once before they disappear. If you want one to reappear in place of the old one, you'll have to use Brr magic.

6.3.6. Rainbow Float

There's not really much to explain here. Rainbow Floats effectively act like collapsing bridges.

6.3.7. Spring

Springs send you flying through the air whenever you stand in front of them. While they do have a colour and subcolour, it doesn't affect their appearance. Direction can be set from 0 to 7 and can be changed with rotators (see section 6.4.4).

6.3.8. Suction Tube

Due to a glitch, Suction Tubes appear entirely black in the Editor (and, except for the arrow on the top, the Player) to some users. Direction 0 launches the player north, 1 is east, 2 is south, and 3 is west.

6.3.9. Transporter

Once you step on a transporter, you will ride it until it stops at the edge of the water. At this point, it will turn 180 degrees. Colour and subcolour have visual effects on the square in the middle.

6.4. Buttons

There are two types of buttons: shape buttons, and command buttons. Parts 1-4 of this section cover the former, whereas parts 5 and 6 cover the latter.

6.4.1. Standard Colour Buttons

You're likely already familiar with the five basic types of colour button: the diamond, which acts as a toggler; the DiamondOnce, which is like a diamond but only works once; the circle, which only activates items while it's being pressed; the square, which simply activates the items; and the star, which is linked to a timer. Each of these buttons can hold four colours, though if you only want one you should set all of them to be that one. There's also an ActivateID variable.

6.4.2. Colour Changers

Denoted as "Colour X2Y" buttons, these buttons can change the colour- and, therefore, the ID- of some items, such as gates and transporters (note: they will not affect springs or traps). All the buttons are one-way, except for the two Diamond ones which swap the colours.

6.4.3. Invisible Buttons

Invisible buttons behave exactly like regular buttons. You can see them in the Editor, but not in the Player. They also make no sound. Both standard colour buttons and colour changers have invisible counterparts.

6.4.4. Rotators

Rotators, despite looking like circle buttons, actually act like diamond buttons (i.e. you can do the action and not have it be undone once you step off). They can turn transporters and springs clockwise or counterclockwise- 45 degrees at a time for springs and 90 degrees at a time for transporters. One fault of them is that they can only carry one colour, but in most cases that won't be a problem.

6.4.5. NPC Change, Exclamation, and Move

These buttons are marked by a small "X", which is invisible in-game. NPC Change can drastically alter the behavior of a Stinker, NPC Move can make any NPC move to a different location, and NPC Exclamation can put a particle (see section 6.1.10) over their head. All of these buttons have commands that do the same thing (see Commands 62-64 in Section 8).

6.4.6. General Command

This is the button that can do pretty much anything. It can activate any of the game-changing commands (see section 8 for a list). Just make sure you have Repeatable set to what you want it; that's one of the most common glitches in levels.

6.5. Environment

These are different types of particle generators used for scenery and atmosphere. Blinker causes a single particle to pulse in intensity. CircleBurst lets off particles in all directions. Sparks creates a shower of sparks, with optional "welding" sound effects. Spiral lets off a continuous stream of particles and slowly rotates the direction the particles go out from. Splish creates ripples on the surface of the water. Spray makes a small particle fountain. Steam creates a small steam shoot. None of these have any effect on gameplay, and the particles created may be altered as desired (see section 6.1.10).

6.6. Gates

Gates are common obstacles, although different types of gates serve very different functions.

6.6.1. AutoDoors

AutoDoors allow up to three ActivateID settings to be used (see section 6.1.9). If you want a door to respond to only one ID, set all three ActivateID fields to that specific ID. An ActivateID of 0 translates to "All". These field do something weird; if they go into negative numbers, the name of the field switches to "ActivateType". ActivateType 1 means that only the player can open the AutoDoor; if any other ActivateTypes have a purpose, it is as of yet unknown.

An AutoDoor can be opened if an object with the specified ID is within two tiles of the door (diagonal tiles work too).

6.6.2. Colour Block

The main feature of a Colour Block is its adjustable colour feature. The only way to change the position of a gate is via button, command, or key. The Frame field can be changed to make it look more high-tech, and changing ActivationType can produce some interesting effects.

6.6.3. Dungeon Door

This functions exactly like a Colour Block, but looks different. You can also change this gate's appearance, by changing the style to make it look red or green (note: not the actual gameplay-type colour!)

6.6.4. TollGate

Tollgates require Coins or Stars to be passed. If the gate is a Stargate, your Stars can be used again. If it is a Coingate, however, your Coins will be taken from you. Unless you're planning to make a hub or an intentionally impassable barrier, you should always use Coingates; you'll never have any Stars if you're just playing individual adventures. If you set the cost of a Stargate to a negative number, the cost in-game will be the amount of Stars you currently have when you first enter the room with the gate + the amount you set the cost to. For example, if you set the cost to -5 and you have 1 Star, the gate will require 6 Stars. Once the cost has been calculated, it cannot be recalculated by leaving and reentering the room. Also, using negative numbers on Coingates has no effect.

Do not confuse this type of gate with the one for Rainbow Coins (see section 6.16.2).

6.7. Houses

These are mostly town decorative objects. It should be noted that placing one of these items does not necessarily make it solid - you'll have to change the logic of the individual tiles it occupies. Also, Cottage, Townhouse1, and Townhouse2 all have their own specific door type- all others will work, but won't look in place. In addition, the Cottage Door only functions properly at 45, 90, 135, 180, etc… degrees.

6.8. Indoor

The only one of these six objects that has any gameplay effect is the Arcade, so that's what I'll be discussing. You can have up to three AdventureStart stars (see section 6.10.1) adjacent to the Arcade that can be activated by tokens. (If you want to, you could activate objects besides AdventureStars, such as fireflowers or gates. They just need to have the right ID number.)

Data0 is the ID number of the first AdventureStar to activate, and should be set to 2, 5, 7, 10, 13, or any subsequent number in that sequence (dividing by 3 produces

a remainder of 2). You won't be able to activate three AdventureStars if it isn't. The second and third AdventureStars should have IDs of Data0+1 and Data0+2, respectively.

6.9. Items

A number of significant gameplay objects. You'll likely be using these a lot.

6.9.1. Coin and Gem

Coins and Gems usually aren't necessary to complete the adventure, but they do help contribute toward "Gold" status. Coins can be used for Dialog FNC 4 and TollGates. Gems come in three different styles: 100 points, 250 points, and Shard.

To enable Shard teleportation, use Command 114. The Shards cannot be used in levels 93, 94, and 95.

If you're using the Shards in a Hub, these are the coordinates that they warp you to:

red: -70.wlv, (11, 15)
orange: -12.wlv, (17, 19)
yellow: -44.wlv, (34, 14)
green: -90.wlv, (16, 15)
blue: -64.wlv, (14, 12)
indigo: -21.wlv, (10, 16)
purple: -86.wlv, (11, 12)

6.9.2. Custom Items

One of the most complicated items. The Fn ID field is what ID an object needs to have in order to be affected by the custom item (and also the number scanned for in item collections, see section 7.5). Texture can be set from 0 to 63 and determines what the object looks like (different textures for different Custom Icon sets, should you use your own).

Function (Fn) can be set to Win Adventure, ID On/Off/Tog Local (changes the Active status of an object you're standing next to), or ID On/Off/Tog Global (changes the Active status of all the objects with select ID in the entire area). There are also starred (*) versions of these functions that mean the item is not picked up, but activated upon collection, and plussed (+) versions that can be used

multiple times. Finally, there are items that act as the Spy-Eye, GlowGem, Lamp, and Gloves.

When starting an Adventure, the player automatically starts with Gloves, a Spy-Eye, and a GlowGem. In Hubs, they don't.

6.9.3. Gold Star

Once collected, the Adventure is completed. You may notice that it appears to sink into the floor; this is normal and will show up at its regular height during gameplay.

6.9.4. Key and KeyCard

An item that, when used, opens an adjacent gate/door. This is a rare case where the Colour and Subcolour do not determine the item's ID; they simply determine what gate the key unlocks. KeyCards perform the same function as Keys, but can only operate between Colours 0 through 7.

6.9.5. Token

For use with Arcade machines (see section 6.8).

6.10. LevelExits

Three types of exits for the level. One is used in Hubs to lead to new Adventures, one is the regular kind used by you, and one is used for Wee Stinkers.

6.10.1. AdventureStart

Data0 determines the Adventure that this AdventureStart star will send you to. If you set it to 9, it will start the adventure with folder title Adventure9, for example.

6.10.2. LevelExit

A red arrow on the floor. You can program this object to lead to a specific point in a specific area. This does the same thing as Command 7.

6.10.3. StinkerExit

Once Wee Stinkers enter this space, they will exit the level and you will be awarded 100 points. For the Rescue All Stinkers objective, you'll need to get all the Wee Stinkers in the Adventure to these exits.

6.11. Magic

Rainbow Magic spellballs can be created by use of any of these three objects.

6.11.1. GloveCharge

Your everyday magic charger. An interesting note is that if you hex-edit the GloveCharge .wop file to add a Data1 parameter and then set Data1 to 1, the GloveCharge will only work once.

6.11.2. OnceCharge

This is the "Faint Magic" seen on Uo during PotZ. It will give you one charge instead of nine and disappear immediately.

6.11.3. Spell Generator

Every time a Command 1 (Activate) is executed with a Spell Generator's ID as the Data1, a spellball will fly from the Spell Generator's location toward a specific target point, specified with Goal X and Goal Y. Although the "Spell" field says "Not Used Yet" in place of "Flash", Indigo Magic does in fact work with these. It should also be noted that unlike Brr spellballs fired by the player, Brr fired by Spell Generators is permanent; unless a frozen object is hit by Pow, it will stay frozen forever.

6.12. Monsters

This section covers the various types of monsters and creatures you interact with, most of which actively try to kill you.

6.12.1. BurstFlower

If you get within three tiles of a BurstFlower, it will charge up briefly and then shoot fireballs in all eight directions. If you step away, it won't reset its charge entirely, but will instead gradually lower it until you step close to it again. The time between shots, including both the dormant period and the second chargeup period, is long enough for the player to walk 25 tiles.

6.12.2. Chomper

A hostile monster that chases you wherever you go. Smarter than the RTW Chompers and can actually go around walls. You can also adjust its speed and give it a special property: Ghost (the ability to go through Coins and Gems), Glow (the ability to be seen in lightless areas), or Mecha (acts identically in terms of

gameplay but looks robotic instead of red).

6.12.3. Crab

Crabs come in two flavors: Red and Green. If a crab is Awake or Asleep and you get close to it, it will run away from you if it's Red, and start following you if it's Green. If the crab is Curious, it will start following you around from the moment you enter the level, no matter how far away it is (even if it's Red). Disabled crabs are basically rocks - they don't respond to any outside interactions.

6.12.4. FireFlower

A rather dangerous magic-spitting plant, although thankfully it isn't lethal to the touch. You can program them to either stay facing in the same direction, always face you, or turn 45 degrees with every shot. They can also be programmed to have multiple hit points, making them common bosses. If you switch the Type to Ice, it will start shooting Brr instead of Pow; note that unlike the Brr fired by the player, anything hit by an IceFlower's Brr will never unfreeze unless subsequently hit by Pow.

6.12.5. Ghost

Ghosts follow you around just like Chompers, but will stop moving and turn invisible if you get out of a certain radius of tiles from them (default is 6). They can also be adjusted to go faster via the Speed parameter.

6.12.6. Lurker

A Lurker covers nine tiles, and although only five of them can activate it, all nine will be chomped if the Lurker is activated. The time between when the Lurker sinks into the ground and when its teeth appear again is long enough for the player to walk nine tiles.

6.12.7. Rainbow Bubble

Rainbow Bubbles will keep their distance from you just like Scritters. If they are hit by a fireball while over water, a Rainbow Float will appear at the position where they were destroyed.

6.12.8. Scritter

This cute little furball will always try to stay three spaces away from you. Apart from ID and Colour, it has no settings in the Editor.

6.12.9. SpikeyBall

Spikeyballs are effectively RTW Z-Bots, just with more settings. Upon hitting a wall, they will bounce left, bounce right, or do a 180 degree turn (noted as "Bounce Diagonal"). Just like Z-Bots, they will not stop for water and instead plunge straight to their watery, 250-point-awarding graves, so you may want to take that into account when designing levels. They can also be adjusted for speed.

6.12.10. Turtle

Turtles are harmless creatures that swim across water when they go into it. They don't have many settings, just ID, direction, and turn.

6.12.11. Water Chomper

Hoo boy, Water Chompers. These guys are scary. They act just like Chompers, but can move across water just as easily as they can across floors. Only walls and lava hold them back.

6.12.12. Wraith

Wraiths are to FireFlowers as Ghosts are to Chompers. They'll shoot spellballs at you, but will stop and disappear if you exit a certain radius. They can shoot Pow, Brr, or (surprisingly) Grow.

6.13. NPCs

NPCs are Non-Player Characters. You'll more than likely be using them if you want to make anything close to a storyline.

All Talkable NPCs can have their Greeting adjusted, so that they'll play a specific greeting phrase when you talk to them. These Greetings include 3 for Kaboom, 3 for ZBot, Chomper, 2 for Thwarts, 2 for Trolls, Monster, 5 for Stinky, 2 for Loof, 4 for Qookie, 2 for Peegue, and 9 for Wee.

6.13.1. Baby Boomer

Baby Boomers are very similar to Wee Stinkers. If you set the Winning Condition to Rescue All BabyBoomers, you'll have to guide them all to StinkerExits to win the adventure. They can optionally have the ability to do a single boom, in which they can act like a TNT barrel and let off short-range fireballs in all eight directions. A nice thing about Baby Boomers is that once they wake up, they never go back to sleep.

6.13.2. Ice Troll

Ice Trolls are basically Thwarts, but they can shoot Brr instead of Pow. If Anim is set to Hands Up, the Ice Troll will run with their hands up in a panic instead of running normally.

6.13.3. Kaboom!

Kaboom!s are NPCs that act similarly to Stinkers. You can set their Texture to Blue, Purple, Red, Gold, or Dark, and give them one of many Turn or Anim settings.

6.13.4. Stinker

The most complicated object in the game. The first adjustable parameter is dialog, i.e. they will display this dialog when talked to (set it to 0 for speechless). You can adjust their texture (eyes, skin color, shoes) to Blue (Stinky), Purple (Loof), Red (Qookie), Dark (Peegue), Shadow Stinker, Fire Stinker, Green (Grynkler), or White (Jeeboo).

Stinkers can also have hats and glasses. There are several different categories of hats and two different categories of glasses, and many of these categories have multiple hats in them.

You can also adjust a Stinker's Walking Animation (WalkAnim), Turn, or basic animation (Anim). There's loads of different values for each of these adjustments.

6.13.5. Thwart

This NPC has two notable characteristics: Colour (can be set to standard or any of the rainbow colours, has no effect on ID!) and Shooter (determines whether the Thwart throws fireballs, comes with a handy TimerMax1). You can also program Thwarts to be talkable or run with their hands up.

6.13.6. Wee Stinker

If you've played the first two levels of either WA or MoFI, you'll already be familiar with Wee Stinkers. Apart from ID and Type, they have no settings in the Editor.

6.13.7. Wysp (Rainbow Star)

With the advent of PotZ, Wysp's object has become usable for the entire Rainbow Star species. Rainbow Stars can have any of 10 different textures: Wysp, Purple, Orange, Blue, Glasses, Gold, Silver, Inverted Rainbow, Loopy, or Creepy. They also have the ability to fly over water.

6.13.8. Z-Bot Master Class

Master Class Z-Bots can be programmed to shoot fire at the player like Thwarts. If IntroSound is On, they will play a Z-Bot voice clip as the player enters the level. They can also be set to face a fixed direction or always face the player.

6.13.9. Talking Barrel

This small barrel talks with you!

6.14. Other

A variety of non-gameplay-affecting objects are in this group. They're usually used for scenery and decoration.

6.14.1. Meteorite

The only one with any special parameters is the Meteor, whose Data values have the following effects:
ID: Activating the ID will 'create' the actual meteor.
Data0: The start height of the meteor.
Data1: The destination X coord.
Data2: The destination Y coord.
Data3: The destination height. A same start and destination height makes the meteor never explode for some spooky reason.

Don't use too many meteorites too quickly, or the game will crash.

6.15. Outdoor

Trees, ferns, flowers, mushrooms, and rocks. For the trees, remember to set the tiles they occupy to Logic Wall if you don't want them to be partially walk-through.

The only Outdoor object that actually has a gameplay function is the Tentacle. If you get within two tiles of it, or if there's something on top of it, it shrinks into the floor. It's essentially like an AutoDoor that can only be activated by the player.

6.16. Retro

These objects were carried over from the original Wonderland trilogy; they made their first WA appearances in MoFI's "Floing Void". This group is unusual in that the objects therein have very different purposes and functions; the only thing grouping them together is their game of origin.

6.16.1. Coily

One of the few objects in the game with truly random behavior, a Coily hops in a random cardinal direction as long as it has open space. No settings here.

6.16.2. CoinGate and Rainbow Coin

This type of CoinGate should not be confused with a similar gate that takes Gold Coins (see section 6.6.4).

CoinGates open automatically if all Rainbow Coins in the level have been collected. Unlike with StarGates, this means that you don't have to walk up to these CoinGates in order to open them; all you need to do is collect the last coin.

6.16.3. Laser Gate

There are two things that make the Laser Gate particularly interesting. First, it doesn't accept keys, and second, it activates and deactivates instantly; no wait time required. The design limitation is that the Colour values accepted only range from 0 to 6. (There is a SubColour value, but it has to be hex-edited in; see section 6.22.3.)

6.16.4. Scouge

A Scouge spits out fireballs in much the same manner as a FireFlower. It's immune to magic, can't be walked around diagonally, and has a fixed direction, so it's basically a shooting wall.

6.16.5. UFO

If the player is aligned vertically or horizontally with a UFO, the UFO will shoot a fireball at the player, even if there's a wall in the way. If Data4 is set to 1, then the UFO will do something interesting: it will only go onto tiles with the same top texture as Floor Basic Style 2 (see section 5.1.)

6.16.6. Wooden Box

Acts identically to a regular barrel (see section 6.2.1.) Remember that unlike in the Classic Trilogy, you can't push boxes in WA.

6.16.7. Z-Bot Class 001

These Z-Bots are very similar to Spikeyballs. The only difference in terms of gameplay is that you can't set their speed and the "Bounce Diag" option is absent.

6.17. Signs

These seven types of signs all serve the same purpose: read them to activate a dialog. You can set their dialog (note: the +10000 is just for internal purposes, pretend it isn't there), texture, and whether they move.

6.18. Teleporters

Another object that has Colour and Subcolour affect its ID and appearance. Once you step into a teleporter, you instantly go to the other one and both teleporters disappear. Try not to use more than two teleporters of the same kind in a level; it can lead to some unwanted glitches. Also, since teleporters are relatively slow to activate, you may want to fiddle with the ActivationSpeed.

6.19. Traps

There are two types of traps: Cage, and Fire. Both of these are affected by Colour, even though they don't show it visually. A Cage's default Colour is 9, and a Fire Trap's is 12.

6.19.1. Cage Trap

When you walk into one of these, you'll be trapped and unable to move unless a button is pressed to let you out. You can also use Cage Traps for the Capture All Scritters adventure goal.

6.19.2. Fire Trap

TimerMax1 is how many frames the Fire Trap's "on" status lasts for, and TimerMax2 is how many frames its "off" status lasts for.

6.20. Z-Bots

Out of the seven types of Z-Bots, three are also included in other categories. Information on those is reprinted here for convenience purposes.

6.20.1. Mothership

Motherships fly in an endless circuit between up to three destination tiles, specified by the FlyGoal parameters. If the coordinates for any point are both 0, then the Mothership will skip that point in its travel log.

Every time a Mothership arrives at one of its destinations, it will take the object located at the point specified by SourceX and SourceY and make a copy of it at the Mothership's current position. (Leave both SourceX and SourceY as 0 if you don't want anything cloned.) It will then wait a period of time (specified by TimerMax) before starting to move again.

6.20.2. MooBot (Pushbot)

MooBots can be activated by Pop magic, buttons, or General Commands. Upon hitting a wall, they will turn left, turn right, or turn 180 degrees. Keep in mind that if any of the three methods to activate MooBots are attempted while the MooBot is already in motion, they will fail; the MooBot will just continue on its course uninterrupted.

6.20.3. UFO

If the player is aligned vertically or horizontally with a UFO, the UFO will shoot a fireball at the player, even if there's a wall in the way. If Data4 is set to 1, then the UFO will do something interesting: it will only go onto tiles with the same top texture as Floor Basic Style 2 (see section 5.1.)

6.20.4. ZipBot (Weebot)

ZipBots might appear at first glance to be just like basic Spikeyballs, but there's one important difference. Whatever the top texture of the tile they're placed on is, they will only go on tiles with the same top texture. If you want them to cross bridges, you'll have to adjust the top texture of the water those bridges are in.

6.20.5. ZapBot

If ZapBots are aligned vertically or horizontally with the player, and if the difference between the two is at or less than the specified Range (default is 7), then the ZapBot will fry the player instantly. ZapBot lasers can't be outrun; the only thing that will act as a shield is a Floing bubble. If Track is set to 1, then the ZapBot will stick to a specific top tile texture just like a ZipBot (do note that ZapBots can fly over water).

6.20.6. Z-Bot Master Class

Master Class Z-Bots can be programmed to shoot fire at the player like Thwarts. If IntroSound is On, they will play a Z-Bot voice clip as the player enters the level. They can also be set to face a fixed direction or always face the player.

6.20.7. Z-Bot Class 001

These Z-Bots are very similar to Spikeyballs. The only difference in terms of gameplay is that you can't set their speed and the "Bounce Diag" option is absent.

6.21. Hidden Items (Advanced)

Users Qloof234 and jdl have uncovered a few items that work in the game but aren't listed in the editor. If you're an experienced user who wants to experiment a little, you might want to download these!

Links to the relevant topics are included with each item. Explanations of how they work are included in the topic, and I won't waste space by repeating them here.

6.21.1. Magic Mirror
http://pcpuzzle.com/forum/viewtopic.php?t=25590

6.21.2. Sky Machine Map
http://pcpuzzle.com/forum/viewtopic.php?t=25589

6.21.3. WA Beta Custom Item
http://pcpuzzle.com/forum/viewtopic.php?t=25526

6.22. Creating Your Own Objects (Advanced)

If you have a substantial amount of experience with the Editor and a hex-editor like XVI32, you can actually create your own objects. However, all you can do is create custom models, add extra parameters, or swap models; you can't create completely new functions, like the infamous Gem Gate. If you need help with a reasonable request, don't hesitate to ask me about it via PM; I'll be happy to help!

In case you're wondering what .wop files are, they're the files that allow for objects to be made in the Editor. You can find them under Data\Editor\ObjectPresets.

6.22.1. Custom Models
You might have noticed that I skipped over the CustomModel subsection earlier; that's because I was saving it for here.

Custom models have two parts: the model itself (a .3ds file) and the model's texture (a .jpg file). Give both of them the same name (e.g. MyModel.3ds and MyModel.jpg) and place them both in UserData\Custom\Models. Next, select the

"custom" object in the CustomModel category and type the model name in place of "Default". If you want the object to be lethal to the touch, set Deadly to Yes.

The second page of adjustments are for the animation that the model can have. The higher YawAnim is set to, the faster the object will spin counterclockwise; negative YawAnim means clockwise spinning. PitchAnim and RollAnim are similar, just on the other axes of rotation. XAnim notes how far the model will travel horizontally away from its origin point before restarting its rotation; YAnim is vertical, and ZAnim is up and down. XSpeed, YSpeed, and ZSpeed control the object's speed along all three axes during its cycle.

6.22.2. Extra Parameters
If you want to add an additional setting to an object, like TextureName or YawAdjust, this is how you go about doing it.

Open up the .wop file with XVI32 and scroll down to the bottom. You should see a string of stuff like this, where blue is hexadecimal bytes (on the left) and red is a string of characters (on the right):

02 00 00 00 ID 06 00 00 00 Active 09 00 00 00 YawAdjust 0A 00 00 00 RollAdjust etc.

Notice a pattern there? If you figured out that the first blue byte preceding each parameter (ID, Active, YawAdjust, and RollAdjust in this case) is equal to the number of characters in the variable, cookie for you.

If you want to add extra parameters to the end of .wop files, you'll have to keep that in mind. Just figure out how many characters there are in the parameter, type the four "blue bytes" accordingly, and then type the parameter name itself.

6.22.3. Model Swaps
Be prepared for glitches when working with this type of hexing, especially if you're trying to do anything involving a Stinker NPC.

Let's say we're trying to create a barrel with a pillar model for whatever reason. Open up the Pillar.wop file (under Houses) and you'll see these bytes at the beginning (using the same blue-red format as last time):

0B 00 00 00 !Obstacle28

Sounds familiar? Yeah, model names have the four "blue bytes", just like parameters do.

Now that you know the model name, open up Barrel Reg.wop (under Boxes). You should see these bytes at the beginning:

08 00 00 00 !Barrel1

Delete them. In their place, insert the model name you found for the pillar.

Save the file as PillarBarrel.wop or something and load it in an adventure. If it works, great! If not, you probably did something wrong along the way.

7. Dialogs

Dialogs are pieces of text that carry out the textual portion of adventures. You'll most likely be using them often.

7.1. How to Activate Dialogs

Dialogs can be activated in one of three ways. First, you can talk to an NPC who has a dialog equal to the one you want. Second, you can read a sign with the dialog you want. Third, you can use a Command 21. All of these methods are mentioned elsewhere, but I thought it would be a good idea to put them here as well.

7.2. What are Interchanges?

Interchanges are the building blocks of dialogs. You can only see one interchange at a time. Once you're done viewing one interchange in-game, you can choose an answer to bring you to the next one. Most dialogs will be made up of multiple interchanges, except possibly some signs. Each interchange can have up to eight answers, which can be cycled through by pressing "Answer #_", where _ is the current answer number. To move between interchanges, click on the Interchange bar near the top of the screen.

7.3. Basic FNCs: 1 and 2

Below every answer of a dialog, you'll see two important variables: 'FNC' and 'Data'. Right-click or left-click on these fields to change the numbers in them. When FNC is set to 1, choosing the answer will make the dialog end. The next time you start the dialog, it will begin with the Interchange equal to the Data number you chose. When FNC is set to 2, it will go directly to the Interchange equal to the Data number you chose.

7.4. FNC 3: AskAbouts

This is by far the least common FNC used, but it can still come in handy for some specific situations (for example, a shop like Moosejaw's). Once you click on an answer with FNC 3, you are taken to the AskAbout Menu (you can just leave 'Data' blank, it isn't used here).

The "AskAbout Title Line" is the line you see whenever the AskAbout menu is reached. Just type with your mouse over the field to set it.

To toggle between AskAbouts, click "AskAbout #_". You can have up to 100 AskAbouts, although I certainly wouldn't recommend using all of them!

Each AskAbout has an Interchange that it links to. You can set this by clicking on the Interchange field (under the Askabout bar, not at the top of the screen!)

"Active" is set to -2 (active) or -1 (inactive). The official Editor site made a typo and printed it as vice versa- this is to eliminate confusion. You can also activate, deactivate, or toggle AskAbouts with Commands 23, 24, and 25, respectively. In very rare cases, you may also want to set Active to a different number for use with Commands 28-30 (see section 8.14). Askabouts with "Active" set to anything but -2 will not be active.

The "Repeat" field is set to -1 (if the AskAbout should always appear when active) of 1, 2, 3, 4, 5, 6, etc… denoting how many times the AskAbout can be used before it disappears. Occasionally you might need to have Repeat 1, but I see no reason to have repeats of 2 or higher.

7.5. FNC 4 and 5: Collecting Coins and Items

If FNC is set to 4, then the dialog will scan for a number of coins equal to the Data number. If you don't have that many, you keep the ones you have, and the interchange one ahead is started (e.g. if you were in interchange 4, you would go to interchange 5). If you have all of them, the coins will be taken from you, and you will go to two interchanges ahead (e.g. if you were in interchange 4, you would go to interchange 6). If you set Data to a negative number, the game will actually give you that many coins instead of subtracting them, and it will always go 2 interchanges ahead. This is good if you're planning on selling items for coins.

FNC 5 works in a similar manner, except it collects "Custom" items with Fn IDs matching the Data number (see section 6.9.2 for more information).

7.6. Commands in Dialogs

You'll notice that with every answer you can give to a dialog, there are five more numerical fields: CMD (short for Command), Data1, Data2, Data3, and Data4. These fields work in a similar manner to a General Command button, being able to execute one command per interchange if you so choose. For a full list of commands, see Section 8.

7.7. Typing a Dialog

To type a dialog, just hover your mouse over the line you want typed and begin typing. It should be noted that Caps Lock does not affect the characters, and not all characters can be typed (e.g. the asterisk *). To get rid of characters you don't want anymore, go to the space right after them and press the BACKSPACE key. Really, there's not very much to it.

7.8. Text Appearance Modifiers

To spice up your text a little bit, you can add in appearance modifiers. There are two types: colours and actions. To select the modifiers, click on the symbols that represent them on the right side of the page. To apply them to a piece of text, click once on the first letter you want to change.

7.8.1. Colour Modifiers
There are twelve colours you can use:
1. W for White (note: this is also the default color, use it for cancelling out other colors if you want to)
2. G for Gray (not very noticeable, use for subtle emphasis)
3. R for Red
4. O for Orange
5. Y for Yellow
…you get the idea…
9. V for Violet
10. R for Rainbow (really blaring, use sparingly)
11. B for Blink (alternates between black and white)
12. W for Warning (alternates between black and red)

7.8.2. Action Modifiers

NO for None: Restores the text to being motionless.

SH for Shiver: Causes the text to vibrate back and forth in a scared kind of way.

JI for Jitter: Same as SH, but much more panicky.

WA for Wave: Causes the text to wave up and down in a friendly manner.

BO for Bounce: The text bounces from being small to being big.

ZO for Zoom: The text appears big in the Editor, but just takes more time to appear in the Player. It ends up the same size as all the other text. Preferably use at the beginning of Interchanges.

ZS for Zoom Shiver: Same as ZO, but after appearing the text looks like JI instead of NO.

CR for Circle: The text orbits its original spot.

EI for Eight (as in figure-eight): The text does a lazy-ish infinity loop around its original spot.

UD for Up-Down: The text rapidly moves vertically, up and down one line. This can easily mess up the view, so use with caution!

LR for Left-Right: The text rapidly moves horizontally left and right one space.

RT for Rotation/Reverberate (?): Pulses every few seconds. Hardly noticeable.

8. Commands

Commands are a very important part of level making, able to be executed both in a level and in a dialog. Commands can do pretty much anything to objects, and can be incredibly useful when used correctly.

Each command has four numerical values that go along with it, although not all of them have to be used. These values are known as Data1, Data2, Data3, and Data4.

Command 1: Activate

If an object is inactive, i.e. does not appear in the level currently, this will activate it and make it appear. It can also be used to close gates. Command 1 will not work on objects that have been destroyed, however.

Command: 1
Data1: ID of the object(s) you want activated
Data2: Not used
Data3: Not used
Data4: Not used

Command 2: Deactivate

The exact opposite of Activate, this command will deactivate objects with the intended ID.

Command: 2
Data1: ID of the object(s) you want deactivated
Data2: Not used
Data3: Not used
Data4: Not used

Command 3: Toggle

I use this command as a substitute for Commands 1 and 2, as it can serve both purposes. If the object is active, CMD 3 will deactivate it, and if it is inactive, CMD 3 will activate it.

Command: 3
Data1: ID of the object(s) you want toggled
Data2: Not used
Data3: Not used
Data4: Not used

Command 4: Modify Object

This is the most powerful command in the game. It can be used to modify one of an object's attributes, such as Logic, ScaleAdjust, and Data0-Data9 while the adventure is already in progress! For further information, see Qloof's thread on the subject.

Command: 4
Data1: Object ID
Data2: Object modifier you want changed
Data3: What you want the modifier changed to
Data4: Not used

Command 5: Destroy

After CMD 5 is used to destroy an object, it can't be retrieved. An object's destruction usually involves the object disappearing with a blast of little white stars. Of course, there are exceptions, such as the TNT barrel.

Command: 5
Data1: ID of the object(s) you want destroyed
Data2: Not used
Data3: Not used
Data4: Not used

Command 6: Set Lighting

Light is made up of three colors: red, green and blue. The lighting of a level is normally the maximum of all of them, but you can adjust these values to change it.

If the value for a specific color is between 0 and 255, the command will set the level's directional light. If it's between 256 and 511, the command will set the level's ambient light to 256 less than the entered value.

Command: 6
Data1: Red lighting amount
Data2: Green lighting amount
Data3: Blue lighting amount
Data4: Not used

Command 7: Teleport

CMD 7 is similar to a LevelExit (see section 6.9.1). The fade-in-fade-out animation is the same, and it still brings you to one specific point in one specific level.

Command: 7
Data1: Destination level number
Data2: Destination X-coordinate number
Data3: Destination Y-coordinate number
Data4: Rotation (0 is facing south, 45 is southwest, 90 is west, etc.)

Command 8: Start Adventure

This command is used exclusively in Hubs. It acts similarly to an Adventure Star, except if you use it after completing the adventure it will still look at it as uncompleted- i.e. you can get two stars from the same Adventure.

This command normally crashes the game if you're playing individual adventures, but if Data1 is set to 0, then the current adventure will be restarted.

Command: 8
Data1: Adventure number
Data2: Not used
Data3: Not used
Data4: Not used

Command 9: Earthquake

When this command is used, it will shake the ground temporarily. Making the ground shake longer does not make the sound last longer. I recommend you have the ground shake for about 250 frames, as it's roughly equal to the time of the sound. It should also be noted that earthquakes are not cumulative in frame time; if you execute a 4000000 frame earthquake and then execute a 1 frame one, the shaking will stop after the one-frame earthquake is done.

Command: 9
Data1: Number of frames the earthquake will last for
Data2: Not used
Data3: Not used
Data4: Not used

Command 10: Play Sound

Using this command, you can play one of the many sound effects in the game's files. Click here to download a list.

Command: 10
Data1: The number of the sound to play
Data2: Not used
Data3: Not used
Data4: Not used

Command 11: Play Sound at Tile

Whereas Command 10 produces ambient sound, Command 11 produces sound originating from a specific tile. The closer the player is to this tile, the louder the sound will be.

Command: 11
Data1: The number of the sound to play
Data2: X coordinate
Data3: Y coordinate
Data4: Not used

Command 12: Modify Music

While it's not currently possible to change the music track that plays in the level, it is possible to change its volume and tempo.

Command: 12
Data1: Volume (default is 100)
Data2: Not used
Data3: Tempo (default is 44)
Data4: Not used

Command 13: Set Weather

This command will change the weather in the level from whatever its default value is to a specified type. 0 is Clear, 1 is Light Snow, 2 is Heavy Snow, and so in; the numbers correspond directly to the order that the weather effects come in in the editor.

Command: 13
Data1: Value of the weather to be set
Data2: Not used
Data3: Not used
Data4: Not used

Command 14: Change Music

This command will change the current level music to a new one. The values point to number of .ogg file in Data\Music folder.

Command: 14
Data1: Value of the .ogg to be set
Data2: Not used
Data3: Not used
Data4: Not used

Command 15: Give Magic

This command gives the magic specified in Data1 to the player. 0 is Floing, 1 is Pow, 2 is Pop and so on.

Command: 15
Data1: Value of the magic to give to player
Data2: Not used
Data3: Not used
Data4: Not used

Command 21: Dialog - Start Dialog

I use this command a lot. It starts a dialog in a manner akin to talking to an NPC or sign, but the camera doesn't zoom in.

Command: 21
Data1: Dialog number
Data2: Starting Interchange number (-1 for default)

Data3: Not used
Data4: Not used

Command 22: Dialog - Change Starting Interchange

Changes a dialog to have a different starting Interchange. Don't try to use this command while in a dialog; you'll go straight to the dialog and interchange you're trying to affect, messing everything up in the process.

Command: 22
Data1: Dialog number
Data2: New starting Interchange number
Data3: Not used
Data4: Not used

Commands 23-25: Dialog - Change AskAbout Activity

These three commands function like Commands 1, 2, and 3, but affect AskAbouts in dialogs instead of objects in levels. Command 23 is activate, Command 24 is deactivate, and Command 25 is toggle.

Command: 23/24/25
Data1: Dialog number
Data2: AskAbout number
Data3: Not used
Data4: Not used

Commands 26-27: Dialog - Change AskAbout Functions

These commands change the function of specific AskAbouts. CMD 26 changes an AskAbout's Active value, so it's pretty much like Commands 23, 24, and 25. CMD 27 changes the Interchange the AskAbout points to.

Command: 26/27
Data1: Dialog number
Data2: AskAbout number
Data3: New value for the AskAbout
Data4: Not used

Commands 28-30: Dialog - Global AskAbout Activity Change

These commands function like Commands 1, 2, and 3, but deal with AskAbouts in a very unusual way. Once this command is executed, it will affect all AskAbouts across all dialogs that have the required Active number. Command 28 is activate, Command 29 is deactivate, and Command 30 is toggle.

One possible use for these is if you have multiple shopkeeper NPCs with different dialogs that sell the same thing; if you purchase something from one shopkeeper, this command could disable purchasing the same thing from all the others.

Command: 28/29/30
Data1: Active value of target AskAbout(s)
Data2: Not used
Data3: Not used
Data4: Not used

Commands 41 and 42: Copy Object

This command makes an identical copy of an object at another position in the level. Command 41 simply copies the object without any special effects, whereas Command 42 copies it with an effect like that of a UFO Mothership.

Command: 41/42

Data1: X coordinate of the object to be copied
Data2: Y coordinate of the object to be copied
Data3: X coordinate of the destination tile
Data4: Y coordinate of the destination tile

Commands 51 and 52: Change Movement Type

This command is second only to CMD 4 in being really fun to mess around with. By using this command, you can get objects to move like other objects. MovementTypes 30-34 make the object move somewhat like a Scritter, 41-48 make it move somewhat like a DragonTurtle or Spikeyball, and 71-78 make it move in a straight line but do a 180 degree turn each time it hits a wall. There is also another variable called MovementTypeData mentioned by user 'cbloopy', but no one really knows what it does. If someone figures it out, please tell me and I'll include it in a future update of this guide.

Command: 51/52

Data1: Target ID
Data2: MovementType (CMD 52 only, not used with CMD 51)
Data3: MovementTypeData (CMD 52 only, not used with CMD 51)
Data4: MovementType (CMD 51 only, not used with CMD 52)

Command 61: NPC Move

This is the command version of the NPC Move button, being able to make any NPC (except Baby Boomers and Wee Stinkers) move to a certain location. I'd recommend that you only use this command in dialogs, as the actual NPC Move button is easier to work with but can only be used in levels.

Command: 61

Data1: NPC ID
Data2: Destination X Coordinate
Data3: Destination Y Coordinate
Data4: Not used

Command 62: NPC Change, Part 1

This is half of the NPC Change button's command version. Since the NPC Change button has so many variables, it had to be broken up into two commands. Like Command 61, it's a good idea to only use this in dialogs, as the button is easier to work with. If you don't want to change a variable, set the corresponding Data value to -1.

Command: 62

Data1: NPC ID

Data2: Dialog number (0 for no dialog)

Data3: Expression (0=happy, 1=surprised, 2=sad, 3=asleep, 4=angry)

Data4: Rotation (0-360, works by degrees)

Command 63: NPC Change, Part 2

The second half of the NPC Change function, although this part is used less often than the first one. Again, set a value to -1 if you don't want to change that part of the NPC.

Command: 63

Data1: NPC ID

Data2: Walking Animation (0=waddle, 1=walk, 2=run)

Data3: Basic Idle Behavior (between 0 and 29, corresponding directly to the behaviors on the adjustment board)

Data4: Basic Idle Animation (between 0 and 10, corresponding directly to the animations on the adjustment board)

Command 64: NPC Exclamation

The command version of the NPC Exclamation button. Again, it's a good idea to only use this in dialogs, as the level button is easier to use.

Command: 64

Data1: NPC ID

Data2: Particle ID (see section 6.4.5 on particles)

Data3: Number of particles

Data4: Not used

Commands 102-104: Run Cutscenes

These commands will run the pre-programmed cutscenes from the official games. There's not much point using them in custom adventures or hubs, because you can't alter the text in the cutscenes without hex-editing the main game wg.exe file.

Command: 102/103/104
Data1: Not used
Data2: Not used
Data3: Not used
Data4: Not used

Command 111: Refill Lamp

If you have a lamp item and it's running low on charge, this command will refill it to its full 99 charges.

Command: 111
Data1: Not used
Data2: Not used
Data3: Not used
Data4: Not used

Commands 112 and 113: Change Inventory Size

These commands will change how many items you can carry. CMD 112 will change the number to 16, while CMD 113 will change the number to 25. You can't change the size back to 9, and if you have size 25 then you can't go back to 16 either.

Command: 112/113
Data1: Not used
Data2: Not used
Data3: Not used
Data4: Not used

Command 114: Activate Shard Teleportation

After activating this command, you'll be able to use the Rainbow Shards to teleport to places in the Hub. Once shard teleportation is enabled, it's enabled forever. The only caveat is that the player can't use the Shards while they're in level 93, 94, or 95.

Command: 114
Data1: Not used
Data2: Not used
Data3: Not used
Data4: Not used

Command 115: Open Adventure Replay Menu

This command will open the Floing menu, like it does when Guggenheimer floings you back in time. It can only be used in Hubs; if you try it in the Player, you'll get the same useless starry screen as you do if you try playing a cutscene.

Command: 115
Data1: Not used
Data2: Not used
Data3: Not used
Data4: Not used

Commands 116-117: Alter Player's Appearance

Command 116 will change the player's hat, while Command 117 will change the player's accessory (e.g. glasses, eyepatch, parrot).

Command: 116/117
Data1: Not used
Data2: Not used
Data3: Not used
Data4: Not used

Command 118: Display Hub Complete Message

This command will display a small hub complete message.

Command: 119
Data1: Not used
Data2: Not used
Data3: Not used
Data4: Not used

Command 119: Remove Magic

This command removes the current magic.

Command: 119

Data1: Not used

Data2: Not used

Data3: Not used

Data4: Not used