

Raspberry Pi Minecraft Changes and Revisions

Description: The Raspberry Pi is a simple open source computer that runs on a linux operating system. It is the bare bones of a what a computer is, but it is capable of some pretty impressive things. Kids these days like the game Minecraft...I don't know why. An open source version of Minecraft makes it possible to make changes in the game while keeping a familiar user interface.

Download Minecraft

What you are doing and why: You want to play a computer game, and that will require the presence of that game on your computer. So we have to go out to the internet and get it. We will be using an open source version of the game from Minecraft - Pi Edition (<http://pi.minecraft.net>).

From the terminal

1. Open the terminal.
2. Type in the following command:

```
wget https://s3.amazonaws.com/assets.minecraft.net/pi/minecraft-pi-0.1.1.tar.gz
```

This will get a compressed file from the website.

3. Type in the following command:

```
tar -zxfv minecraft-pi-0.1.1.tar.gz
```

This will 'unzip' the file.

4. A new folder got placed on your computer's home directory. Lets change directory (cd) into it.

```
cd mcpi
```

5. Now lets run the program and play Minecraft (I have no idea how one 'plays minecraft'. Type this into the console.

```
./minecraft-pi
```

Put an Icon on the Desktop for the next time you play Minecraft

What you are doing and why: At some point you will be done playing Minecraft, and at some later point you will probably want to play again. It sure would be easier to click on an icon on your desktop as opposed to opening your terminal and doing it that way.

1. Copy this image (<http://www.raspberrypi-spy.co.uk/wp-content/uploads/2013/10/minecraft.png>) to your mcpi folder. It is probably easiest to do this from the GUI (as opposed to the terminal).

This image is the icon that will appear on your desktop.

2. Right click somewhere on your desktop and select a **New > Blank File**. Name the file "minecraft.desktop".
3. Right click on that file, which is currently a blank file. Select 'Leafpad' from the available options. This is a type of open source text editor.
4. Copy the following code into that file:

```
[Desktop Entry]
Name=Minecraft Pi Edition
Comment=Launch Minecraft Pi Edition!
Exec=sh -c 'cd ~/mcpi && lxterminal -l -t Minecraft -e ./minecraft-pi'
Icon=/home/pi/mcpi/minecraft.png
Terminal=false
Type=Application
Categories=Application;Games;
StartupNotify=true
```

5. Select Save under File and exit Leafpad. Your icon now looks like a Minecraft thingy.

This basically follows this tutorial. (<http://www.raspberrypi-spy.co.uk/2013/10/how-to-setup-minecraft-on-the-raspberry-pi/>)

Create a New Game in Minecraft

What you are doing and why: You are bored. You have already beaten Minecraft (is that a thing you can do?). You want to fool around with the code and do something else. You want to hide an object in your Minecraft World and look for it. Somehow that seems like more fun. Its funner. Lets do that.

We will basically follow the instructions here:

(<http://www.stuffaboutcode.com/2013/01/raspberry-pi-minecraft-hide-and-peek.html>)

1. Open the terminal and type in this command. You will download a core for the game.

```
sudo apt-get install git-core
```

2. You will want to navigate back to your home directory from wherever you are. Type:

```
cd ~
```

3. Now you will go and steal someone else's work. Except in the open source world, there is no such thing as stealing. This will be an instance of you going to get the code that they made freely available.

```
git clone https://github.com/martinohanlon/minecraft-hs.git
```

This will create a folder in your home directory called minecraft-hs.

4. Go into that directory.

```
cd minecraft-hs
```

5. Inside that folder is a program called minecraft-hs.py. We want to use python to run that program. Type:

```
python minecraft-hs.py
```

6. Chances are you got an error message. That is because the way the code is written (line 28) a game needs to be open and running. So double click on the desktop icon you just installed. Start a game.

7. Hit <Esc> to get out of the game mode, and bring up the terminal again. Type:

```
python minecraft-hs.py
```

Now the game starts and has a message saying that a diamond has been hidden and you should find it. When you move closer to it you get messages saying 'warmer' and when you are further from it, you get messages saying 'colder'.

At this point you can play the game to your heart's content. My heart reaches contentment pretty quickly because I just don't understand the game very well. To satisfy yourself, you can

tinker with some aspects of this that would be kind and rewarding: If you tinker enough, then the changes you have made to the game become original, and you have 'forked' the code that Martin O'Hanlon has produced.