

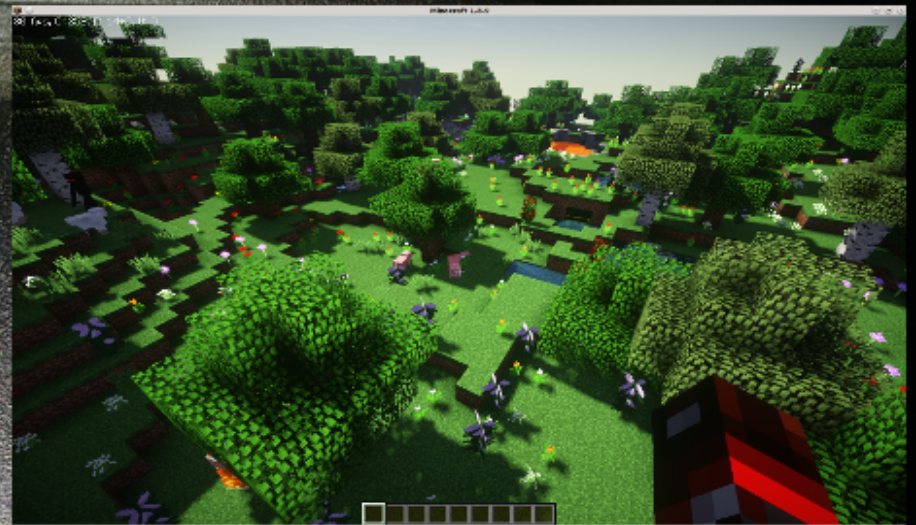
MINECRAFT

Run a Minecraft Server
on a Raspberry Pi 2



EMMETT MILLER

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- **Grab the latest Oracle java for arm 32bit [-1 RMS points] (openjdk fails to build to server):**

`http://www.oracle.com/technetwork/java/javase/downloads/jdk8-downloads-2133151.html`

-> Linux ARM 32 Hard Float ABI 77.71 MB `jdk-8u71-linux-arm32-vfp-hflt.tar.gz`

- **Extract to /opt**

```
sudo tar -xf jdk-*.tar.gz -C /opt
```

- **Create a symlink to /usr/local/bin/java:**

```
sudo ln -s /opt/jdk1.8.0_71/bin/java  
/usr/local/bin/java
```

- **Make a directory for minecraft server files and fetch latest BuildTools:**

```
mkdir minecraft
```

```
cd minecraft
```

```
wget
```

```
https://hub.spigotmc.org/jenkins/job/BuildTools  
/lastSuccessfulBuild/artifact/target/BuildTools  
.jar
```

- **Build spigot!**

```
java -jar BuildTools.jar
```

- **[wait around 20 minutes]**
- **Results in a file called spigot-1.8.8.jar - this is your minecraft server!**

- **Make a startup script**
- **vim start.sh**

```
#!/bin/bash
```

```
/usr/local/bin/java -Xms512M -Xmx960M  
-jar /home/pi/minecraft/spigot-1.8.8.jar  
nogui
```

- **Make executable:**

```
chmod +x start.sh
```

- **Start your minecraft server!**

```
./start.sh
```

Highly recommended to help performance:

- **Overclock Raspberry Pi via `$ sudo raspi-config`**
- **Reduce lag with the following settings for spigot.yml:**
`https://www.spigotmc.org/wiki/bbcode.1943/archive`
(Also cuts memory and cpu usage significantly!)

Typical Resource Load

```
(pi) 192.168.1.155 - Konsole <3>
File Edit View Bookmarks Settings Help

 1 [||||| 57.4%] Tasks: 28, 32 thr; 3 running
 2 [||||| 50.2%] Load average: 1.86 0.95 0.40
 3 [||||| 51.4%] Uptime: 3 days, 01:00:05
 4 [||||| 50.7%]
Mem[|||||721/973MB]
Swp[|||||0/99MB]

 PID USER     PRI  NI  VIRT   RES    SHR  S  CPU% MEM%   TIME+  Command
11927 pi        20   0 1161M 682M 11380 S 205. 70.1 9h10:12 /usr/local/bin/java -Xms512M -Xmx960M -jar /ho
11954 pi        20   0 1161M 682M 11380 R 99.6 70.1 8h15:49 /usr/local/bin/java -Xms512M -Xmx960M -jar /ho
12066 pi        20   0 1161M 682M 11380 R 98.7 70.1 6:01.36 /usr/local/bin/java -Xms512M -Xmx960M -jar /ho
11933 pi        20   0 1161M 682M 11380 S  5.2 70.1 8:38.75 /usr/local/bin/java -Xms512M -Xmx960M -jar /ho
20372 pi        20   0  5356 2876  2312 R  1.9  0.3 0:03.12 htop
  722 pi        20   0  8208 5432  2060 S  0.5  0.5 24:14.81 tmux
11929 pi        20   0 1161M 682M 11380 S  0.0 70.1 2:34.03 /usr/local/bin/java -Xms512M -Xmx960M -jar /ho
11935 pi        20   0 1161M 682M 11380 S  0.0 70.1 5:25.81 /usr/local/bin/java -Xms512M -Xmx960M -jar /ho
11970 pi        20   0 1161M 682M 11380 S  0.0 70.1 3:21.33 /usr/local/bin/java -Xms512M -Xmx960M -jar /ho
12064 pi        20   0 1161M 682M 11380 S  0.0 70.1 1:38.54 /usr/local/bin/java -Xms512M -Xmx960M -jar /ho
  1165 pi        20   0 11476 3272  2624 S  0.0  0.3 0:01.72 sshd: pi@pts/2
12074 pi        20   0 1161M 682M 11380 S  0.0 70.1 2:06.01 /usr/local/bin/java -Xms512M -Xmx960M -jar /ho
11955 pi        20   0 1161M 682M 11380 S  0.0 70.1 5:05.69 /usr/local/bin/java -Xms512M -Xmx960M -jar /ho
11931 pi        20   0 1161M 682M 11380 S  0.0 70.1 0:01.54 /usr/local/bin/java -Xms512M -Xmx960M -jar /ho
11930 pi        20   0 1161M 682M 11380 S  0.0 70.1 0:01.33 /usr/local/bin/java -Xms512M -Xmx960M -jar /ho
  705 pi        20   0 11476 3320  2672 S  0.0  0.3 4:47.98 sshd: pi@pts/0
  687 ntp       20   0  5684 3324  2892 S  0.0  0.3 0:40.31 /usr/sbin/ntpd -p /var/run/ntpd.pid -g -u 107:
  670 root     20   0  2564 1680  1396 S  0.0  0.2 0:02.18 /sbin/dhccpd -q -w
12065 pi        20   0 1161M 682M 11380 S  0.0 70.1 16:13.65 /usr/local/bin/java -Xms512M -Xmx960M -jar /ho
12062 pi        20   0 1161M 682M 11380 S  0.0 70.1 1:30.79 /usr/local/bin/java -Xms512M -Xmx960M -jar /ho
12078 pi        20   0 1161M 682M 11380 S  0.0 70.1 0:00.07 /usr/local/bin/java -Xms512M -Xmx960M -jar /ho
20386 pi        20   0 1161M 682M 11380 S  0.0 70.1 0:00.01 /usr/local/bin/java -Xms512M -Xmx960M -jar /ho
20380 pi        20   0 1161M 682M 11380 S  0.0 70.1 0:00.02 /usr/local/bin/java -Xms512M -Xmx960M -jar /ho
11941 pi        20   0 1161M 682M 11380 S  0.0 70.1 0:05.74 /usr/local/bin/java -Xms512M -Xmx960M -jar /ho
F1Help F2Setup F3Search F4Filter F5Tree F6SortBy F7Nice -F8Nice +F9Kill F10Quit

(pi) 192.168.1.155
```

DEMO

EMMETT MILLER (AGE 6)
@SCOTTLINUM (AGE > 6)