

## **How Not To Fret When The Server Goes Down**

If you're reading this because you think the server is down and want to restart it, chances are you already have a minimum proficiency in shell. If you don't, that's still fine, because I'm gonna stop being cheeky breeky now and teach you step-by-step on how to restart the server.

### **Before you start:**

1. Make sure you have access to the user `ec2-user` on the Amazon EC2 instance. This means you should have a private key file `.pem` (Extensions may be different, E.g. `.ppk`, but they're all readable by text editors) that works for `ec2-user`.
2. Know the IP address to the instance.
3. Have SSH-capable application. GUI-based or console-based, doesn't matter.

### **How to Connect:**

PuTTY:

Consult <http://docs.aws.amazon.com/AWSEC2/latest/UserGuide/putty.html>

because I haven't done it.

Console-based:

1. Change directory to the one containing your `.pem` file.
2. Type in `ssh -i <your-pem-file> <username>@<ip-to-your-instance>` and press enter. To fill in the blanks with an example, your command should look like:  

```
ssh -i privatekey.pem my-user@127.255.255.1
```
3. If it prompts you to accept (and save) the certificate or something, enter `y` and continue.
4. You should be connected to the instance.

Bitvise:

1. Open Client Key Manager, located beneath the Authentication box and above the notifications log.
2. Click on “Import”, select the private key file, and open it.
3. Make note of the number appearing besides “Global”. If you haven’t done this (on Bitvise) before, it should be 1. There shouldn’t be anything else to change, so click “Import” to finalize settings. Close the Client Key Manager window.
4. Fill in the “Host” field with the IP address ONLY. That is, the string of 4 numbers separated by dots, like 51.10.207.93. Port should be 22.
5. Fill in “Username” field with “ec2-user”, or whatever default username EC2 has provided you, depending on your instance’s Operating System.
6. Click on the dropdown menu beside “Initial method”, and select “publickey”. Next, on the dropdown menu beside “Client key”, select the key with the number you got from step 3.
7. Click on “Login” at the bottom of the window. After a brief moment, two windows should pop-up; that means you have successfully logged in. For future logins (you have already imported the key file), start from step 4 instead.

### **How to Quickly Start/Restart the Server:**

Use the console (window with black background). If you hear any beeping noise while using Bitvise’s console, do not be alarmed, it is simply to notify that you are backspacing on an empty line or something of the like.

1. Confirm that you are on your home folder. The prompt (words that come before the flashing block) should be [`<username>@ip-<ip> ~`]\$, where `<username>` is your username (so `ec2-user`), and `<ip>` is the IP address you’re connected to, except with dots replaced by dashes. For example, if user Timmy connected to IP address 51.10.207.93, then his/her prompt would be [`Timmy@ip-51-10-207-93 ~`]\$. If it is different, Enter `cd $home`.
2. Enter `screen -r`. If a message saying “There are no screens to be resumed” appears, type `screen` instead.
3. Enter `./startServer.sh`. This runs a script that handles running the server.
4. Hold the control key (Usually marked Ctrl on your keyboard) and the A key, then press the D key. A message saying [`detached from <something something>`] should show. If [`screen is terminating`] shows up, please repeat the process.
5. You’re done! Close the console by entering `exit` and press “Logout” if you’re on Bitvise.

**Notes:**

**When connecting to the instance:**

DO NOT MODIFY YOUR PRIVATE FILE KEY! Ask your alpha code monkey for a new one if you lost or rendered it unusable.

**When on the instance:**

DO NOT EDIT ANY FILE UNLESS ORDERED BY THE LEADERS! Let the code monkeys do the tree-swinging job.

**When in screen:**

DO NOT CLOSE THE WINDOW! Detach the screen first by pressing Ctrl + A + D first, otherwise the screen will terminate and so will the server!

**When in doubt:**

DO NOT MAKE CHANGES WITHOUT ASKING! A code monkey probably has more experience writing better-tasting spaghetti code than you.

**If the above steps do not work, contact a back-end code monkey. Banana is optional.**