

Pretty Cure 5's Euclidian Installation Guide

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2016-11-21

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Assumptions

1. You know how to SSH.
2. You know how to use NeCTAR.
3. You have setup your Key Pair.
(Click **Project** » **Compute** » **Access & Security**, then click the **Key Pairs** tab; this should be the automatic default when you click **Launch Instance** (From the **Access & Security** tab.), in step 5 of the NeCTAR section.)
4. You know how to use SAGE2.

Server-side

2.1 NeCTAR

1. Goto <https://dashboard.rc.nectar.org.au/auth/login/>.
2. Click **Log In**.
3. Authenticate your NeCTAR account.
(You may be taken to RMIT's authentication services; university dependent.)
4. Click **Project** » **Compute** » **Instances**.
(LHS navigation menu.)
5. Click **Launch Instance**.
6. Type **Pretty Cure Server** into the **Instance Name** text field.
7. Click **Flavor** » **m2.small**.
8. Click **Image Name** » **NeCTAR Ubuntu 16.04 LTS (Xenial) amd64 (293.9 MB)**.
9. Click **Launch**.
10. Wait for the **Task** to become "None".
(Launching the instance can take a few minutes.)
11. Record the **IP Address** for SSH'ing to the server.

2.2 SSH

1. SSH to the recorded **IP Address**, `c` username **ubuntu**.
(You should have a command-prompt.)

2.3 Installation

```
1 # sweet home
2 home=/home/ubuntu;
3
4 # server address (the server you just SSH'd to)
5 cat<<<____.____.____.____>"$home"/server;
6
7 # ip numbers (as many as you want; this is to allow firewall access)
8 # the first one should be yours! ;)
9 cat<<WHEN>"$home"/phonebook;
10 _____._____._____._____
11 _____._____._____._____
12 WHEN
13
14 # install (follow the prompts; everything should be agreeable)
15 # you should have a ~/phonebook and a ~/server
16 # you should install iptables-persistent
17 # ...
18 # it appears there is a new prompt!!! _-_-
19 # I recognise it!!! _-_-
20 # it used to be purely text-based!!! _-_-
21 # just select "install the package maintainer's version"
22 # now it should be hands-free
23 github=https://raw.githubusercontent.com/;
24 installer=Pretty-Cure-5/Euclidian/master/Server/install.sh;
25 wget -O- $github$installer | bash;
26 # verify software is installed correctly (screenshot below)
27 # check firewall; as per post-install instructions
28
29 # cd to the git repo
30 cd Euclidian/Server
31 nohup node sys.js &
```

2.4 Setup

1. Goto `http://____.____.____.____:1337/`. (Use the recorded **IP Address**.)
2. Click `SAGE2 Reconfigurations`.
3. Click `GitHub-NeCTAR synchronisation`.

Client-side

Access the Pretty Cure Server @ `http://____.____.____.____:1337/`.
(Use the recorded **IP Address**.)

3.1 SAGE2 UI

The SAGE2 Interface.

3.2 SAGE2 Overview Display

The SAGE2 Display. It is query-string based, from the address bar.

`clientID`: Negative-one is the overview display.

Positive integers starting from zero are the individual displays.

(Upper-limit depends on the display quantity.)

3.3 GitHub-NeCTAR synchronisation

Pulls any changes from GitHub, and reinitialises the SAGE2 server. This is used to update apps, as they are being developed; so developers are not required to SSH with the server.

3.4 Firewall Invitations

This is used to invite new IP addresses into the server firewall. It is query-string based, from the address bar.

`ip`: the IP address to invite into the firewall.

3.5 SAGE2 Reconfigurations

This is used to manipulate the SAGE2 configuration file. It is query-string based, from the address bar.

`cols` & `rows`: the number of columns, and rows; determines display quantity.

`width` & `height`: the pixel resolution of each display.

`hex`: the SAGE2 background colour.

`rgba`: the SAGE2 foreground colour.