# Instruction on run the Boa script on the VritualBox.

- You should install the Virtual Box first: https://www.virtualbox.org/wiki/Downloads
- Then double download the Ubuntu18.04.ova file and double click on it.
  You need following user and pass to login to the Linux.

```
User: boa
Pass: boag2018
```

- Open the Firefox browser. It should open the following url by default.

  - URL: http://127.0.0.1/boa/run
  - User: boa
  - Password: rocks

- You can see on the job lists some examples that have been tested on the Non-Redundant protein database.

  - NB: Since it is one node Hadoop cluster queries may take few minutes to run.

- Copy past the following Boa script to test the interface:

```
c: Cluster = input;
counts: output sum[string][string][string] of int;

ann := getAnnotations(c.seqid);

if (match (`unnamed protein`, ann))
    counts[c.id][c.seqid][ann] << 1;
```