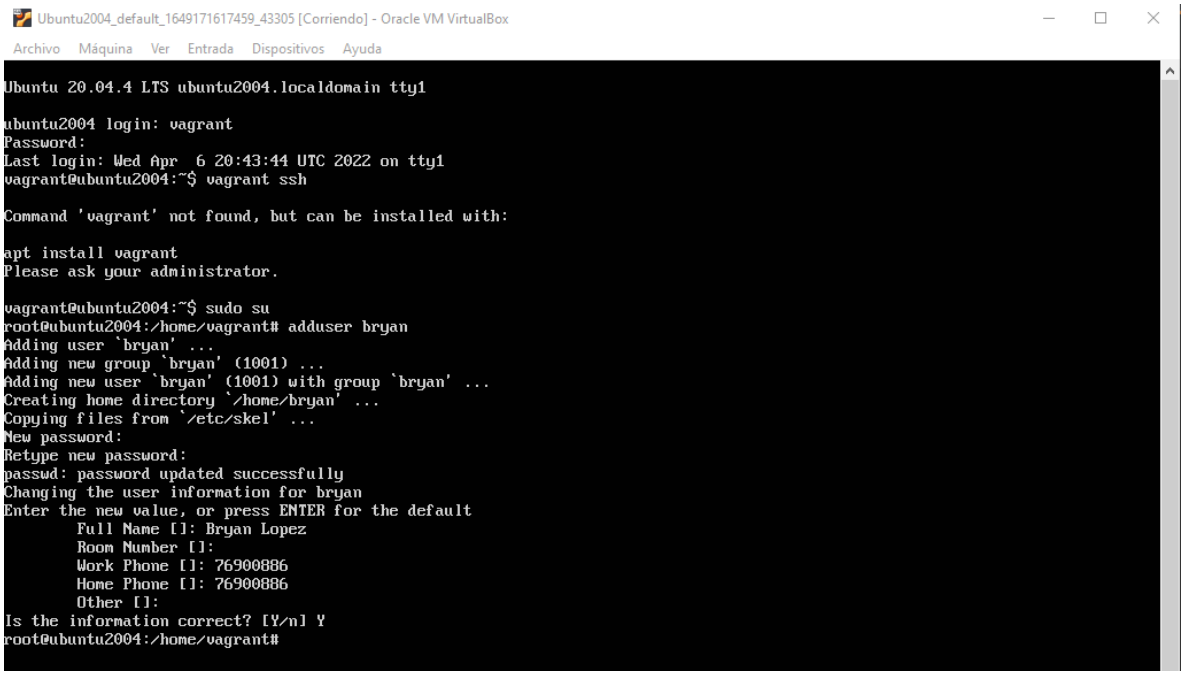
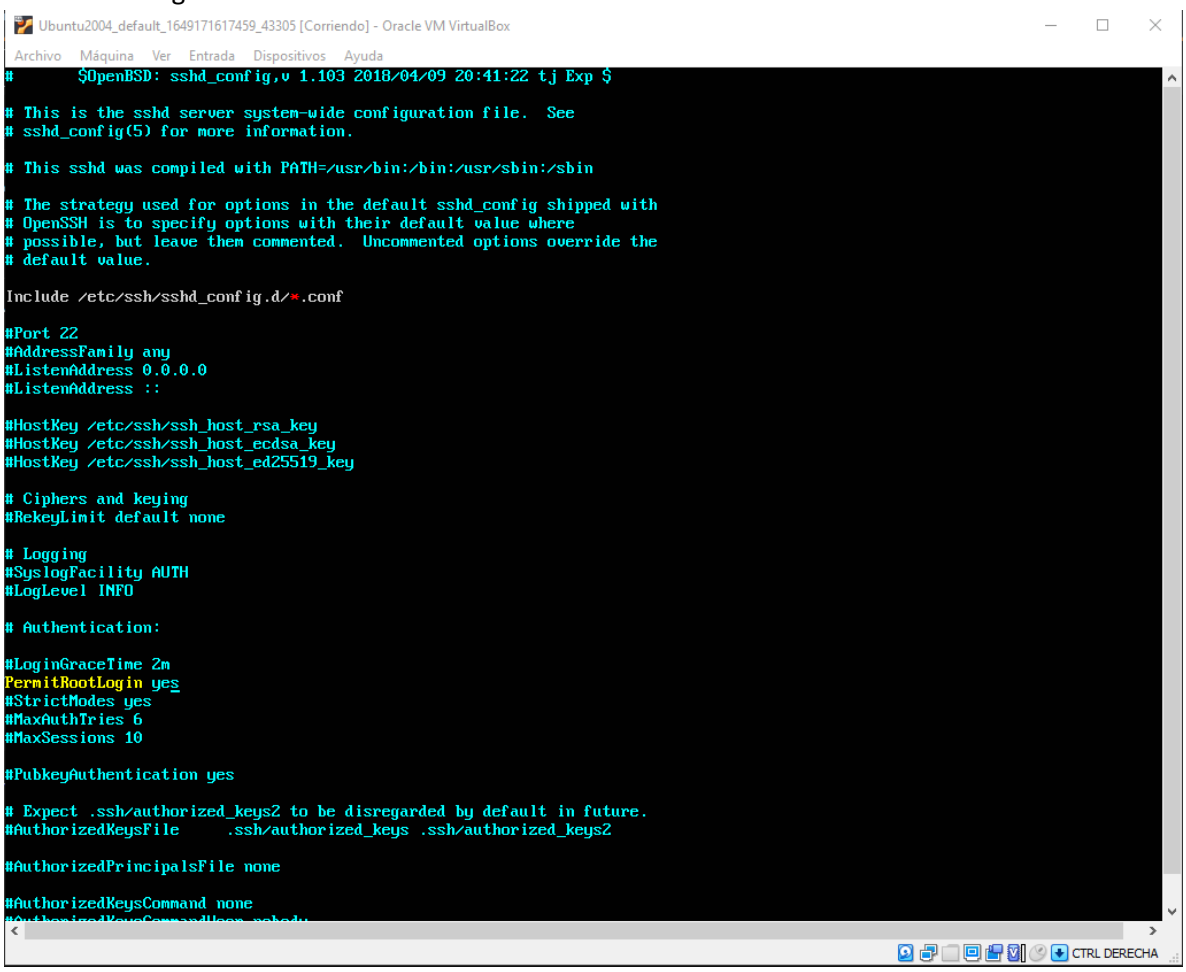
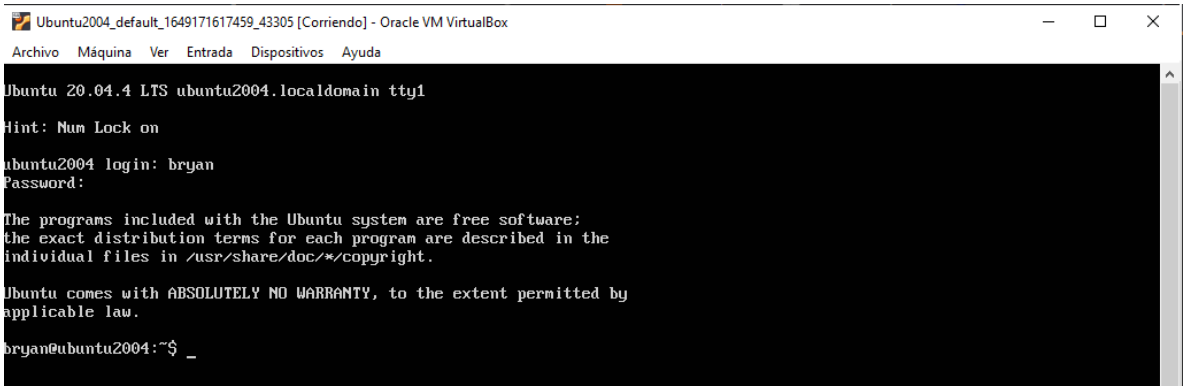
1. Create a new user for the Ubuntu VM



2. Enable root login in the ssh.conf file

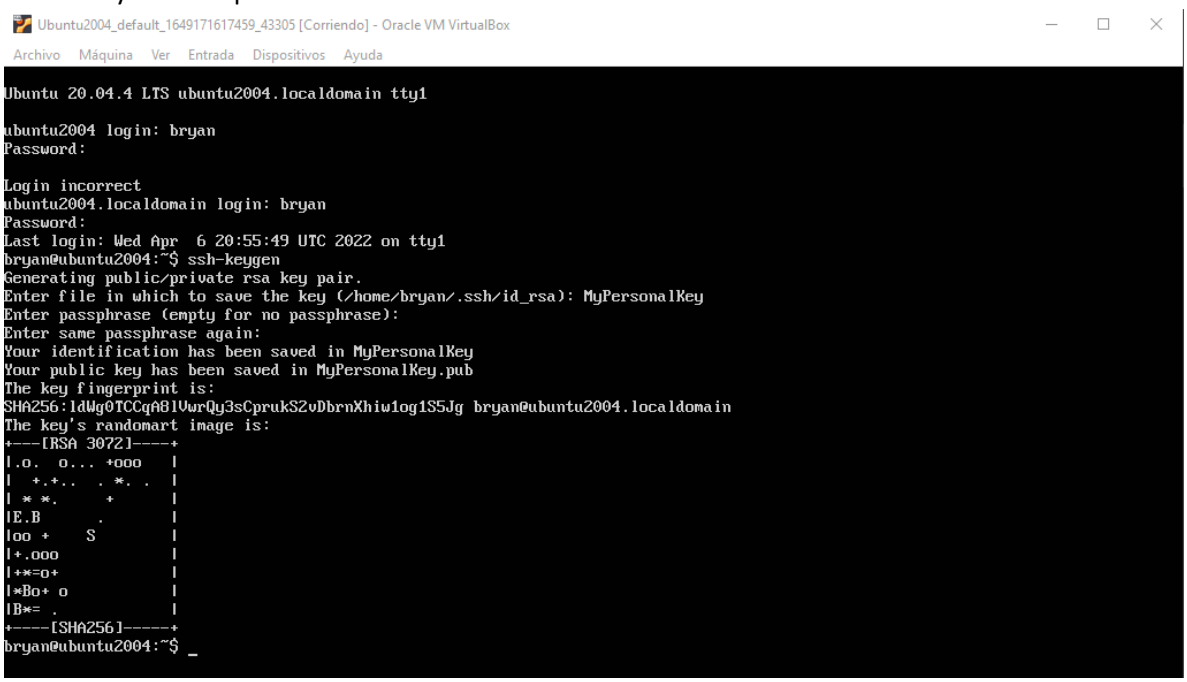


3. User successfully created

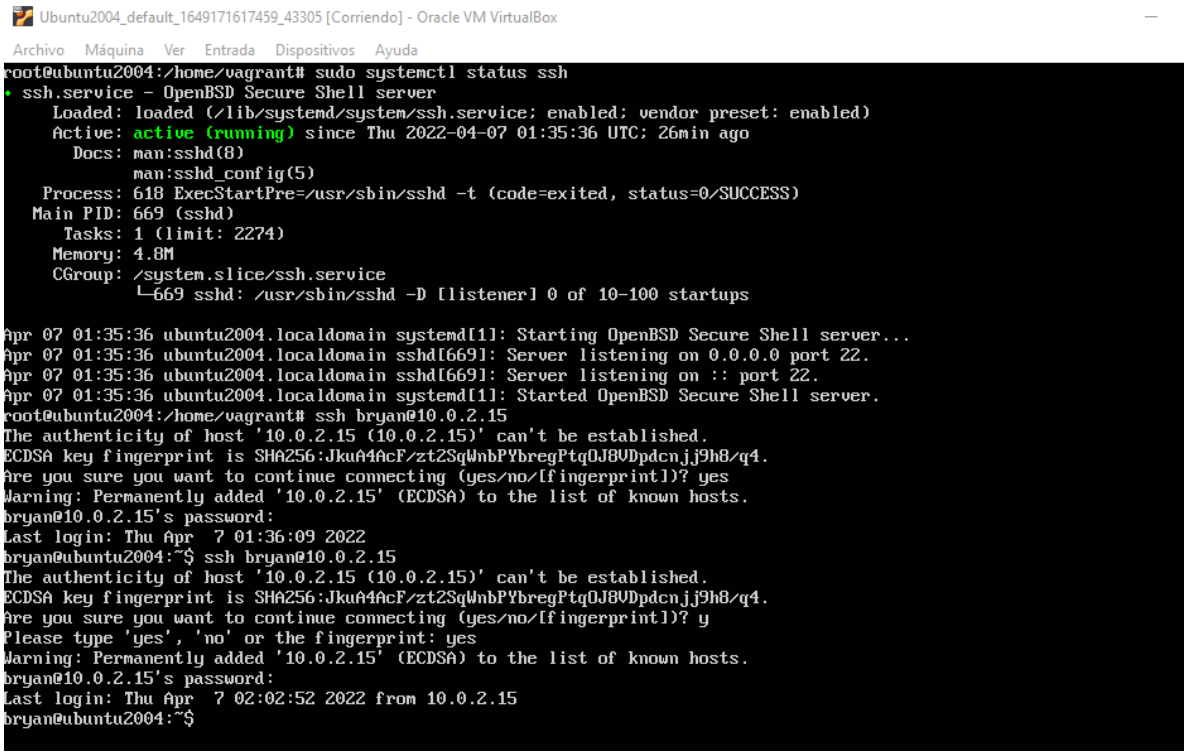


4. Now let's try to log in with the new user

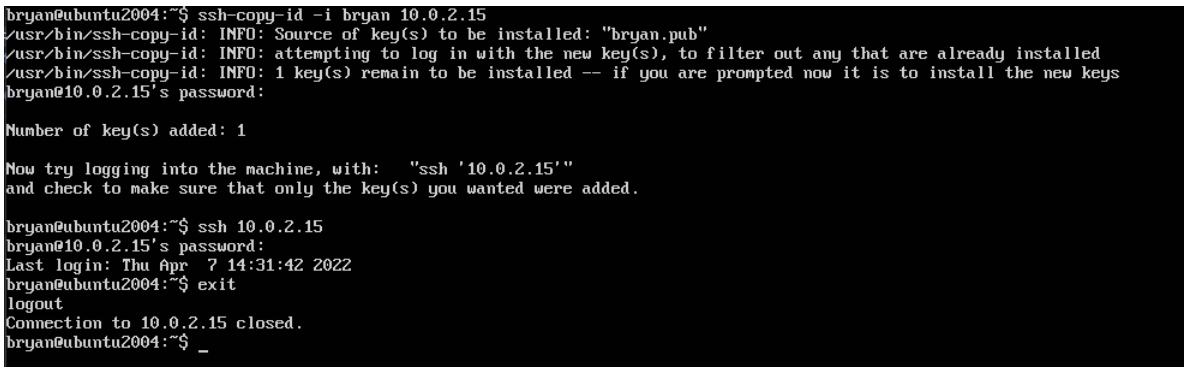
5. Set un keys for the personal user



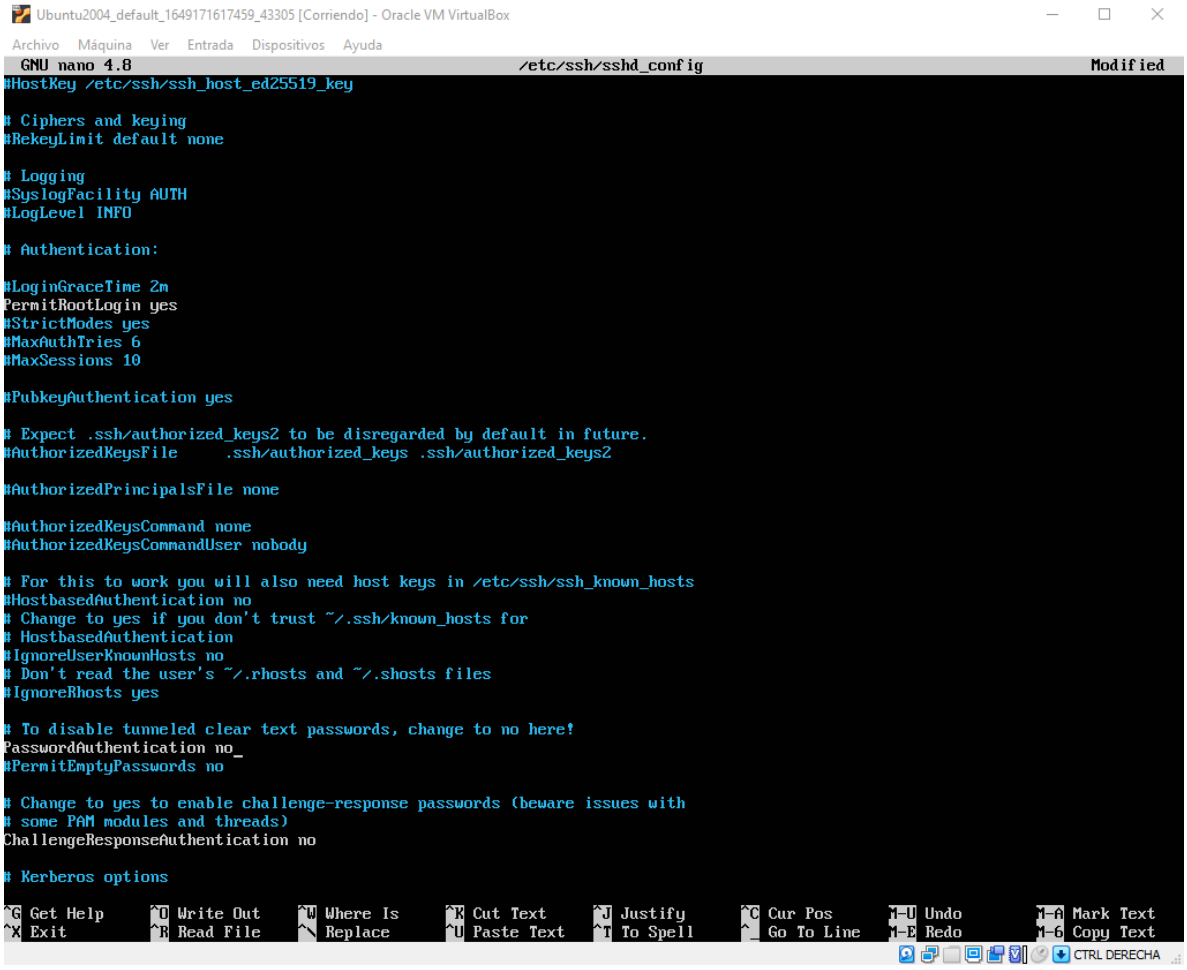
6. Use the personal key to Access the ssh



7. Add the public key to the ssh

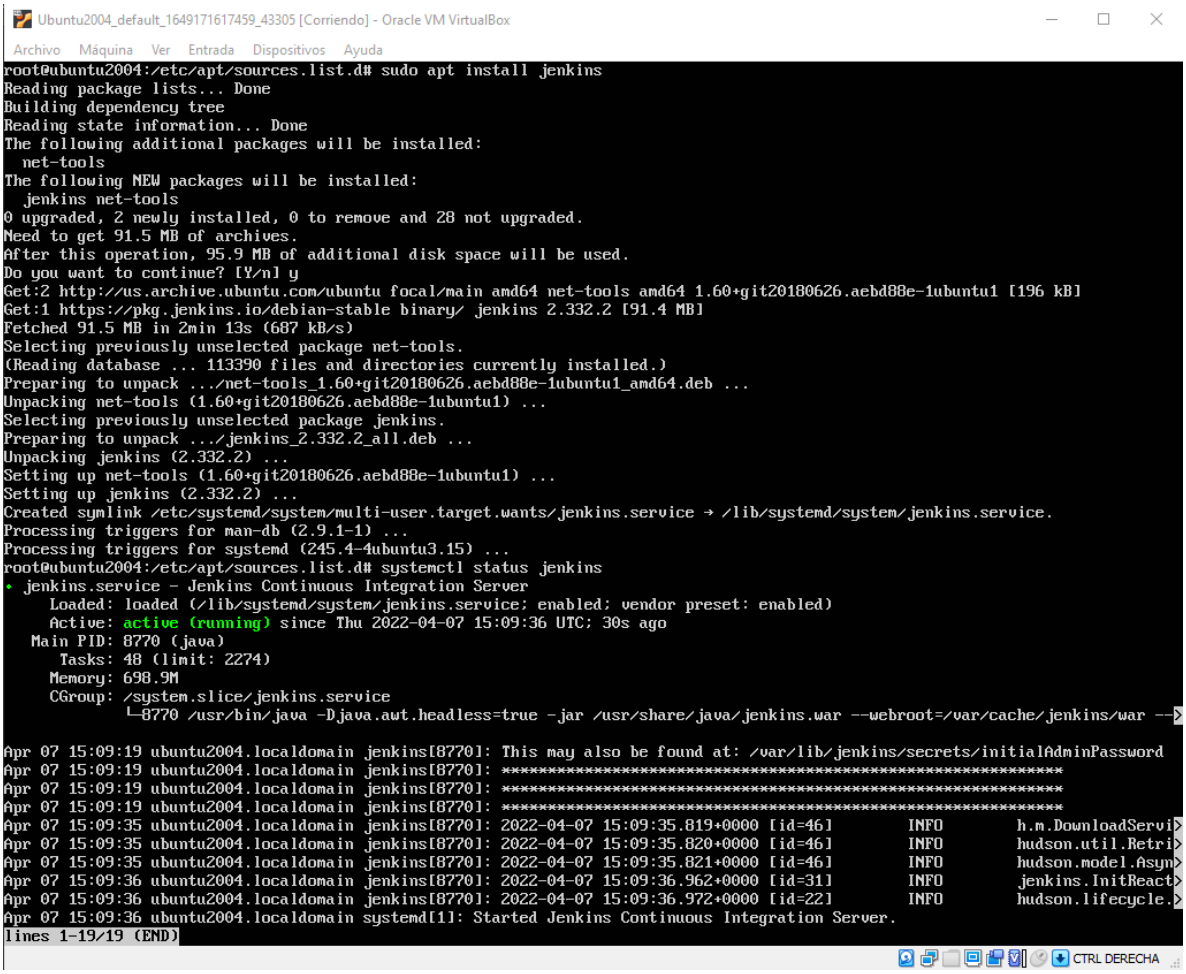


8. Set the password authentication = no



9. Log in without password

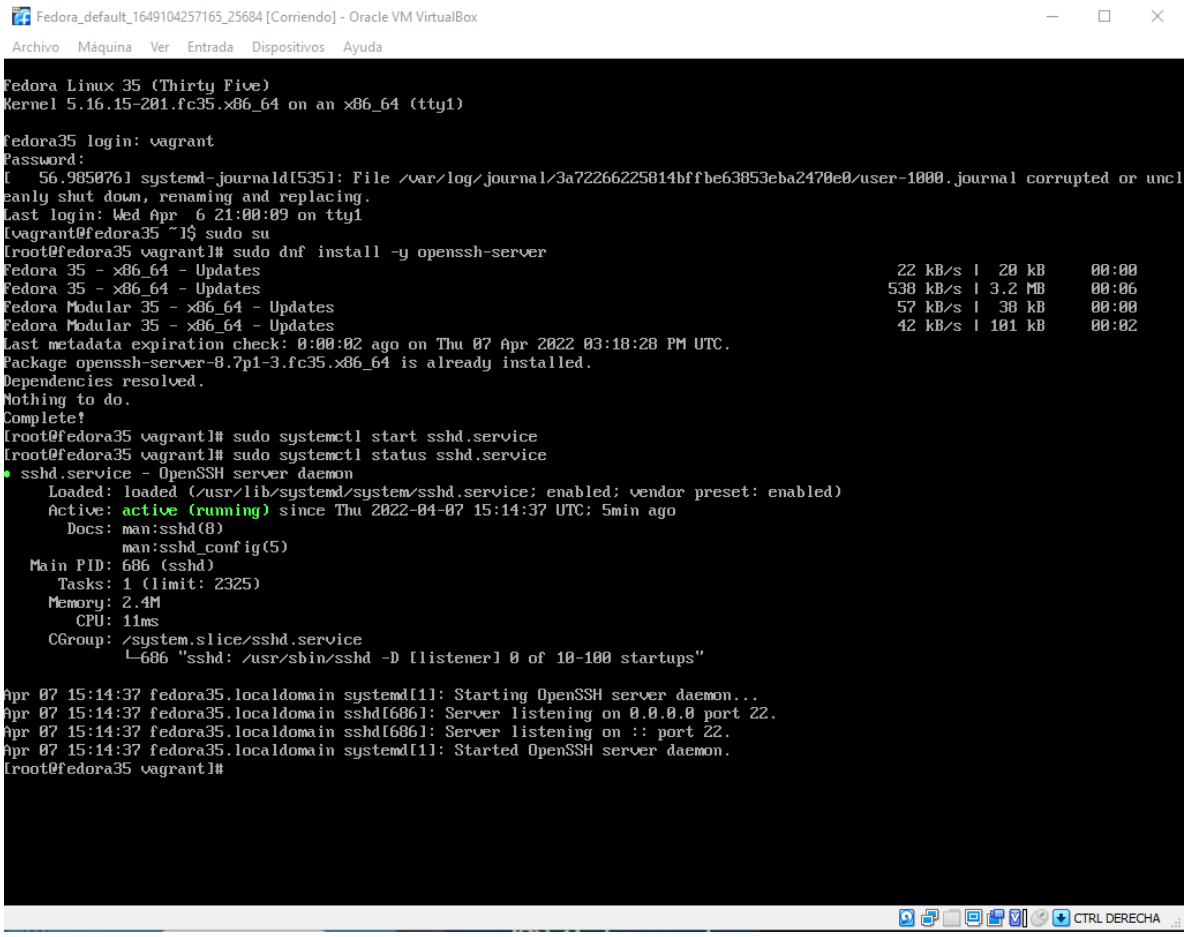
10. Then we install Jenkins



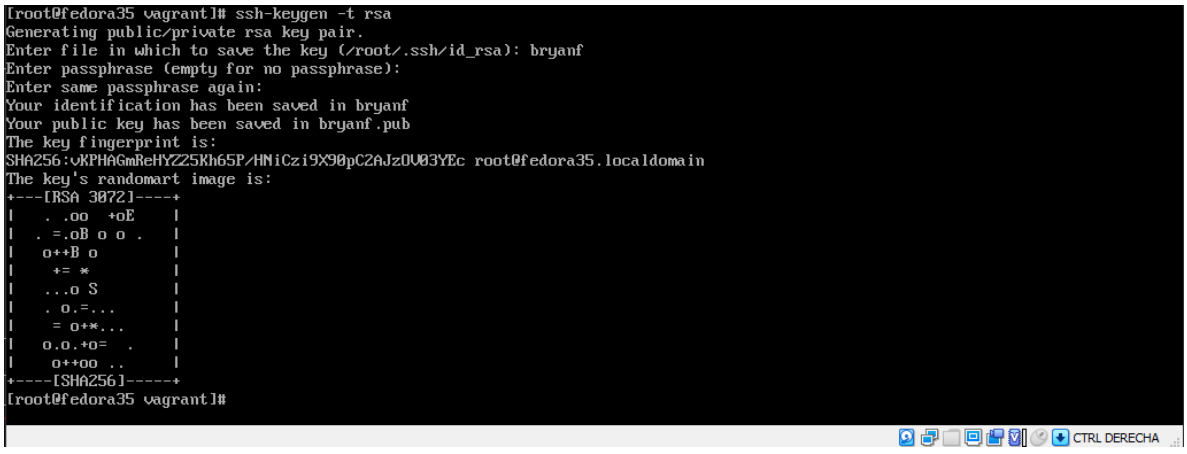
11. Adding the password

12. New user in fedora

13. Install shh.service



14. Now lets créate a new key



15. Test connection

```
[bryanf@fedora35 ~]$ ssh bryanf@10.0.2.15
The authenticity of host '10.0.2.15 (10.0.2.15)' can't be established.
ED25519 key fingerprint is SHA256:AQ6yVH1nxwqk/bnL4HJ23CE4hr7vTSPTBkEQfL6KiRQ.
This key is not known by any other names
Are you sure you want to continue connecting (yes/no/[fingerprint])? y
Please type 'yes', 'no' or the fingerprint: yes
Warning: Permanently added '10.0.2.15' (ED25519) to the list of known hosts.
bryanf@10.0.2.15's password:
Last login: Thu Apr  7 15:25:36 2022
[bryanf@fedora35 ~]$ _
```

16. Install java and jenkis

```
Installed:
  alsa-lib-1.2.6.1-3.fc35.x86_64                                copy-jdk-configs-4.0-2.fc35.noarch
  cups-libs-1:2.3.3op2-16.fc35.x86_64                           fontconfig-2.13.94-5.fc35.x86_64
  giflib-5.2.1-8.fc35.x86_64                                    java-11-openjdk-1:11.0.14.1.1-5.fc35.x86_64
  java-11-openjdk-headless-1:11.0.14.1.1-5.fc35.x86_64          javapackages-filesystem-6.0.0-1.fc35.noarch
  lcms2-2.12-2.fc35.x86_64                                      libXcomposite-0.4.5-6.fc35.x86_64
  libXi-1.7.10-7.fc35.x86_64                                    libXrender-0.9.10-15.fc35.x86_64
  libXtst-1.2.3-15.fc35.x86_64                                  libfontenc-1.1.3-16.fc35.x86_64
  libjpeg-turbo-2.1.0-3.fc35.x86_64                             lksctp-tools-1.0.18-11.fc35.x86_64
  lua-5.4.4-1.fc35.x86_64                                       lua-posix-35.0-4.fc35.x86_64
  mkfontscale-1.2.1-3.fc35.x86_64                               ttmkfdir-3.0.9-64.fc35.x86_64
  tzdata-java-2021e-1.fc35.noarch                               xml-common-0.6.3-57.fc35.noarch
  xorg-x11-fonts-Type1-7.5-32.fc35.noarch

Complete!
[root@fedora35 vagrant]# sudo wget -O /etc/yum.repos.d/jenkins.repo https://pkg.jenkins.io/redhat/jenkins.repo
--2022-04-07 15:50:10--  https://pkg.jenkins.io/redhat/jenkins.repo
Resolving pkg.jenkins.io (pkg.jenkins.io)... 199.232.134.133, 2a04:4e42:61::645
Connecting to pkg.jenkins.io (pkg.jenkins.io)|199.232.134.133|:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 71
Saving to: '/etc/yum.repos.d/jenkins.repo'

/etc/yum.repos.d/jenkins.repo   100%[=====================================================>]      71  --.-KB/s    in

2022-04-07 15:50:11 (3.72 MB/s) - '/etc/yum.repos.d/jenkins.repo' saved [71/71]

[root@fedora35 vagrant]# sudo rpm --import https://pkg.jenkins.io/redhat/jenkins.io.key
[root@fedora35 vagrant]# dnf repolist
repo id                                             repo name
fedora                                              Fedora 35 - x86_64
fedora-cisco-openh264                               Fedora 35 openh264 (From Cisco) - x86_64
fedora-modular                                      Fedora Modular 35 - x86_64
jenkins                                             Jenkins
updates                                             Fedora 35 - x86_64 - Updates
updates-modular                                     Fedora Modular 35 - x86_64 - Updates
[root@fedora35 vagrant]# _
```

17.

```
[root@fedora35 vagrant]# sudo rpm --import https://pkg.jenkins.io/redhat/jenkins.io.key
[root@fedora35 vagrant]# dnf repolist
repo id                                          repo name
fedora                                           Fedora 35 - x86_64
fedora-cisco-openh264                            Fedora 35 openh264 (From Cisco) - x86_64
fedora-modular                                   Fedora Modular 35 - x86_64
jenkins                                          Jenkins
updates                                          Fedora 35 - x86_64 - Updates
updates-modular                                  Fedora Modular 35 - x86_64 - Updates
[root@fedora35 vagrant]# sudo dnf install jenkins
Jenkins                                                                    42 kB/s |  98 kB     00:02
Dependencies resolved.
================================================================================================================
 Package                    Architecture              Version                    Repository                  Size
================================================================================================================
Installing:
 jenkins                    noarch                    2.342-1.1                  jenkins                     87 M

Transaction Summary
================================================================================================================
Install  1 Package

Total download size: 87 M
Installed size: 87 M
Is this ok [y/N]: y
Downloading Packages:
jenkins-2.342-1.1.noarch.rpm                                                  616 kB/s |  87 MB     02:24
----------------------------------------------------------------------------------------------------------------
Total                                                                         616 kB/s |  87 MB     02:24
Running transaction check
Transaction check succeeded.
Running transaction test
Transaction test succeeded.
Running transaction
  Preparing        :                                                                                      1/1
  Running scriptlet: jenkins-2.342-1.1.noarch                                                             1/1
  Installing       : jenkins-2.342-1.1.noarch                                                             1/1
  Running scriptlet: jenkins-2.342-1.1.noarch                                                             1/1
  Verifying        : jenkins-2.342-1.1.noarch                                                             1/1

Installed:
  jenkins-2.342-1.1.noarch

Complete!
[root@fedora35 vagrant]#
```

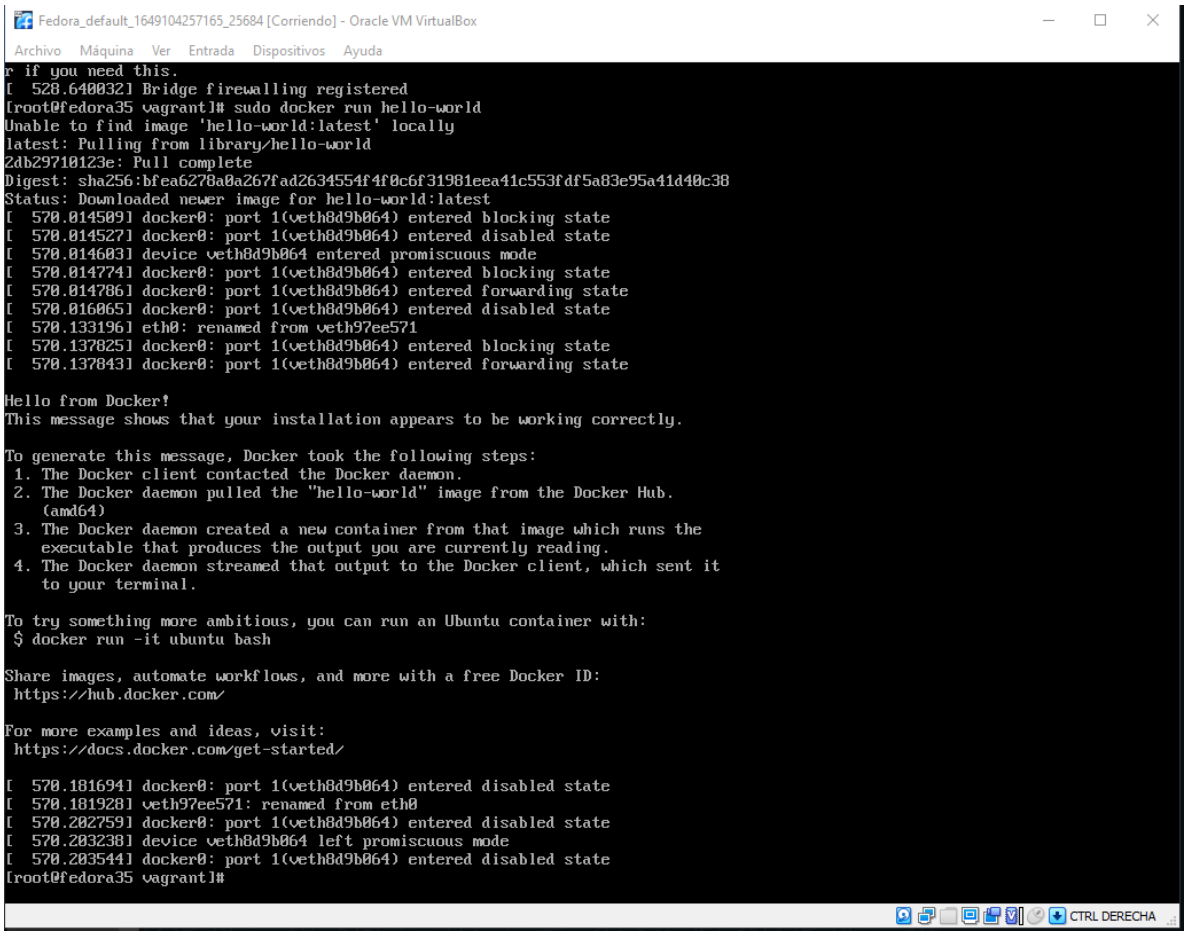
18. And finally check the status

```
Installed:
  jenkins-2.342-1.1.noarch

Complete!
[root@fedora35 vagrant]# /etc/init.d/jenkins start
Starting jenkins (via systemctl):
                                                           [  OK  ]
[root@fedora35 vagrant]#
[root@fedora35 vagrant]# /etc/init.d/jenkins status
● jenkins.service - Jenkins Continuous Integration Server
     Loaded: loaded (/usr/lib/systemd/system/jenkins.service; disabled; vendor preset: disabled)
     Active: active (running) since Thu 2022-04-07 15:57:53 UTC; 10s ago
   Main PID: 19281 (java)
      Tasks: 47 (limit: 2325)
     Memory: 747.6M
        CPU: 32.097s
     CGroup: /system.slice/jenkins.service
             └─19281 /usr/bin/java -Djava.awt.headless=true -jar /usr/share/java/jenkins.war --webroot=/var/cache/j

Apr 07 15:57:34 fedora35.localdomain jenkins[19281]: This may also be found at: /var/lib/jenkins/secrets/initialAdm
Apr 07 15:57:34 fedora35.localdomain jenkins[19281]: ************************************************************
Apr 07 15:57:34 fedora35.localdomain jenkins[19281]: ************************************************************
Apr 07 15:57:34 fedora35.localdomain jenkins[19281]: ************************************************************
Apr 07 15:57:53 fedora35.localdomain jenkins[19281]: 2022-04-07 15:57:53.505+0000 [id=46]        INFO        h.m.Do
Apr 07 15:57:53 fedora35.localdomain jenkins[19281]: 2022-04-07 15:57:53.507+0000 [id=46]        INFO        hudson
Apr 07 15:57:53 fedora35.localdomain jenkins[19281]: 2022-04-07 15:57:53.508+0000 [id=46]        INFO        hudson
Apr 07 15:57:53 fedora35.localdomain jenkins[19281]: 2022-04-07 15:57:53.959+0000 [id=30]        INFO        jenkin
Apr 07 15:57:53 fedora35.localdomain jenkins[19281]: 2022-04-07 15:57:53.970+0000 [id=22]        INFO        hudson
Apr 07 15:57:53 fedora35.localdomain systemd[1]: Started Jenkins Continuous Integration Server.

[root@fedora35 vagrant]# _
```

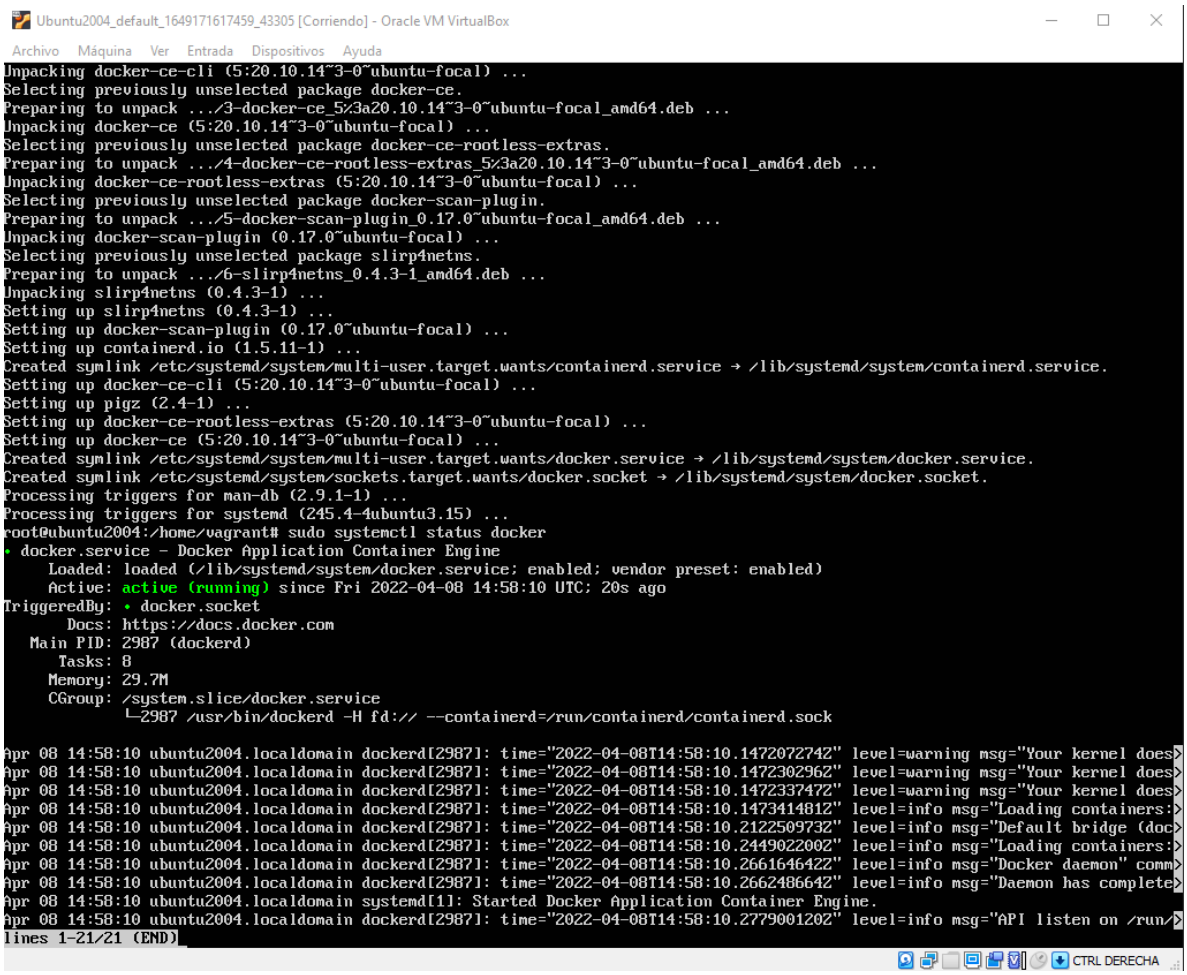
19. And set the firewall

```
[root@fedora35 vagrant]# firewall-cmd --add-port=8080/tcp --permanent
success
[root@fedora35 vagrant]# firewall-cmd --reload
success
[root@fedora35 vagrant]# firewall-cmd --list-all
public (active)
  target: default
  icmp-block-inversion: no
  interfaces: eth0
  sources:
  services: dhcpv6-client mdns ssh
  ports: 8080/tcp
  protocols:
  forward: yes
  masquerade: no
  forward-ports:
  source-ports:
  icmp-blocks:
  rich rules:
[root@fedora35 vagrant]#
```

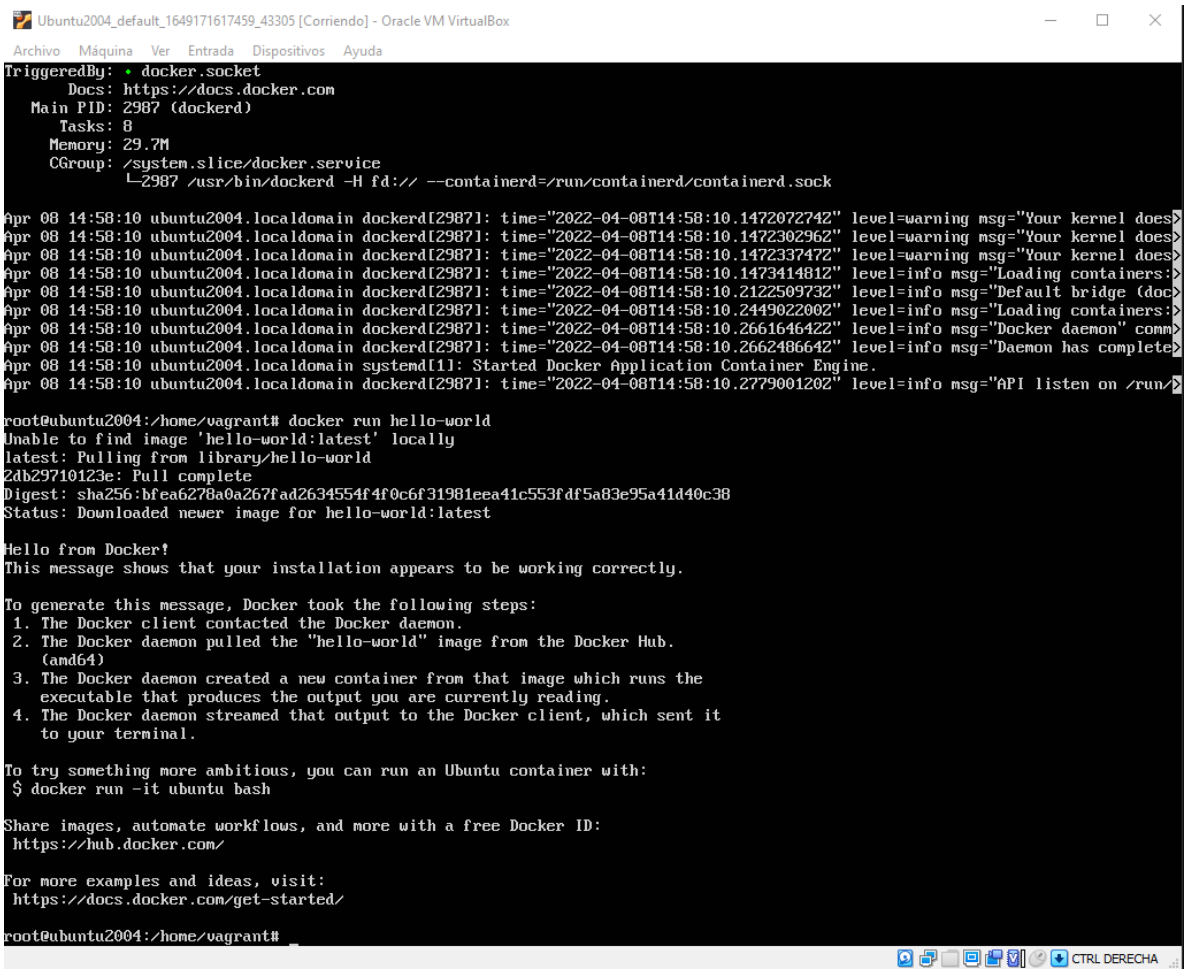
20. The next thing to do is install Docker, once Docker its installed run the hello world command (sudo systemctl start Docker then sudo Docker run hello-world)



21. The same goes with ubuntu


Ubuntu2004_default_1649171617459_43305 [Corriendo] - Oracle VM VirtualBox
Archivo Máquina Ver Entrada Dispositivos Ayuda
Unpacking docker-ce-cli (5:20.10.14~3-0~ubuntu-focal) ...
Selecting previously unselected package docker-ce.
Preparing to unpack .../3-docker-ce_5%3a20.10.14~3-0~ubuntu-focal_amd64.deb ...
Unpacking docker-ce (5:20.10.14~3-0~ubuntu-focal) ...
Selecting previously unselected package docker-ce-rootless-extras.
Preparing to unpack .../4-docker-ce-rootless-extras_5%3a20.10.14~3-0~ubuntu-focal_amd64.deb ...
Unpacking docker-ce-rootless-extras (5:20.10.14~3-0~ubuntu-focal) ...
Selecting previously unselected package docker-scan-plugin.
Preparing to unpack .../5-docker-scan-plugin_0.17.0~ubuntu-focal_amd64.deb ...
Unpacking docker-scan-plugin (0.17.0~ubuntu-focal) ...
Selecting previously unselected package slirp4netns.
Preparing to unpack .../6-slirp4netns_0.4.3-1_amd64.deb ...
Unpacking slirp4netns (0.4.3-1) ...
Setting up slirp4netns (0.4.3-1) ...
Setting up docker-scan-plugin (0.17.0~ubuntu-focal) ...
Setting up containerd.io (1.5.11-1) ...
Created symlink /etc/systemd/system/multi-user.target.wants/containerd.service → /lib/systemd/system/containerd.service.
Setting up docker-ce-cli (5:20.10.14~3-0~ubuntu-focal) ...
Setting up pigz (2.4-1) ...
Setting up docker-ce-rootless-extras (5:20.10.14~3-0~ubuntu-focal) ...
Setting up docker-ce (5:20.10.14~3-0~ubuntu-focal) ...
Created symlink /etc/systemd/system/multi-user.target.wants/docker.service → /lib/systemd/system/docker.service.
Created symlink /etc/systemd/system/sockets.target.wants/docker.socket → /lib/systemd/system/docker.socket.
Processing triggers for man-db (2.9.1-1) ...
Processing triggers for systemd (245.4-4ubuntu3.15) ...
root@ubuntu2004:/home/vagrant# sudo systemctl status docker
• docker.service - Docker Application Container Engine
Loaded: loaded (/lib/systemd/system/docker.service; enabled; vendor preset: enabled)
Active: active (running) since Fri 2022-04-08 14:58:10 UTC; 20s ago
TriggeredBy: • docker.socket
Docs: https://docs.docker.com
Main PID: 2987 (dockerd)
Tasks: 8
Memory: 29.7M
CGroup: /system.slice/docker.service
└─2987 /usr/bin/dockerd -H fd:// --containerd=/run/containerd/containerd.sock
Apr 08 14:58:10 ubuntu2004.localdomain dockerd[2987]: time="2022-04-08T14:58:10.1472072742" level=warning msg="Your kernel does
Apr 08 14:58:10 ubuntu2004.localdomain dockerd[2987]: time="2022-04-08T14:58:10.1472302962" level=warning msg="Your kernel does
Apr 08 14:58:10 ubuntu2004.localdomain dockerd[2987]: time="2022-04-08T14:58:10.1472337472" level=warning msg="Your kernel does
Apr 08 14:58:10 ubuntu2004.localdomain dockerd[2987]: time="2022-04-08T14:58:10.1473414812" level=info msg="Loading containers:
Apr 08 14:58:10 ubuntu2004.localdomain dockerd[2987]: time="2022-04-08T14:58:10.2122509732" level=info msg="Default bridge (doc
Apr 08 14:58:10 ubuntu2004.localdomain dockerd[2987]: time="2022-04-08T14:58:10.2449022002" level=info msg="Loading containers:
Apr 08 14:58:10 ubuntu2004.localdomain dockerd[2987]: time="2022-04-08T14:58:10.2661646422" level=info msg="Docker daemon" comm
Apr 08 14:58:10 ubuntu2004.localdomain dockerd[2987]: time="2022-04-08T14:58:10.2662486642" level=info msg="Daemon has complete
Apr 08 14:58:10 ubuntu2004.localdomain systemd[1]: Started Docker Application Container Engine.
Apr 08 14:58:10 ubuntu2004.localdomain dockerd[2987]: time="2022-04-08T14:58:10.2779001202" level=info msg="API listen on /run/
lines 1-21/21 (END)
CTRL DERECHA

22.


Ubuntu2004_default_1649171617459_43305 [Corriendo] - Oracle VM VirtualBox
Archivo Máquina Ver Entrada Dispositivos Ayuda
TriggeredBy: • docker.socket
Docs: https://docs.docker.com
Main PID: 2987 (dockerd)
Tasks: 8
Memory: 29.7M
CGroup: /system.slice/docker.service
└─2987 /usr/bin/dockerd -H fd:// --containerd=/run/containerd/containerd.sock
Apr 08 14:58:10 ubuntu2004.localdomain dockerd[2987]: time="2022-04-08T14:58:10.1472072742" level=warning msg="Your kernel does
Apr 08 14:58:10 ubuntu2004.localdomain dockerd[2987]: time="2022-04-08T14:58:10.1472302962" level=warning msg="Your kernel does
Apr 08 14:58:10 ubuntu2004.localdomain dockerd[2987]: time="2022-04-08T14:58:10.1472337472" level=warning msg="Your kernel does
Apr 08 14:58:10 ubuntu2004.localdomain dockerd[2987]: time="2022-04-08T14:58:10.1473414812" level=info msg="Loading containers:
Apr 08 14:58:10 ubuntu2004.localdomain dockerd[2987]: time="2022-04-08T14:58:10.2122509732" level=info msg="Default bridge (doc
Apr 08 14:58:10 ubuntu2004.localdomain dockerd[2987]: time="2022-04-08T14:58:10.2449022002" level=info msg="Loading containers:
Apr 08 14:58:10 ubuntu2004.localdomain dockerd[2987]: time="2022-04-08T14:58:10.2661646422" level=info msg="Docker daemon" comm
Apr 08 14:58:10 ubuntu2004.localdomain dockerd[2987]: time="2022-04-08T14:58:10.2662486642" level=info msg="Daemon has complete
Apr 08 14:58:10 ubuntu2004.localdomain systemd[1]: Started Docker Application Container Engine.
Apr 08 14:58:10 ubuntu2004.localdomain dockerd[2987]: time="2022-04-08T14:58:10.2779001202" level=info msg="API listen on /run/
root@ubuntu2004:/home/vagrant# docker run hello-world
Unable to find image 'hello-world:latest' locally
latest: Pulling from library/hello-world
2db29710123e: Pull complete
Digest: sha256:bfea6278a0a267fad2634554f4f0c6f31981eea41c553fdf5a83e95a41d40c38
Status: Downloaded newer image for hello-world:latest
Hello from Docker!
This message shows that your installation appears to be working correctly.
To generate this message, Docker took the following steps:
1. The Docker client contacted the Docker daemon.
2. The Docker daemon pulled the "hello-world" image from the Docker Hub.
(amd64)
3. The Docker daemon created a new container from that image which runs the
executable that produces the output you are currently reading.
4. The Docker daemon streamed that output to the Docker client, which sent it
to your terminal.
To try something more ambitious, you can run an Ubuntu container with:
$ docker run -it ubuntu bash
Share images, automate workflows, and more with a free Docker ID:
https://hub.docker.com/
For more examples and ideas, visit:
https://docs.docker.com/get-started/
root@ubuntu2004:/home/vagrant#
CTRL DERECHA