

```

momid@momid:~$ sudo apt install openssh-server openssh-client
[sudo] password for momid:
Reading package lists... Done
Building dependency tree
Reading state information... Done
openssh-client is already the newest version (1:8.2p1-4ubuntu0.2).
openssh-client set to manually installed.
The following additional packages will be installed:
  libwrap0 ncurses-term openssh-sftp-server ssh-import-id
Suggested packages:
  molly-guard monkeysphere ssh-askpass
The following NEW packages will be installed:
  libwrap0 ncurses-term openssh-server openssh-sftp-server ssh-import-id
0 upgraded, 5 newly installed, 0 to remove and 102 not upgraded.
Need to get 734 kB of archives.
After this operation, 6121 kB of additional disk space will be used.
Do you want to continue? [Y/n] y
Get:1 http://es.archive.ubuntu.com/ubuntu focal/main amd64 libwrap0 amd64 7.6.q-30 [46.3 kB]
Get:2 http://es.archive.ubuntu.com/ubuntu focal/main amd64 ncurses-term all 6.2-0ubuntu2 [249 kB]
Get:3 http://es.archive.ubuntu.com/ubuntu focal-updates/main amd64 openssh-sftp-server amd64 1:8.2p1-4ubuntu0.2 [51.5 kB]
Get:4 http://es.archive.ubuntu.com/ubuntu focal-updates/main amd64 openssh-server amd64 1:8.2p1-4ubuntu0.2 [377 kB]
Get:5 http://es.archive.ubuntu.com/ubuntu focal/main amd64 ssh-import-id all 5.10-0ubuntu1 [10.0 kB]
Fetched 734 kB in 1s (837 kB/s)
Preconfiguring packages ...
Selecting previously unselected package libwrap0:amd64.
(Reading database ... 68300 files and directories currently installed.)
Preparing to unpack .../libwrap0_7.6.q-30_amd64.deb ...
Unpacking libwrap0:amd64 (7.6.q-30) ...
Selecting previously unselected package ncurses-term.
Preparing to unpack .../ncurses-term_6.2-0ubuntu2_all.deb ...
Unpacking ncurses-term (6.2-0ubuntu2) ...

Progress: [ 14%] [#####.....]

```

```

momid@momid:~$ sudo systemctl status ssh
• ssh.service - OpenBSD Secure Shell server
  Loaded: loaded (/lib/systemd/system/ssh.service; enabled; vendor preset: enabled)
  Active: active (running) since Sat 2021-03-27 16:20:38 UTC; 1min 24s ago
    Docs: man:sshd(8)
           man:sshd_config(5)
  Main PID: 2487 (sshd)
    Tasks: 1 (limit: 4619)
  Memory: 1.2M
  CGroup: /system.slice/ssh.service
          └─2487 sshd: /usr/sbin/sshd -D [listener] 0 of 10-100 startups

Mar 27 16:20:38 momid systemd[1]: Starting OpenBSD Secure Shell server...
Mar 27 16:20:38 momid sshd[2487]: Server listening on 0.0.0.0 port 22.
Mar 27 16:20:38 momid sshd[2487]: Server listening on :: port 22.
Mar 27 16:20:38 momid systemd[1]: Started OpenBSD Secure Shell server.
momid@momid:~$ sudo systemctl status sshd
• ssh.service - OpenBSD Secure Shell server
  Loaded: loaded (/lib/systemd/system/ssh.service; enabled; vendor preset: enabled)
  Active: active (running) since Sat 2021-03-27 16:20:38 UTC; 1min 26s ago
    Docs: man:sshd(8)
           man:sshd_config(5)
  Main PID: 2487 (sshd)
    Tasks: 1 (limit: 4619)
  Memory: 1.2M
  CGroup: /system.slice/ssh.service
          └─2487 sshd: /usr/sbin/sshd -D [listener] 0 of 10-100 startups

Mar 27 16:20:38 momid systemd[1]: Starting OpenBSD Secure Shell server...
Mar 27 16:20:38 momid sshd[2487]: Server listening on 0.0.0.0 port 22.
Mar 27 16:20:38 momid sshd[2487]: Server listening on :: port 22.
Mar 27 16:20:38 momid systemd[1]: Started OpenBSD Secure Shell server.
momid@momid:~$

```

```
daniel@daniel-XPS-15-9570:~$ ssh momid@192.168.56.105 -p 22
momid@192.168.56.105's password:
Welcome to Ubuntu 20.04.1 LTS (GNU/Linux 5.4.0-67-generic x86_64)
```

```
* Documentation:  https://help.ubuntu.com
* Management:    https://landscape.canonical.com
* Support:       https://ubuntu.com/advantage
```

System information as of Sat Mar 27 16:25:29 UTC 2021

```
System load:  0.0                Processes:            126
Usage of /home: 0.2% of 975MB    Users logged in:     1
Memory usage:   6%               IPv4 address for enp0s3: 10.0.2.15
Swap usage:    0%               IPv4 address for enp0s8: 192.168.56.105
```

```
102 updates can be installed immediately.
0 of these updates are security updates.
To see these additional updates run: apt list --upgradable
```

Last login: Sat Mar 27 16:17:04 2021

```
momid@momid:~$ lsblk
```

NAME	MAJ:MIN	RM	SIZE	RO	TYPE	MOUNTPPOINT
loop0	7:0	0	71.3M	1	loop	/snap/lxd/16099
loop1	7:1	0	55M	1	loop	/snap/core18/1880
loop2	7:2	0	29.9M	1	loop	/snap/snapd/8542
loop3	7:3	0	32.3M	1	loop	/snap/snapd/11402
loop4	7:4	0	55.5M	1	loop	/snap/core18/1988
loop5	7:5	0	70.4M	1	loop	/snap/lxd/19647
sda	8:0	0	10G	0	disk	
├─sda1	8:1	0	1M	0	part	
├─sda2	8:2	0	300M	0	part	
│ └─md0	9:0	0	299M	0	raid1	
│ └─md0p1	259:0	0	294M	0	part	/boot
├─sda3	8:3	0	9.7G	0	part	
│ └─md1	9:1	0	9.7G	0	raid1	
│ └─dm_crypt-0	253:0	0	9.7G	0	crypt	
│ └─vg0-lv--home	253:1	0	1G	0	lvm	/home
│ └─vg0-lv--root	253:2	0	8G	0	lvm	/
│ └─vg0-lv--swap	253:3	0	692M	0	lvm	[SWAP]
sdb	8:16	0	10G	0	disk	
├─sdb1	8:17	0	1M	0	part	
├─sdb2	8:18	0	300M	0	part	
│ └─md0	9:0	0	299M	0	raid1	
│ └─md0p1	259:0	0	294M	0	part	/boot
├─sdb3	8:19	0	9.7G	0	part	
│ └─md1	9:1	0	9.7G	0	raid1	
│ └─dm_crypt-0	253:0	0	9.7G	0	crypt	
│ └─vg0-lv--home	253:1	0	1G	0	lvm	/home
│ └─vg0-lv--root	253:2	0	8G	0	lvm	/
│ └─vg0-lv--swap	253:3	0	692M	0	lvm	[SWAP]
sr0	11:0	1	1024M	0	rom	

```
momid@momid:~$
```

```

Include /etc/ssh/sshd_config.d/*.conf

Port 22022
#AddressFamily any
#ListenAddress 0.0.0.0
#ListenAddress ::

#HostKey /etc/ssh/ssh_host_rsa_key
#HostKey /etc/ssh/ssh_host_ecdsa_key
#HostKey /etc/ssh/ssh_host_ed25519_key

# Ciphers and keying
#RekeyLimit default none

# Logging
#SyslogFacility AUTH
#LogLevel INFO

# Authentication:

#LoginGraceTime 2m
PermitRootLogin no
#StrictModes yes
#MaxAuthTries 6
#MaxSessions 10

#PubkeyAuthentication yes

# Expect .ssh/authorized_keys2 to be disregarded by default in future.
#AuthorizedKeysFile .ssh/authorized_keys .ssh/authorized_keys2

#AuthorizedPrincipalsFile none

#AuthorizedKeysCommand none
"/etc/ssh/sshd_config" 123L, 3275C written
root@momid:/home/momid#

```

```

root@momid:/home/momid# systemctl restart sshd
root@momid:/home/momid# systemctl status sshd
● ssh.service - OpenBSD Secure Shell server
   Loaded: loaded (/lib/systemd/system/ssh.service; enabled; vendor preset: enabled)
   Active: active (running) since Sat 2021-03-27 16:35:23 UTC; 5s ago
     Docs: man:sshd(8)
           man:sshd_config(5)
  Process: 3032 ExecStartPre=/usr/sbin/sshd -t (code=exited, status=0/SUCCESS)
 Main PID: 3045 (sshd)
    Tasks: 1 (limit: 4619)
   Memory: 1.1M
   CGroup: /system.slice/ssh.service
           └─3045 sshd: /usr/sbin/sshd -D [listener] 0 of 10-100 startups

Mar 27 16:35:23 momid systemd[1]: Stopping OpenBSD Secure Shell server...
Mar 27 16:35:23 momid systemd[1]: ssh.service: Succeeded.
Mar 27 16:35:23 momid systemd[1]: Stopped OpenBSD Secure Shell server.
Mar 27 16:35:23 momid systemd[1]: Starting OpenBSD Secure Shell server...
Mar 27 16:35:23 momid sshd[3045]: Server listening on 0.0.0.0 port 22022.
Mar 27 16:35:23 momid sshd[3045]: Server listening on :: port 22022.
Mar 27 16:35:23 momid systemd[1]: Started OpenBSD Secure Shell server.
root@momid:/home/momid# _

```

```

daniel@daniel-XPS-15-9570:~$ ssh momid@192.168.56.105 -p 22
ssh: connect to host 192.168.56.105 port 22: Connection refused
daniel@daniel-XPS-15-9570:~$ ssh momid@192.168.56.105 -p 22022
momid@192.168.56.105's password:
Welcome to Ubuntu 20.04.1 LTS (GNU/Linux 5.4.0-67-generic x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:    https://landscape.canonical.com
 * Support:       https://ubuntu.com/advantage

System information as of Sat Mar 27 16:36:57 UTC 2021

System load:  0.0          Processes:            127
Usage of /home: 0.2% of 975MB Users logged in:      1
Memory usage:  6%          IPv4 address for enp0s3: 10.0.2.15
Swap usage:    0%          IPv4 address for enp0s8: 192.168.56.105

102 updates can be installed immediately.
0 of these updates are security updates.
To see these additional updates run: apt list --upgradable

Last login: Sat Mar 27 16:36:35 2021 from 192.168.56.1
momid@momid:~$

```

```

[momid@localhost ~]$ sudo systemctl status sshd
[sudo] password for momid:
● sshd.service - OpenSSH server daemon
   Loaded: loaded (/usr/lib/systemd/system/sshd.service; enabled; vendor preset: enabled)
   Active: active (running) since Sat 2021-03-27 12:39:44 EDT; 27s ago
     Docs: man:sshd(8)
           man:sshd_config(5)
  Main PID: 893 (sshd)
    Tasks: 1 (limit: 23960)
   Memory: 2.4M
   CGroup: /system.slice/sshd.service
           └─893 /usr/sbin/sshd -D -oCiphers=aes256-gcm@openssh.com,chacha20-poly1305@openssh.com,a
mar 27 12:39:44 localhost.localdomain systemd[1]: Starting OpenSSH server daemon...
mar 27 12:39:44 localhost.localdomain sshd[893]: Server listening on 0.0.0.0 port 22.
mar 27 12:39:44 localhost.localdomain sshd[893]: Server listening on :: port 22.
mar 27 12:39:44 localhost.localdomain systemd[1]: Started OpenSSH server daemon.
lines 1-15/15 (END)

```

```

root@momid:/home/momid# ssh momid@192.168.56.110 -p 22
The authenticity of host '192.168.56.110 (192.168.56.110)' can't be established.
ECDSA key fingerprint is SHA256:wAtTyFUSC1W24ryYzx6IDE60fIFsxVoLbJ/nga/miZY.
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
Warning: Permanently added '192.168.56.110' (ECDSA) to the list of known hosts.
momid@192.168.56.110's password:
Activate the web console with: systemctl enable --now cockpit.socket

Last login: Sat Mar 27 12:39:55 2021
[momid@localhost ~]$ lsblk
NAME        MAJ:MIN RM  SIZE RO TYPE MOUNTPOINT
sda          8:0    0   8G  0 disk
├─sda1       8:1    0    1G  0 part /boot
├─sda2       8:2    0    7G  0 part
│   └─cl-root 253:0    0  6.2G  0 lvm  /
└─cl-swap    253:1    0  820M  0 lvm  [SWAP]
sdb          8:16    0    8G  0 disk
└─cl-newvar  253:2    0    1G  0 lvm  /var
sr0         11:0    1 1024M  0 rom
[momid@localhost ~]$

```

```

[momid@localhost ~]$ ssh momid@192.168.56.105 -p 22022
The authenticity of host '[192.168.56.105]:22022 ([192.168.56.105]:22022)' can't be established.
ECDSA key fingerprint is SHA256:SYwYgmtKxnTqKUpfALtZUaySrLQhE6Uy4z803ER02ZA.
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
Warning: Permanently added '[192.168.56.105]:22022' (ECDSA) to the list of known hosts.
momid@192.168.56.105's password:
Welcome to Ubuntu 20.04.1 LTS (GNU/Linux 5.4.0-67-generic x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:    https://landscape.canonical.com
 * Support:       https://ubuntu.com/advantage

System information as of Sat Mar 27 16:44:09 UTC 2021

System load:  0.0               Processes:    130
Usage of /home: 0.2% of 975MB   Users logged in: 1
Memory usage:  6%              IPv4 address for enp0s3: 10.0.2.15
Swap usage:    0%              IPv4 address for enp0s8: 192.168.56.105

102 updates can be installed immediately.
0 of these updates are security updates.
To see these additional updates run: apt list --upgradable

Last login: Sat Mar 27 16:36:57 2021 from 192.168.56.1
momid@momid:~$ _

```

```

[root@localhost momid]# sudo systemctl restart
Too few arguments.
[root@localhost momid]# sudo systemctl restart sshd
Job for sshd.service failed because the control process exited with error code.
See "systemctl status sshd.service" and "journalctl -xe" for details.
[root@localhost momid]#

```

```

-- Support: https://access.redhat.com/support
--
-- Unit sshd-keygen.target has finished shutting down.
mar 27 12:49:06 localhost.localdomain systemd[1]: Stopping sshd-keygen.target.
-- Subject: Unit sshd-keygen.target has begun shutting down
-- Defined-By: systemd
-- Support: https://access.redhat.com/support
--
-- Unit sshd-keygen.target has begun shutting down.
mar 27 12:49:06 localhost.localdomain systemd[1]: Reached target sshd-keygen.target.
-- Subject: Unit sshd-keygen.target has finished start-up
-- Defined-By: systemd
-- Support: https://access.redhat.com/support
--
-- Unit sshd-keygen.target has finished starting up.
--
-- The start-up result is done.
mar 27 12:49:06 localhost.localdomain systemd[1]: Starting OpenSSH server daemon...
-- Subject: Unit sshd.service has begun start-up
-- Defined-By: systemd
-- Support: https://access.redhat.com/support
--
-- Unit sshd.service has begun starting up.
mar 27 12:49:06 localhost.localdomain sshd[1620]: error: Bind to port 22022 on 0.0.0.0 failed: Perm>
mar 27 12:49:06 localhost.localdomain sshd[1620]: error: Bind to port 22022 on :: failed: Permissio>
mar 27 12:49:06 localhost.localdomain sshd[1620]: fatal: Cannot bind any address.
mar 27 12:49:06 localhost.localdomain systemd[1]: sshd.service: Main process exited, code=exited, s>
mar 27 12:49:06 localhost.localdomain systemd[1]: sshd.service: Failed with result 'exit-code'.
mar 27 12:49:06 localhost.localdomain systemd[1]: Failed to start OpenSSH server daemon.
-- Subject: Unit sshd.service has failed
-- Defined-By: systemd
-- Support: https://access.redhat.com/support
--
-- Unit sshd.service has failed.
--
-- The result is failed.
lines 2205-2240/2240 (END)

```

```
# The strategy used for options in the default sshd_config shipped with
# OpenSSH is to specify options with their default value where
# possible, but leave them commented. Uncommented options override the
# default value.

# If you want to change the port on a SELinux system, you have to tell
# SELinux about this change.
# semanage port -a -t ssh_port_t -p tcp #PORTNUMBER
#
Port 22022
#AddressFamily any
#ListenAddress 0.0.0.0
#ListenAddress ::
```

```
[root@localhost momidl]# yum install semanage
CentOS-8 - AppStream                3.5 MB/s | 6.3 MB      00:01
CentOS-8 - Base                     1.8 MB/s | 2.3 MB      00:01
CentOS-8 - Extras                   4.0 kB/s | 9.6 kB      00:02
No match for argument: semanage
Error: No se pudo encontrar ningún resultado: semanage
[root@localhost momidl]# _
```

```
[root@localhost momidl]# yum provides semanage
Última comprobación de caducidad de metadatos hecha hace 0:01:34, el sáb 27 mar 2021 12:53:04 EDT.
policycoreutils-python-utils-2.9-9.el8.noarch : SELinux policy core python utilities
Repositorio : BaseOS
Resultado de:
Archivo      : /usr/sbin/semanage
[root@localhost momidl]# _
```

```
[root@localhost momidl]# semanage port -l | grep ssh
ssh_port_t      tcp      22
[root@localhost momidl]# _
```

```
[root@localhost momidl]# semanage port -a -t ssh_port_t -p tcp 22022
[ 1311.527960] SELinux: Converting 2311 SID table entries...
[ 1312.093684] SELinux: Context system_u:unconfined_r:sandbox_t:s0-s0:c0.c1023 became invalid (unmapped).
[ 1312.704565] SELinux: Context unconfined_u:unconfined_r:sandbox_t:s0-s0:c0.c1023 became invalid (unmapped).
[ 1312.749686] SELinux: policy capability network_peer_controls=1
[ 1312.749704] SELinux: policy capability open_perms=1
[ 1312.749714] SELinux: policy capability extended_socket_class=1
[ 1312.749725] SELinux: policy capability always_check_network=0
[ 1312.749737] SELinux: policy capability cgroup_seclabel=1
[ 1312.749756] SELinux: policy capability mmp_nosuid_transition=1
[root@localhost momidl]# _
```

```
[root@localhost momidl]# semanage port -l | grep ssh
ssh_port_t      tcp      22022, 22
[root@localhost momidl]# _
```

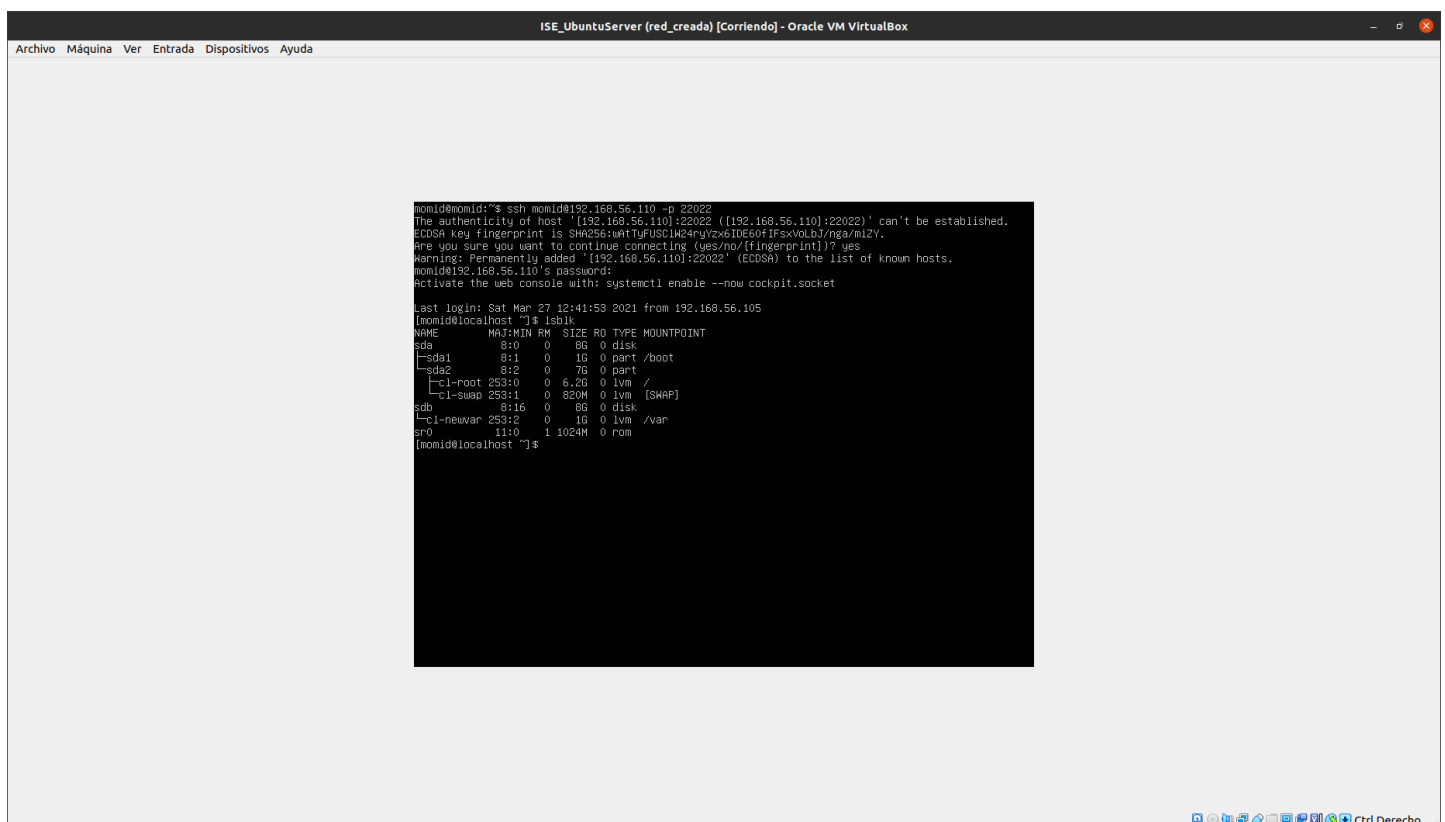


```
[root@localhost momid]# systemctl restart sshd
[root@localhost momid]# systemctl status sshd
● sshd.service - OpenSSH server daemon
   Loaded: loaded (/usr/lib/systemd/system/sshd.service; enabled; vendor preset: enabled)
   Active: active (running) since Sat 2021-03-27 13:07:02 EDT; 4s ago
     Docs: man:sshd(8)
           man:sshd_config(5)
  Main PID: 23304 (sshd)
    Tasks: 1 (limit: 23960)
   Memory: 1.1M
   CGroup: /system.slice/sshd.service
           └─23304 /usr/sbin/sshd -D -oCiphers=aes256-gcm@openssh.com,chacha20-poly1305@openssh.com

mar 27 13:07:02 localhost.localdomain systemd[1]: Stopped OpenSSH server daemon.
mar 27 13:07:02 localhost.localdomain systemd[1]: Starting OpenSSH server daemon...
mar 27 13:07:02 localhost.localdomain sshd[23304]: Server listening on 0.0.0.0 port 22022.
mar 27 13:07:02 localhost.localdomain sshd[23304]: Server listening on :: port 22022.
mar 27 13:07:02 localhost.localdomain systemd[1]: Started OpenSSH server daemon.
lines 1-16/16 (END)
```

```
momid@momid:~$ ssh momid@192.168.56.110 -p 22022
ssh: connect to host 192.168.56.110 port 22022: No route to host
momid@momid:~$
```

```
[root@localhost momid]# firewall-cmd --permanent --add-port=22022/tcp
success
[root@localhost momid]# firewall-cmd --reload
success
[root@localhost momid]# _
```



```
ISE_CentOS_LVM (red_creada) [Corriendo] - Oracle VM VirtualBox
Archivo Máquina Ver Entrada Dispositivos Ayuda

[root@localhost momid]# ssh momid@192.168.56.105 -p 22022
The authenticity of host '192.168.56.105:22022 ([192.168.56.105]:22022)' can't be established.
ECDSA key fingerprint is SHA256:SVu/gmtKkonTqUpl6L4ZUaySrLqH55Ay4z0B3ER0Z2a.
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
Warning: Permanently added '192.168.56.105:22022' (ECDSA) to the list of known hosts.
momid@192.168.56.105's password:
Welcome to Ubuntu 20.04.1 LTS (GNU/Linux 5.4.0-67-generic x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:    https://landscape.canonical.com
 * Support:       https://ubuntu.com/advantage

System information as of Sat Mar 27 17:16:16 UTC 2021

System load:  0.0          Processes:    120
Usage of /home: 0.2% of 975MB   Users logged in: 1
Memory usage:  6%           IPv4 address for enp8s3: 10.0.2.15
Swap usage:    0%           IPv4 address for enp8s8: 192.168.56.105

182 updates can be installed immediately.
9 of these updates are security updates.
To see these additional updates run: apt list --upgradable

Last login: Sat Mar 27 17:00:32 2021
momid@momid:~$
```

```
ISE_CentOS_LVM (red_creada) [Corriendo] - Oracle VM VirtualBox
Archivo Máquina Ver Entrada Dispositivos Ayuda

9 of these updates are security updates.
To see these additional updates run: apt list --upgradable

Last login: Sat Mar 27 17:00:32 2021
momid@momid:~$ lsblk
NAME        MAJ:MIN RM  SIZE RO TYPE MOUNTPOINT
loop0       7:0      0  71.3M  1 loop /snap/lsd/16099
loop1       7:1      0   55M   1 loop /snap/core18/1881
loop2       7:2      0  29.3M  1 loop /snap/snapd/6542
loop3       7:3      0  32.3M  1 loop /snap/snapd/11402
loop4       7:4      0  55.5M  1 loop /snap/core18/1988
loop5       7:5      0  70.4M  1 loop /snap/lsd/19647
sda         8:0      0   10G   0 disk
├─sda1      8:1      0    1M   0 part
├─sda2      8:2      0  380M   0 part
├─└─md0     9:0      0  259M   0 raid1
│   └─md0p1 259:0    0  254M   0 part /boot
├─sda3      8:3      0   9.7G   0 part
├─└─md1     9:1      0   9.7G   0 raid1
│   └─dm_crypt-0 253:0    0   9.7G   0 crypt
│       └─vg0-lv--home 253:1    0    1G   0 lvm /home
│           └─vg0-lv--root 253:2    0    8G   0 lvm /
│               └─vg0-lv--swap 253:3    0  692M   0 lvm [SWAP]
└─sdb       8:16     0   10G   0 disk
    ├─sdb1   8:17     0    1M   0 part
    ├─sdb2   8:18     0  380M   0 part
    └─└─md0     9:0      0  259M   0 raid1
        │   └─md0p1 259:0    0  254M   0 part /boot
        └─sdb3   8:19     0   9.7G   0 part
            └─md1     9:1      0   9.7G   0 raid1
                └─dm_crypt-0 253:0    0   9.7G   0 crypt
                    └─vg0-lv--home 253:1    0    1G   0 lvm /home
                        └─vg0-lv--root 253:2    0    8G   0 lvm /
                            └─vg0-lv--swap 253:3    0  692M   0 lvm [SWAP]
sr0         1:0      1 1024M   0 rom

momid@momid:~$
```



```

momid@momid:~$ ssh-keygen
Generating public/private rsa key pair.
Enter file in which to save the key (/home/momid/.ssh/id_rsa):
Enter passphrase (empty for no passphrase):
Enter same passphrase again:
Your identification has been saved in /home/momid/.ssh/id_rsa
Your public key has been saved in /home/momid/.ssh/id_rsa.pub
The key fingerprint is:
SHA256:kITLQnPP2twn5JEe1GYZEdmAz7oWd3HPoz2zIYuY7n4 momid@momid
The key's randomart image is:
+---[RSA 3072]-----+
|
| o*X
| o +.B..
| . + Xo.
| . o X.
| . O +S
|   + B = +
|   + +.+.
|   ooE..o+..
|   =*.. . .+
+---[SHA256]-----+
momid@momid:~$

```

```

[momid@localhost ~]$ ssh-keygen
Generating public/private rsa key pair.
Enter file in which to save the key (/home/momid/.ssh/id_rsa):
Enter passphrase (empty for no passphrase):
Enter same passphrase again:
Your identification has been saved in /home/momid/.ssh/id_rsa.
Your public key has been saved in /home/momid/.ssh/id_rsa.pub.
The key fingerprint is:
SHA256:K4wCj0oWx34SftNDIPrQkzjmrS8bvghQUmPFndGeoxJ momid@localhost.localdomain
The key's randomart image is:
+---[RSA 3072]-----+
| +o...+ |
| o .. o E |
| . . . o |
| = o . . = |
| o * + ooS. |
| oB = o.o . |
| =.O * + . |
| =+.* = + |
| o**o . . |
+---[SHA256]-----+
[momid@localhost ~]$ _

```

```

momid@momid:~$ ssh-copy-id momid@192.168.56.110 -p 22022
/usr/bin/ssh-copy-id: INFO: Source of key(s) to be installed: "/home/momid/.ssh/id_rsa.pub"
/usr/bin/ssh-copy-id: INFO: attempting to log in with the new key(s), to filter out any that are already installed
/usr/bin/ssh-copy-id: INFO: 1 key(s) remain to be installed -- if you are prompted now it is to install all the new keys
momid@192.168.56.110's password:

Number of key(s) added: 1

Now try logging into the machine, with: "ssh -p '22022' 'momid@192.168.56.110'"
and check to make sure that only the key(s) you wanted were added.

momid@momid:~$

```

```
[momid@localhost ~]$ ssh-copy-id momid@192.168.56.105 -p 22022
/usr/bin/ssh-copy-id: INFO: Source of key(s) to be installed: "/home/momid/.ssh/id_rsa.pub"
/usr/bin/ssh-copy-id: INFO: attempting to log in with the new key(s), to filter out any that are already installed
/usr/bin/ssh-copy-id: INFO: 1 key(s) remain to be installed -- if you are prompted now it is to install all the new keys
momid@192.168.56.105's password:
Permission denied, please try again.
momid@192.168.56.105's password:

Number of key(s) added: 1

Now try logging into the machine, with:  "ssh -p '22022' 'momid@192.168.56.105'"
and check to make sure that only the key(s) you wanted were added.

[momid@localhost ~]$ _
```

```
momid@momid:~$ ssh momid@192.168.56.110 -p 22022
Activate the web console with: systemctl enable --now cockpit.socket

Last login: Thu Apr  8 15:37:25 2021
[momid@localhost ~]$ _
```

```
[momid@localhost ~]$ ssh momid@192.168.56.105 -p 22022
Welcome to Ubuntu 20.04.1 LTS (GNU/Linux 5.4.0-67-generic x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:    https://landscape.canonical.com
 * Support:       https://ubuntu.com/advantage

System information as of Thu Apr  8 19:42:44 UTC 2021

System load:   0.19               Processes:            125
Usage of /home: 0.2% of 975MB    Users logged in:     1
Memory usage:   5%               IPv4 address for enp0s3: 10.0.2.15
Swap usage:     0%               IPv4 address for enp0s8: 192.168.56.105

102 updates can be installed immediately.
0 of these updates are security updates.
To see these additional updates run: apt list --upgradable

The list of available updates is more than a week old.
To check for new updates run: sudo apt update

Last login: Thu Apr  8 19:39:12 2021
momid@momid:~$
```

```

#IgnoreUserKnownHosts no
# Don't read the user's ~/.rhosts and ~/.shosts files
#IgnoreRhosts yes

# To disable tunneled clear text passwords, change to no here!
PasswordAuthentication no
#PermitEmptyPasswords no

# Change to yes to enable challenge-response passwords (beware issues with
# some PAM modules and threads)
ChallengeResponseAuthentication no

# Kerberos options
#KerberosAuthentication no
#KerberosOrLocalPasswd yes
#KerberosTicketCleanup yes
#KerberosGetAFSToken no

# GSSAPI options
#GSSAPIAuthentication no
#GSSAPICleanupCredentials yes
#GSSAPIStrictAcceptorCheck yes
#GSSAPIKeyExchange no

# Set this to 'yes' to enable PAM authentication, account processing,
# and session processing. If this is enabled, PAM authentication will
# be allowed through the ChallengeResponseAuthentication and
# PasswordAuthentication. Depending on your PAM configuration,
# PAM authentication via ChallengeResponseAuthentication may bypass
# the setting of "PermitRootLogin without-password".
# If you just want the PAM account and session checks to run without
# PAM authentication, then enable this but set PasswordAuthentication
# and ChallengeResponseAuthentication to 'no'.
UsePAM yes

#AllowAgentForwarding yes
:wq_

```

```

# Logging
#SyslogFacility AUTH
SyslogFacility AUTHPRIV
#LogLevel INFO

# Authentication:

#LoginGraceTime 2m
PermitRootLogin no
#StrictModes yes
#MaxAuthTries 6
#MaxSessions 10

#PubkeyAuthentication yes

# The default is to check both .ssh/authorized_keys and .ssh/authorized_keys2
# but this is overridden so installations will only check .ssh/authorized_keys
AuthorizedKeysFile      .ssh/authorized_keys

#AuthorizedPrincipalsFile none

#AuthorizedKeysCommand none
#AuthorizedKeysCommandUser nobody

# For this to work you will also need host keys in /etc/ssh/ssh_known_hosts
#HostbasedAuthentication no
# Change to yes if you don't trust ~/.ssh/known_hosts for
# HostbasedAuthentication
#IgnoreUserKnownHosts no
# Don't read the user's ~/.rhosts and ~/.shosts files
#IgnoreRhosts yes

# To disable tunneled clear text passwords, change to no here!
PasswordAuthentication no
#PermitEmptyPasswords no
PasswordAuthentication yes
:wq

```