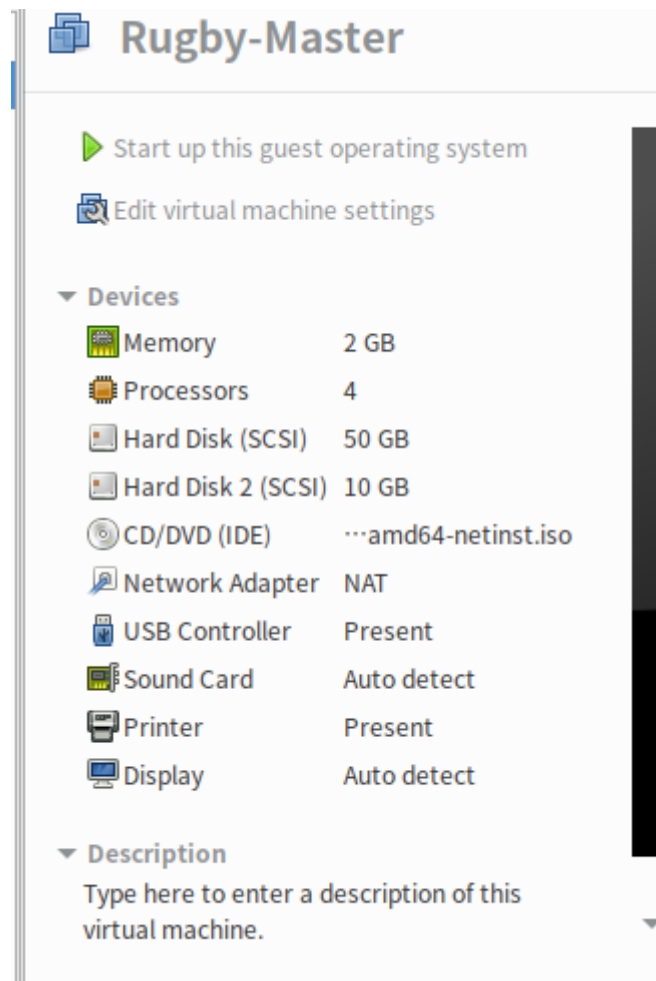# Prepare

vm config

os: debian-9.8.0-amd64-netinst

No graphical interface

static ip

```
supinfo@RugbyMaster:~$ sudo apt-get install net-tools
supinfo@RugbyMaster:~$ sudo vim /etc/network/interfaces

# The primary network interface
+auto ens33
allow-hotplug ens33
iface ens33 inet static
+        address 192.168.10.130
+        netmask 255.255.255.0
```

mount

8G partition for user account.

2G partition for archives .

```
Created a new partition 1 of type 'Linux' and of size 8 GiB.
Created a new partition 1 of type 'Linux' and of size 2 GiB.

supinfo@RugbyMaster:~$ sudo fdisk -l
Disk /dev/sdb: 10 GiB, 10737418240 bytes, 20971520 sectors
Units: sectors of 1 * 512 = 512 bytes
Sector size (logical/physical): 512 bytes / 512 bytes
I/O size (minimum/optimal): 512 bytes / 512 bytes
Disklabel type: dos
Disk identifier: 0x5a798bd8

Device     Boot    Start      End  Sectors Size Id Type
/dev/sdb1           63 16777279 16777217   8G 83 Linux
/dev/sdb2     16777280 20971519  4194240   2G 83 Linux


# storage disk for user data
/dev/sdb1       /storage/user   ext4    defaults 0 0
/dev/sdb2       /storage/user   ext4    defaults 0 0
```

SSH
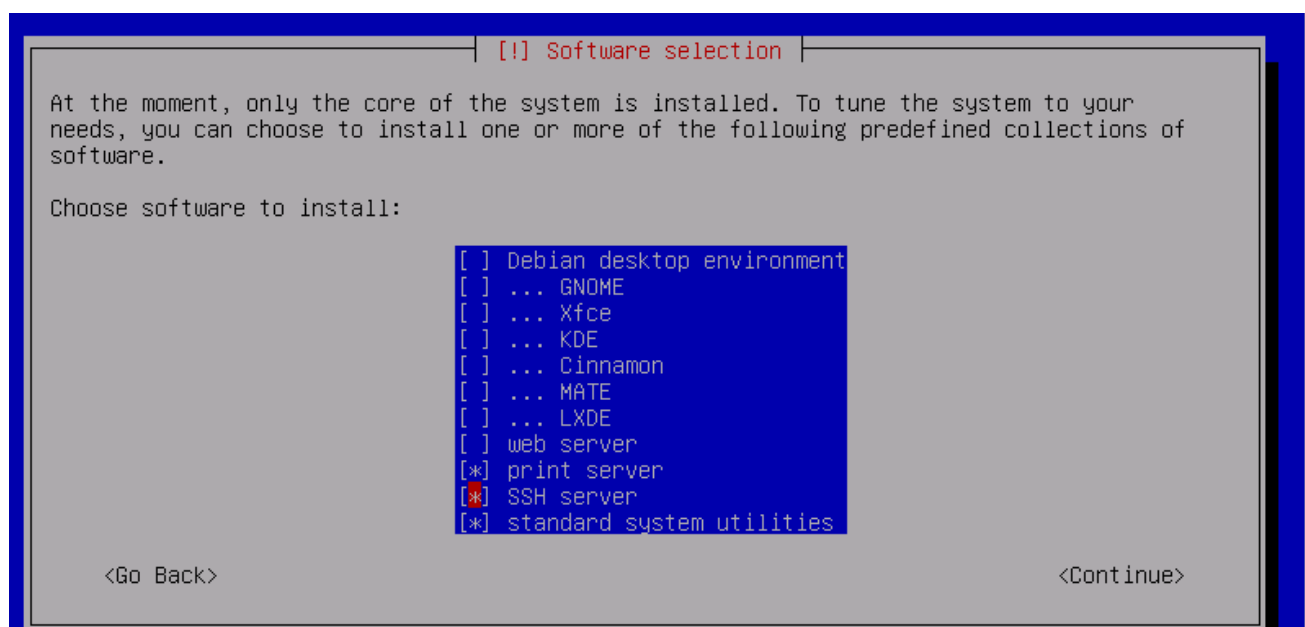
```
supinfo@RugbyMaster:~$ sudo service ssh status
* ssh.service - OpenBSD Secure Shell server
   Loaded: loaded (/lib/systemd/system/ssh.service; enabled; vendor preset: enabled
   Active: active (running) since Sat 2019-04-13 12:35:29 UTC; 6min ago
  Process: 493 ExecStartPre=/usr/sbin/sshd -t (code=exited, status=0/SUCCESS)
 Main PID: 502 (sshd)
    Tasks: 1 (limit: 19660)
   CGroup: /system.slice/ssh.service
           `-502 /usr/sbin/sshd -D
```

ssh key in pc

```
gorkr@gorkr-PC:~$ scp /home/gorkr/.ssh/id_rsa.pub
supinfo@192.168.10.130:/home/supinfo/.ssh
supinfo@192.168.10.130's password:
id_rsa.pub                                              100%  401
615.4KB/s   00:00
```

in server, only administer account, refuse root

```
supinfo@RugbyMaster:~$ chmod 700 .ssh
supinfo@RugbyMaster:~$ mv .ssh/id_rsa.pub .ssh/authorized_keys

PubkeyAuthentication yes                      #允许公钥认证
AuthorizedKeysFile .ssh/authorized_keys       #指定包含用于用户身份验证的公钥的文件
PasswordAuthentication no                      #选项前面可以加#号注释掉，同样会禁用密码登录
PermitRootLogin no

supinfo@RugbyMaster:~$ sudo systemctl restart sshd.service
```

Users

demo user

```
empty:x:1001:1003:,,,:/storage/user/home/empty:/bin/bash
half:x:1002:1004:,,,:/storage/user/home/half:/bin/bash
overflow:x:1003:1005:,,,:/storage/user/home/overflow:/bin/bash
```

system account

```
root@RugbyMaster:/# useradd -r -s /sbin/nologin rugbadmin

root@RugbyMaster:/# cat /etc/passwd | grep rugbadmin
rugbadmin:x:997:997::/home/rugbadmin:/sbin/nologin

root@RugbyMaster:/script# vim  /etc/sudoers
```

Quota

```
root@RugbyMaster:/home/supinfo# sudo cat /etc/fstab
# /etc/fstab: static file system information.
#
# Use 'blkid' to print the universally unique identifier for a
# device; this may be used with UUID= as a more robust way to name devices
# that works even if disks are added and removed. See fstab(5).
#
# <file system> <mount point>   <type>  <options>       <dump>  <pass>
# / was on /dev/sda1 during installation
UUID=f0e0f04e-a984-4556-831b-4af9f16013be /               ext4    errors=remount-ro 0
    1
# swap was on /dev/sda5 during installation
UUID=8804f190-027b-4e0f-9918-a154fa4fa40b none            swap    sw              0
  0
/dev/sr0        /media/cdrom0   udf,iso9660 user,noauto   0       0

# storage disk for user data
/dev/sdb1       /storage/user   ext4    defaults,usrquota,grpquota 0 0
/dev/sdb2       /storage/safeplace   ext4    defaults 0 0
root@RugbyMaster:/home/supinfo#


/dev/sdb1 on /storage/user type ext4 (rw,relatime,quota,usrquota,grpquota,data=ordered)

root@RugbyMaster:/home/supinfo# quotacheck -acgu
root@RugbyMaster:/home/supinfo# quotaon -a


root@RugbyMaster:/home/supinfo# edquota -u empty
root@RugbyMaster:/home/supinfo# quota -u empty
Disk quotas for user empty (uid 1001):
    Filesystem  blocks   quota   limit   grace   files   quota   limit   grace
     /dev/sdb1       20  409600  512000                       5       0       0
root@RugbyMaster:/home/supinfo# edquota -p empty -u half
root@RugbyMaster:/home/supinfo# edquota -p empty -u overflow
```

Sudo

```
visudo
supinfo ALL=(root)  /bin/chmod
supinfo ALL=(ROOT)  /bin/mv
```

Cron

```
root@RugbyMaster:/home/supinfo/bin# cat /etc/cron.allow
rugbadmin

root@RugbyMaster:/script# ls -l
total 4
-rwx------ 1 rugbadmin rugbadmin 885 May  6 09:12 monit_and_archive.sh

root@RugbyMaster:/script# crontab -e -u rugbadmin
0 * * * * /script/monit_and_archive.sh

root@RugbyMaster:/script# crontab -l -u rugbadmin
0 * * * * /script/monit_and_archive.sh
```