User Manual for Android Recovery OS

1 Boot into Recovery OS

To boot into the recovery OS, you may press and hold the *left shift* button during the booting process (after seeing the VirtualBox splash screen). Then GRUB menu will show up. Use the `up` and `down` arrow keys to move the highlighted line to "Ubuntu" then press `enter`.
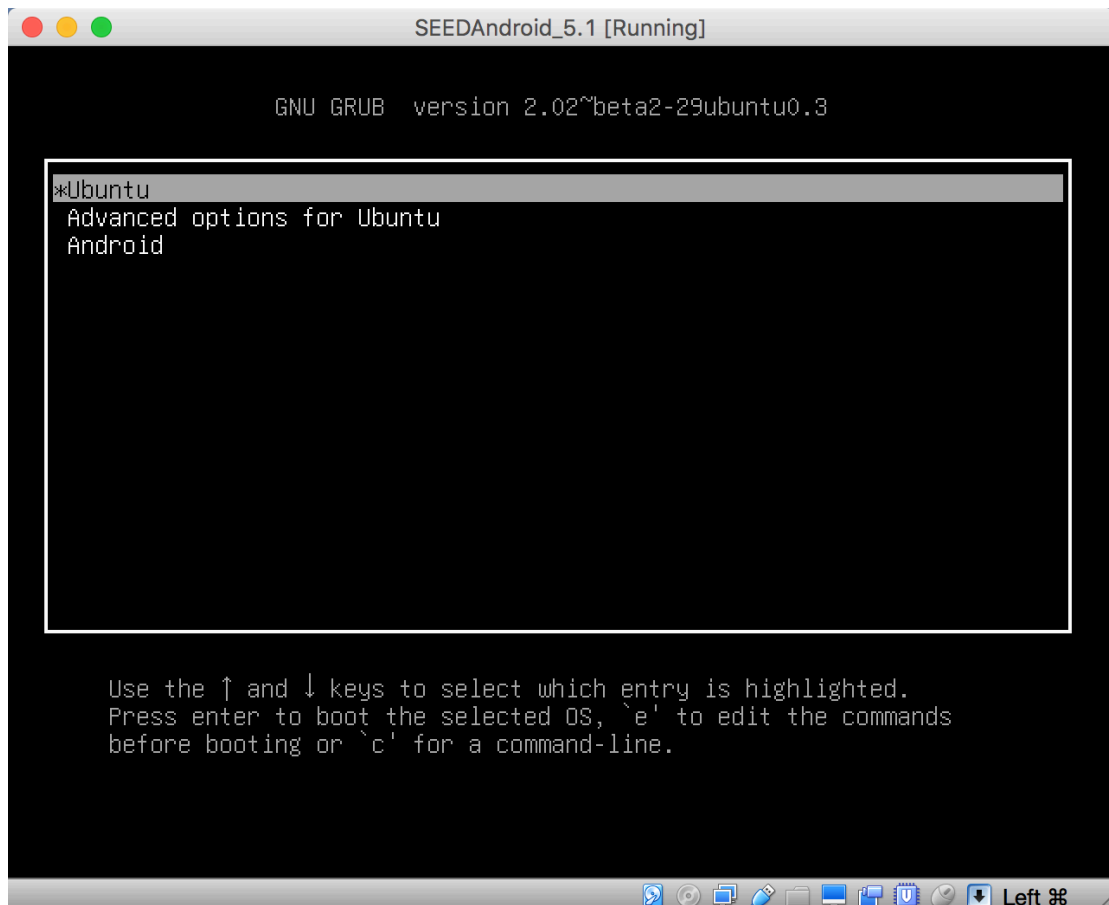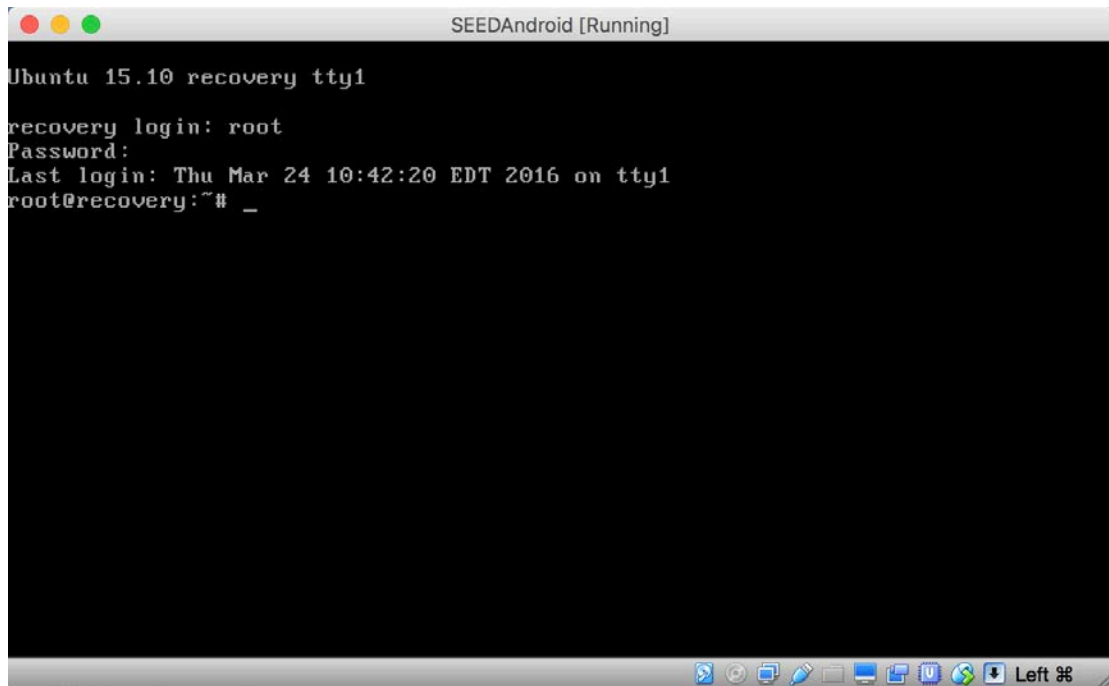

2 Log into the Recovery OS

After the recovery OS boots up, it will ask the user to login. There are two accounts predefined in the recovery OS:

Username	Password	Privilege
root	root	root
seed	dees	normal, but can run commands as root using sudo

For most tasks in the recovery OS, you will need the root privilege, so you may want to login as root directly. If you are afraid of destroying the system mistakenly, you may login as a normal user, and then use "sudo" to run privileged operations.

3 Shutdown/Reboot
You can simply use the "`Machine -> Close -> Power Off`" menu in VirtualBox to shut down the recovery OS. From inside the recover OS, you can use the following commands to achieve the same goal:
- Shutdown command: `shutdown -P now`
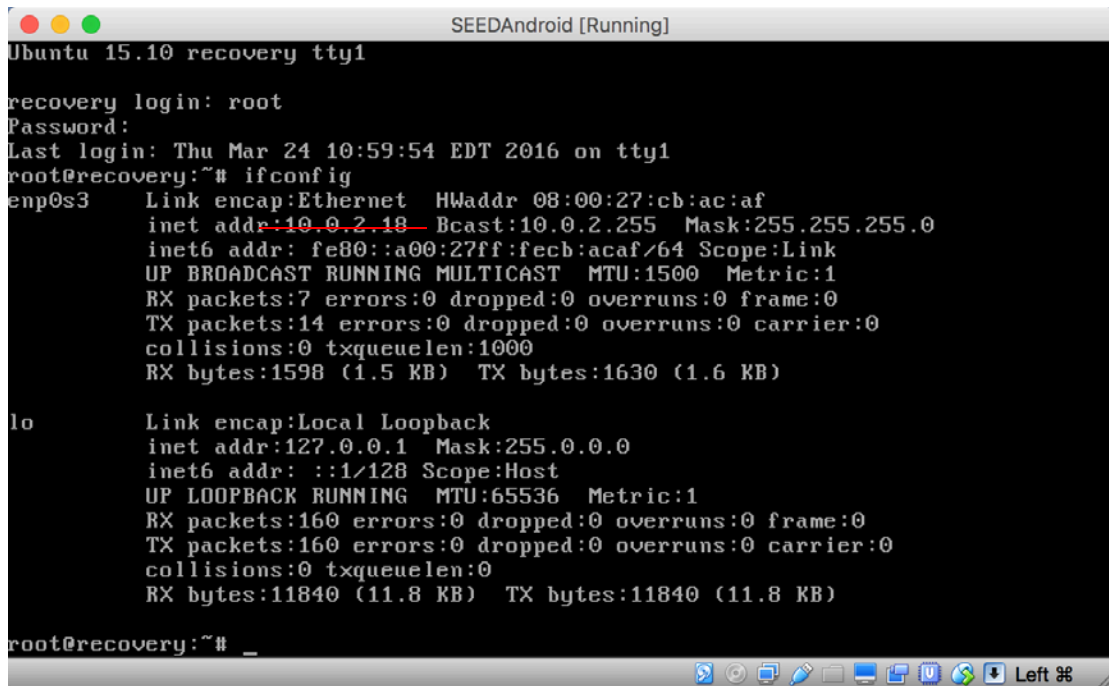- Reboot command: `reboot`

4 Text Editors
There are text editors on this system.
- `nano`: easy to use, recommended for text editing
- `vi`: not recommended, unless you already know what vi is and like to use it.

5 File Transfer and remote control
You may need to transfer files to and from the recovery OS. We have `ssh` daemon (sshd) running on recovery OS, so you can use `scp` or `sftp` command to transfer files. We will do the file transfer from another VM (e.g. MobiSEEDUbuntu14.04_x64). You need to get the IP address of the recover OS first; you can use `ifconfig` to get the IP address. We will use `<recovery ip>` to refer to it.

Android Recovery OS Manual

NOTE: when you attempt to connect the recovery OS through `ssh/scp/sftp` the first time, a message will show as the following. You will need to type "yes" and "return". This is a normal confirmation when you first connect to some servers.

ssh: The ssh command allow you to remotely control the recovery OS. It will provide you a shell prompt on your MobiSEEDUbuntu VM. You can type the following command to login as "seed" on recovery OS remotely:

```
ssh seed@<recovery ip>
```

scp: The scp (secure copy) command is the remote version of Unix's cp command. It uses ssh for remote copies. Here are two examples:

- Copy `a.txt` from MobiSEEDUbuntu to recovery OS (the file will be copied to `/home/seed/`, which is the home directory for seed)
    ```
    scp ./a.txt seed@<recovery ip>
    ```

- Copy `b.txt` from `/home/seed/` on recovery OS to MobiSEEDUbuntu VM
    ```
    scp seed@<recovery ip>:/home/seed/b.txt ./
    ```

sftp: The sftp (secure ftp) is an `ftp` client interface built on top of ssh. To start, type
```
sftp seed@<recovery ip>
```

After login, you can use the following `ftp` commands:

- `cd <directory>:` change current working directory
- `ls:` list files under current directory
- `put <file> [destination]:` upload a file to the remote side
- `get <file> [destination]:` download a file from the remote side