

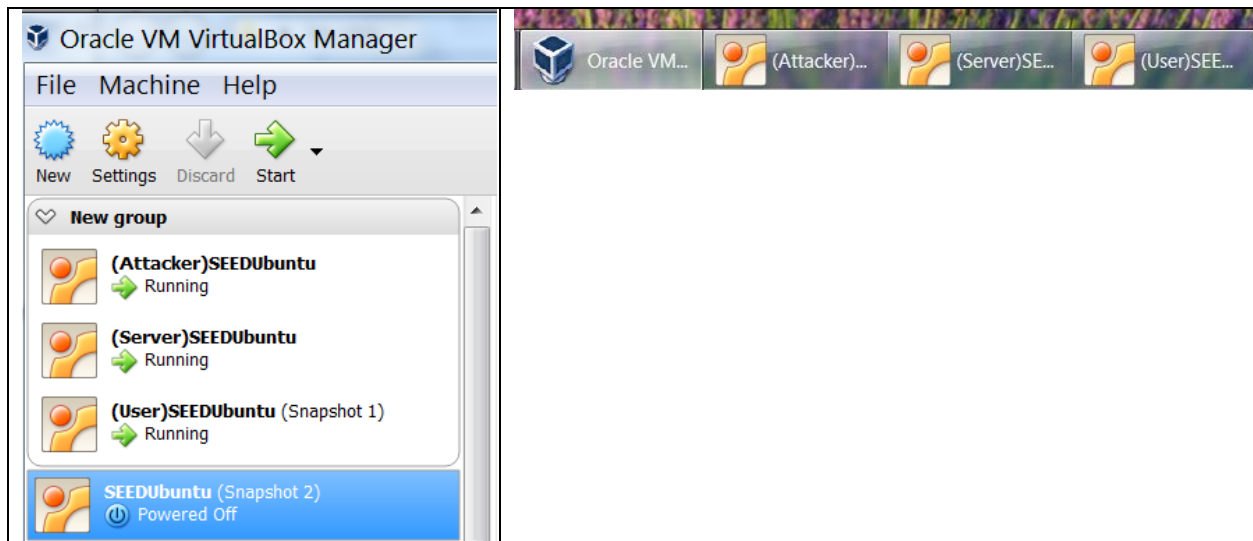
# Customization for Labs with Multiple VMs

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In some of the labs, especially network security labs, we have to run several VMs, and switch back and forth among them. Since all these VMs look the same, it is difficult to know which VMs we are in. By doing the following customization, we can make our lives easier when working on SEED labs.

## 1. Name of the VM

Very often, we need to click the icons on the taskbar to switch among VMs. When we name our VMs, if we put different words at the front, we can clearly tell the difference even though their icons are the same.



## 2. Customize terminal

We will use terminal quite often, and for network security labs, we often need to know the IP address of the VM. In VirtualBox, although all VMs by default get their IP addresses from the DHCP server, as long as the MAC address of a VM does not change, it always gets the same IP. Therefore, we can hardcode the IP address and the role that a VM is playing in the command prompt. This way, we always see the information. The following instructions show how to change the command prompt in bash (the VM is playing the "Server" role).

- 1) Add the following line to the end of the `.bashrc` file

```
PS1=' \u@Server(10.0.2.17):\w\$ '
```

2) Run the following command to

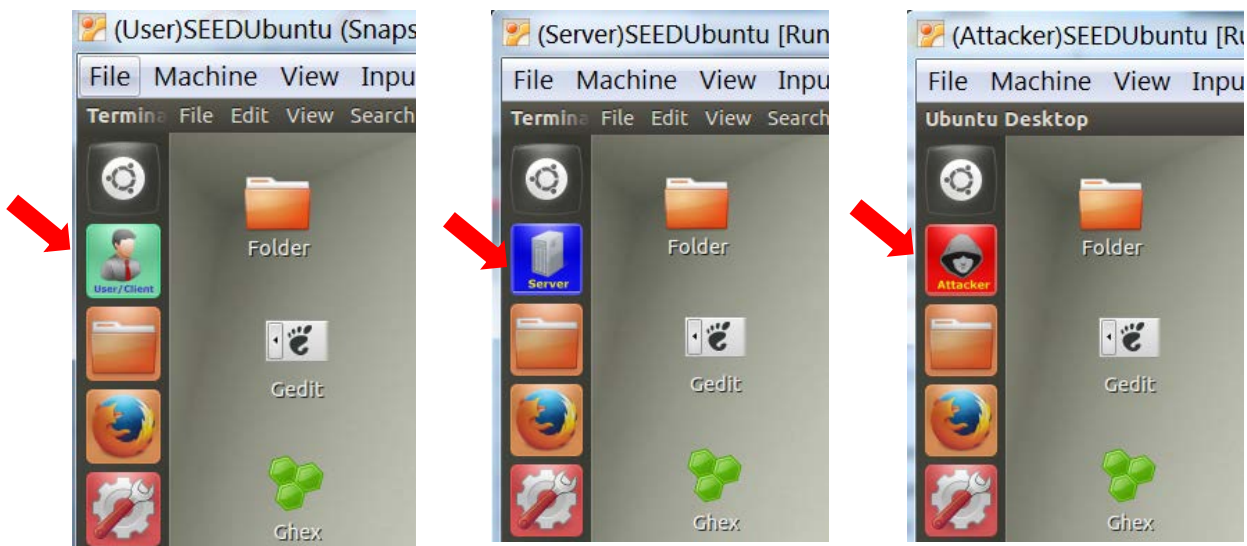
```
$ . .bashrc
```

3) The result

```
seed@Server(10.0.2.17):~$
```

### 3. Customize the Desktop

We do not always use terminal in our labs, with the desktop looking the same for all the VMs, it is not very clear which VM we are in. We can put an icon on the launcher bar to clearly indicate the role of the VM. See the following example.



Please copy the `Customization.zip` file from the web site, unzip it in your home directory, and do the following (assuming that we are customizing the VM for attacker)

- 1) Drag `attacker.desktop` to the launch bar. That will lock it there.
- 2) Long click the icon on the launch bar, and you can move it to another position.
- 3) If you want to remove it from the launch bar, you can right click the icon.

### 4. Customize the background

If you would like to do some further customization, you can change the desktops background picture (right click inside the desktop). We also provided some customized images for that purpose inside the zip file.