==  December 10, 2017



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**OPERATING SYSTEM : LINUX**

420-235-AS

Project: CentOS 6

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**I. INTRODUCTION:**

1. CentOS 6.9 DVD

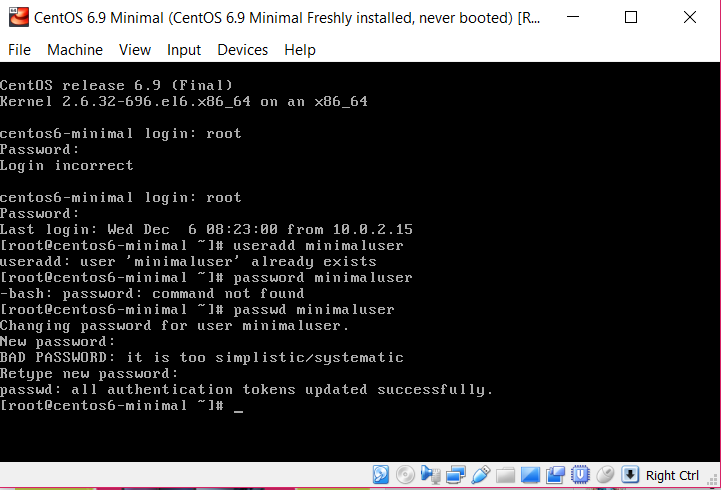
* Host Name: centos6-dvd-minimal
* User Name: dvduser
* IP address : 10.0.2.15

2. CentOS 6.9 Minimal

* Host Name: centos6-minimal
* User Name: minimaluser
* IP address : 10.0.2.4

**II. ERROR & ANSWER FOR PROJECT QUESTION:**

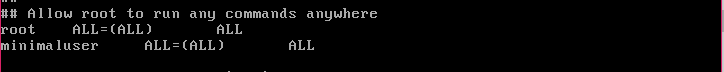
1. Log in as root & create a new user



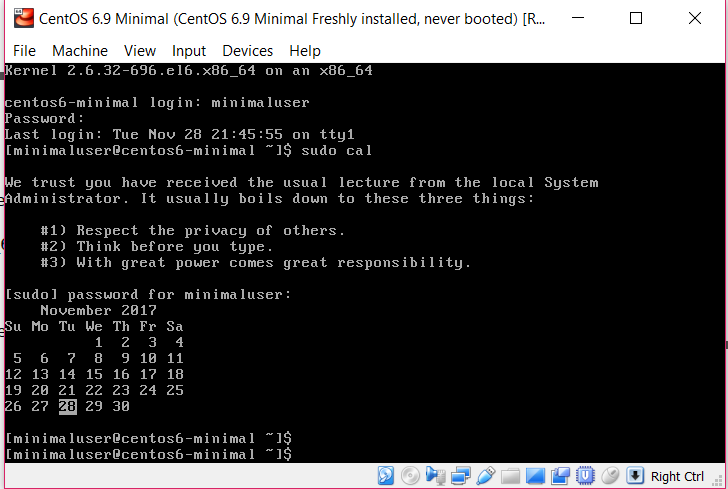
* FIRST ERROR : Wrong command “password” for minimaluser
* FIXING ERROR: “passwd minimaluser “

1. Give sudo permission for new user & test sudo work

* At root , type “visudo” to go inside the script and add the user below root

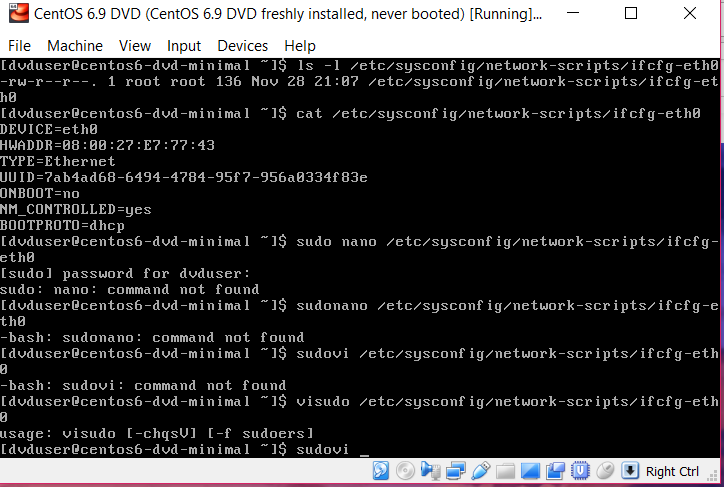


* Testing sudo work on minimaluser

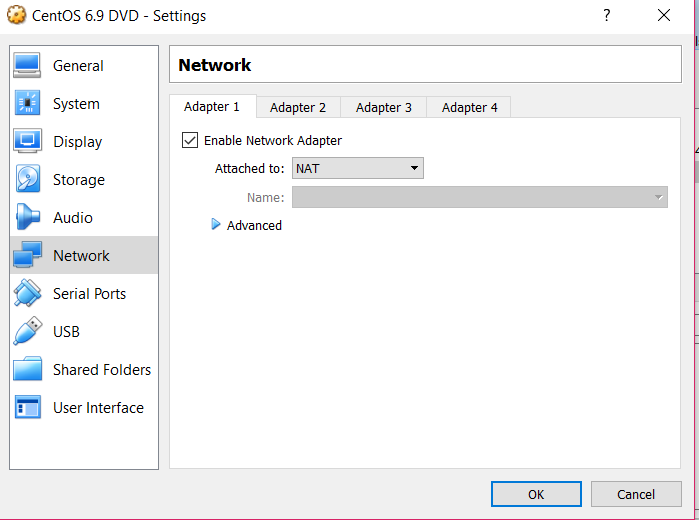


1. Networking setup

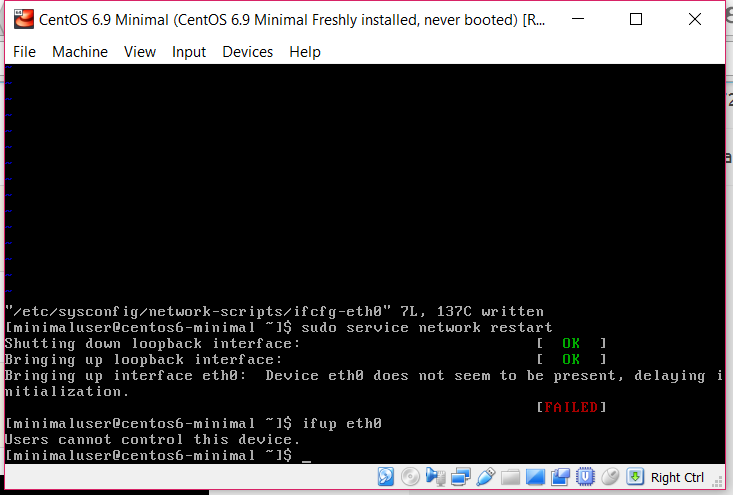
* ERROR 1: When I try to set up network, I can’t find the right command to go into script (/etc/sysconfig/network-scripts/ifcfg-eth0)



* FIXING ERROR: sudo vi /etc/sysconfig/network-scripts/ifcfg-eth0 🡪 I should have a space between “sudo” and “vi”.
* ERROR 2: When I set network to “NAT” for both VMs and change ONBOOT=yes, I got the same IP address for both VMs .



* FIXING ERROR 1 (but it doesn’t success) 🡪 ERROR 2: I try to change MAC address in the “Advanced” but I got the second error when I restart the network.



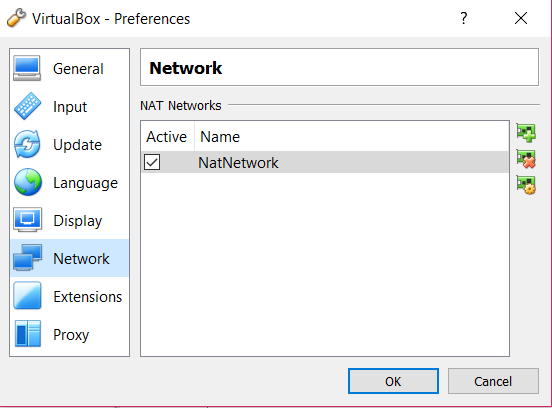
* FIXING ERROR 2: I have to use snapshot and setup the network again (Nat 🡪 NatNetwork). Redo the above command:

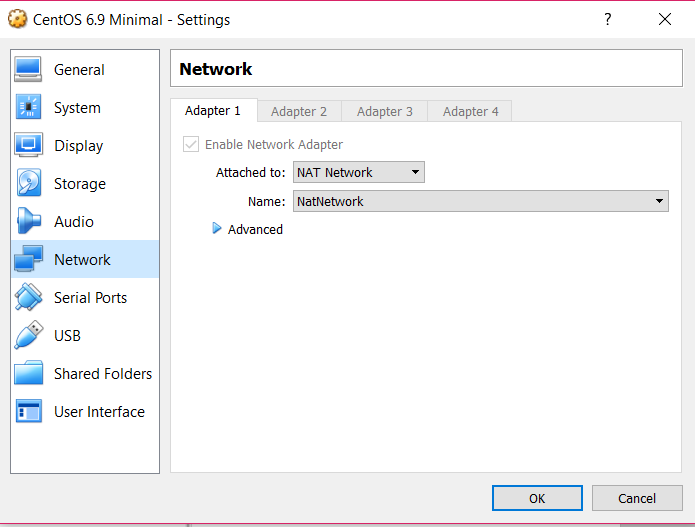
+ sudo vi /etc/sysconfig/network-scripts/ifcfg-eth0

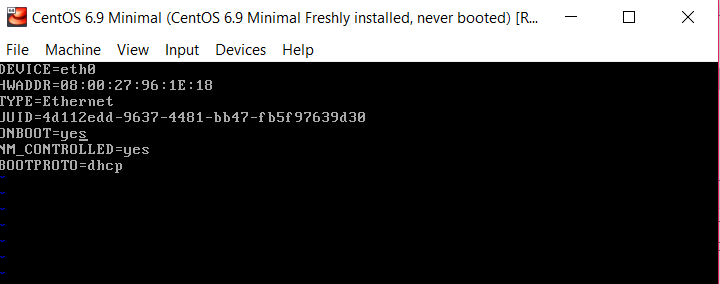
+ Change ONBOOT = yes

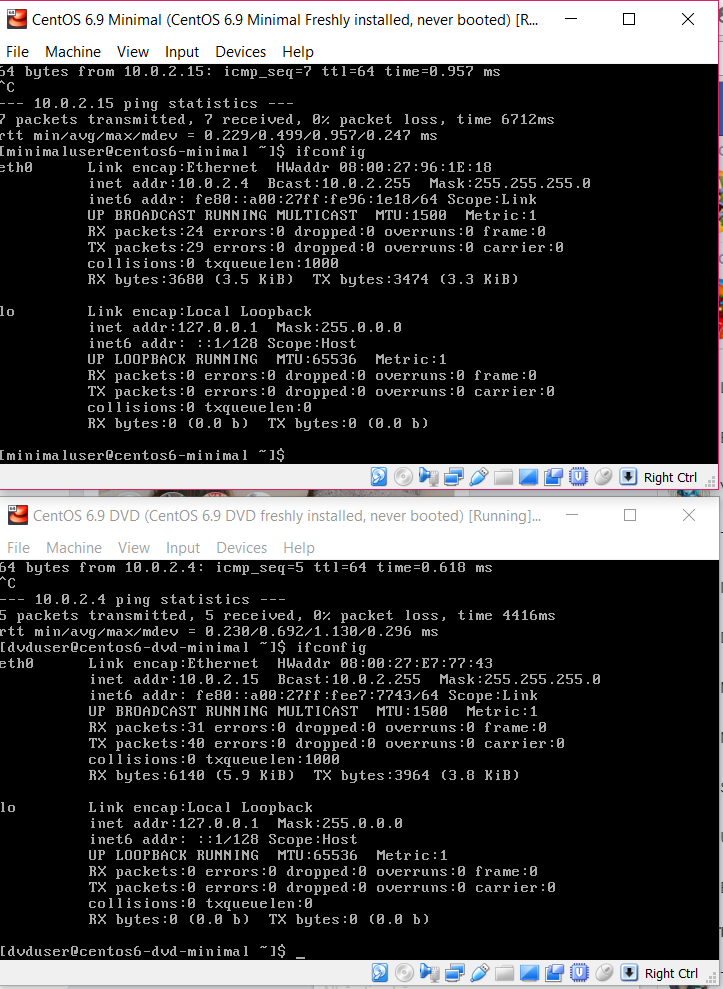
+ sudo service network restart

+ ifconfig









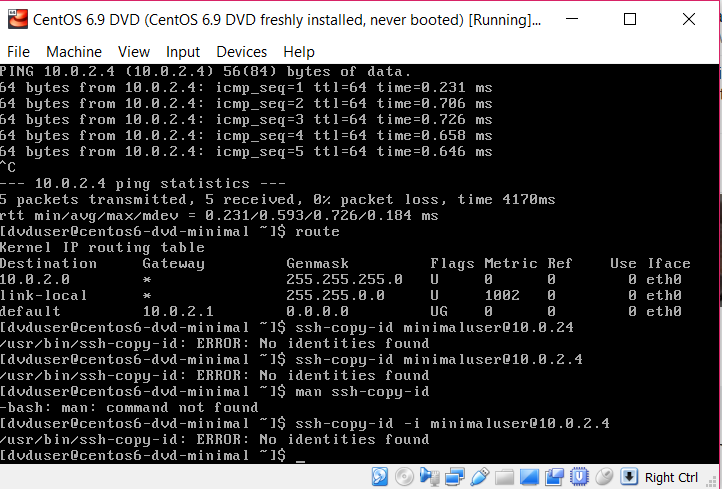
1. Generate SSH connection between both VMs

* ERROR 1: When I installed ssh & key package for both VMs by using:

+ sudo yum install openssh-clients

+ ssh-keygen 🡪 create a private key for each VM

+ ssh-copy-id 🡪 generate a public key between 2 VMs but this error appears



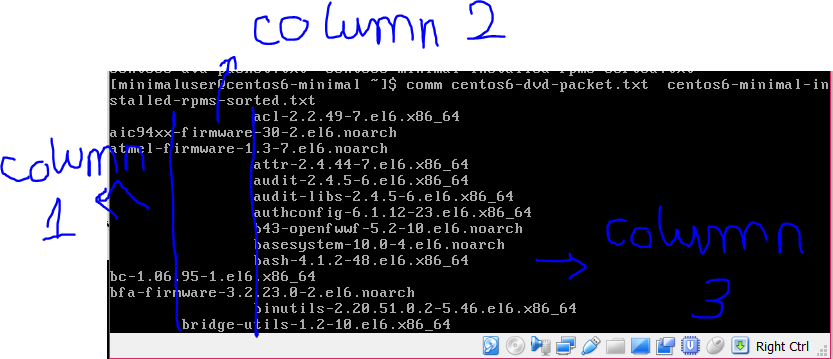
* FIXING ERROR 1: I realize that the problem is “ssh-keygen” because I give the wrong path when the system ask me to enter the file’s name 🡪 I shouldn’t type any name or password and let it set by default 🡪 private key can be created.

1. Comparing installed packages (DO IN MINIMAL VM)

* List all installed packages in local host:
* rpm –qa | sort > centos6-minimal-installed-rpms-sorted.txt
* Remotely list and sort all installed package by using ssh :
* touch centos6-dvd-minimal -installed-rpms-sorted.txt
* ssh [dvduser@10.0.2.15](mailto:dvduser@10.0.2.15) “rpm –qa” | sort > centos6-dvd-minimal-installed-rpms-sorted.txt
* Compare packages between 2 files :
* comm -3 centos6-minimal-installed-rpms-sorted.txt centos6-dvd-packet.txt | nl



* comm : the command uses for comparing 2 files
* -3 : eliminate the identical packages between 2 files 🡪 only show different packages
* nl : count how many different packages between 2 files
* OR I CAN USE:
* comm centos6-minimal-installed-rpms-sorted.txt centos6-dvd-packet.txt



* Column 1 : List of packages in file 1 that are different from file 2
* Column 2 : List of packages in file 2 that are different from file 1
* Column 3 : All of the packages are identical between 2 files