WEEK 1 ASSIGNMENT

Large-Scale Data Storage Systems – DATA-5400 | Spring 2020

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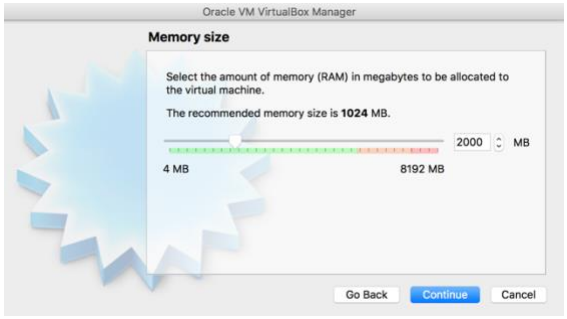
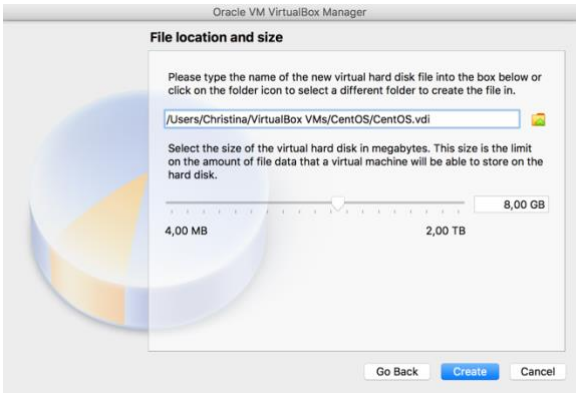
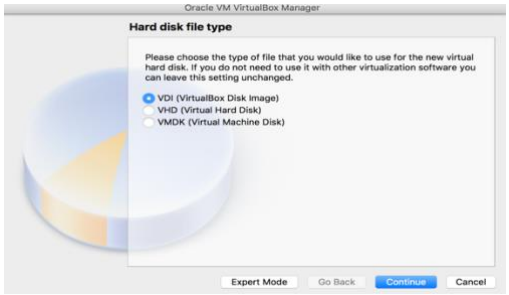
The goal of this exercise was to create a CentOS virtual machine (VM) using Oracle´s VirtualBox. I am using a Mac with 8 GB RAM. Thus, I have downloaded the appropriate software tools: VirtualBox 6.1.2 from https://www.virtualbox.org and CentOS V7 from https://www.centos.org (CentOS-7-x86_64-Minimal-1908.iso).

After starting VirtualBox, I created a new instance for the CentOS VM. Using the new button in the Oracle VirtualBox Manager, I set up the new Linux VM instance "CentOS". (I previously created a VM termed "MyCentos" but didn´t document the process using screenshots).

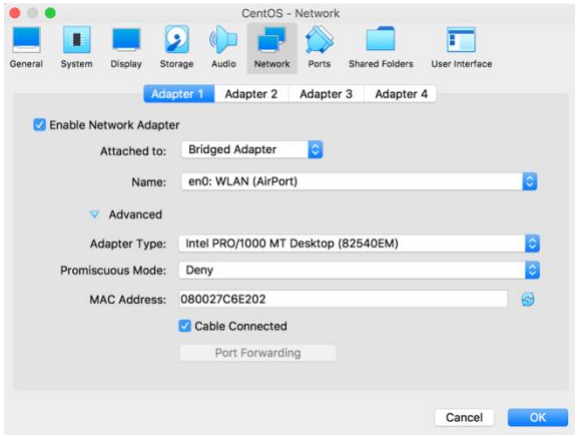
The following screenshots document the steps taken to specify the VM. 2 GB of memory was allocated to the VM.



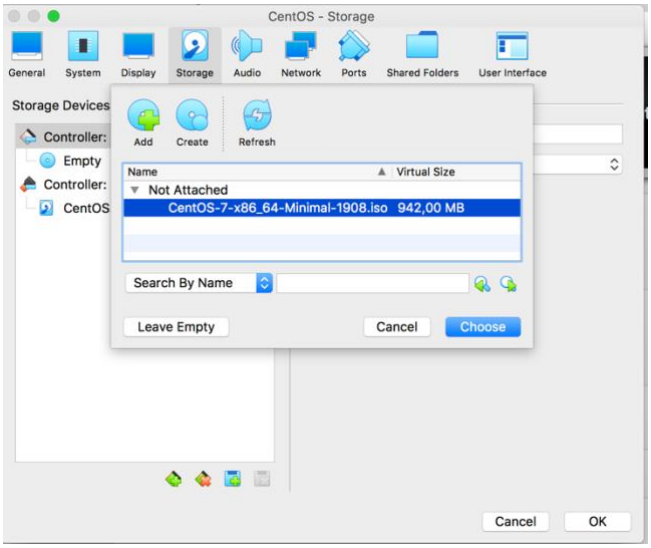




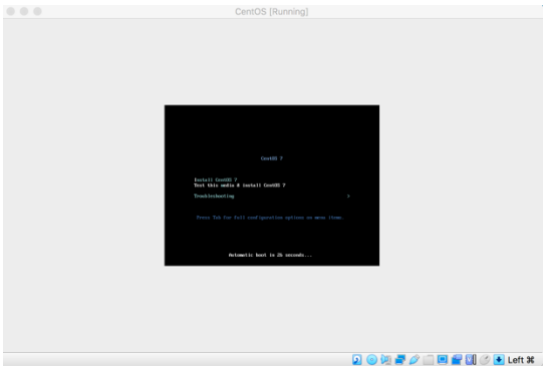
In the Network settings of the newly created CentOS instance, I selected “Bridged Adapter”:



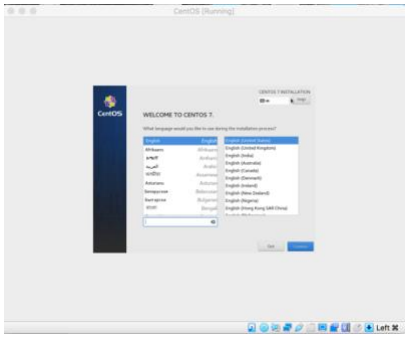
In the Storage settings, the previously downloaded CentOS-7 .iso file was selected:



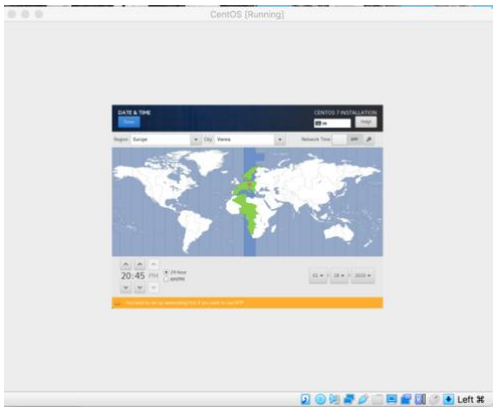
Starting the VM and installing CentOS 7. During the installation process the mouse is captured within the window and released using the left Command key (⌘) on my Mac Book.

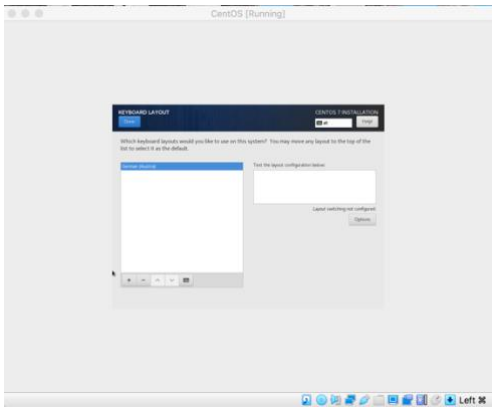


I selected the language English and English (United States):

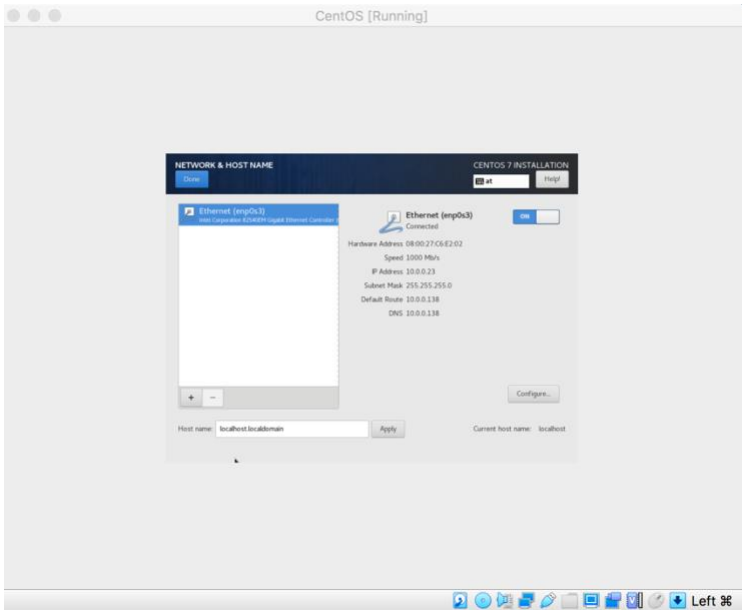


As for time zone, I selected Europe, Vienna, as I am living in Austria. I also changed the keyboard layout to German (Austria):

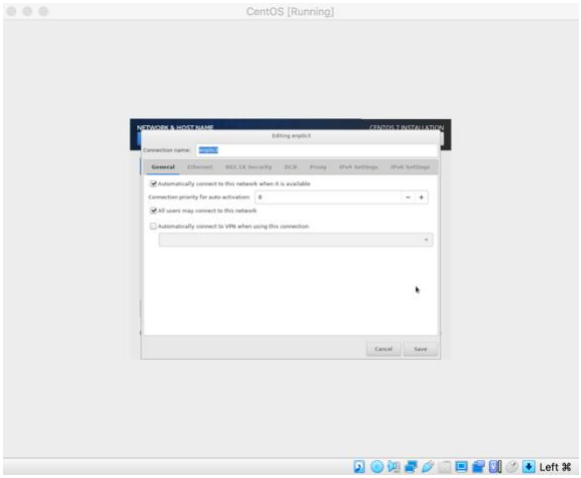




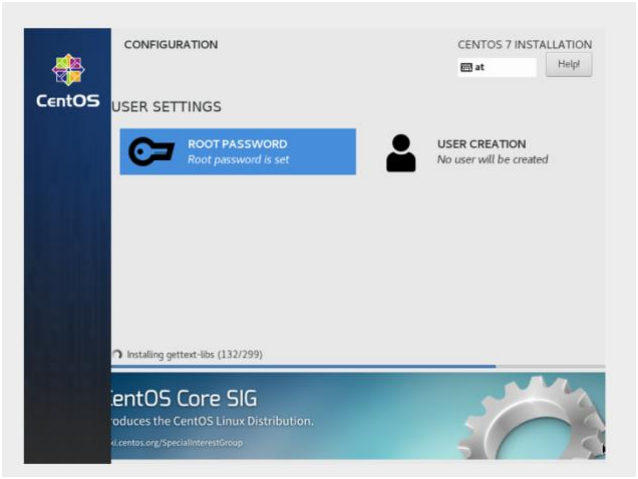
In the Network & Host Name settings, I turned on the Ethernet switch and made sure that an IP address shows up.



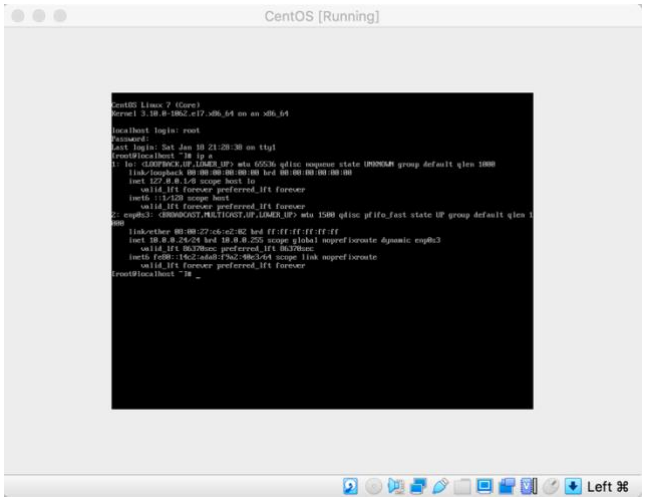
In the Configure settings, I enabled the automatic connection to the network when available and all users may connect to this network.



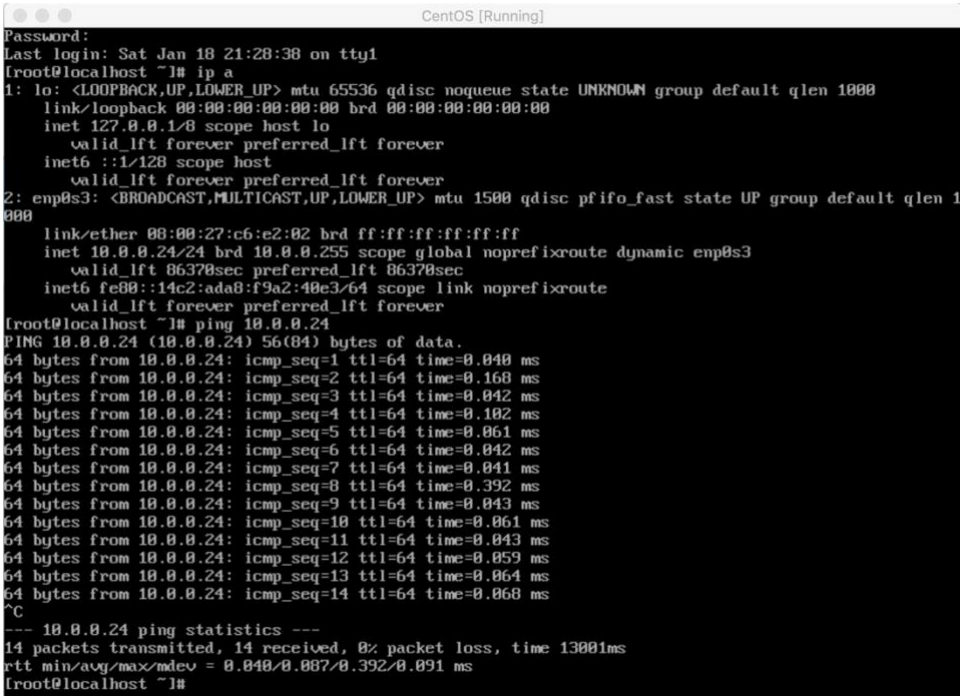
A root password was provided, and the installation finalized.



Running the VM CentOS from Virtual Box works through hitting the start arrow. CentOS boots up and I login to the root using my password.

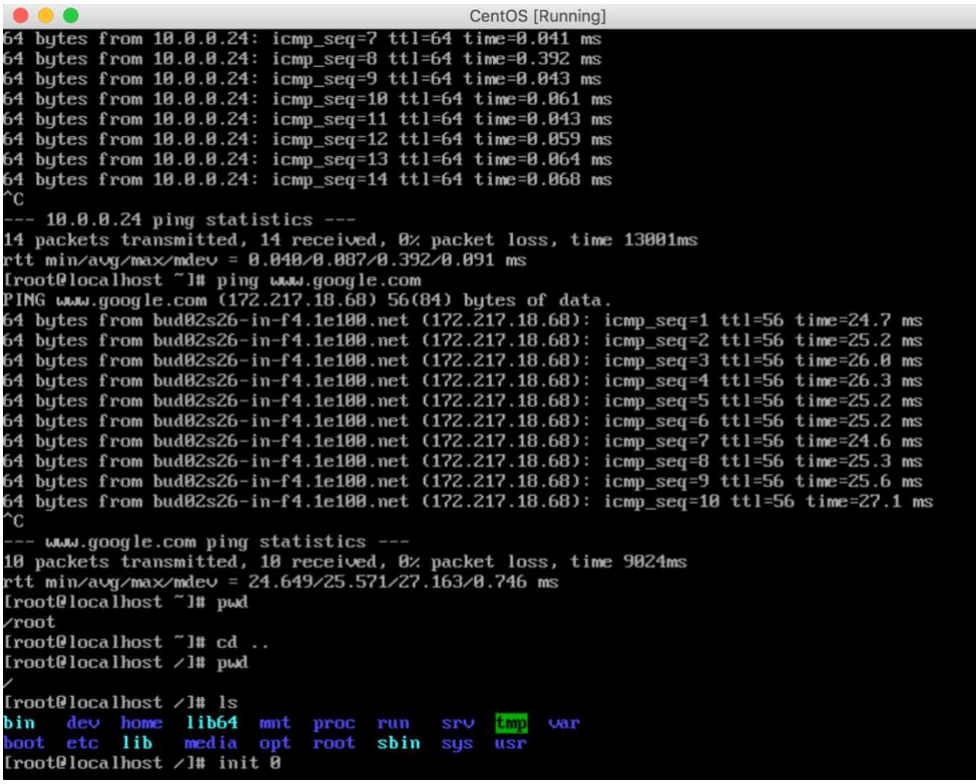


Check for IP address using the `ip a` command and ping IP address:

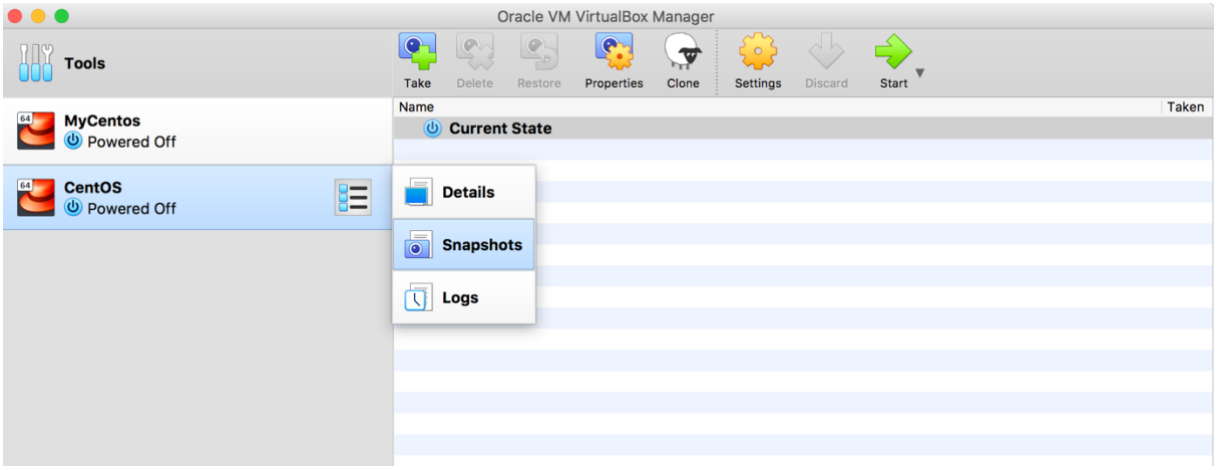


Ping www.google.com and explore the OS with different Linux commands:

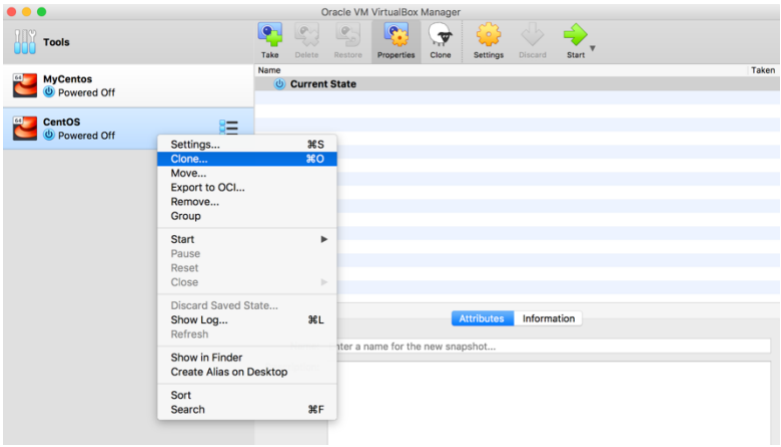
`pwd` – prints current working directory
`cd ..` – changes working directory
`ls` – lists files within the directory

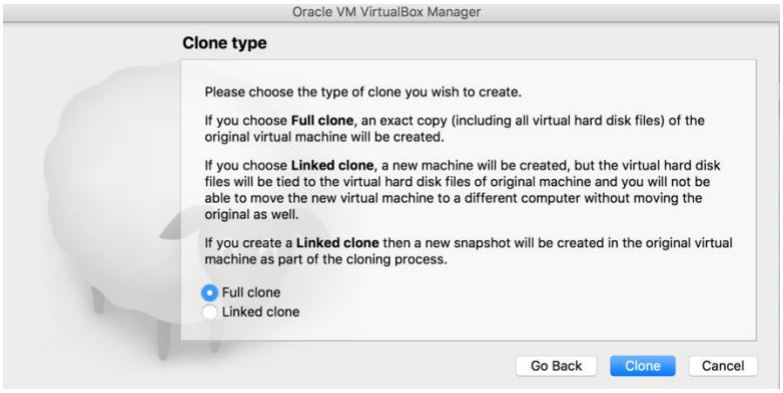


Create a snapshot of the VM in Virtual Box through selecting the VM and using the right mouse click and selecting “Snapshots”. A snapshot saves the current state of the VM.

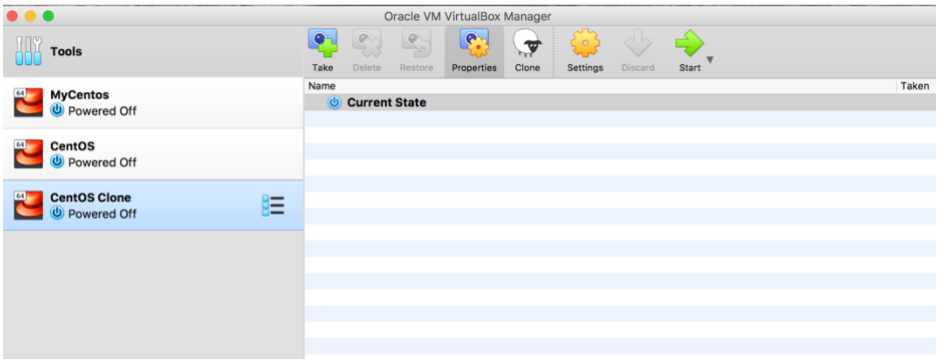


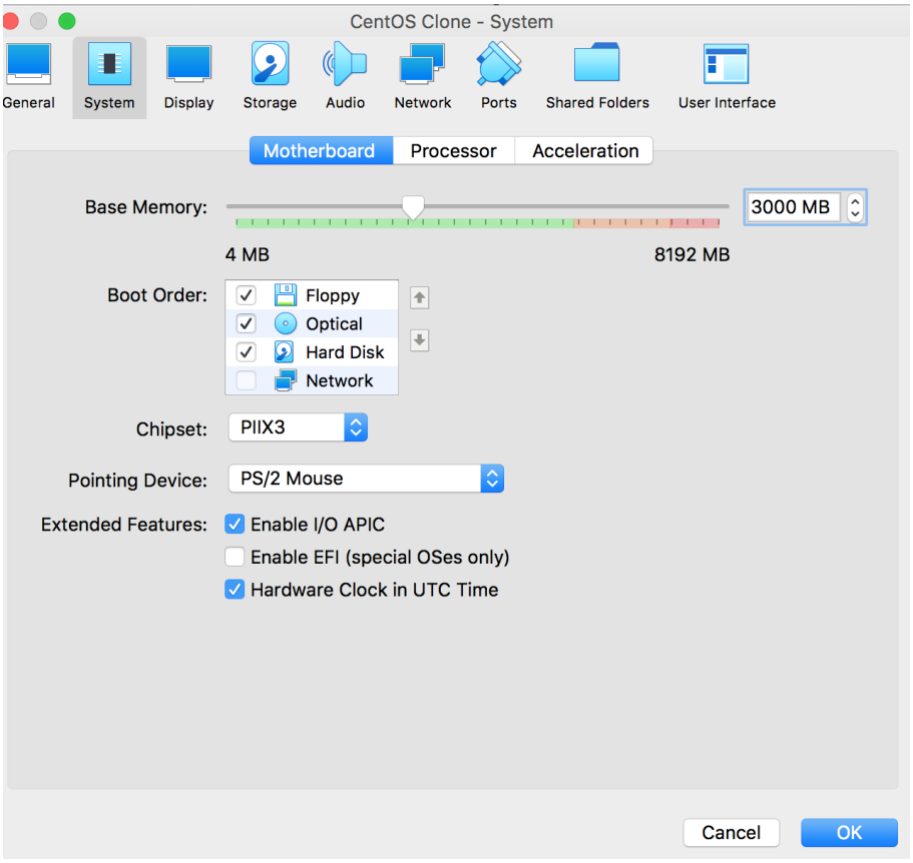
Make a clone of the VM CentOS through selecting the CentOS VM and displaying the menu using the right mouse click. Select “Clone…” from the drop-down menu, specify the name for the clone: “CentOS Clone” and select to create a “Full clone”.



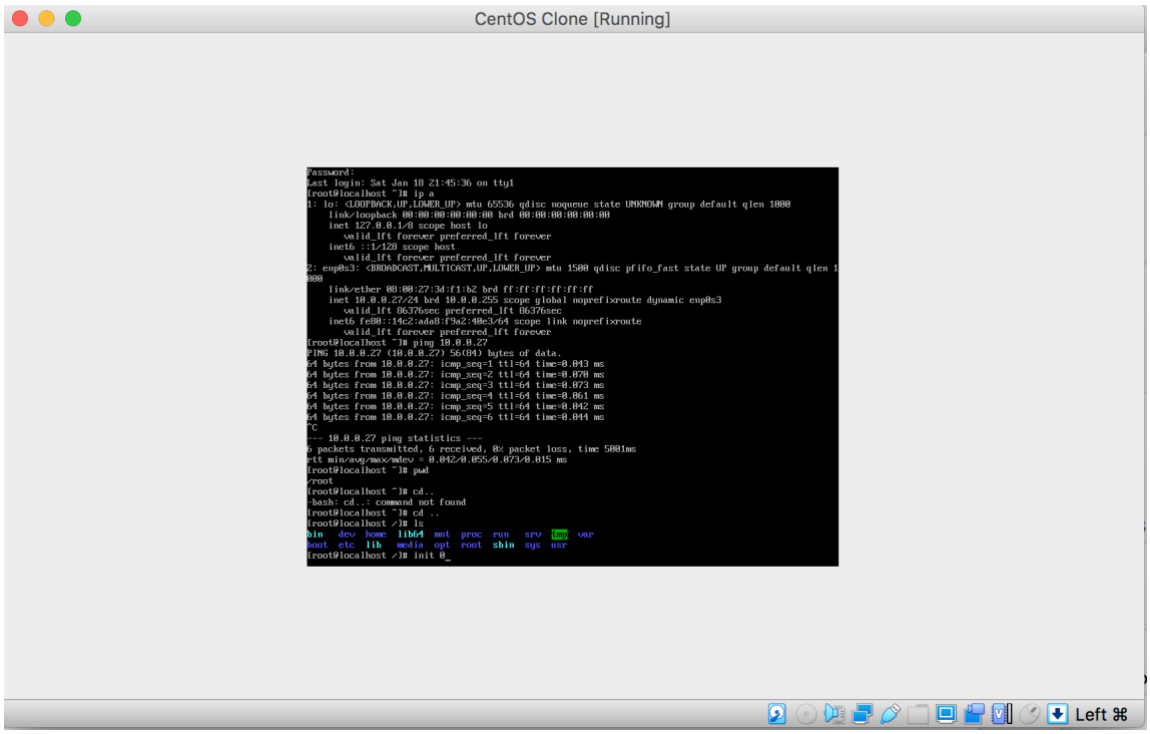


Allocate 3 GB of RAM to the CentOS Clone:





Test the cloned VM CentOS Clone through logging in using the root and PW. Get IP address and ping IP address. Try a few Linux commands.



To power off the VM use `init 0` or `shutdown now`.

To sum up this assignment, I successfully created a Virtual Machine using Oracle´s Virtual Box on which I can run CentOS, a Linux OS. Both, the initial CentOS virtual machine and its clone are fully functional Linux operating systems.
I didn´t experience any problems in downloading the software packages or installing the VM on my Mac Book Pro.