

## Practical Exercise 5-1: Managing User Accounts from the CLI

This Practical Exercise will take students through the creation of new user accounts, creation and verification of accounts and passwords and modification of accounts.

Open VirtualBox and start the openSUSE VM. Run snapshot 9-1 for the correctly configured environment. To run snapshot 9-1:

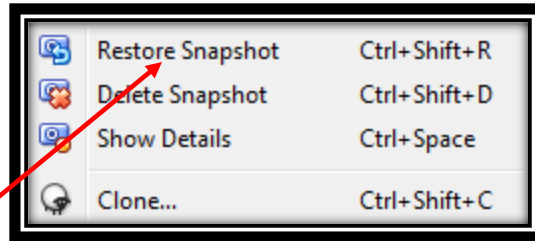
1. Open the Oracle VM VirtualBox manager by double clicking this icon on your desktop:



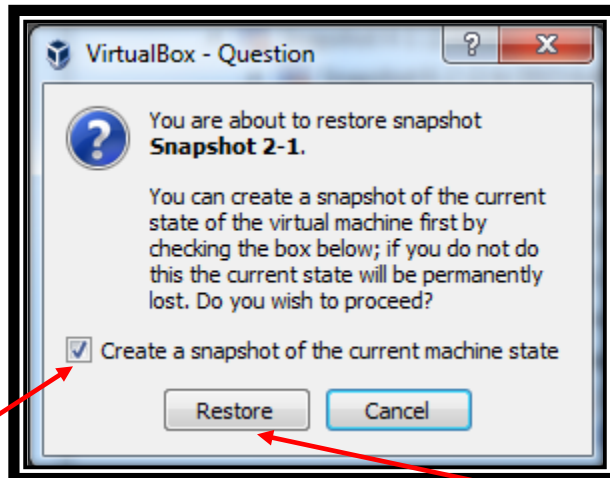
2. Click "Snapshots" in the top right of the Oracle VM Virtualbox Manager.



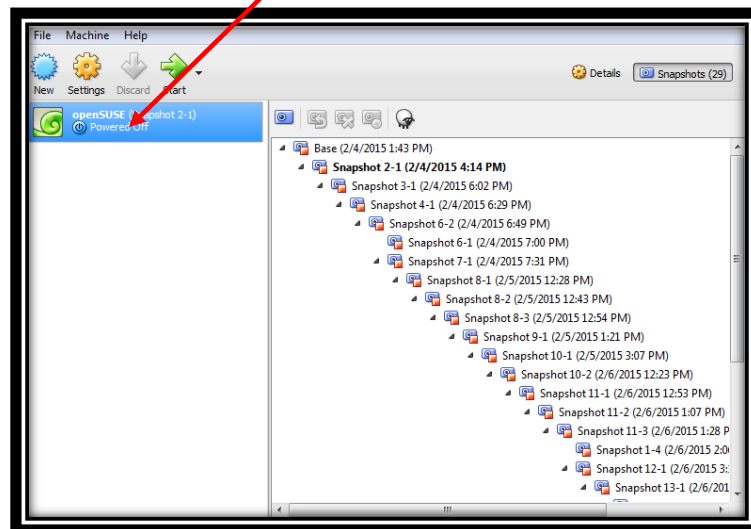
3. In the right side box populated with snapshots scroll up and find the one titled "Snapshot 2-1" and right click on it. The following box should appear:



4. Select "Restore Snapshot" and the following pop-up should appear:



5. Uncheck the "Create a Snapshot of the current machine state" box and then click the "Restore" button.
6. You should now see in the left box the openSUSE (Snapshot 2-1) with a status of "Powered Off." Power it on by double clicking it.



7. A separate window should open and you should see the openSUSE Linux OS booting.
8. Press **CTRL+ALT+F1** to move to the command line shell.
9. At your login prompt, authenticate to the system as the user: **root** and password: **student**.
10. Create a user account for yourself by doing the following:
  - a. Determine a username and password for yourself. A common convention is to use your first initial with your last name. Use the **openssl passwd --crypt** command to encrypt your password. Keep the password between 0 to 10 characters. It is case sensitive as is the hash output!
  - b. Enter your username here:\_\_\_\_\_
  - c. Enter the plaintext password here:\_\_\_\_\_
  - d. Enter the hashed password here:\_\_\_\_\_
  - e. At the shell prompt, enter **useradd -c "your\_full\_name" -m -p "your\_encrypted\_password" -s "/bin/bash" your\_username**.
  - f. At the shell prompt, enter **tail /etc/passwd**. Verify that your new user account was created.
  - g. OK, the account is there. Try to log into your account but first exit root by entering **exit**.
  - h. For the login enter what you wrote in item b (your username).
  - i. For the password enter what you wrote in item c (not the hash encrypted version!).
  - j. You should be logged in now to that account and the command prompt should show your username.
  - k. You can create an account in the system using the full command in item d and put your plaintext password in after the -p. It will create the account which could be

verified by checking `/etc/passwd` and `/etc/shadow` but you will not be able to log in.

- l. This example worked well because we limited the password to a size of 0 to 10 characters. Entering a password after the `openssl passwd -crypt` larger than 10 characters will return an error stating the hash result is too large. This may require a python or perl script to complete this task if using `useradd`. The account can be created with the `useradd` utility and then the password established with the `passwd` utility. This will encrypt the password in `/etc/shadow`. This is done in the next few steps.
11. Exit your account by entering **exit** and enter **root** at the login and **student** for the password. You should now be in the root user.
12. Create a user account using your system's default settings by entering **useradd dtracy** at the shell prompt.
13. At the shell prompt, enter **tail /etc/passwd**. Verify that your new user account was created. Notice that the new user is missing many parameters. Add these parameters by doing the following:
  - a. Enter a full name for the dtracy user account by entering **usermod -c "Richard Tracy" dtracy** at the shell prompt.
  - b. At the shell prompt, enter **tail /etc/passwd**. Verify that the full name was added to the dtracy account.
  - c. Give dtracy a password by entering **passwd dtracy** at the shell prompt.
    - i. Enter the plaintext password here:\_\_\_\_\_
  - d. When prompted, enter a new password for dtracy.
  - e. Let's log onto the dtracy account. Exit the root user by entering **exit**.
  - f. Enter **dtracy** at the login. Enter the password you set and wrote down in c in the password.
  - g. You should now be logged in as user dtracy.

- h. Enter exit at the command prompt to leave the dtracy account.

**--End of Practical Exercise--**