TIE-23546 Cloud Platforms

Exercise 2: Linux System Administration

v1.3

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In this exercise, we deal with Linux administrator commands.

1. Take a snapshot [VMware Workstation\ Ubuntu Server 01 -> Snapshot\ Take Snapshot\ Snapshot 2].

[Oracle VirtualBox\ Ubuntu Server 01 -> Snapshot\ Take\ Snapshot 2].

1. Turn on the Ubuntu Server 01 and open the SSH connection. Answer the questions in the table.

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| --- | --- | --- |
| **System Administration** | | |
| Number | What command you… | Command |
| 1 | 1. print the amount of used disk space in gigabytes 2. How much disk space was used in gigabytes? 3. How much disk space was available gigabytes? | 1. Df-h |
| 2 | 1. print /lib directory size 2. What was the size of the /lib directory? | 1. du -h /lib 2. 0 |
| 3 | 1. print every process on the system 2. print only prosess numbers for the SSH server | 1. ps -auxf 2. ps -ef |
| 4 | create the file runme.sh | Cat >runme.sh |
| 5 | Type or copy the following lines in "runme.sh".  #!/bin/bash  date +%d-%m-%Y-%H:%M  Tip. You can use nano editor ([link](https://www.howtoforge.com/linux-nano-command/)). | cat >runme.sh  #!/bin/bash date +%d-%m-%Y-%H:%M |
| 6 | specify that only the owner of the runme.sh script has read, write, and execute privileges | Chmod +rwx |
| 7 | 1. run runme.sh script 2. What was the output? | 1. -rwxrwxr-x 1 kumud kumud 33 Nov 1 05:39 runme.sh |
| 8 | take a backup of the home directory (/home/*user\_name*) to /tmp directory. Use tar command. Name the target file backup.tar.gz.  Tip! Check the [link](https://www.cyberciti.biz/faq/how-do-i-compress-a-whole-linux-or-unix-directory/). | /$ tar -zcvf/tmp/kum-backup.tar.gz /home/kumud/ |
| 9 | 1. update the package index files 2. install the newest versions of all packages 3. install ntpdate package   Tip! Check the [link](https://www.cyberciti.biz/faq/how-do-i-update-ubuntu-linux-softwares/). | 1. apt-get update 2. apt-get upgrade 3. apt-get install ntpdate |
| 10 | update the system clock from time1.mikes.fi | ntpdate -u time1.mikes.fi |
| 11 | update the hardware clock from the system clock | Hwclock -w |
| 12 | print the network status | netstat |
| 13 | print network interface configuration from eth0 or ens33 | Ifconfig |
| 14 | print the IP routing table | Ip route list  Or  Netstat -rn |
| 15 | Shutdown the Ubuntu Server first. Then close the WMware software. | sudo poweroff |
| 16 | Do not destroy the virtual machine. We will use it in the future exercises. |  |
| 17 | Save the final report to your home directory in Word Doc and Adobe PDF (Word / File / Save as / PDF). |  |
| 18 | Return the final report in PDF format. |  |