

Andre J Plath

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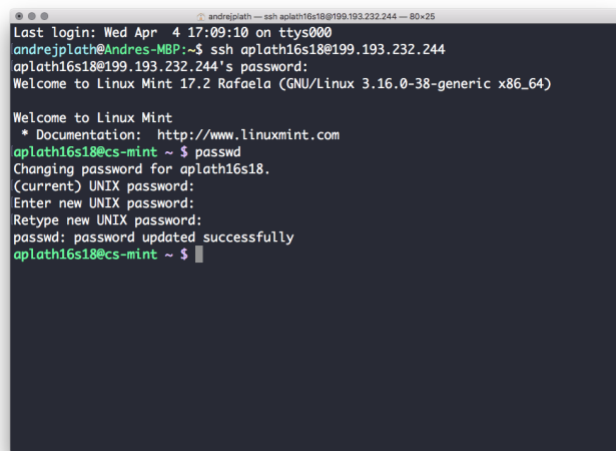
CS364 Information Management

April 3, 2018

Lab 1 Linux Fun

I-II. Connecting to a Linux Machine:

SSH into server and entered password. Changed password upon first log-in. Used “**passwd**” command to change password. The **passwd** command changes the user's password.

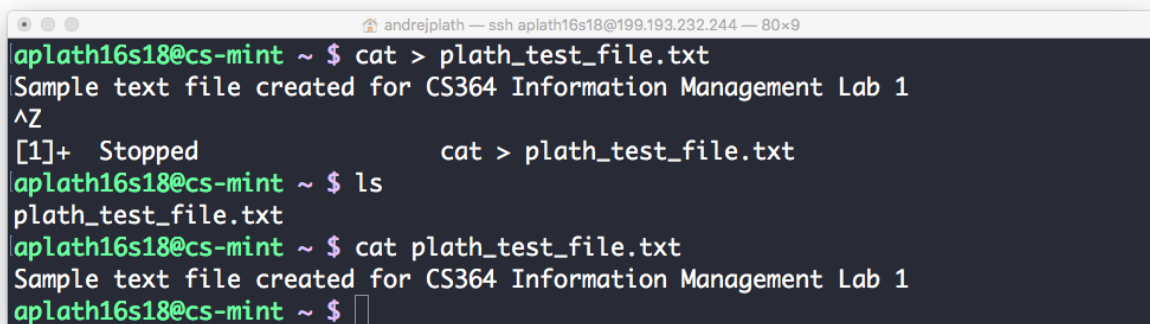
A terminal window titled 'andrejplath — ssh aplath16s18@199.193.232.244 — 80x25'. The output shows a successful SSH login to a Linux Mint 17.2 Rafaela machine. The user is prompted to enter their password, and then to change it using the 'passwd' command. The terminal shows the prompts for the current password, new password, and retype new password, followed by a confirmation message 'passwd: password updated successfully'.

```
Last login: Wed Apr  4 17:09:10 on ttys000
andrejplath@Andres-MBP:~$ ssh aplath16s18@199.193.232.244
aplath16s18@199.193.232.244's password:
Welcome to Linux Mint 17.2 Rafaela (GNU/Linux 3.16.0-38-generic x86_64)

Welcome to Linux Mint
 * Documentation: http://www.linuxmint.com
aplath16s18@cs-mint ~ $ passwd
Changing password for aplath16s18.
(current) UNIX password:
Enter new UNIX password:
Retype new UNIX password:
passwd: password updated successfully
aplath16s18@cs-mint ~ $
```

III. Basic User Commands:

- 1) Used the “**cat**” command to create a new txt file. The command is for viewing and adding to text files. Used “**CTRL-Z**” to save file but also can use “**CTRL-D**” for same outcome.

A terminal window titled 'andrejplath — ssh aplath16s18@199.193.232.244 — 80x9'. The user runs 'cat > plath_test_file.txt' to create a new file. They then press CTRL-Z, which shows as '^Z' and '[1]+ Stopped'. The user then presses CTRL-D, which shows as '[1]+ Stopped' and 'cat > plath_test_file.txt'. Finally, they run 'ls' to list the files, showing 'plath_test_file.txt', and then 'cat plath_test_file.txt' to view the file's contents, which is 'Sample text file created for CS364 Information Management Lab 1'.

```
aplath16s18@cs-mint ~ $ cat > plath_test_file.txt
Sample text file created for CS364 Information Management Lab 1
^Z
[1]+  Stopped                  cat > plath_test_file.txt
aplath16s18@cs-mint ~ $ ls
plath_test_file.txt
aplath16s18@cs-mint ~ $ cat plath_test_file.txt
Sample text file created for CS364 Information Management Lab 1
aplath16s18@cs-mint ~ $
```

- 2) Used “**cd**” to change directory. The **cd** command allows you to change directories. Used “**ls**” command to list contents of directory. The **ls** command shows you the files in your current directory. Used “**cd**” to return to previous

directory.

```
andrejplath — ssh aplath16s18@199.193.232.244 — 80x25
aplath16s18@cs-mint /home $ ls
aalnasser1317 DOF16U31 krule14s18 TBF16U29
aalnasser13w18 DOF16U32 lijians17 TBF16U3
aalykhan17w18 DOF16U33 lloyhs17 TBF16U30
abishops18 DOF16U34 lthalmans17 TBF16U31
aearl16s17 DOF16U35 mcalawa15w18 TBF16U32
afrancos17 DOF16U36 mgbrown08s17 TBF16U33
agreenley17s18 DOF16U37 mlarios12s18 TBF16U34
ahakami1717 DOF16U38 mmerdink TBF16U35
ahakami17w18 DOF16U39 natefreys17 TBF16U36
ahorners17 DOF16U4 nharvey TBF16U37
ahoward17s18 DOF16U40 nkis17 TBF16U38
ajohnson DOF16U41 nleonard17s18 TBF16U39
akubo14s18 DOF16U42 nstarks17 TBF16U4
aleclercs17 DOF16U43 olsond TBF16U40
aplath16s18 DOF16U44 olsonds17 TBF16U41
atkubos17 DOF16U45 omlidaw18 TBF16U42
avickers17s18 DOF16U46 pharnishjr11s18 TBF16U43
bbauers17 DOF16U47 qzhu1617 TBF16U44
beerst DOF16U48 qzhu16w18 TBF16U45
bkarkanen DOF16U49 raustin16 TBF16U46
bmorgan DOF16U5 rboatman TBF16U47
bspencer16s18 DOF16U50 rcaamalcastillo13s18 TBF16U48
bvance17s18 DOF16U51 rcuda TBF16U49
cdannen10s18 DOF16U52 rjennings1717 TBF16U5
```

- 3) Used “**cat**” command with the name of txt file to output content of file.

```
andrejplath — ssh aplath16s18@199.193.232.244 — 80x9
aplath16s18@cs-mint ~ $ cat > plath_test_file.txt
Sample text file created for CS364 Information Management Lab 1
^Z
[1]+  Stopped                  cat > plath_test_file.txt
aplath16s18@cs-mint ~ $ ls
plath_test_file.txt
aplath16s18@cs-mint ~ $ cat plath_test_file.txt
Sample text file created for CS364 Information Management Lab 1
aplath16s18@cs-mint ~ $
```

- 4) Used “**rm**” command to delete test txt file. The **rm** command is used to remove or delete a file in your directory.

```
andrejplath — ssh aplath16s18@199.193.232.244 — 80x9
aplath16s18@cs-mint ~ $ ls
plath_test_file.txt
aplath16s18@cs-mint ~ $ rm plath_test_file.txt
aplath16s18@cs-mint ~ $ ls
aplath16s18@cs-mint ~ $
```

- 5) Used “**top**” command to display information on the Linux system, running processes, and system resources, including the CPU, RAM, swap usage, and total number of tasks being run. Used “**q**” to quit.

```
andrejplath — ssh aplath16s18@199.193.232.244 — 80x24
top - 17:45:39 up 68 days, 17:23, 6 users, load average: 0.04, 0.19, 0.20
Tasks: 308 total, 2 running, 305 sleeping, 1 stopped, 0 zombie
%Cpu(s): 4.3 us, 0.5 sy, 0.0 ni, 94.8 id, 0.0 wa, 0.0 hi, 0.3 si, 0.0 st
KiB Mem: 4041288 total, 3674260 used, 367028 free, 241464 buffers
KiB Swap: 2095100 total, 13416 used, 2081684 free. 1818512 cached Mem

  PID USER      PR  NI   VIRT   RES   SHR  S  %CPU  %MEM    TIME+  COMMAND
 46032 rushingj  20   0 1481868 209616 67104 S   4.3   5.2   3767:51 cinnamon
 55578 root        20   0 126884   6968  5820 S   1.3   0.2    0:00.04 sshd
 55580 root        20   0 126884   6824  5684 S   0.7   0.2    0:00.02 sshd
  1070 mongodb    20   0 387196  58304 10816 S   0.3   1.4   602:25.45 mongod
 46128 rushingj  20   0 595944 205104 20816 S   0.3   5.1  100:19.15 cinnamon-s+
 55520 aplath1+  20   0  25076   3244  2620 R   0.3   0.1    0:00.44 top
 55581 sshd        20   0  62824   3124  2364 S   0.3   0.1    0:00.01 sshd
    1 root        20   0  33920   4324  2652 S   0.0   0.1    1:06.07 init
    2 root        20   0      0      0      0 S   0.0   0.0    0:00.22 kthreadd
    3 root        20   0      0      0      0 S   0.0   0.0   16:03.56 ksoftirqd/0
    5 root        0 -20      0      0      0 S   0.0   0.0    0:00.00 kworker/0:0+
    7 root        20   0      0      0      0 S   0.0   0.0   53:18.94 rcu_sched
    8 root        20   0      0      0      0 R   0.0   0.0   42:58.42 rcuos/0
    9 root        20   0      0      0      0 S   0.0   0.0    4:12.74 rcuos/1
   10 root        20   0      0      0      0 S   0.0   0.0    0:00.00 rcuos/2
   11 root        20   0      0      0      0 S   0.0   0.0    0:00.00 rcuos/3
aplath16s18@cs-mint ~ $
```

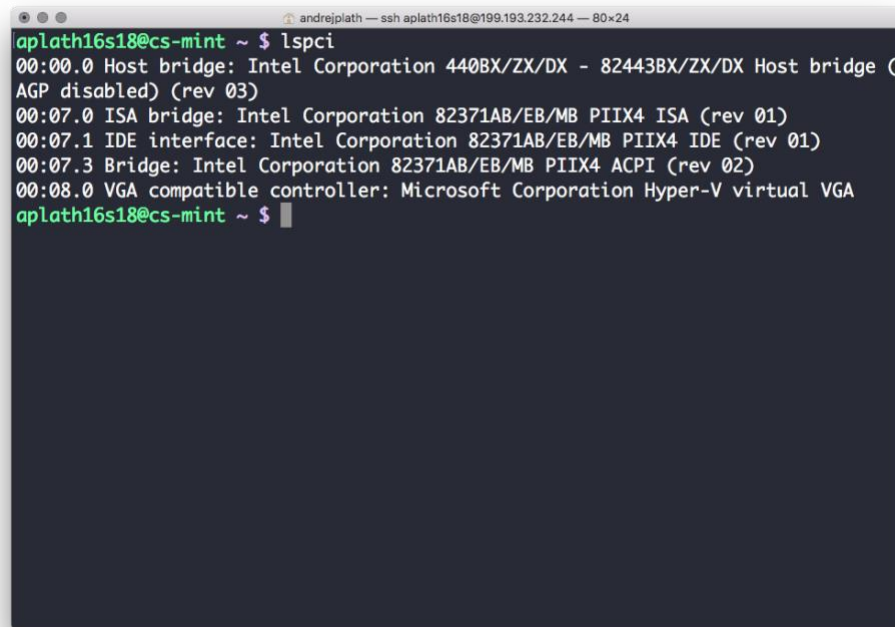
- 6) Used “**clear**” to clear screen of content.

```
andrejplath — ssh aplath16s18@199.193.232.244 — 80x24
 2 root      20    0    0    0    0 S  0.0  0.0  0:00.22 kthreadd
 3 root      20    0    0    0    0 S  0.0  0.0  16:03.56 ksoftirqd/0
 5 root      0 -20    0    0    0 S  0.0  0.0  0:00.00 kworker/0:++
 7 root      20    0    0    0    0 S  0.0  0.0  53:18.94 rcu_sched
 8 root      20    0    0    0    0 R  0.0  0.0  42:58.42 rcuos/0
 9 root      20    0    0    0    0 S  0.0  0.0  4:12.74 rcuos/1
10 root      20    0    0    0    0 S  0.0  0.0  0:00.00 rcuos/2
11 root      20    0    0    0    0 S  0.0  0.0  0:00.00 rcuos/3
aplath16s18@cs-mint ~ $ clear
aplath16s18@cs-mint ~ $
```

- 7) Used the “**who**” command. The **who** command tells you who is currently logged into the machine.

```
andrejplath — ssh aplath16s18@199.193.232.244 — 80x24
aplath16s18@cs-mint ~ $ who
aplath16s18 pts/2      2018-04-04 17:07 (76-14-196-251.or.wavecable.com)
rushingj pts/4        2018-04-03 12:32 (john-10.wou.edu)
tholman17s18 pts/7    2018-04-04 17:12 (c-73-180-18-113.hsd1.or.comcast.net)
rcaamalcastillo13s18 pts/8    2018-04-04 17:51 (192.95.68.102)
rushingj tty8         2018-02-08 09:46 (:0)
rushingj pts/1        2018-02-08 09:48 (:0)
aplath16s18@cs-mint ~ $
```

- 8) Used “**lspci**” command. command lists all PCI buses and devices connected to them. This commonly includes network cards and sound cards.



```
andreiplath — ssh aplath16s18@199.193.232.244 — 80x24
aplath16s18@cs-mint ~ $ lspci
00:00.0 Host bridge: Intel Corporation 440BX/ZX/DX - 82443BX/ZX/DX Host bridge (AGP disabled) (rev 03)
00:07.0 ISA bridge: Intel Corporation 82371AB/EB/MB PIIX4 ISA (rev 01)
00:07.1 IDE interface: Intel Corporation 82371AB/EB/MB PIIX4 IDE (rev 01)
00:07.3 Bridge: Intel Corporation 82371AB/EB/MB PIIX4 ACPI (rev 02)
00:08.0 VGA compatible controller: Microsoft Corporation Hyper-V virtual VGA
aplath16s18@cs-mint ~ $
```

IV. Cooler Commands:

- 1) “**banner**” command can print banners. No options and can print only 10 characters at most.



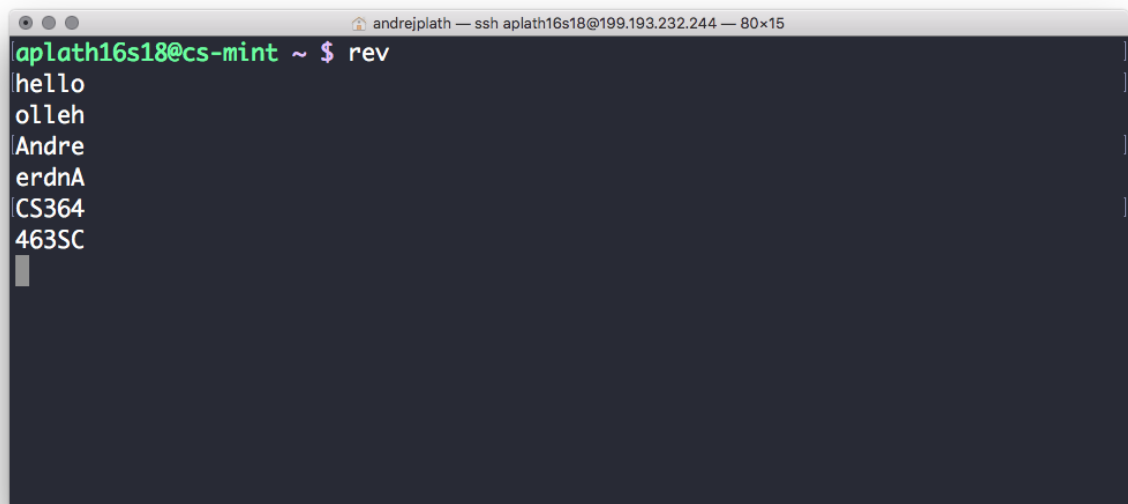
```
andreiplath — ssh aplath16s18@199.193.232.244 — 80x24
aplath16s18@cs-mint ~ $ banner W.O.U.
# # ##### # #
# # # # # #
# # # # # #
# # # # # #
# # # ### # # ### # #
# # # ### # # ### # #
## ## ### ##### ## #####
aplath16s18@cs-mint ~ $
```

- 2) “**fortune**” command will put up a random, but hopefully sensible quote, or your fortune for the day.

A terminal window with a dark background and light text. The title bar at the top reads "andrejplath — ssh aplath16s18@199.193.232.244 — 80x15". The prompt is "aplath16s18@cs-mint ~ \$". The user has entered the command "fortune". The output is a quote: "You will remember something that you should not have forgotten." followed by a new line and the prompt "aplath16s18@cs-mint ~ \$".

```
andrejplath — ssh aplath16s18@199.193.232.244 — 80x15
aplath16s18@cs-mint ~ $ fortune
You will remember something that you should not have forgotten.
aplath16s18@cs-mint ~ $
```

- 3) “**rev**” command will print the reverse of whatever you type in. First run rev, then start typing one sentence at a time.

A terminal window with a dark background and light text. The title bar at the top reads "andrejplath — ssh aplath16s18@199.193.232.244 — 80x15". The prompt is "aplath16s18@cs-mint ~ \$". The user has entered the command "rev". The output shows the reverse of the input: "hello" becomes "olleh", "Andre" becomes "erdnA", "CS364" becomes "463SC", and "463SC" becomes "CS364". The prompt "aplath16s18@cs-mint ~ \$" is visible at the bottom.

```
andrejplath — ssh aplath16s18@199.193.232.244 — 80x15
aplath16s18@cs-mint ~ $ rev
hello
olleh
Andre
erdnA
CS364
463SC
aplath16s18@cs-mint ~ $
```