

Ganpat University
(2CSE204) Basics of Operating System and Shell Scripting

Name: Jaymin Gondaliya

Enrollment No: 23162171007

Sem - 2

Branch: CS

Class: B

Batch: 25

Practical-12

1. Set your system clock in such a way that it is NTP client of classroom.exaple.com and verify the same

Command – nano /etc/chrony.conf , chronyc sources -v

```
File Edit View Search Terminal Help
GNU nano 2.9.8 /etc/chrony.conf

# Use public servers from the pool.ntp.org project.
# Please consider joining the pool (http://www.pool.ntp.org/join.html).
#server 0.rhel.pool.ntp.org iburst
#server 1.rhel.pool.ntp.org iburst
#server 2.rhel.pool.ntp.org iburst
#server 3.rhel.pool.ntp.org iburst
#server 172.25.254.254 iburst
server classroom.example.com iburst
# Ignore stratum in source selection.
stratumweight 0
```

```
[student@workstation ~]$ systemctl restart chronyd
[student@workstation ~]$ chronyc sources -v
210 Number of sources = 1

.-- Source mode '^' = server, '=' = peer, '#' = local clock.
/ .- Source state '*' = current synced, '+' = combined , '-' = not combined,
| / '?' = unreachable, 'x' = time may be in error, '~' = time too variable.
||
||      .- xxxx [ yyyy ] +/- zzzz
||      |             |             |
||      | Reachability register (octal) -. | xxxx = adjusted offset,
||      | Log2(Polling interval) --.    | yyyy = measured offset,
||      |             |             | zzzz = estimated error.
||      |             |             |
||      |             |             |
MS Name/IP address      Stratum Poll Reach LastRx Last sample
=====
^* classroom.example.com 2      6      17      12      -818ns[ -66us ] +/- 4004us
[student@workstation ~]$
```

2. Create an archive of /usr/local directory and compress it as /root/yourname_surname.tar.xz
List of files must be visible at the time of compression
Command – sudo tar -cvJF /root/jaimin_gondaliya.tar.xz /usr/local

```
[sentinel@thunderbolt ~]$ sudo tar -cvJf /root/jaimin_gondaliya.tar.xz /usr/local
[sudo] password for sentinel:
tar: Removing leading '/' from member names
/usr/local/
/usr/local/bin/
/usr/local/bin/subfinder
/usr/local/etc/
/usr/local/games/
/usr/local/include/
/usr/local/lib/
/usr/local/lib64/
/usr/local/lib64/bpf/
/usr/local/libexec/
/usr/local/sbin/
/usr/local/share/
/usr/local/share/applications/
/usr/local/share/applications/mimeinfo.cache
/usr/local/share/info/
/usr/local/share/man/
/usr/local/share/man/man1/
/usr/local/share/man/man1x/
/usr/local/share/man/man2/
/usr/local/share/man/man2x/
/usr/local/share/man/man3/
/usr/local/share/man/man3x/
/usr/local/share/man/man4/
/usr/local/share/man/man4x/
```

3. Display the list of directories/files present inside the compressed file
Command - tar -tvf jaimin_gondaliya.tar.xz

```
[root@thunderbolt ~]# ls
anaconda-ks.cfg cleqr initial-setup-ks.cfg jaimin_gondaliya.tar.xz
[root@thunderbolt ~]# tar -tvf jaimin_gondaliya.tar.xz
drwxr-xr-x root/root          0 2024-01-29 14:48 usr/local/
drwxr-xr-x root/root          0 2024-01-29 10:31 usr/local/bin/
-rwxrwxr-x sentinel/sentinel 36070584 2024-01-29 10:29 usr/local/bin/subfinder
drwxr-xr-x root/root          0 2021-06-22 01:06 usr/local/etc/
drwxr-xr-x root/root          0 2021-06-22 01:06 usr/local/games/
drwxr-xr-x root/root          0 2021-06-22 01:06 usr/local/include/
drwxr-xr-x root/root          0 2021-06-22 01:06 usr/local/lib/
drwxr-xr-x root/root          0 2024-01-29 14:48 usr/local/lib64/
drwxr-xr-x root/root          0 2021-06-22 01:06 usr/local/lib64/bpf/
drwxr-xr-x root/root          0 2021-06-22 01:06 usr/local/libexec/
drwxr-xr-x root/root          0 2021-06-22 01:06 usr/local/sbin/
drwxr-xr-x root/root          0 2024-01-29 14:48 usr/local/share/
drwxr-xr-x root/root          0 2024-01-29 14:56 usr/local/share/applications/
-rw-r--r-- root/root        13 2024-01-29 14:56 usr/local/share/applications/mimeinfo.cache
drwxr-xr-x root/root          0 2021-06-22 01:06 usr/local/share/info/
drwxr-xr-x root/root          0 2024-01-29 14:48 usr/local/share/man/
drwxr-xr-x root/root          0 2021-06-22 01:06 usr/local/share/man/man1/
drwxr-xr-x root/root          0 2021-06-22 01:06 usr/local/share/man/man1x/
drwxr-xr-x root/root          0 2021-06-22 01:06 usr/local/share/man/man2/
drwxr-xr-x root/root          0 2021-06-22 01:06 usr/local/share/man/man2x/
drwxr-xr-x root/root          0 2021-06-22 01:06 usr/local/share/man/man3/
drwxr-xr-x root/root          0 2021-06-22 01:06 usr/local/share/man/man3x/
drwxr-xr-x root/root          0 2021-06-22 01:06 usr/local/share/man/man4/
drwxr-xr-x root/root          0 2021-06-22 01:06 usr/local/share/man/man4x/
drwxr-xr-x root/root          0 2021-06-22 01:06 usr/local/share/man/man5/
drwxr-xr-x root/root          0 2021-06-22 01:06 usr/local/share/man/man5x/
```

4. Extract the compressed file in such a way that the names of directories/files must be visible while extraction.

Command – `tar -xvf /root/jaimin_gondaliya.tar.xz -c /`

```
File Edit View Search Terminal Help
[root@thunderbolt ~]# tar -xvf /root/jaimin_gondaliya.tar.xz -C /
usr/local/
usr/local/bin/
usr/local/bin/subfinder
usr/local/etc/
usr/local/games/
usr/local/include/
usr/local/lib/
usr/local/lib64/
usr/local/lib64/bpf/
usr/local/libexec/
usr/local/sbin/
usr/local/share/
usr/local/share/applications/
usr/local/share/applications/mimeinfo.cache
usr/local/share/info/
usr/local/share/man/
usr/local/share/man/man1/
usr/local/share/man/man1x/
usr/local/share/man/man2/
usr/local/share/man/man2x/
usr/local/share/man/man3/
usr/local/share/man/man3x/
usr/local/share/man/man4/
usr/local/share/man/man4x/
usr/local/share/man/man5/
usr/local/share/man/man5x/
usr/local/share/man/man6/
usr/local/share/man/man6x/
```