Hands-on Lab: Archiving and Compressing Files

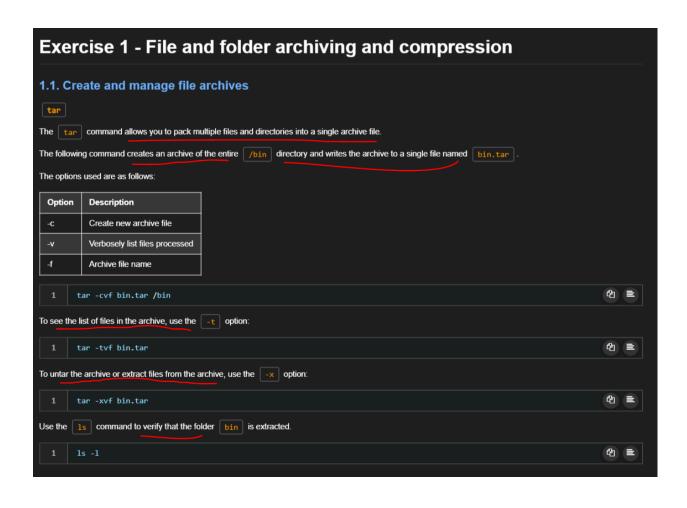


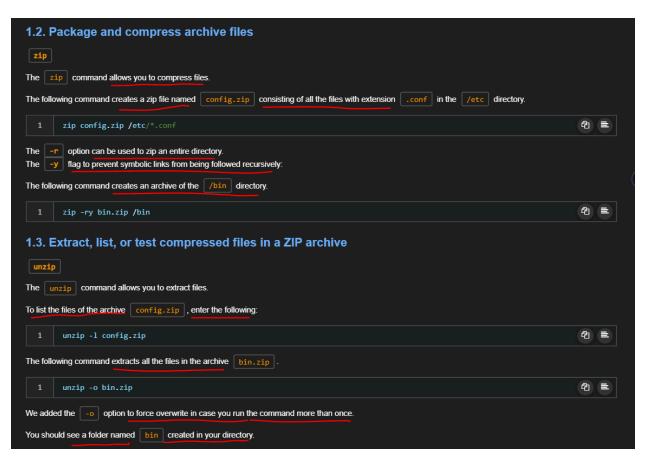
Estimated time needed: 15 minutes

Learning Objectives

After completing this lab, you will be able to:

- Create archives for sets of files and folders
- Compress and decompress files
- Extract files and folders from an existing archive





```
theia@theia-naimbenalaya: /home/project
 ⚠ Problems
                                                                                              > theia@theia-naimbenalaya: /home/project
                                                                                                                                                                    > theia@theia-naimbenalaya: /home/pi
theia@theia-naimbenalaya:/home/project$ tar -cvf bin.tar /bin
tar: Removing leading `/' from member names
/bin
theia@theia-naimbenalaya:/home/project$ tar -tvf bin.tar
lrwxrwxrwx root/root 0 2025-01-25 21:05 bin -> usr/bin
theia@theia-naimbenalaya:/home/project$ tar -xvf bin.tar
bin
theia@theia-naimbenalaya:/home/project$ ls -1
total 12
 lrwxrwxrwx 1 theia users    7 Jan 25 21:05 <mark>bin -> usr/bin</mark>
-rw-r--r-- 1 theia users 10240 Jun 30 19:33 <mark>bin.tar</mark>
lrwxrwxrwx 1 theia users
theia@theia-naimbenalaya:/home/project$ zip config.zip /etc/*.conf
   adding: etc/adduser.conf (deflated 55%)
adding: etc/ca-certificates.conf (deflated 76%)
   adding: etc/ca-certificates.conf (deflated adding: etc/debconf.conf (deflated 56%) adding: etc/deluser.conf (deflated 40%) adding: etc/e2scrub.conf (deflated 49%) adding: etc/gai.conf (deflated 57%) adding: etc/host.conf (deflated 13%) adding: etc/ld.so.conf (deflated 6%) adding: etc/libaudit.conf (deflated 34%) adding: etc/mke2fs.conf (deflated 55%) adding: etc/msswitch.conf (deflated 39%) adding: etc/pam.conf (deflated 60%) adding: etc/pam.conf (deflated 62%) adding: etc/resolv.conf (deflated 26%)
    adding: etc/resolv.conf (deflated 26%) adding: etc/sensors3.conf (deflated 82%) adding: etc/sudo.conf (deflated 63%)
    adding: etc/sudo_logsrvd.conf (deflated 69%)
    adding: etc/sysctl.conf (deflated 60%)
    adding: etc/ucf.conf (deflated 61%)
    adding: etc/xattr.conf (deflated 55%)
theia@theia-naimbenalaya:/home/project$ zip -ry bin.zip /bin
adding: bin (stored 0%)
```

```
theia@theia-naimbenalaya:/home/project$ unzip -l config.zip
Archive: config.zip
    Length
                          Date
          3028 2025-01-25 21:05
6288 2025-03-27 17:36
2969 2022-02-20 09:42
604 2018-09-15 18:14
                                                             etc/adduser.conf
                                                            etc/debconf.conf
                                                             etc/deluser.conf
          085 2022-01-08 15:02
2584 2022-02-03 00:27
92 2021-10-15 06:06
34 2020-12-16 06:04
                                                             etc/e2scrub.conf
                                                            etc/gai.conf
etc/host.conf
                                                            etc/ld.so.conf
etc/libaudit.conf
        34 2020-12-16 06:04
191 2022-03-17 13:50
744 2022-01-08 15:02
586 2013-12-19 00:41
510 2025-03-27 17:35
552 2020-08-11 20:15
104 2025-06-30 19:32
10593 2022-03-31 17:07
4573 2023-04-03 14:00
9390 2023-04-03 14:00
2355 2022-02-25 06:32
1260 2020-06-16 01:37
681 2022-03-23 05:41
                                                             etc/mke2fs.conf
                                                             etc/mongod.conf
                                                             etc/nsswitch.conf
                                                             etc/pam.conf
etc/resolv.conf
                                                            etc/resolv.conf
etc/sensors3.conf
etc/sudo.conf
etc/sudo_logsrvd.conf
etc/sysctl.conf
etc/ucf.conf
etc/xattr.conf
                                                             20 files
theia@theia-naimbenalaya:/home/project$ unzip -o bin.zip
Archive: bin.zip
linking: bin
finishing deferred symbolic links:
                                                                            -> usr/bin
                                                  -> usr/bin
theia@theia-naimbenalaya:/home/project$
```

Summary

In this lab, you learned that:

- tar allows you to pack multiple files and directories into a single archive file
- zip allows you to compress files
- unzip allows you to extract files