

# CLI - Exercise 04: Tar

## Exercise 04 – WinSCP and tar

1. Using **Putty**, login to our shared server - <https://www.putty.org/>
  - a. connect the NBCC VPN (*required if you are NOT on campus*)
  - b. the server IP address is 10.157.121.244
  - c. your username is in the Announcements for this course, on Brightspace
  - d. your password is your NBCC StudentID
2. Create a sub-directory under your **home** directory, called **shell-scripts**
3. Download & install **WinSCP** - <https://winscp.net/>  
*(you can use another tool, if you wish)*
4. Using WinSCP, connect to our shared server (same credentials as Step 1)
5. Copy the following .SH files from your windows machine to the shared server  
*(under your shell-scripts directory)*
  - a. from Assignment 02 – copyPrompt.sh
  - b. from Exercise 02 – wordCount.sh, safeCopy.sh, checkPermissions.sh
6. Returning to Putty, create a **new shell script** (shell-scripts/**submitTar.sh**), which does the following:
  - a. Create a single TAR file containing all files from the shell-scripts directory  
*(ensure the tar file is NOT created in the shell-scripts directory)*
  - b. If the tar command fails, exit the script
  - c. Create a shell variable to define the destinationFileName  
DestinationDirectory:        “/home/cli-shared”  
DestinationFileName:        “Ex04-” + {your username} + “.tar”  
*(HINT: use the command ‘whoami’)*
  - d. If the destinationFileName already exists, display an error message and exit the script
  - e. Otherwise, the script should copy your TAR file into the “cli-shared” directory
7. Execute this script !
8. Confirm that your script executed properly (“ls /home/cli-shared”)
9. Use the command “tar tvf” to ensure that that the ‘tar-ball’ contains all 5 .sh files, and that it does NOT contain files with a full path (see below)
10. Finally, submit the **new script** (submitTar.sh) to the BrightSpace Dropbox  
*(You will have to rename your .sh file to .TXT before BrightSpace will permit the upload)*

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NOTE: The goal is to create a TAR file with only file names (no directories)

```
chris@nb-srv-lcl2:~$ tar tvf scripts1.tar
-rw-rw-r-- chris/chris      371 2025-02-19 01:51 checkPermissions.sh
-rw-rw-r-- chris/chris     1077 2025-02-19 01:51 copyPrompt.sh
-rw-rw-r-- chris/chris      365 2025-02-19 01:52 safeCopy.sh
P-rwxrwxr-x chris/chris     336 2025-02-19 01:12 submitTar.sh
-rw-rw-r-- chris/chris      593 2025-02-19 01:51 wordCount.sh
chris@nb-srv-lcl2:~$
```

OR, file names under a single directory

```
chris@nb-srv-lcl2:~$ tar tvf scripts2.tar
-rw-rw-r-- chris/chris      371 2025-02-19 01:51 shell-scripts/checkPermissions.sh
-rw-rw-r-- chris/chris     1077 2025-02-19 01:51 shell-scripts/copyPrompt.sh
-rw-rw-r-- chris/chris      365 2025-02-19 01:52 shell-scripts/safeCopy.sh
-rwxrwxr-x chris/chris     336 2025-02-19 01:12 shell-scripts/submitTar.sh
-rw-rw-r-- chris/chris      593 2025-02-19 01:51 shell-scripts/wordCount.sh
chris@nb-srv-lcl2:~$
```

**DO NOT** submit a tar file with full path names !!!

~~```
chris@nb-srv-lcl2:~$ tar tvf scripts3.tar
-rw-rw-r-- chris/chris      371 2025-02-19 01:51 home/chris/shell-scripts/checkPermissions.sh
-rw-rw-r-- chris/chris     1077 2025-02-19 01:51 home/chris/shell-scripts/copyPrompt.sh
-rw-rw-r-- chris/chris      365 2025-02-19 01:52 home/chris/shell-scripts/safeCopy.sh
-rwxrwxr-x chris/chris     336 2025-02-19 01:12 home/chris/shell-scripts/submitTar.sh
-rw-rw-r-- chris/chris      593 2025-02-19 01:51 home/chris/shell-scripts/wordCount.sh
chris@nb-srv-lcl2:~$
```~~