

WEEK 10

COMP(2041|9044)

Ready for the term to be over?

MYEXPERIENCE

Please complete your myExperience of your experience of me :)

Try to be honest and give me any necessary feedback as this helps me improve! If you think I was horrible, please be nice about it but will always accept constructive criticism.

Please do as the information is invaluable (to me and the course)

ASSIGNMENT

How is the assignment going?
Does anyone have hints or advice for other students?
Has anyone discovered interesting cases that have to be handled?

SCP VS RSYNC

4. These commands both copy a directory tree to a CSE server.

```
$ scp -r directory1/ z1234567@login.cse.unsw.edu.au:directory2/  
$ rsync -a directory1/ z1234567@login.cse.unsw.edu.au:directory2/
```

What underlies them?

How do they differ?

Why are these differences important?

SCP VS RSYNC

- Both commands use `ssh` to connect to the remote machine
- `rsync` will be more efficient if directory2 already exists with similar contents.
 - It only copies files which are different or only changed bytes.
 - `rsync -a` copies metadata such as file permissions and modification data
 - `scp -rp` would copy metadata.

SCP VS RSYNC

5. Assumes Linux kernel source tree containing thousand of source files can be found in `/usr/src/linux`

Write a shell script that emails each of the 50,000 source (.c) files to Andrew, each as an attachment to a separate email.

The source files may be anywhere in a directory tree than goes 10+ levels deep.

Please don't run this script, and in general be very careful with such scripts. It is very embarrassing to accidentally send thousands of emails.

What assumptions does your script make?

SCP VS RSYNC



```
#!/bin/sh
```

```
directory=/usr/src/linux
```

```
# depends on pathnames not containing white-space
```

```
for c_file in $(find "$directory" -type f -name '*.c')  
do  
    echo mutt -s "C for you" -a "$c_file" -- andrewt@unsw.edu.au  
done
```

CODE DEMO!

TIME FOR LAB

[Code and Slides Available here](https://github.com/jeremyle56/tutoring/tree/24T2/24T2/cs2041)

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