Research Software Engineering

Introduction to the SCRTP desktop

Part 5 - Watching files and processes

Commands are given in backticks, like `ls`. A running command can be killed using Ctrl-C. A command started in the background (using a final &) can be found using `ps` and killed using `kill [pid]`. If you get very stuck, closing your terminal session will kill anything running.

- Use 'tail' to view the last 20 lines of a file.
- The following command will write to a file called tmp.txt at intervals of 5 seconds for 30 seconds. The final '&' means the command runs in the background, leaving your command prompt usable. The '-w 30' part of the command limits the total time it will run for. Do not omit this!
- Run `ping -w 30 -i 5 127.0.0.1 > tmp.txt &` Once that is started, a file tmp.txt will appear. Watch the file being written using `tail -f tmp.txt`. Once the command finishes, use Ctrl-C to exit the tail command.
- Start the above ping command again, and try `ps`. What is it's PID?
- Try killing the command using `kill [pid]` Note that kill alone is a 'co-operative' abort, and will work only if the process is responding. 'Stuck' processes can be forced to end using `kill -9 [PID]` but be cautious.
- Find a large text file (or modify the ping command above to write 100 lines). Display it on screen using the command `cat`. Try the same using `less` or `more`.

1 H Ratcliffe, 2017