RHSA1

Red hat System Administration 1

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Course Plan

Day 04

- Processes
- Redirection
- Pipeline wc diff
- Grep cut sort
- LAB 4

Notes
Before LAB

Process

Program: Static code on disk.

Process: An active instance of a program in memory.

Job: A user-initiated task managed by the shell.

Daemon: A background process running continuously.

Services: System-level functionalities provided by daemons,

managed by the init system and listen to ip/port

#ps to view current process of my terminal
#ps a to view all running process of all terminals
#ps aux to view all process on the system + info about users running the process cpu% mem% utilization
#top to show runtime of processes

#ps –ef to view pid and ppid
#pstree
#kill –help
#kill -9 kill signal
#kill -15 terminate signal ctrl+c
Ctrl+z stopped

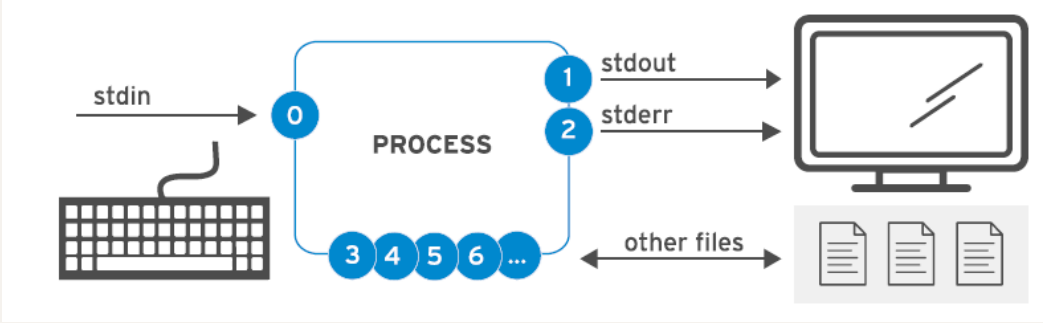
Redirection

> file
Redirect stdout to overwrite a file.

>> file
Redirect stdout to append to a file.

2> file
Redirect stderr to overwrite a file.

2> /dev/null
Discard stderr error messages by redirecting them to /dev/null.



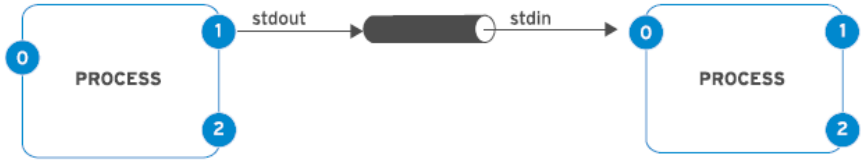
> file* 2>&1 or *&> file
Redirect stdout and stderr to overwrite the same file.

>> file* 2>&1 or *&>> file
Redirect stdout and stderr to append to the same file.

Pipeline & WC & diff

Construct Pipelines

A *pipeline* is a sequence of one or more commands that are separated by the vertical bar character (|). A pipeline connects the standard output of the first command to the standard input of the next command.



ls -l /tmp | wc

Word Count

The wc command displays the number of characters, words, and lines in a specified file.
#wc file
#wc –l –c –w file

Diff command

used to compare the contents of two files for differences.

#diff file1 file2

Grep & cut & sort

Grep
Searching for word
grep <regular-expression>/<word> <filepath>
#grep –help #man grep

cut command
cuts fields or columns of text from standard input
displays the result to standard output

cut option[s] [filename]
-f specifies field or column.
-d specifies field delimiter (default is TAB).
-c specifies characters and cuts by characters.
#cut -f 3 -d: /etc/passwd

sort command
sorts text data after accepting it from either a file or the output of another command

sort option[s] [filename]
-t: separator :
-k1 based on first field
#sort -t : -k3 /etc/passwd

LAB 04

1. List the user commands and redirect the output to /tmp/commands.list
2. Count the number of user commands
3. Get all the users names whose first character in their login is ‘g’.
4. Get the logins name and full names (comment) of logins starts with “g”.
5. Save the output of the last command sorted by their full names in a file.
6. Display the number of users who is logged now to the system.
7. Display lines 7 to line 10 of /etc/passwd file
8. What happens if you execute:

   cat filename1 | cat filename2
   ls | rm
   ls /etc/passwd | wc –l

LAB 04

Processes:

1. Issue the command sleep 100.
2. Stop the last command.
3. Resume the last command in the background
4. Issue the jobs command and see its output.
5. Send the sleep command to the foreground and send it again to the background.
6. Kill the sleep command.
7. Display your processes only
8. Display all processes except yours
9. Use the pgrep command to list your processes only
10. Kill your processes only.