AINUX

—TASTE OF LINUX—

WELCOME TO THE WORLD OF LINUX

DAY - 14

CREATED BY : ARYAN M.P

Monitoring & Managing Linux Processes

What is Process?

A process is a running instance lunched, executable program. Every process is assigned a unique *process ID* (PID) for tracking.

A process consists of:
- An address space of allocated memory.
- One or more execution threads of program code.
- the process state.

Fork: - An existing process duplicates its own address space to create a new child   process structure is called fork.
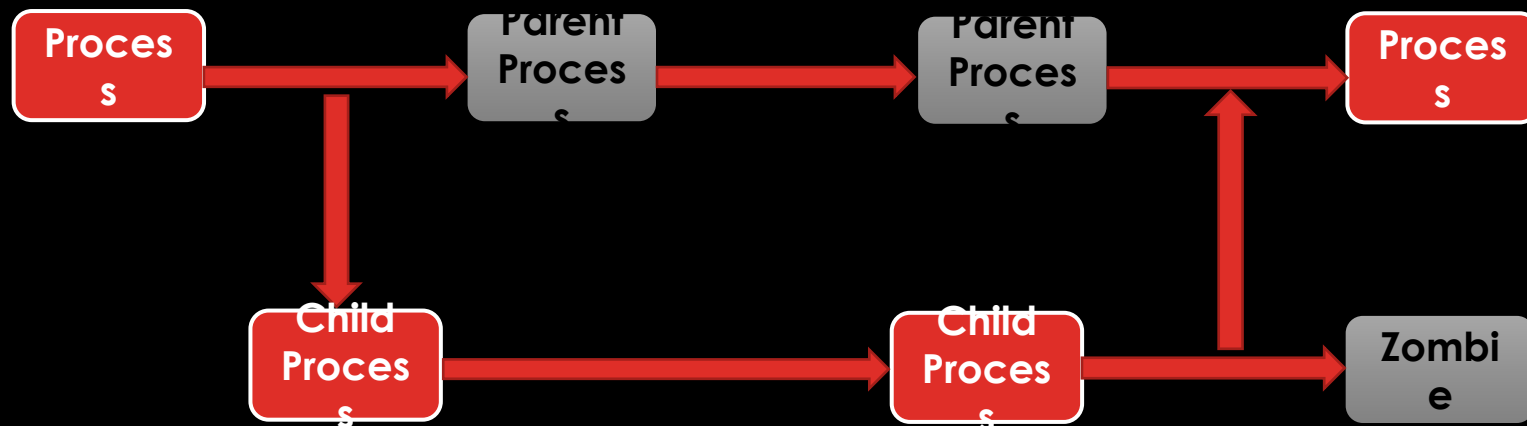
Monitoring & Managing Linux Processes

To display process
ps

To display all the process
ps aux   [a = All process | u = User list based | x = List the BSD Style]

To count all running the process
ps aux | wc

To display the process with more technical details in long listing manner.
ps lax

JOBS:- Everything that is happening on the Linux system, is happening as a process. But in some cases users lunched the command from shell environment, then it becomes the job.

To create a blank job
dd if=/dev/zero of=/dev/null
[by pressing CTRL+Z to minimize the job or can use "&" at the end of the command to minimize]

To display background job
jobs

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To display last background job
bg

To foreground job
fg %job-number
i.e, # fg %1

You can also display the job by ps command
ps j

To display the child process.
ps fax

To search a particular process.
ps aux | grep process-name
i.e, # ps aux | grep vsftpd

Kill Processes

What is Signal
Signals are the instruction that are send to process.

Most Common Signals

Signal No.	Short Name	Definition	Description
1	HUP	Hangup	It's tells a process to reload it's configuration but basically as an administrator you will use "TERM" or "KILL".
9	KILL	Kill	It's just terminate (Kicked)the activity.
15 (Default)	TERM	Terminate	This is the Kind request to a process to stop it's activity

Kill Processes

top

To Kill the process
kill PID
i.e, # kill 2908

To force Kill the process
kill -9 PID
i.e, # kill -9 2908

To Kill all same process
killall "Process-name"
i.e, # killall dd

Note:-
1.   To kill the process you required super user privilege.
2.   Killall sends a signal to one or more processes matching selection criteria, such as "command-name", "process-owned by specific user".

Kill Processes

To Kill all process owned by an user

\# killall –u user-name command

 i.e, # killall –u subha dd

Note:-

Pkill command is also like "killall" command. But here we can mention UID, GID

Example:

1. \# pkill command   [#pkill dd]
2. \# pkill –signal command   [#pkill -9 dd]
3. \# pkill –U UID command   [#pkill –U 0 dd]
4. \# pkill –G GID command   [#pkill –G 1001 dd]
5. \# pkill –t ternimal-name command   [#pkill –t tty2 dd]

Note:-

Pgrep command is used to search process

Example:-

\# pgrep –l –u subha

THANK YOU