Mastering Linux Command-line
The Process
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The Process

- What is a PROCESS?
- Parent & Child Processes
- Program Vs Process
- Types of Processes
- Foreground Processes
 Background Processes
 Daemons
- Internal and External Commands
- How is a process created?
- "nohup" command

- "time" command
- Signals
- stty" command
- · "kill" command
- \$ and \$\$ System Variables
- "wait" command
- Job Control (jobs, fg and bg)

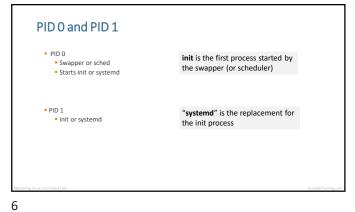
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Process

Process A program in execution is called a *process*. Linux is a multi-user and multi-tasking system. Multiple processes ullet Each process is allocated a unique number ullet process identifier (PID)

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Parent & Child Processes Process A creates another process B A → Parent Process



Types of Processes	
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Types of Processes

- Interactive Process (or Foreground Process)
- Non-Interactive Process (or Background Process)
- Daemons

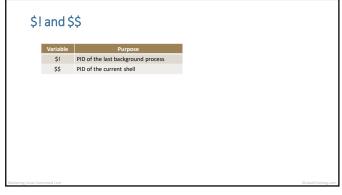
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Run a command in the background

- Use & (ampersand) after the command.
- Example: \$ find / -name global* > found.txt &

ill To kill a process To make a process run, after logging out ice Set the priority of a process	Command	Purpose	
nohup To make a process run, after logging out sice Set the priority of a process	ps	View the list of processes	
sice Set the priority of a process	kill	To kill a process	
	nohup	To make a process run, after logging out	
Get time stats of a command/process.	nice	Set the priority of a process	
	time	Get time stats of a command/process.	

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Signals

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Signals	
A signal is a message sent to a process.	
A parent process and child process could send signals to each other.	
Signals have:NameNumber	

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SIGNAL	Name	Meaning
1	SIGUP	Hang up
2	SIGINT	Interrupt
3	SIGQUIT	Quit
9	SIGKILL	Sure Kill
15	SIGTERM	Software Termination
24	SIGSTOP	Stopped

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Job Control Commands

fg Brings the background job to foreground	fg Brings the background job to foreground bg &→ Put ampersand at the end of the command to run it in the background Ctrl2→ Suspend the foreground process, and then use "bg"	fg Brings the background job to foreground bg &→Put ampersand at the end of the command to run it in the background Ctrl-2→Suspend the foreground process, and then use "bg"	Command	Purpose
bg 8. → Put ampersand at the end of the command to run it in the background Ctrl-2 → Suspend the foreground process, and then use "bg"	bg 8. → Put ampersand at the end of the command to run it in the background Ctrl-2 → Suspend the foreground process, and then use "bg"	bg & → Put ampersand at the end of the command to run it in the background Ctrl-z → Suspend the foreground process, and then use "bg"	jobs	Display the list of current jobs
background Ctrl-z → Suspend the foreground process, and then use "bg"	background Ctrl-z → Suspend the foreground process, and then use "bg"	background Ctrl-z → Suspend the foreground process, and then use "bg"	fg	Brings the background job to foreground
			bg	background Ctrl-z → Suspend the foreground process, and then use "bg"

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DONE	