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When exiting the shell of a Linux System, all running processes are usually terminated or hang up. So what do you do If you still want to keep the processes running even exiting the shell/terminal? This is where the **nohup command** comes in.

Nohup Command

Nohup, short for no hang up is a command in Linux systems that keep processes running even after exiting the shell or terminal. Nohup prevents the processes or jobs from receiving the SIGHUP (Signal Hang UP) signal. This is a signal that is sent to a process upon closing or exiting the terminal. In this guide, we take a look at the nohup command and demonstrate how it can be used.

Nohup Command Syntax

Nohup command syntax is as follows;

```
nohup command arguments
```

OR

```
nohup options
```

Let's see how the command comes into play

Checking the version of Nohup

You can begin by checking the version of Nohup using the syntax below

```
nohup --version
```

Output

```
jamie@debian:~$ nohup --version
nohup (GNU coreutils) 8.26
Copyright (C) 2016 Free Software Foundation, Inc.
License GPLv3+: GNU GPL version 3 or later <http://gnu.org/licenses/gpl.html>.
This is free software: you are free to change and redistribute it.
There is NO WARRANTY, to the extent permitted by law.
Written by Jim Meyering.
```

Starting a process using Nohup

If you want to keep your processes/jobs running, precede the command with nohup as shown below. The jobs will still continue running in the shell and will not get killed upon exiting the shell or terminal.

```
nohup ./hello.sh
```

Output

```
jamie@debian:~$ nohup ./hello.sh
nohup: ignoring input and appending output to 'nohup.out'
jamie@debian:~$
```

From the output above, the output of the command has been saved to nohup.out to verify this run,

```
cat nohup.out
```

Output

```
jamie@debian: f $
jamie@debian: ~ $ cat nohup.out
Hello World !
```

Additionally, you can opt to redirect the output to a different file as shown

```
nohup ./hello.sh > output.txt
```

Once again, to view the file run

```
cat output.txt
```

Output

```
jamie@debian:~$ nohup ./hello.sh > output.txt
nohup: ignoring input and redirecting stderr to stdout
jamie@debian:~$
jamie@debian:~$ cat output.txt
Hello World !
```

To redirect to a file and to standard error and output use the > filename 2>&1 attribute as shown

```
nohup ./hello.sh > myoutput.txt >2&1
```

Output

```
jamie@debian:~$ nohup ./hello.sh > myoutput.txt 2>&1
jamie@debian:~$
jamie@debian:~$ cat myoutput.txt
nohup: ignoring input
Hello World !
jamie@debian:~$
```

Starting a process in the background using Nohup

To start a process in the background use the & symbol at the end of the command. In this example, we are pinging google.com and sending it to the background.

```
nohup ping google.com &
```

Output

```
jamie@debian:~$ nohup ping google.com &
[1] 2565
jamie@debian:~$ nohup: ignoring input and appending output to 'nohup.out'
```

To check the process when resuming the shell use the pgrep command as shown

```
pgrep -a ping
```

Output

```
jamie@debian:~$ pgrep -a ping
2565 ping google.com
jamie@debian:~$
```

If you want to stop or kill the running process, use the kill command followed by the process ID as shown

```
kill 2565
```

Output

```
jamie@debian:~$
jamie@debian:~$
[1]+ Terminated nohup ping google.com
jamie@debian:~$
```

Summary

- 1. All processes that are run using the nohup command will ignore the SIGHUP signal even upon exiting the shell.
- 2. Once a job is started or executed using the nohup command, stdin will not be available to the user.
- 3. By default, the nohup.out is used as the default file for stdout and stderr.

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While we believe that this content benefits our community, we have not yet thoroughly reviewed it. If you have any suggestions for improvements, please let us know by clicking the "report an issue" button at the bottom of the tutorial.

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- dinesh

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When you run this command normally, does it produce any output as you are redirecting the output in a file.

- Hemant Ganwgar

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great for tcpdump: nohup sudo tcpdump -i any -nn -w /var/tmp/file.pcap -C 100 - W 50 "src x.x.x.x and dst y.y.y.y" & •to find the process that u created: - pgrep -a tcpdump - ps aux | grep then: sudo kill

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- Murugan

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^

Hi. Thanks for the nice tips. I am a newbie in this field and I have a simple question. well, I am using nohup in my work in the background. well. I am facing a problem which is. once I submit the job it working well in the background. no issue. but I have 50+ commands to run. so it is creating a long queue. now the problem is that each job take some time to finish and because of that a long-waited queue got cancel automatically. is there any way to keep it in the queue or prolonged the queuing time or another way by which PID keep activate itself until its turn come for execution? love to hear from your expertise. Thanks

- Malik Waqar Arshad

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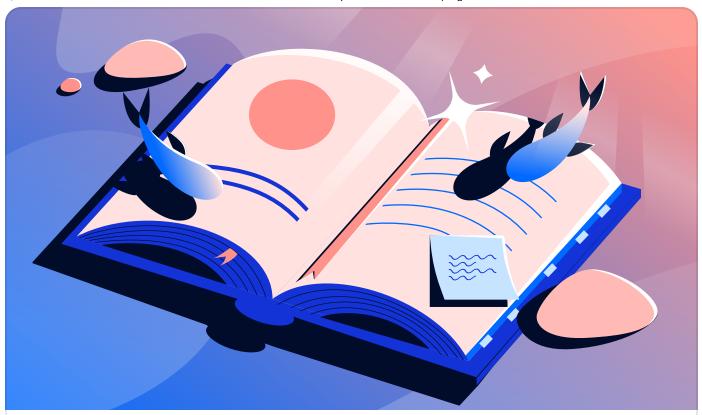
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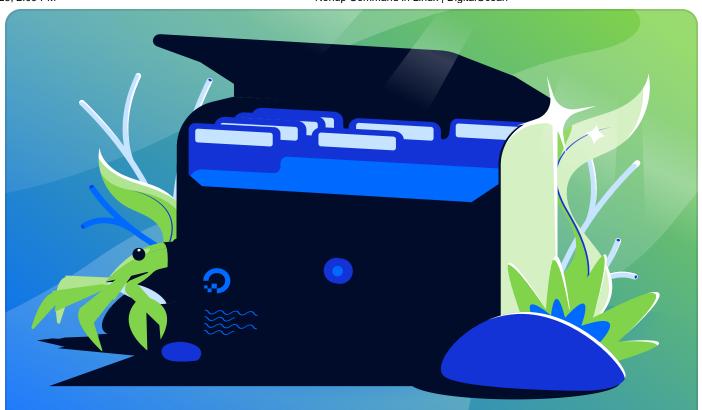
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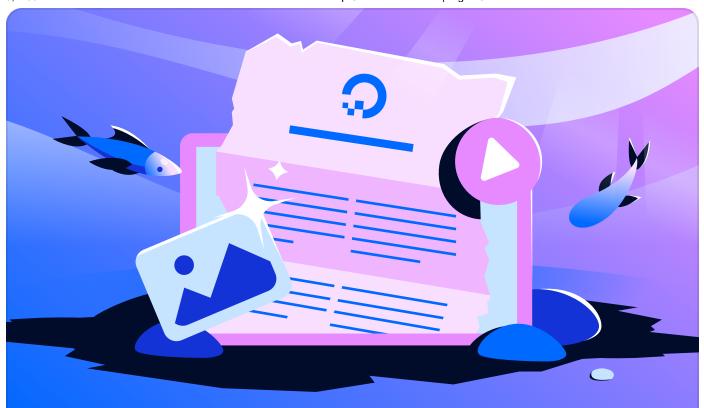
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