

Programster

Tutorials focusing on Linux, programming, and open source

Linux CLI Cheatsheet

SATURDAY, SEPTEMBER 26, 2015

Below are some short snippets of code to help you perform day-to-day tasks in Linux. If you can't find what you are looking for, make sure to look at the [BASH cheatsheet](#).

Related Posts

- [Linux CLI Cheatsheet](#)
- [Docker CLI Cheatsheet](#)

Replace Text In Files (Sed)

I use variations of the sed command to manipulate config files for automated scripts

```
SEARCH="search text here"  
REPLACE="replace text here"  
FILEPATH="/path/to/file.conf"  
sed -i "s;$SEARCH;$REPLACE;" $FILEPATH
```

If you want to replace an entire line, then just use `. *` as shown below.

```
SEARCH="bind-address.*"  
REPLACE="bind-address = $PRIVATE_IP"  
FILEPATH="/etc/mysql/my.cnf"  
sudo sed -i "s;$SEARCH;$REPLACE;" $FILEPATH
```

You can use `[[:space:]]\+=` when you don't know how many whitespaces or tabs there are. E.g.

```
SEARCH="datadir[[:space:]]\+= /var/lib/mysql"  
REPLACE="datadir = /media/data/mysql"  
FILEPATH="/etc/mysql/my.cnf"  
sudo sed -i "s;$SEARCH;$REPLACE;" $FILEPATH
```

Write To File (With Sudo Privs)

```
echo "my content here" | sudo tee $FILEPATH
```

Alternatively:

```
cat << EOF > [filepath]  
[script content]  
EOF
```

Append To File (With Sudo Privs)

```
echo "my content here" | sudo tee -a $FILEPATH
```

Check Sata Connection of Drives

```
dmesg | grep -i ahci | grep -i --color Gbps
```

Check the SATA Connection Of Specific Drive

```
smartctl -a /dev/sda | grep "^SATA"
```

Note:

You will need to install the smartctl package if you haven't already.

Get Time Taken

Sometimes it's useful to know how long a command takes. All you have to do is wrap it like so:

```
CMD="YOUR COMMAND GOES HERE"
utime="$( TIMEFORMAT='%lU';time ( $CMD ) 2>&1 1>/dev/null )"
echo "$utime"
```

CentOS - Check If Reboot Required

```
#!/bin/bash
LAST_KERNEL=$(rpm -q --last kernel | perl -pe 's/^kernel-(\S+
CURRENT_KERNEL=$(uname -r)

test $LAST_KERNEL = $CURRENT_KERNEL || echo REBOOT
```

Generate Random Password

This is my favourite option from How-To-Geek: [10 Ways to Generate a Random Password from the Command Line](#)

```
openssl rand -base64 32
```

Output IPs

```
hostname -I
```

If you want each IP on a newline, use the command below:

```
hostname -I | xargs | tr [:space:] '\n'
```

Move all Files With Directory To Own Folder

If have a hornet's nest of files, perhaps from a backup, and want to move all the PDFs into their own directory then you can execute the following:

```
find . -name "*.pdf" -type f -exec /bin/mv {} ./pdf \;
```

Obviously if you just wanted to copy the files instead, use:

```
find . -name "*.pdf" -type f -exec /bin/cp {} ./pdf \;
```

Note:

Using xargs may be better, [please refer here](#).

Add to Cron

Often it's necessary for an installation script to install a cron job, such as to run a script on boot. To do this automatically, just use the following code snippet. **Make sure to adjust the third line accordingly.**

```
TMP_CRON_FILE="/tmp/cron_file"
crontab -l > $TMP_CRON_FILE
echo "@reboot /bin/bash /path/to/bash/script.sh" >> $TMP_CRON
crontab $TMP_CRON_FILE
rm $TMP_CRON_FILE
```

Check Sata Connection of Drives

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dmesg | grep -i ahci | grep -i --color Gbps
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Get Time Taken

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References

- [Nixcraft - Linux Command To Find SATA Link Speed](#)
- [Unix & Linux - How to measure time of program execution and store that inside a variable](#)

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AUTHOR

[Programster](#)

Stuart is a software developer with a passion for Linux and open source projects.

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