1 Shell CheatSheet   LANGUAGES

- PDF Link: cheatsheet-shell-A4.pdf, Category: languages

- Blog URL: `https://cheatsheet.dennyzhang.com/cheatsheet-shell-A4`

- Related posts: Vim CheatSheet, #denny-cheatsheets

File me Issues or star this repo.

1.1 Basic

Name	Comment
Redirect stdout/stderr	`ls /tmp >/dev/null 2>&1`
Deal with filename	`basename $f`, `dirname $f`
Use timeout: avoid command hang	timeout 10 sh -c 'ls -lt'
Restart shell without killing terminal	`exec -l $SHELL`
Run sub-shell	`echo $BASH_SUBSHELL; ( echo "Running in subshell:  $BASH_SUBSHELL" )`
Set pipefail	`set -ueoxv pipefail`, `set +ueoxv pipefail`
Run static code check	Link: shellcheck

1.2 Shell script

Name	Comment
Trap exit signal	code/trap-exit.sh
Shell retry	code/shell-retry.sh
Check if a string contains a substring	code/string-contains.sh
Check if a string in a list	code/string-in-list.sh, Link: stackoverflow
Log with timestamp	code/log-with-timestamp.sh
Quit if current user is not root	code/assert-user-root.sh
Set -x on fly	code/restore-debug-output.sh

1.3 Environment variables

Name	Comment
List all environment variables	`export`
Define a new env variable	export NAME1="value1"

1.4 zsh

Name	Comment
Disable all zsh's autocorrect	In ~/.zshrc, `unsetopt correct_all`
Disable a given autocorrect	In ~/.zshrc, alias ssh='nocorrect ssh'. $zsh_{disable}$

1.5 GNU tools

1.5.1 Echo string

Name	Comment
Echo red text	echo -e "hello,[0;31m there [0;31m"
Echo multiple lines	echo -e "hello,"
Echo bold text	echo -e hello, "\033[1mThis is bold text.\033[0m"
Echo underlined text	echo -e hello, "\033[4mThis is underlined text.\033[0m"

1.6 Shell Basic

1.6.1 cd

Name	Comment
Go to given folder	`cd /var/log/`
Go to folder in subshell	`(cd /var/log/ && ls)` After this, PWD won't be changed
Go to home	`cd`
Go to parent folder	`cd ..`
Go to previous folder	`cd -`

1.6.2 Numeric

Name	Comment
*	`expr 5 \* 4`
+	`let z=x+y, z=$x+$y`
==	`int1 -eq int2, [ $?  -eq 0 ] && echo "good"`
>=	`int1 -ge =int2`
>	`int1 -gt =int2`
<=	`int1 -le =int2`
<	`int1 -lt =int2`
!=	`int1 -ne =int2`

1.6.3 xargs

```
# Run grep for files filtered by find
find /var/log -name "*.log" | xargs grep -i error

# Loop with pipes
cat /etc/passwd | awk -F':' '{print $1}' | xargs -I{} sudo -l -U {} | grep -v "not allowed to"
```

1.7 Scripts

- Compare command output

```
[ 0 -eq $(find ./data -name "*.txt" -type f -print | wc -l) ]
```

- get ip from eth0

```
/sbin/ifconfig eth0 | grep 'inet addr:' | cut -d: -f2 | awk '{ print $1}'
```

1.8 More Resources

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