

CheatSheet: Linux Files

LINUX

- PDF Link: [cheatsheet-file-A4.pdf](#), Category: linux
- Blog URL: <https://cheatsheet.dennyzhang.com/cheatsheet-file-A4>
- Related posts: CheatSheet: Linux Process, CheatSheet: Linux Networking, [#denny-cheatsheets](#)

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1.1 Check file

| Name | Comment |
|---|--|
| Show file content | <code>cat /etc/hosts</code> |
| Show file content with line numbers | <code>cat -n /etc/hosts</code> |
| Show with line numbers, excluding blank lines | <code>cat -b /etc/hosts</code> |
| Show the first 3 lines | <code>head -n3 /etc/hosts</code> |
| Show the first 20 bytes | <code>head -c20 /etc/hosts</code> |
| Show the last 3 lines | <code>tail -n3 /etc/hosts</code> |
| Show the last 20 bytes | <code>tail -c20 /etc/hosts</code> |
| Keep tailing log file | <code>tail -f /var/log/system.log, taif /var/log/system.log</code> |
| Show file starting from 4th line | <code>more +4 /etc/hosts</code> |
| Show the 4th line | <code>sed -n '4p' /etc/hosts</code> |
| Show 4th, 5th, 7th and 8th lines | <code>sed -n '4,5p;7,8p' /etc/hosts</code> |
| Show matched string with 3 lines before and after | <code>grep -C 3 "127.0.0.1" /etc/hosts</code> |
| For table-like file, show 2nd column | <code>awk -F'\t' '{print \$2}' /etc/hosts</code> |
| For table-like file, swap 1st and 2nd columns | <code>awk -F'\t' '{print \$2,\$1}' /etc/hosts</code> |
| Find file encoding | <code>file -i /var/log/corecaptured.log</code> |

1.2 Find file

| Name | Summary |
|--------------------------------------|--|
| Basic find | <code>find /home/mac/<myfolder> -name "my*.log"</code> |
| Find files with two patterns | <code>find . -iname "my*.log" -o -iname "my*.txt"</code> |
| Find folder old than 3 days | <code>find . -maxdepth 1 -type d -ctime +3</code> |
| Find files changed within 60 minutes | <code>find /var/log -mmin 60 -type f</code> |
| Find with ls details | <code>find . \(-iname README.md \) -ls</code> |
| Find files filtered by size | <code>find /var/log -type f -size +50k -size -100k</code> |
| Find files older than another file | <code>find . -newer /tmp/file</code> |
| Find files while excluding patterns | <code>find . -name "*.log" -prune -o -name ".git" -prune -o -type f -print0</code> |

1.3 Find and delete

| Name | Summary |
|---|---|
| Find and delete with given names | <code>find . -name Thumbs.db -delete</code> |
| Recursively delete empty folders | <code>find . -type d -empty -delete</code> |
| Delete files haven't been updated in 5 days | <code>find . -mtime +5 -exec rm {} \;</code> |
| Delete folders created older than 5 days | <code>find . -name "npm-*" -type d -ctime +2 -exec rm -rf {} +</code> |

1.4 Watch file

| Name | Comment |
|------------------------|--|
| Show file changes | <code>watch -d -n 1 stat /var/log/message</code> |
| Keep tailing log files | <code>tail -f /var/log/system.log, taif /var/log/system.log</code> |

1.5 Copy file

| Name | Comment |
|---|---|
| Copy one file | <code>cp /etc/hosts /tmp/hosts</code> |
| Copy one folder | <code>cp -r /usr/local/bin/ /tmp/bin/</code> |
| Copy for backup | <code>cp /tmp/hosts{,.bak}, ls -lth /tmp/hosts*</code> |
| Create a copy but ask confirmation for overwrite | <code>cp -i ~/foo.txt /tmp/foo.txt</code> |
| Create a copy for backup with timestamp as suffix | <code>cp myfile.txt{,."\$(date +%Y%m%d-%H%M%S)"}></code> |
| Copy files by checking timestamp | <code>rsync -av \$src_dir \$dest_dir</code> |
| Copy files by comparing checksum | <code>rsync -avc \$src_dir \$dest_dir</code> |

1.6 Watch file

| Name | Command |
|----------------------------------|---|
| Remove a file or folder | <code>rm -rf <path></code> |
| Remove a file or an empty folder | <code>rm -f <path></code> |
| Remove a file by inode | <code>find <path> -inum 5555 -exec rm -i '{}' \;</code> |

1.7 Diff File

| Name | Command |
|--------------------------------|--|
| Diff two files | <code>diff <file1> <file2></code> |
| Ignore uppercase and lowercase | <code>diff -i <file1> <file2></code> |
| Diff output of two commands | <code>diff <(date) <(somecommand)</code> |
| Generate patch from two files | <code>diff -Naur <file1><file2> > diff.patch</code> |
| Diff two directories | <code>diff -r <dir1> <dir2></code> |
| Show only brief summary | <code>diff -r --brief <dir1> <dir2></code> |

1.8 Make directory

| Name | Comment |
|--|---|
| Make directory. Report error, if existing | <code>mkdir foo</code> |
| Make directory. Avoid reporting error, if existing | <code>mkdir -p foo</code> |
| Make directory and its parents | <code>mkdir -p foo/bar/dir1</code> |
| Make directories with the hierarchy | <code>mkdir -p foo/{bar,bad/{dir1,dir2}}, tree foo</code> |

1.9 More Resources

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