1 CheatSheet: Linux Files

LINUX

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- PDF Link: cheatsheet-file-A4.pdf, Category: linux
- Blog URL: https://cheatsheet.dennyzhang.com/cheatsheet-file-A4
- \bullet Related posts: Cheat Sheet: Linux Process, #denny-cheat sheets

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1.1 Check file

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

1.2 Find fine

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

1.3 Find and delete

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

1.4 Watch files

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

1.5 Copy file

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

1.6 Diff File

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

1.7 Make directory

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

1.8 More Resources

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