

Лабораторная работа 6

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Ознакомление с инструментами поиска файлов и фильтрации текстовых данных.

Приобретение практических навыков: по управлению процессами (и заданиями), по проверке использования диска и обслуживанию файловых систем.

Выполнение лабораторной работы

Создадим файл file.txt добавим в него все названия файлов из home и etc

```
./opensc-x86_64.conf
./NetworkManager/NetworkManager.conf
./PackageKit/CommandNotFound.conf
./PackageKit/PackageKit.conf
./PackageKit/Vendor.conf
./UPower/UPower.conf
./X11/xinit/xinput.d/ibus.conf
./X11/xorg.conf.d/80-keyboard.conf
./abrt/plugins/CCpp.conf
./abrt/plugins/java.conf
./abrt/plugins/oops.conf
./abrt/plugins/python3.conf
./abrt/plugins/vmcore.conf
./abrt/plugins/xorg.conf
./abrt/abrt-action-save-package-data.conf
./abrt/abrt.conf
./abrt/gpg_keys.conf
./alsa/conf.d/99-pipewire-default.conf
./alsa/conf.d/58-pipewire.conf
./alsa/state-daemon.conf
./alsa/alsactl.conf
./anaconda/conf.d/80-do-nothing.conf
./anaconda/conf.d/81-still-do-nothing.conf
./anaconda/profile.d/almalinux.conf
./anaconda/profile.d/centos.conf
./anaconda/profile.d/fedora-el.conf
./anaconda/profile.d/fedora-iot.conf
./anaconda/profile.d/fedora-kde.conf
./anaconda/profile.d/fedora-kinoite.conf
./anaconda/profile.d/fedora-server.conf
./anaconda/profile.d/fedora-silverblue.conf
./anaconda/profile.d/fedora-workstation.conf
./anaconda/profile.d/fedora.conf
./anaconda/profile.d/ovirt.conf
./anaconda/profile.d/rhel.conf
./anaconda/profile.d/rhwh.conf
./anaconda/profile.d/rocky.conf
./anaconda/profile.d/scientific-linux.conf
./anaconda/anaconda.conf
find: './audit': Permission denied
./authselect/authselect.conf
./authselect/nsswitch.conf
./avahi/avahi-daemon.conf
./bluetooth/main.conf
./containers/registries.conf.d/800-shortnames.conf
./containers/registries.conf
```

Рис. 1: Вывод файлов

Скопируем файлы .conf в файл conf.txt

```
./resetiv.conf  
[avkrukhnalev@fedora etc]$ cd  
[avkrukhnalev@fedora ~]$ touch conf.txt  
[avkrukhnalev@fedora ~]$ cp file.txt conf.txt  
[avkrukhnalev@fedora ~]$
```

Рис. 2: conf

Выведем все файлы на букву С

```
home/avkrukhalev/work/study/2022-2023/blog/.git/modules/public/objects/c1
home/avkrukhalev/work/study/2022-2023/blog/.git/modules/public/objects/e2/c8fa248b636eecc2c79299a10198d9af5275
home/avkrukhalev/work/study/2022-2023/blog/.git/modules/public/objects/cf
home/avkrukhalev/work/study/2022-2023/blog/.git/modules/public/objects/cb
home/avkrukhalev/work/study/2022-2023/blog/.git/modules/public/objects/98/c37482a0ff74a275a5117b2c230e97d87671a
home/avkrukhalev/work/study/2022-2023/blog/.git/modules/public/objects/35/c8ca678b9c3ecc3e9fa3c5169530cbf5c20280
home/avkrukhalev/work/study/2022-2023/blog/.git/modules/public/objects/56/cd3d98dab70e06113b3a5c1ba1c57905834706
home/avkrukhalev/work/study/2022-2023/blog/.git/modules/public/objects/26/c4f7b11ab0d9e12d2473eefcb3bc2aad8875f
home/avkrukhalev/work/study/2022-2023/blog/.git/modules/public/objects/c5
home/avkrukhalev/work/study/2022-2023/blog/.git/modules/public/objects/7d/ca1d907fde034ebacc631acfedf45dea89274
home/avkrukhalev/work/study/2022-2023/blog/.git/modules/public/objects/ce
home/avkrukhalev/work/study/2022-2023/blog/.git/modules/public/objects/cd
home/avkrukhalev/work/study/2022-2023/blog/.git/modules/public/objects/c9
home/avkrukhalev/work/study/2022-2023/blog/.git/modules/public/config
home/avkrukhalev/work/study/2022-2023/blog/.git/config
home/avkrukhalev/work/study/2022-2023/blog/assets/media/albums/demo/chris-montgomery-smgIvepind4-unsplash.jpg
home/avkrukhalev/work/study/2022-2023/blog/config
home/avkrukhalev/work/study/2022-2023/blog/config.default/config.yaml
home/avkrukhalev/work/study/2022-2023/blog/content
home/avkrukhalev/work/study/2022-2023/blog/content/publication/conference-paper
home/avkrukhalev/work/study/2022-2023/blog/content/publication/conference-paper/cite.bib
home/avkrukhalev/work/study/2022-2023/blog/content/publication/conference-paper/conference-paper.pdf
home/avkrukhalev/work/study/2022-2023/blog/content/publication/journal-article/cite.bib
home/avkrukhalev/work/study/2022-2023/blog/resources/_gen/images/media/albums/demo/chris-montgomery-smgIvepind4-unsplash_hu68f1f4ae312ace9ad5e06a7b0d5ca9_245831_750x750_fit_q75_h2_lanczos.webp
home/avkrukhalev/work/study/2022-2023/blog/resources/_gen/images/publication/conference-paper
home/avkrukhalev/work/study/2022-2023/blog/public/admin.config.yml
home/avkrukhalev/work/study/2022-2023/blog/public/cas
home/avkrukhalev/work/study/2022-2023/blog/public/css/lib/chrom
home/avkrukhalev/work/study/2022-2023/blog/public/media/icons/brands/course.svg
home/avkrukhalev/work/study/2022-2023/blog/public/media/albums/demo/chris-montgomery-smgIvepind4-unsplash_hu68f1f4ae312ace9ad5e06a7b0d5ca9_245831_750x750_fit_q75_h2_lanczos.webp
home/avkrukhalev/work/study/2022-2023/blog/public/media/albums/demo/chris-montgomery-smgIvepind4-unsplash.jpg
home/avkrukhalev/work/study/2022-2023/blog/public/publication/conference-paper
home/avkrukhalev/work/study/2022-2023/blog/public/publication/conference-paper/conference-paper.pdf
home/avkrukhalev/work/study/2022-2023/blog/public/publication/conference-paper/cite.bib
home/avkrukhalev/work/study/2022-2023/blog/public/publication/journal-article/cite.bib
home/avkrukhalev/work/study/2022-2023/blog/public/categories
home/avkrukhalev/work/study/2022-2023/blog/public/category
home/avkrukhalev/work/study/2022-2023/blog/report/bib/cite.bib
home/avkrukhalev/work/study/2022-2023/blog/report/pandoc/csl
home/avkrukhalev/work/study/2022-2023/blog/report/pandoc/pandocxnos/core.py
home/avkrukhalev/work/study/2022-2023/blog/report/pandoc/filters/pandocxnos/_pycache__core.cpython-310.pyc
home/avkrukhalev/work/study/2022-2023/ArtKruh.github.io/.git/hooks/commit-msg.sample
home/avkrukhalev/work/study/2022-2023/ArtKruh.github.io/.git/objects/74/c1a317b739d90e1c4d03b8e44b3516f59d3e
home/avkrukhalev/work/study/2022-2023/ArtKruh.github.io/.git/config
home/avkrukhalev/work/study/2022-2023/ArtKruh.github.io/.git/index
```

Рис. 3: файлы на С

Далее выведем все файлы на h из etc постранично

```
./brltty/input/om/horizonal.txt
./brltty/Input/hd
./brltty/Input/hm
./brltty/Input/ht
./brltty/Input/hw
./brltty/Text/he.ttb
./brltty/Text/hi.ttb
./brltty/Text/hr.ttb
./brltty/Text/hu.ttb
./brltty/Text/hy.ttb
./containers/oci/hooks.d
find: './cups/ssl': Permission denied
find: './dhcp': Permission denied
find: './firewalld': Permission denied
find: './grub.d': Permission denied
./hp
./hp/hplip.conf
./httpd
./httpd/conf/httpd.conf
./libibverbs.d/hfi1verbs.driver
./libibverbs.d/hns.driver
find: './libvirt': Permission denied
./logrotate.d/httpd
find: './lvm/archive': Permission denied
find: './lvm/backup': Permission denied
find: './lvm/cache': Permission denied
find: './nftables': Permission denied
find: './openvpn/client': Permission denied
find: './openvpn/server': Permission denied
find: './polkit-1/localauthority': Permission denied
find: './polkit-1/rules.d': Permission denied
./sane.d/dll.d/hpaio
./sane.d/hp.conf
./sane.d/hp3900.conf
./sane.d/hp4200.conf
./sane.d/hp5400.conf
./sane.d/hpsj5s.conf
./sane.d/hs2p.conf
find: './sos/cleaner': Permission denied
find: './ssh/sshd_config.d': Permission denied
find: './sssd': Permission denied
find: './sudoers.d': Permission denied
./sysconfig/htcacheclean
./systemd/homed.conf
./udev/hwdb.d
./udev/hwdb.bin
./hostname
./host.conf
```


Запустим в фоновом режиме запись всех файлов с концом на log

[Фоновый режим] (image/5.png){ #fig:005 width=50% }

Удалим logfile и запустим gedit в фоновом режиме

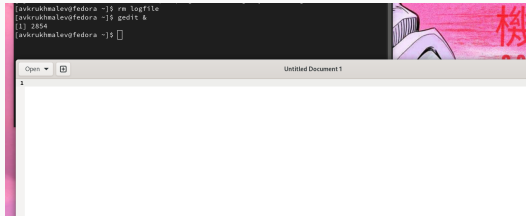


Рис. 5: gedit

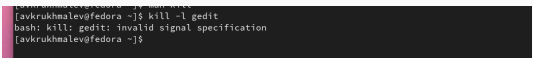
Определим идентификатор процесса gedit, используя команду ps, конвейер и фильтр

grep.

```
for more details see ps(1).  
[avkrukhmalev@fedora ~]$ ps aux | grep gedit  
avkruh+  3090  0.0  0.0 222168  2220 pts/0    S+   23:05   0:00 grep --color=auto gedit  
[avkrukhmalev@fedora ~]$
```

Рис. 6: конвейер

Прочитаем справку по kill и выключим gedit, если выключить его заранее то будет ошибка.

A terminal window with a dark background and a pink vertical bar on the left. It shows a user at a Fedora prompt attempting to kill the gedit process. The command is successful, but the subsequent command to kill gedit by name fails with an error message.

```
[avkrukhmalev@fedora ~]$ kill -l gedit
[avkrukhmalev@fedora ~]$ kill -l gedit
bash: kill: gedit: invalid signal specification
[avkrukhmalev@fedora ~]$
```

Рис. 7: Ошибки

Выполним команды `df` и `du`, предварительно получив более подробную информацию об этих командах, с помощью команды `man`.

```
[1]+ Done gedit
[avkrukhmalev@fedora ~]$ df
Filesystem      1K-blocks      Used Available Use% Mounted on
devtmpfs         4096            0      4096    0% /dev
tmpfs            1729636         0    1729636    0% /dev/shm
tmpfs            691856        1384    690472    1% /run
/dev/sda2        40997888    12827956    27732924   32% /
tmpfs            1729636         8    1729628    1% /tmp
/dev/sda1        996780        296840    631928   32% /boot
/dev/sda2        40997888    12827956    27732924   32% /home
folder          357803004    176118932    181684072   50% /media/sf_folder
tmpfs            345924         504    345420    1% /run/user/1001
/dev/sr0         62390         62390         0 100% /run/media/avkrukhmalev/VBox_GAs_6.1.18
[avkrukhmalev@fedora ~]$ du
8      ./mozilla/extensions/{ec8030f7-c20a-464f-9b0e-13a3a9e97384}
8      ./mozilla/extensions
0      ./mozilla/plugins
0      ./mozilla/firefox/Crash Reports/events
24     ./mozilla/firefox/Crash Reports
0      ./mozilla/firefox/Pending Pings
0      ./mozilla/firefox/7cvz4eeo.default-release/minidumps
0      ./mozilla/firefox/7cvz4eeo.default-release/crashes/events
4      ./mozilla/firefox/7cvz4eeo.default-release/crashes
2696   ./mozilla/firefox/7cvz4eeo.default-release/security_state
0      ./mozilla/firefox/7cvz4eeo.default-release/storage/permanent/chrome/idb/3870112724rsegnoittet-e
s.files/journals
792    ./mozilla/firefox/7cvz4eeo.default-release/storage/permanent/chrome/idb/3870112724rsegnoittet-e
s.files
0      ./mozilla/firefox/7cvz4eeo.default-release/storage/permanent/chrome/idb/3561288849sdhlie.files
0      ./mozilla/firefox/7cvz4eeo.default-release/storage/permanent/chrome/idb/1451318868ntouronlalnodr
y--eprc.files
0      ./mozilla/firefox/7cvz4eeo.default-release/storage/permanent/chrome/idb/1657114595AncateirvtiSty
.files
0      ./mozilla/firefox/7cvz4eeo.default-release/storage/permanent/chrome/idb/2823318777ntouronlalnodr
y--naod.files
0      ./mozilla/firefox/7cvz4eeo.default-release/storage/permanent/chrome/idb/291006336Spiupsah.files
```

Рис. 8: `df` and `du`

Воспользовавшись справкой команды `find`, выведем имена всех директорий, имеющих в нашем домашнем каталоге.

[illegible]

Я приобрел практические навыки: по управлению процессами (и заданиями), по проверке использования диска и обслуживанию файловых систем.