Linux administration

PART 1

```
root@host1:/etc# file /etc/passwd
/etc/passwd: ASCII text
root@host1:/etc# cat /etc/passwd
root:x:0:0:root:/root:/bin/bash
daemon:x:1:1:daemon:/usr/sbin:/usr/sbin/nologin
bin:x:2:2:bin:/bin:/usr/sbin/nologin
sys:x:3:3:sys:/dev:/usr/sbin/nologin
sync:x:4:65534:sync:/bin:/bin/sync
games:x:5:60:games:/usr/games:/usr/sbin/nologin
man:x:6:12:man:/var/cache/man:/usr/sbin/nologin
lp:x:7:7:lp:/var/spool/lpd:/usr/sbin/nologin
mail:x:8:8:mail:/var/mail:/usr/sbin/nologin
news:x:9:9:news:/var/spool/news:/usr/sbin/nologin
uucp:x:10:10:uucp:/var/spool/uucp:/usr/sbin/nologin
proxy:x:13:13:proxy:/bin:/usr/sbin/nologin
www-data:x:33:33:www-data:/var/www:/usr/sbin/nologin
backup:x:34:34:backup:/var/backups:/usr/sbin/nologin
list:x:38:38:Mailing List Manager:/var/list:/usr/sbin/nologin
irc:x:39:39:ircd:/var/run/ircd:/usr/sbin/nologin
gnats:x:41:41:Gnats Bug-Reporting System (admin):/var/lib/gnats:/usr/sbin/nologin
nobody:x:65534:65534:nobody:/nonexistent:/usr/sbin/nologin
systemd-network:x:100:102:systemd Network Management,,,:/run/systemd:/usr/sbin/nologin
systemd-resolve:x:101:103:systemd Resolver,,,:/run/systemd:/usr/sbin/nologin
systemd-timesync:x:102:104:systemd Time Synchronization,,,:/run/systemd:/usr/sbin/nologin
messagebus:x:103:106::/nonexistent:/usr/sbin/nologin
syslog:x:104:110::/home/syslog:/usr/sbin/nologin
_apt:x:105:65534::/nonexistent:/usr/sbin/nologin
tss:x:106:111:TPM software stack,,,:/var/lib/tpm:/bin/false
uuidd:x:107:112::/run/uuidd:/usr/sbin/nologin
tcpdump:x:108:113::/nonexistent:/usr/sbin/nologin
landscape:x:109:115::/var/lib/landscape:/usr/sbin/nologin
pollinate:x:110:1::/var/cache/pollinate:/bin/false
usbmux:x:111:46:usbmux daemon,,,:/var/lib/usbmux:/usr/sbin/nologin
systemd-coredump:x:999:999:systemd Core Dumper:/:/usr/sbin/nologin
user1:x:1000:1000:Dmitry:/home/user1:/bin/bash
lxd:x:998:100::/var/snap/lxd/common/lxd:/bin/false
root@host1:/etc# _
```

Screenshot 1 – etc/password file

```
dip:x:30:user1
www-data:x:33:
backup:x:34:
operator:x:37:
list:x:38:
irc:x:39:
src:x:40:
gnats:x:41:
shadow:x:42:
utmp:x:43:
video:x:44:
sasl:x:45:
plugdev:x:46:user1
staff:x:50:
games:x:60:
users:x:100:
nogroup:x:65534:
systemd-journal:x:101:
systemd-network:x:102:
systemd-resolve:x:103:
systemd-timesync:x:104:
crontab:x:105:
messagebus:x:106:
input:x:107:
kvm:x:108:
render:x:109:
syslog:x:110:
tss:x:111:
uuidd:x:112:
tcpdump:x:113:
ssh:x:114:
landscape:x:115:
lxd:x:116:user1
systemd-coredump:x:999:
user1:x:1000:
mlocate:x:117:
root@host1:/etc# _
```

Screenshot 2 – etc/groups file

```
shadow:x:42:
utmp:x:43:
video:x:44:
sasl:x:45:
plugdev:x:46:user1
staff:x:50:
games:x:60:
users:x:100:
nogroup:x:65534:
systemd-journal:x:101:
systemd-network:x:102:
systemd-resolve:x:103:
systemd-timesync:x:104:
crontab:x:105:
messagebus:x:106:
input:x:107:
kvm:x:108:
render:x:109:
syslog:x:110:
tss:x:111:
uuidd:x:112:
tcpdump:x:113:
ssh:x:114:
landscape:x:115:
lxd:x:116:user1
systemd-coredump:x:999:
user1:x:1000:
mlocate:x:117:

[2]+  Stopped                 less group
root@host1:/etc#
root@host1:/etc# useradd -r -u 1001 -g 1001 -s /usr/bin/nologin User2
useradd: group '1001' does not exist
root@host1:/etc# useradd -r -u 1001 -g 1000 -s /usr/bin/nologin User2
useradd: Warning: missing or non-executable shell '/usr/bin/nologin'
root@host1:/etc# useradd -m user2
root@host1:/etc#
```

Screenshot 3 – useradd/adduser добавление пользователей в систему

```
utmp:x:43:
video:x:44:
sasl:x:45:
plugdev:x:46:user1
staff:x:50:
games:x:60:
users:x:100:
nogroup:x:65534:
systemd-journal:x:101:
systemd-network:x:102:
systemd-resolve:x:103:
systemd-timesync:x:104:
crontab:x:105:
messagebus:x:106:
input:x:107:
kvm:x:108:
render:x:109:
syslog:x:110:
tss:x:111:
uuidd:x:112:
tcpdump:x:113:
ssh:x:114:
landscape:x:115:
lxd:x:116:user1
systemd-coredump:x:999:
user1:x:1000:
mlocate:x:117:

[2]+  Stopped                 less group
root@host1:/etc#
root@host1:/etc# useradd -r -u 1001 -g 1001 -s /usr/bin/nologin User2
useradd: group '1001' does not exist
root@host1:/etc# useradd -r -u 1001 -g 1000 -s /usr/bin/nologin User2
useradd: Warning: missing or non-executable shell '/usr/bin/nologin'
root@host1:/etc# useradd -m user2
root@host1:/etc# usermod -l unroot user2
root@host1:/etc# _
```

Screenshot 4 – usermod -l смена имени пользователя

```
#
# The default group for users
# 100=users on Debian systems
# Same as USERS_GID in adduser
# This argument is used when the -n flag is specified.
# The default behavior (when -n and -g are not specified) is to create a
# primary user group with the same name as the user being added to the
# system.
# GROUP=100
#
# The default home directory. Same as DHOME for adduser
# HOME=/home
#
# The number of days after a password expires until the account
# is permanently disabled
# INACTIVE=-1
#
# The default expire date
# EXPIRE=
#
# The SKEL variable specifies the directory containing "skeletal" user
# files; in other words, files such as a sample .profile that will be
# copied to the new user's home directory when it is created.
# SKEL=/etc/skel
#
# Defines whether the mail spool should be created while
# creating the account
# CREATE_MAIL_SPOOL=yes

root@host1:/etc# ls -lar /etc/skel
total 20
-rw-r--r--  1 root root  807 Feb 25  2020 .profile
-rw-r--r--  1 root root 3771 Feb 25  2020 .bashrc
-rw-r--r--  1 root root  220 Feb 25  2020 .bash_logout
drwxr-xr-x 96 root root 4096 Jul 28 07:13 ..
drwxr-xr-x  2 root root 4096 Feb  1 17:23 .
root@host1:/etc#
```

Screenshot 5 – skel dir(skeleton) директория

```
# primary user group with the same name as the user being added to the
# system.
# GROUP=100
#
# The default home directory. Same as DHOME for adduser
# HOME=/home
#
# The number of days after a password expires until the account
# is permanently disabled
# INACTIVE=-1
#
# The default expire date
# EXPIRE=
#
# The SKEL variable specifies the directory containing "skeletal" user
# files; in other words, files such as a sample .profile that will be
# copied to the new user's home directory when it is created.
# SKEL=/etc/skel
#
# Defines whether the mail spool should be created while
# creating the account
# CREATE_MAIL_SPOOL=yes

root@host1:/etc# ls -lar /etc/skel
total 20
-rw-r--r--  1 root root  807 Feb 25  2020 .profile
-rw-r--r--  1 root root 3771 Feb 25  2020 .bashrc
-rw-r--r--  1 root root  220 Feb 25  2020 .bash_logout
drwxr-xr-x 96 root root 4096 Jul 28 07:13 ..
drwxr-xr-x  2 root root 4096 Feb  1 17:23 .
root@host1:/etc# deluser --remove-home unroot
Looking for files to backup/remove ...
Removing files ...
Removing user `unroot' ...
Warning: group `user2' has no more members.
Done.
root@host1:/etc# _
```

Screenshot 6 – deluser удаление пользователя

```
-rw-r--r--   1 root root 3771 Feb 25  2020 .bashrc
-rw-r--r--   1 root root  220 Feb 25  2020 .bash_logout
drwxr-xr-x 96 root root 4096 Jul 28 07:13 ..
drwxr-xr-x  2 root root 4096 Feb  1 17:23 .
root@host1:/etc# deluser --remove-home unroot
Looking for files to backup/remove ...
Removing files ...
Removing user `unroot' ...
Warning: group `user2' has no more members.
Done.
root@host1:/etc# adduser kto
Adding user `kto' ...
Adding new group `kto' (1001) ...
Adding new user `kto' (1002) with group `kto' ...
Creating home directory `/home/kto' ...
Copying files from `/etc/skel' ...
New password:
Retype new password:
Sorry, passwords do not match.
passwd: Authentication token manipulation error
passwd: password unchanged
Try again? [y/N] y
New password:
Retype new password:
passwd: password updated successfully
Changing the user information for kto
Enter the new value, or press ENTER for the default
        Full Name []: Vasyl
        Room Number []: 1
        Work Phone []: 123
        Home Phone []: 123
        Other []: 0
Is the information correct? [Y/n] y
root@host1:/etc# passwd --lock kto
passwd: password expiry information changed.
root@host1:/etc# usermod -U kto
root@host1:/etc# _
```

Screenshot 7- passwd lock блокировка пароля пользователя

```
-rw-r--r--   1 root root     14464 Feb 16  2020 services
-rw-r-----   1 root shadow    1175 Jul 28 07:30 shadow
-rw-r-----   1 root shadow    1179 Jul 28 07:26 shadow-
-rw-r--r--   1 root root       146 Jul  5 07:54 shells
drwxr-xr-x   2 root root      4096 Feb  1 17:23 skel/
drwxr-xr-x   6 root root      4096 Feb  1 17:27 sos/
drwxr-xr-x   3 root root      4096 Jul  5 08:01 ssh/
drwxr-xr-x   4 root root      4096 Jul  5 07:56 ssl/
-rw-r--r--   1 root root        55 Jul 28 07:23 subgid
-rw-r--r--   1 root root        38 Jul 28 07:08 subgid-
-rw-r--r--   1 root root        55 Jul 28 07:23 subuid
-rw-r--r--   1 root root        38 Jul 28 07:08 subuid-
-r--r-----   1 root root       755 Feb  3  2020 sudoers
drwxr-xr-x   2 root root      4096 Feb  1 17:24 sudoers.d/
-rw-r--r--   1 root root      2351 Feb 13  2020 sysctl.conf
drwxr-xr-x   2 root root      4096 Feb  1 17:23 sysctl.d/
drwxr-xr-x   5 root root      4096 Feb  1 17:18 systemd/
drwxr-xr-x   2 root root      4096 Feb  1 17:21 terminfo/
drwxr-xr-x   2 root root      4096 Jul  5 07:50 thermald/
-rw-r--r--   1 root root         8 Feb  1 17:24 timezone
drwxr-xr-x   2 root root      4096 Feb  1 17:27 tmpfiles.d/
drwxr-xr-x   2 root root      4096 Feb  1 17:23 ubuntu-advantage/
-rw-r--r--   1 root root      1260 Dec 14  2018 ucf.conf
drwxr-xr-x   4 root root      4096 Feb  1 17:24 udev/
drwxr-xr-x   3 root root      4096 Feb  1 17:27 ufw/
drwxr-xr-x   3 root root      4096 Feb  1 17:28 update-manager/
drwxr-xr-x   2 root root      4096 Feb  1 17:28 update-motd.d/
drwxr-xr-x   2 root root      4096 Jan 20  2021 update-notifier/
-rw-r--r--   1 root root       556 Jul 16  2019 updatedb.conf
drwxr-xr-x   2 root root      4096 Feb  1 17:22 vim/
drwxr-xr-x   4 root root      4096 Feb  1 17:27 vmware-tools/
lrwxrwxrwx   1 root root        23 Feb  1 17:23 vtrgb -> /etc/alternatives/vtrgb
-rw-r--r--   1 root root      4942 Jul 24  2019 wgetrc
-rw-r--r--   1 root root       642 Sep 24  2019 xattr.conf
drwxr-xr-x   4 root root      4096 Feb  1 17:22 xdg/
-rw-r--r--   1 root root       477 Oct  7  2019 zsh_command_not_found
root@host1:/etc#
```

Screenshot 8 – ls alF подробная информация о директории

```
  Swap usage:    0%

 * Super-optimized for small spaces - read how we shrank the memory
   footprint of MicroK8s to make it the smallest full K8s around.

   https://ubuntu.com/blog/microk8s-memory-optimisation

68 updates can be installed immediately.
0 of these updates are security updates.
To see these additional updates run: apt list --upgradable


Last login: Wed Jul 28 06:41:11 UTC 2021 on tty1
root@host1:~# passwd --help
Usage: passwd [options] [LOGIN]

Options:
  -a, --all                     report password status on all accounts
  -d, --delete                  delete the password for the named account
  -e, --expire                  force expire the password for the named account
  -h, --help                    display this help message and exit
  -k, --keep-tokens             change password only if expired
  -i, --inactive INACTIVE       set password inactive after expiration
                                to INACTIVE
  -l, --lock                    lock the password of the named account
  -n, --mindays MIN_DAYS        set minimum number of days before password
                                change to MIN_DAYS
  -q, --quiet                   quiet mode
  -r, --repository REPOSITORY   change password in REPOSITORY repository
  -R, --root CHROOT_DIR         directory to chroot into
  -S, --status                  report password status on the named account
  -u, --unlock                  unlock the password of the named account
  -w, --warndays WARN_DAYS      set expiration warning days to WARN_DAYS
  -x, --maxdays MAX_DAYS        set maximum number of days before password
                                change to MAX_DAYS

root@host1:~#
```

Screenshot 9 – passwd -e делает пароль устаревшим

```
Creating home directory `/home/kto' ...
Copying files from `/etc/skel' ...
New password:
Retype new password:
Sorry, passwords do not match.
passwd: Authentication token manipulation error
passwd: password unchanged
Try again? [y/N] y
New password:
Retype new password:
passwd: password updated successfully
Changing the user information for kto
Enter the new value, or press ENTER for the default
        Full Name []: Vasyl
        Room Number []: 1
        Work Phone []: 123
        Home Phone []: 123
        Other []: 0
Is the information correct? [Y/n] y
root@host1:/etc# passwd --lock kto
passwd: password expiry information changed.
root@host1:/etc# usermod -U kto
root@host1:/etc# passwd -S kto
kto P 07/28/2021 0 99999 7 -1
root@host1:/etc# -chage -d 0 kto

Command '-chage' not found, did you mean:

  command 'chage' from deb passwd (1:4.8.1-1ubuntu5.20.04)
  command 'lchage' from deb libuser (1:0.62~dfsg-0.3)

Try: apt install <deb name>

root@host1:/etc# chage -d 0 kto
root@host1:/etc# passwd -S kto
kto P 01/01/1970 0 99999 7 -1
root@host1:/etc#
```

Screenshot 10 – chage -d 0 выставляет дату созданию пароля просроченной

```
root@host1:/home/kto# chmod who=ugo file.txt
chmod: invalid mode: 'who=ugo'
Try 'chmod --help' for more information.
root@host1:/home/kto# chmod who=a file.txt
chmod: invalid mode: 'who=a'
Try 'chmod --help' for more information.
root@host1:/home/kto# chmod a=permission file.txt
chmod: invalid mode: 'a=permission'
Try 'chmod --help' for more information.
root@host1:/home/kto# chmod ugo= file.txt
root@host1:/home/kto# ls -al
total 20
drwxr-xr-x 2 kto  kto  4096 Jul 28 07:59 .
drwxr-xr-x 5 root root 4096 Jul 28 07:23 ..
-rw-r--r-- 1 kto  kto   220 Jul 28 07:23 .bash_logout
-rw-r--r-- 1 kto  kto  3771 Jul 28 07:23 .bashrc
-rw-r--r-- 1 kto  kto   807 Jul 28 07:23 .profile
---------- 1 root root    0 Jul 28 07:59 file.txt
root@host1:/home/kto# chmod a= file.txt
root@host1:/home/kto# ls -al
total 20
drwxr-xr-x 2 kto  kto  4096 Jul 28 07:59 .
drwxr-xr-x 5 root root 4096 Jul 28 07:23 ..
-rw-r--r-- 1 kto  kto   220 Jul 28 07:23 .bash_logout
-rw-r--r-- 1 kto  kto  3771 Jul 28 07:23 .bashrc
-rw-r--r-- 1 kto  kto   807 Jul 28 07:23 .profile
---------- 1 root root    0 Jul 28 07:59 file.txt
root@host1:/home/kto# chmod a=rwx file.txt
root@host1:/home/kto# ls -al
total 20
drwxr-xr-x 2 kto  kto  4096 Jul 28 07:59 .
drwxr-xr-x 5 root root 4096 Jul 28 07:23 ..
-rw-r--r-- 1 kto  kto   220 Jul 28 07:23 .bash_logout
-rw-r--r-- 1 kto  kto  3771 Jul 28 07:23 .bashrc
-rw-r--r-- 1 kto  kto   807 Jul 28 07:23 .profile
-rwxrwxrwx 1 root root    0 Jul 28 07:59 file.txt
root@host1:/home/kto#
```

Screenshot 11 – chmod a=rwx выставляет права доступа на файл

```
chmod: invalid mode: 'who=a'
Try 'chmod --help' for more information.
root@host1:/home/kto# chmod a=permission file.txt
chmod: invalid mode: 'a=permission'
Try 'chmod --help' for more information.
root@host1:/home/kto# chmod ugo= file.txt
root@host1:/home/kto# ls -al
total 20
drwxr-xr-x 2 kto  kto  4096 Jul 28 07:59 .
drwxr-xr-x 5 root root 4096 Jul 28 07:23 ..
-rw-r--r-- 1 kto  kto   220 Jul 28 07:23 .bash_logout
-rw-r--r-- 1 kto  kto  3771 Jul 28 07:23 .bashrc
-rw-r--r-- 1 kto  kto   807 Jul 28 07:23 .profile
---------- 1 root root    0 Jul 28 07:59 file.txt
root@host1:/home/kto# chmod a= file.txt
root@host1:/home/kto# ls -al
total 20
drwxr-xr-x 2 kto  kto  4096 Jul 28 07:59 .
drwxr-xr-x 5 root root 4096 Jul 28 07:23 ..
-rw-r--r-- 1 kto  kto   220 Jul 28 07:23 .bash_logout
-rw-r--r-- 1 kto  kto  3771 Jul 28 07:23 .bashrc
-rw-r--r-- 1 kto  kto   807 Jul 28 07:23 .profile
---------- 1 root root    0 Jul 28 07:59 file.txt
root@host1:/home/kto# chmod a=rwx file.txt
root@host1:/home/kto# ls -al
total 20
drwxr-xr-x 2 kto  kto  4096 Jul 28 07:59 .
drwxr-xr-x 5 root root 4096 Jul 28 07:23 ..
-rw-r--r-- 1 kto  kto   220 Jul 28 07:23 .bash_logout
-rw-r--r-- 1 kto  kto  3771 Jul 28 07:23 .bashrc
-rw-r--r-- 1 kto  kto   807 Jul 28 07:23 .profile
-rwxrwxrwx 1 root root    0 Jul 28 07:59 file.txt
root@host1:/home/kto# umask
0022
root@host1:/home/kto# umask -S
u=rwx,g=rx,o=rx
root@host1:/home/kto#
```

*Screenshot 12 – umask (**u**ser file creation mode **mask**)*

```
drwxr-xr-x 5 root root 4096 Jul 28 07:23 ..
-rw-r--r-- 1 kto  kto   220 Jul 28 07:23 .bash_logout
-rw-r--r-- 1 kto  kto  3771 Jul 28 07:23 .bashrc
-rw-r--r-- 1 kto  kto   807 Jul 28 07:23 .profile
---------- 1 root root     0 Jul 28 07:59 file.txt
root@host1:/home/kto# chmod a= file.txt
root@host1:/home/kto# ls -al
total 20
drwxr-xr-x 2 kto  kto  4096 Jul 28 07:59 .
drwxr-xr-x 5 root root 4096 Jul 28 07:23 ..
-rw-r--r-- 1 kto  kto   220 Jul 28 07:23 .bash_logout
-rw-r--r-- 1 kto  kto  3771 Jul 28 07:23 .bashrc
-rw-r--r-- 1 kto  kto   807 Jul 28 07:23 .profile
---------- 1 root root     0 Jul 28 07:59 file.txt
root@host1:/home/kto# chmod a=rwx file.txt
root@host1:/home/kto# ls -al
total 20
drwxr-xr-x 2 kto  kto  4096 Jul 28 07:59 .
drwxr-xr-x 5 root root 4096 Jul 28 07:23 ..
-rw-r--r-- 1 kto  kto   220 Jul 28 07:23 .bash_logout
-rw-r--r-- 1 kto  kto  3771 Jul 28 07:23 .bashrc
-rw-r--r-- 1 kto  kto   807 Jul 28 07:23 .profile
-rwxrwxrwx 1 root root     0 Jul 28 07:59 file.txt
root@host1:/home/kto# umask
0022
root@host1:/home/kto# umask -S
u=rwx,g=rx,o=rx
root@host1:/home/kto# chmod u+s file.txt
root@host1:/home/kto# ls -al
total 20
drwxr-xr-x 2 kto  kto  4096 Jul 28 07:59 .
drwxr-xr-x 5 root root 4096 Jul 28 07:23 ..
-rw-r--r-- 1 kto  kto   220 Jul 28 07:23 .bash_logout
-rw-r--r-- 1 kto  kto  3771 Jul 28 07:23 .bashrc
-rw-r--r-- 1 kto  kto   807 Jul 28 07:23 .profile
-rwsrwxrwx 1 root root     0 Jul 28 07:59 file.txt
root@host1:/home/kto#
```

*Screenshot 13 – **chmod u+s** выдает файлу suid даёт возможность на время выполнения файла непривилегированному пользователю получить права пользователя — владельца файла*

```
-rw-r--r-- 1 kto   kto   3771 Jul 28 07:23 .bashrc
-rw-r--r-- 1 kto   kto    807 Jul 28 07:23 .profile
---------- 1 root  root     0 Jul 28 07:59 file.txt
root@host1:/home/kto# chmod a=rwx file.txt
root@host1:/home/kto# ls -al
total 20
drwxr-xr-x 2 kto   kto   4096 Jul 28 07:59 .
drwxr-xr-x 5 root  root  4096 Jul 28 07:23 ..
-rw-r--r-- 1 kto   kto    220 Jul 28 07:23 .bash_logout
-rw-r--r-- 1 kto   kto   3771 Jul 28 07:23 .bashrc
-rw-r--r-- 1 kto   kto    807 Jul 28 07:23 .profile
-rwxrwxrwx 1 root  root     0 Jul 28 07:59 file.txt
root@host1:/home/kto# umask
0022
root@host1:/home/kto# umask -S
u=rwx,g=rx,o=rx
root@host1:/home/kto# chmod u+s file.txt
root@host1:/home/kto# ls -al
total 20
drwxr-xr-x 2 kto   kto   4096 Jul 28 07:59 .
drwxr-xr-x 5 root  root  4096 Jul 28 07:23 ..
-rw-r--r-- 1 kto   kto    220 Jul 28 07:23 .bash_logout
-rw-r--r-- 1 kto   kto   3771 Jul 28 07:23 .bashrc
-rw-r--r-- 1 kto   kto    807 Jul 28 07:23 .profile
-rwsrwxrwx 1 root  root     0 Jul 28 07:59 file.txt
root@host1:/home/kto# chmod 1755 kto
chmod: cannot access 'kto': No such file or directory
root@host1:/home/kto# chmod 1755 .
root@host1:/home/kto# ls -al
total 20
drwxr-xr-t 2 kto   kto   4096 Jul 28 07:59 .
drwxr-xr-x 5 root  root  4096 Jul 28 07:23 ..
-rw-r--r-- 1 kto   kto    220 Jul 28 07:23 .bash_logout
-rw-r--r-- 1 kto   kto   3771 Jul 28 07:23 .bashrc
-rw-r--r-- 1 kto   kto    807 Jul 28 07:23 .profile
-rwsrwxrwx 1 root  root     0 Jul 28 07:59 file.txt
root@host1:/home/kto#
```

Screenshot 14 – chmod 1755 выдает файлу sticky bit только владелец (и root) файла может удалить файл в этом каталоге.