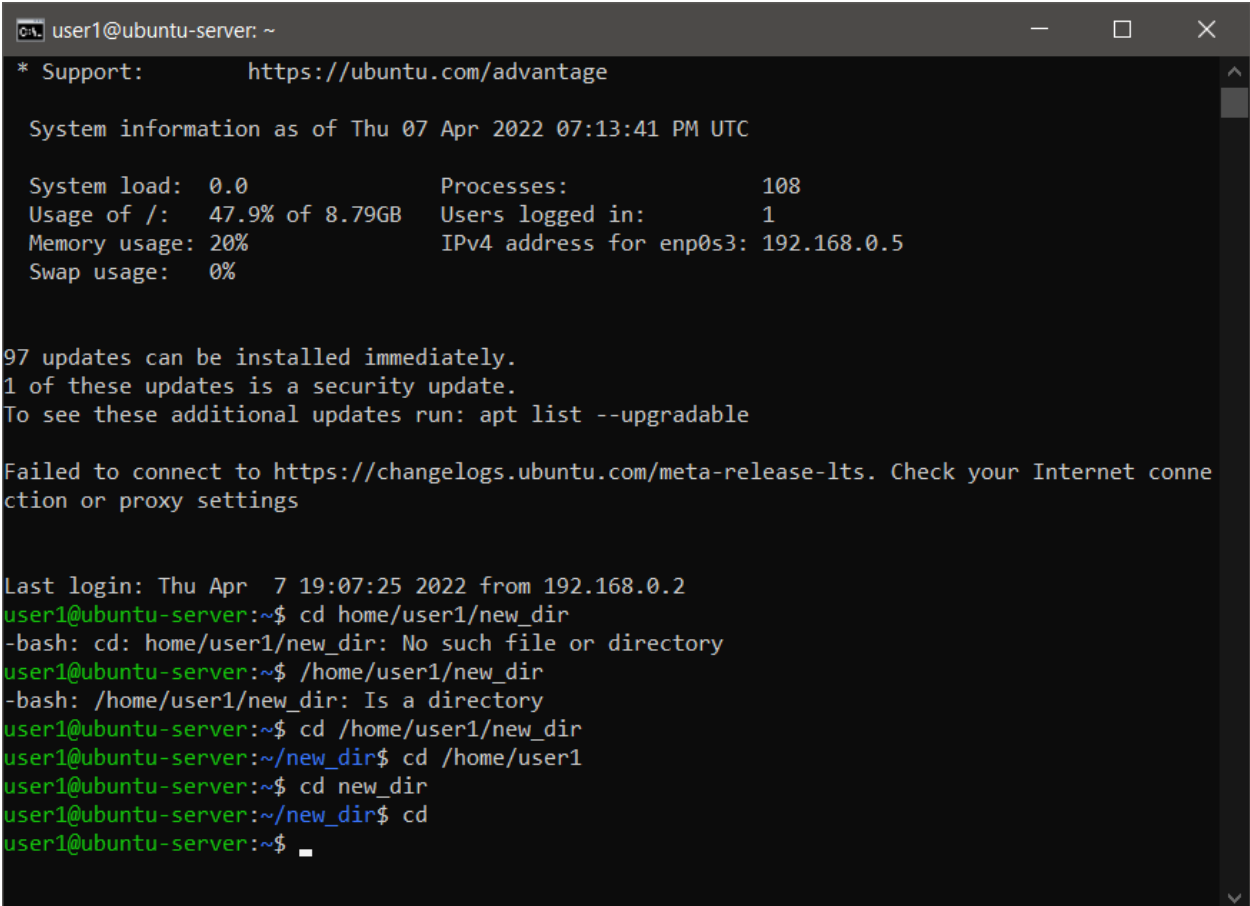


Урок 2. Настройка и знакомство с интерфейсом командной строки

1. Навигация по файловой системе. Попрактиковаться в перемещении между каталогами, используя полный и относительный путь. Перечислить, какие параметры команды `cd` позволят быстро вернуться в домашний каталог, позволят перейти на уровень выше.
2. Управление файлами и каталогами и текстовые редакторы. Создать файл с наполнением, используя несколько способов. Использовать разобранные текстовые редакторы для наполнения файлов данными. Создать копии созданных файлов, создать несколько каталогов с подкаталогами, перенести несколько файлов в созданные каталоги. Перечислить команды и используемые параметры команд.
3. * Используя дополнительный материал, настроить авторизацию по SSH с использованием ключей.

1. Навигация по файловой системе.

Здесь я использовал полный и относительный пути к папке `new_dir`. Для возврата в домашний каталог можно с помощью команды `'cd'` или `'cd ~'`



```
user1@ubuntu-server: ~
* Support:      https://ubuntu.com/advantage

System information as of Thu 07 Apr 2022 07:13:41 PM UTC

System load:  0.0          Processes:           108
Usage of /:   47.9% of 8.79GB  Users logged in:    1
Memory usage: 20%          IPv4 address for enp0s3: 192.168.0.5
Swap usage:   0%

97 updates can be installed immediately.
1 of these updates is a security update.
To see these additional updates run: apt list --upgradable

Failed to connect to https://changelogs.ubuntu.com/meta-release-lts. Check your Internet connection or proxy settings

Last login: Thu Apr  7 19:07:25 2022 from 192.168.0.2
user1@ubuntu-server:~$ cd home/user1/new_dir
-bash: cd: home/user1/new_dir: No such file or directory
user1@ubuntu-server:~$ /home/user1/new_dir
-bash: /home/user1/new_dir: Is a directory
user1@ubuntu-server:~$ cd /home/user1/new_dir
user1@ubuntu-server:~/new_dir$ cd /home/user1
user1@ubuntu-server:~$ cd new_dir
user1@ubuntu-server:~/new_dir$ cd
user1@ubuntu-server:~$
```

2. Управление файлами и каталогами и текстовые редакторы.

Создал файл `new_file` со строкой "new line"


```
user1@ubuntu-server: ~/new_dir
Failed to connect to https://changelogs.ubuntu.com/meta-release-lts. Check your Internet connection or proxy settings

Last login: Thu Apr  7 19:07:25 2022 from 192.168.0.2
user1@ubuntu-server:~$ cd home/user1/new_dir
-bash: cd: home/user1/new_dir: No such file or directory
user1@ubuntu-server:~$ /home/user1/new_dir
-bash: /home/user1/new_dir: Is a directory
user1@ubuntu-server:~$ cd /home/user1/new_dir
user1@ubuntu-server:~/new_dir$ cd /home/user1
user1@ubuntu-server:~$ cd new_dir
user1@ubuntu-server:~/new_dir$ cd
user1@ubuntu-server:~$ cd new_dir
user1@ubuntu-server:~/new_dir$ touch new_file
user1@ubuntu-server:~/new_dir$ echo new line > new_file
user1@ubuntu-server:~/new_dir$ cat new_dile
cat: new_dile: No such file or directory
user1@ubuntu-server:~/new_dir$ cat new_file
new line
user1@ubuntu-server:~/new_dir$ sudo apt install vim -y
[sudo] password for user1:
Reading package lists... Done
Building dependency tree
Reading state information... Done
vim is already the newest version (2:8.1.2269-1ubuntu5.7).
vim set to manually installed.
0 upgraded, 0 newly installed, 0 to remove and 73 not upgraded.
user1@ubuntu-server:~/new_dir$ vim
user1@ubuntu-server:~/new_dir$ user1@ubuntu-server:~/new_dir$ ls
new_file
user1@ubuntu-server:~/new_dir$ vim new_file
user1@ubuntu-server:~/new_dir$ cat new_file
new line
new line by VIM
user1@ubuntu-server:~/new_dir$
```

Добавил строку new line by Nano с помощью Nano

```
user1@ubuntu-server: ~/new_dir
GNU nano 4.8 new_file
new line
new line by VIM
new line by Nano

[ Read 3 lines ]
^G Get Help      ^O Write Out    ^W Where Is    ^K Cut Text    ^J Justify    ^C Cur Pos
^X Exit          ^R Read File    ^_ Replace     ^U Paste Text  ^T To Spell   ^_ Go To Line
```

```
Выбрать user1@ubuntu-server: ~/new_dir
user1@ubuntu-server:~/new_dir$ sudo apt install vim -y
[sudo] password for user1:
Reading package lists... Done
Building dependency tree
Reading state information... Done
vim is already the newest version (2:8.1.2269-1ubuntu5.7).
vim set to manually installed.
0 upgraded, 0 newly installed, 0 to remove and 73 not upgraded.
user1@ubuntu-server:~/new_dir$ vim
user1@ubuntu-server:~/new_dir$ user1@ubuntu-server:~/new_dir$ ls
new_file
user1@ubuntu-server:~/new_dir$ vim new_file
user1@ubuntu-server:~/new_dir$ cat new_file
new line
new line by VIM
user1@ubuntu-server:~/new_dir$ vim new_file
user1@ubuntu-server:~/new_dir$ nano new_file

Use "fg" to return to nano.

[1]+  Stopped                  nano new_file
user1@ubuntu-server:~/new_dir$ nano new_file
user1@ubuntu-server:~/new_dir$ cat new_file
new line
new line by VIM
new line by Nano
user1@ubuntu-server:~/new_dir$
```

3. Создал ключ ssh

```
Выбрать user1@ubuntu-server: ~
user1@ubuntu-server:~/new_dir$ nano new_file
user1@ubuntu-server:~/new_dir$ cat new_file
new line
new line by VIM
new line by Nano
user1@ubuntu-server:~/new_dir$ nano new_file
user1@ubuntu-server:~/new_dir$ cd
user1@ubuntu-server:~$ ssh-keygen
Generating public/private rsa key pair.
Enter file in which to save the key (/home/user1/.ssh/id_rsa):
Created directory '/home/user1/.ssh'.
Enter passphrase (empty for no passphrase):
Enter same passphrase again:
Your identification has been saved in /home/user1/.ssh/id_rsa
Your public key has been saved in /home/user1/.ssh/id_rsa.pub
The key fingerprint is:
SHA256:Jw7mi10JHC8pAZu+2AZGmNAT993X0jxIa+9q6879Mgg user1@ubuntu-server
The key's randomart image is:
+---[RSA 3072]-----+
|  ....  |
| o o. . . .  |
| o= . . . o .  |
| =.. . . = .  |
| o o =o.S = =  |
| .o. =o+oE+ . o  |
| oo.. o. . . .  |
| ..o . . . .ooo  |
| . . . . +*oo+.  |
+---[SHA256]-----+
user1@ubuntu-server:~$
```

установил ssh ключ

```
Выбрать user1@ubuntu-server: ~
SHA256:Jw7mi10JHC8pAZu+2AZGmNAT993X0jxIa+9q6879Mgg user1@ubuntu-server
The key's randomart image is:
+---[RSA 3072]-----+
|      .      |
| o o . . . . |
| o= . . . o . |
| =. . . . = . |
| o o =o.S = = |
|.o. =o+oE+ . o|
|oo.. o. . . .|
|..o . . . .ooo|
|. . . . +*oo+.|
+---[SHA256]-----+
user1@ubuntu-server:~$ ssh-copy-id user1@192.168.0.5
/usr/bin/ssh-copy-id: INFO: Source of key(s) to be installed: "/home/user1/.ssh/id_rsa.pub"
The authenticity of host '192.168.0.5 (192.168.0.5)' can't be established.
ECDSA key fingerprint is SHA256:A0z325ZSwfm4CdqI/lABweyq/42PVogc6jlJ1I0Jk4g.
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
/usr/bin/ssh-copy-id: INFO: attempting to log in with the new key(s), to filter out any that are already installed
/usr/bin/ssh-copy-id: INFO: 1 key(s) remain to be installed -- if you are prompted now it is to install the new keys
user1@192.168.0.5's password:

Number of key(s) added: 1

Now try logging into the machine, with: "ssh 'user1@192.168.0.5'"
and check to make sure that only the key(s) you wanted were added.

user1@ubuntu-server:~$
```