

## Кейс 1. Установка и настройка SSH

```
kinitka@DESKTOP-021IAF5:~$ sudo apt-get install openssh-server
[sudo] password for kinitka:
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
openssh-server is already the newest version (1:9.6p1-3ubuntu13.5).
0 upgraded, 0 newly installed, 0 to remove and 39 not upgraded.
kinitka@DESKTOP-021IAF5:~$ sudo systemctl status ssh
● ssh.service - OpenBSD Secure Shell server
   Loaded: loaded (/usr/lib/systemd/system/ssh.service; disabled; preset: enabled)
   Active: active (running) since Tue 2025-01-07 09:14:11 MSK; 2h 6min ago
   TriggeredBy: ● ssh.socket
     Docs: man:sshd(8)
           man:sshd_config(5)
   Process: 1112 ExecStartPre=/usr/sbin/sshd -t (code=exited, status=0/SUCCESS)
   Main PID: 1114 (sshd)
     Tasks: 1 (limit: 9455)
   Memory: 2.4M ()
   CGroup: /system.slice/ssh.service
           └─1114 "sshd: /usr/sbin/sshd -D [listener] 0 of 10-100 startups"

Jan 07 09:15:06 DESKTOP-021IAF5 sshd[1167]: pam_unix(sshd:session): session opened for user kinitka(uid=1000) by kinitka(uid=0)
Jan 07 09:15:06 DESKTOP-021IAF5 sshd[1171]: pam_unix(sshd:session): session opened for user kinitka(uid=1000) by kinitka(uid=0)
Jan 07 09:19:36 DESKTOP-021IAF5 sshd[1309]: Accepted password for kinitka from 172.24.224.1 port 51756 ssh2
Jan 07 09:19:36 DESKTOP-021IAF5 sshd[1311]: pam_unix(sshd:session): session opened for user kinitka(uid=1000) by kinitka(uid=0)
Jan 07 09:19:36 DESKTOP-021IAF5 sshd[1311]: Accepted password for kinitka from 172.24.224.1 port 51757 ssh2
Jan 07 10:08:47 DESKTOP-021IAF5 sshd[1894]: Failed password for root from 127.0.0.1 port 39022 ssh2
Jan 07 10:08:58 DESKTOP-021IAF5 sshd[1894]: pam_unix(sshd:auth): authentication failure; logname= uid=0 euid=0 tty=ss
ESCOC

abled; preset: enabled)
MSK; 2h 6min ago

d, status=0/SUCCESS)

10-100 startups"

ssion): session opened for user kinitka(uid=1000) by kinitka(uid=0)
d for kinitka from 172.24.224.1 port 51507 ssh2
ssion): session opened for user kinitka(uid=1000) by kinitka(uid=0)
d for kinitka from 172.24.224.1 port 51756 ssh2
ssion): session opened for user kinitka(uid=1000) by kinitka(uid=0)
d for kinitka from 172.24.224.1 port 51757 ssh2
ssion): session opened for user kinitka(uid=1000) by kinitka(uid=0)
th): authentication failure; logname= uid=0 euid=0 tty=ssh ruser= rhost=127.0.0.1 user=root
for root from 127.0.0.1 port 39022 ssh2
for root from 127.0.0.1 port 39022 ssh2
~
~
~
~
lines 1-23/23 (END)...skipping...

abled; preset: enabled)
MSK; 2h 6min ago
```

## Кейс 2. Подключение к удалённому серверу


```
kinitka@DESKTOP-021IAF5: ~  
kinitka@DESKTOP-021IAF5:~$ ip addr show eth0  
2: eth0: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc mq state UP group default qlen 1000  
    link/ether 00:15:5d:05:9d:5c brd ff:ff:ff:ff:ff:ff  
    inet 172.24.233.189/20 brd 172.24.239.255 scope global eth0  
        valid_lft forever preferred_lft forever  
    inet6 fe80::215:5dff:fe05:9d5c/64 scope link  
        valid_lft forever preferred_lft forever  
kinitka@DESKTOP-021IAF5:~$  
  
kinitka@DESKTOP-021IAF5: ~  
Windows PowerShell  
(C) Корпорация Майкрософт (Microsoft Corporation). Все права защищены.  
  
Попробуйте новую кроссплатформенную оболочку PowerShell (https://aka.ms/pscore6)  
  
PS C:\WINDOWS\system32> ssh kinitka@172.24.233.189  
kinitka@172.24.233.189's password:  
Welcome to Ubuntu 24.04.1 LTS (GNU/Linux 5.15.167.4-microsoft-standard-WSL2 x86_64)  
  
* Documentation:  https://help.ubuntu.com  
* Management:    https://landscape.canonical.com  
* Support:       https://ubuntu.com/pro  
  
System information as of Tue Jan  7 11:26:14 MSK 2025  
  
System load:  0.0           Processes:            45  
Usage of /:   0.2% of 1006.85GB   Users logged in:     2  
Memory usage: 12%           IPv4 address for eth0: 172.24.233.189  
Swap usage:   0%  
  
* Strictly confined Kubernetes makes edge and IoT secure. Learn how MicroK8s  
  just raised the bar for easy, resilient and secure K8s cluster deployment.  
  
  https://ubuntu.com/engage/secure-kubernetes-at-the-edge  
Last login: Tue Jan  7 09:19:37 2025 from 172.24.224.1  
kinitka@DESKTOP-021IAF5:~$
```

### Кейс 3. Копирование файлов с помощью SCP

kinitka@DESKTOP-021IAF5: ~

```
kinitka@DESKTOP-021IAF5:~$ ls
snap  ssh
kinitka@DESKTOP-021IAF5:~$ nano file1.txt
kinitka@DESKTOP-021IAF5:~$ ls
file1.txt  snap  ssh
kinitka@DESKTOP-021IAF5:~$ scp -P 2222 /home/kinitka/file1.txt root@localhost:/root/
@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@
@  WARNING: REMOTE HOST IDENTIFICATION HAS CHANGED!  @
@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@
IT IS POSSIBLE THAT SOMEONE IS DOING SOMETHING NASTY!
Someone could be eavesdropping on you right now (man-in-the-middle attack)!
It is also possible that a host key has just been changed.
The fingerprint for the ED25519 key sent by the remote host is
SHA256:poiImJdA1POI5cDpoEcY8mzIhRe2CIE4A38e4bTjKEM.
Please contact your system administrator.
Add correct host key in /home/kinitka/.ssh/known_hosts to get rid of this message.
Offending ECDSA key in /home/kinitka/.ssh/known_hosts:4
  remove with:
  ssh-keygen -f '/home/kinitka/.ssh/known_hosts' -R '[localhost]:2222'
Host key for [localhost]:2222 has changed and you have requested strict checking.
Host key verification failed.
scp: Connection closed
kinitka@DESKTOP-021IAF5:~$ ssh-keygen -f '/home/kinitka/.ssh/known_hosts' -R '[localhost]:2222'
# Host [localhost]:2222 found: line 2
# Host [localhost]:2222 found: line 3
# Host [localhost]:2222 found: line 4
/home/kinitka/.ssh/known_hosts updated.
Original contents retained as /home/kinitka/.ssh/known_hosts.old
kinitka@DESKTOP-021IAF5:~$ scp -P 2222 /home/kinitka/file1.txt root@localhost:/root/
The authenticity of host '[localhost]:2222 ([127.0.0.1]:2222)' can't be established.
ED25519 key fingerprint is SHA256:poiImJdA1POI5cDpoEcY8mzIhRe2CIE4A38e4bTjKEM.
This key is not known by any other names.
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
Warning: Permanently added '[localhost]:2222' (ED25519) to the list of known hosts.
root@localhost's password:
file1.txt
```

100% 10 9.9KB/s 00:00

 root@ef75ab1bd593: ~

```
root@ef75ab1bd593:/# ls
bin  dev  home  lib  usr-is-merged  media  opt  root  sbin  sys  usr
boot  etc  lib  lib64          mnt    proc  run  srv   tmp   var
root@ef75ab1bd593:/# cd root
root@ef75ab1bd593:~# ls
file1.txt
root@ef75ab1bd593:~#
```

```
kinitka@DESKTOP-021IAFS:~$ scp -P 2222 root@localhost:/root/file1.txt /home/kinitka/ssh
root@localhost's password:
file1.txt
kinitka@DESKTOP-021IAFS:~$ cd ssh
kinitka@DESKTOP-021IAFS:~/ssh$ ls
archive_file  file1.txt
kinitka@DESKTOP-021IAFS:~/ssh$
```

100% 10 4.7KB/s 00:00