

Отчет Сергеева Дарья

Раздел 1

1. Подключение к серверу для выполнения практических работ, используя клиент для протокола ssh.

```
daria@baelcost:~$ ssh eltex-pg1-v6@217.71.138.1 -p 44556
The authenticity of host '[217.71.138.1]:44556 ([217.71.138.1]:44556)' can't be established.
ED25519 key fingerprint is SHA256:9EeAnPIp/wDj41XS55iG0Eff5a90ZLW9TTAI37NiBb0.
This key is not known by any other names.
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
Warning: Permanently added '[217.71.138.1]:44556' (ED25519) to the list of known hosts.
eltex-pg1-v6@217.71.138.1's password:
Linux eltex-2025-summer 6.1.0-32-amd64 #1 SMP PREEMPT_DYNAMIC Debian 6.1.129-1 (2025-03-06) x86_64

The programs included with the Debian GNU/Linux system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/copyright.

Debian GNU/Linux comes with ABSOLUTELY NO WARRANTY, to the extent
permitted by applicable law.
eltex-pg1-v6@eltex-2025-summer:~$
```

2. Запускаем новую сессию утилиты screen с именем по умолчанию с помощью Ctrl a, с помощью Ctrl a W можно смотреть все сессии.

```
eltex-pg pts/44 :pts/10:S.1 10:38 43.00s 0.00s ? /usr/bin/bash
eltex-pg pts/45 217.71.139.232 10:39 40.00s 0.00s ? screen
eltex-pg pts/46 :pts/45:S.0 10:39 44.00s 0.00s ? /usr/bin/bash
eltex-pg pts/47 :pts/19:S.0 10:39 31.00s 0.00s ? SCREEN
eltex-pg pts/48 :pts/13:S.1 10:39 18.00s 0.02s 0.02s top
0*$ bash 1$ bash 2$ bash 3$ bash 4$ bash 5$ bash 6$ bash 7$ bash 8-$ bash
```

Список подключенных пользователей можно посмотреть с помощью w

```

eltex-pg1-v6@eltex-2025-summer:~$ w
10:45:42 up 1:44, 42 users, load average: 0.62, 0.40, 0.28
USER      TTY      FROM          LOGIN@      IDLE        JCPU        PCPU WHAT
tech      pts/0    37.193.179.176 09:10       1:34m      0.02s      0.02s -bash
eltex-pg  pts/1    217.71.139.232 10:25       4.00s      0.00s      ?      -bash
eltex-pg  pts/2    217.71.139.232 10:19       15.00s     0.00s      ?      -bash
eltex-pg  pts/3    217.71.131.234 10:19       14.00s     0.00s      ?      screen -r 1836
eltex-pg  pts/4    217.71.131.234 10:21       3.00s      0.01s      0.01s -bash
eltex-pg  pts/5    217.71.131.234 10:24       1.00s      0.01s      ?      screen
eltex-pg  pts/6    178.178.207.24 10:24       21:16      0.00s      ?      -bash
eltex-pg  pts/7    :pts/5:S.1     10:35       9:34       0.00s      ?      /usr/bin/bash
eltex-pg  pts/8    217.71.139.232 10:27       1:16       0.01s      ?      screen
eltex-pg  pts/9    85.140.163.180 10:37       8:11       0.00s      ?      -bash
eltex-pg  pts/10   217.71.139.232 10:27       38.00s     0.00s      ?      screen
eltex-pg  pts/11   217.71.139.232 10:29       2:23       0.01s      ?      screen -r top
eltex-pg  pts/13   217.71.139.232 10:27       2.00s      0.01s      ?      screen
eltex-pg  pts/14   :pts/5:S.8     10:39       6:33       0.00s      ?      /usr/bin/bash
eltex-pg  pts/16   :pts/8:S.0     10:33       7:26       0.00s      0.01s SCREEN
eltex-pg  pts/17   217.71.139.232 10:32       2.00s      0.01s      0.01s -bash
eltex-pg  pts/18   217.71.139.232 10:32       1:01       0.00s      ?      -bash
eltex-pg  pts/19   178.178.207.24 10:32       15.00s     0.01s      ?      screen
eltex-pg  pts/20   :pts/47:S.0    10:43       10:51      0.00s      ?      SCREEN
eltex-pg  pts/22   217.71.139.232 10:34       1:08       0.00s      ?      screen
eltex-pg  pts/23   :pts/5:S.0     10:34       1.00s      0.05s      0.05s w
eltex-pg  pts/24   :pts/47:S.2    10:43       15.00s     0.00s      ?      /usr/bin/bash
eltex-pg  pts/31   :pts/5:S.2     10:36       8:55       0.00s      ?      /usr/bin/bash
eltex-pg  pts/32   :pts/5:S.3     10:36       8:51       0.00s      ?      /usr/bin/bash
eltex-pg  pts/34   :pts/13:S.0    10:36       3:29       0.00s      0.02s SCREEN
eltex-pg  pts/36   :pts/5:S.4     10:37       8:41       0.00s      ?      /usr/bin/bash
eltex-pg  pts/37   :pts/5:S.5     10:37       8:35       0.00s      ?      /usr/bin/bash
eltex-pg  pts/38   :pts/5:S.6     10:37       8:34       0.00s      ?      /usr/bin/bash
eltex-pg  pts/39   :pts/5:S.7     10:37       8:28       0.00s      ?      /usr/bin/bash
eltex-pg  pts/40   :pts/10:S.0    10:38       6:51       0.00s      ?      SCREEN
eltex-pg  pts/41   :pts/8:S.1     10:38       1:16       0.00s      ?      /usr/bin/bash
eltex-pg  pts/42   217.71.139.232 10:39       5:56       0.00s      ?      -bash
eltex-pg  pts/44   :pts/10:S.1    10:38       38.00s     0.00s      ?      /usr/bin/bash
eltex-pg  pts/45   217.71.139.232 10:39       6:28       0.00s      ?      screen
eltex-pg  pts/46   :pts/45:S.0    10:39       6:32       0.00s      ?      /usr/bin/bash
eltex-pg  pts/47   :pts/19:S.0    10:41       15.00s     0.00s      ?      screen -r 1352
eltex-pg  pts/48   :pts/13:S.1    10:39       1:57       0.51s      0.51s top
eltex-pg  pts/50   :pts/3:S.0     10:42       14.00s     0.00s      0.02s SCREEN
eltex-pg  pts/52   :pts/22:S.0    10:41       1:25       0.00s      ?      SCREEN
eltex-pg  pts/61   :pts/13:S.2    10:42       23.00s     0.00s      ?      /usr/bin/bash
eltex-pg  pts/54   :pts/11:S.0    10:43       2:23       0.32s      0.02s SCREEN -S top
eltex-pg  pts/65   :pts/22:S.1    10:44       1:08       0.00s      ?      /usr/bin/bash

```

Отключение от сессии командой Ctrl A D

3. Запустите отсоединенную сессию утилиты screen, при этом запустите в этой сессии команду top. Назовите сессию именем «top».

```

eltex-pg1-v6@eltex-2025-summer:~$ screen -ls
There are screens on:
    2694.pts-5.eltex-2025-summer    (07/07/2025 10:50:31 AM)    (Attached)
    1399.pts-5.eltex-2025-summer    (07/07/2025 10:34:35 AM)    (Detached)
2 Sockets in /run/screen/S-eltex-pg1-v6.
eltex-pg1-v6@eltex-2025-summer:~$

```

Подключаемся к отключенной сессии с помощью screen -r 1399

```

top - 10:56:23 up 1:54, 54 users, load average: 0.00, 0.11, 0.18
Tasks: 313 total, 1 running, 312 sleeping, 0 stopped, 0 zombie
%Cpu(s): 0.5 us, 1.5 sy, 0.0 ni, 96.7 id, 1.3 wa, 0.0 hi, 0.0 si, 0.0 st
MiB Mem : 3914.7 total, 3260.9 free, 614.1 used, 254.0 buff/cache
MiB Swap: 976.0 total, 976.0 free, 0.0 used. 3300.6 avail Mem

```

PID	USER	PR	NI	VIRT	RES	SHR	S	%CPU	%MEM	TIME+	COMMAND
14	root	20	0	0	0	0	S	0.3	0.0	0:00.02	ksoftirqd/0
1728	eltex-p+	20	0	8268	2576	1848	S	0.3	0.1	0:00.07	screen
1758	eltex-p+	20	0	11616	5364	3224	S	0.3	0.1	0:01.68	top
1968	eltex-p+	20	0	11636	5136	3240	S	0.3	0.1	0:00.76	top
2117	eltex-p+	20	0	11636	5140	3240	S	0.3	0.1	0:00.64	top
3157	eltex-p+	20	0	11636	5404	3252	S	0.3	0.1	0:00.33	top
1	root	20	0	168396	12736	9124	S	0.0	0.3	0:00.67	systemd
2	root	20	0	0	0	0	S	0.0	0.0	0:00.00	kthreadd
3	root	0	-20	0	0	0	I	0.0	0.0	0:00.00	rcu_gp
4	root	0	-20	0	0	0	I	0.0	0.0	0:00.00	rcu_par_gp
5	root	0	-20	0	0	0	I	0.0	0.0	0:00.00	slub_flushwq
6	root	0	-20	0	0	0	I	0.0	0.0	0:00.00	netns
8	root	0	-20	0	0	0	I	0.0	0.0	0:00.00	kworker/0:0H-events_highpri
10	root	0	-20	0	0	0	I	0.0	0.0	0:00.00	mm_percpu_wq
11	root	20	0	0	0	0	I	0.0	0.0	0:00.00	rcu_tasks_kthread
12	root	20	0	0	0	0	I	0.0	0.0	0:00.00	rcu_tasks_rude_kthread
13	root	20	0	0	0	0	I	0.0	0.0	0:00.00	rcu_tasks_trace_kthread
15	root	20	0	0	0	0	I	0.0	0.0	0:00.13	rcu_preempt
16	root	rt	0	0	0	0	S	0.0	0.0	0:00.02	migration/0
18	root	20	0	0	0	0	S	0.0	0.0	0:00.00	cpuhp/0
19	root	20	0	0	0	0	S	0.0	0.0	0:00.00	cpuhp/1
20	root	rt	0	0	0	0	S	0.0	0.0	0:00.24	migration/1
21	root	20	0	0	0	0	S	0.0	0.0	0:00.02	ksoftirqd/1
23	root	0	-20	0	0	0	I	0.0	0.0	0:00.00	kworker/1:0H-events_highpri
24	root	20	0	0	0	0	S	0.0	0.0	0:00.00	cpuhp/2
25	root	rt	0	0	0	0	S	0.0	0.0	0:00.24	migration/2
26	root	20	0	0	0	0	S	0.0	0.0	0:00.02	ksoftirqd/2
28	root	0	-20	0	0	0	I	0.0	0.0	0:00.00	kworker/2:0H-events_highpri
29	root	20	0	0	0	0	S	0.0	0.0	0:00.00	cpuhp/3
30	root	rt	0	0	0	0	S	0.0	0.0	0:00.24	migration/3
31	root	20	0	0	0	0	S	0.0	0.0	0:00.02	ksoftirqd/3
33	root	0	-20	0	0	0	I	0.0	0.0	0:00.00	kworker/3:0H-events_highpri
38	root	20	0	0	0	0	S	0.0	0.0	0:00.00	kdevtmpfs
39	root	0	-20	0	0	0	I	0.0	0.0	0:00.00	inet_frag_wq
40	root	20	0	0	0	0	S	0.0	0.0	0:00.00	kauditd
41	root	20	0	0	0	0	S	0.0	0.0	0:00.00	khungtaskd
42	root	20	0	0	0	0	S	0.0	0.0	0:00.00	oom_reaper
43	root	0	-20	0	0	0	I	0.0	0.0	0:00.00	writeback
44	root	20	0	0	0	0	S	0.0	0.0	0:00.13	kcompactd0
45	root	25	5	0	0	0	S	0.0	0.0	0:00.00	ksmd
47	root	39	19	0	0	0	S	0.0	0.0	0:00.06	khugepaged
48	root	0	-20	0	0	0	I	0.0	0.0	0:00.00	kintegrityd
49	root	0	-20	0	0	0	I	0.0	0.0	0:00.00	kblockd
50	root	0	-20	0	0	0	I	0.0	0.0	0:00.00	blkcg_punt_bio
51	root	0	-20	0	0	0	I	0.0	0.0	0:00.00	tpm_dev_wq
52	root	0	-20	0	0	0	I	0.0	0.0	0:00.00	edac-poller

4.Получаем список сессий, созданных утилитой screen.

4.Получаем список сессий, созданных утилитой screen.

```
eltex-pg1-v6@eltex-2025-summer:~$
```

```
:sessionname top
```

4.Получаем список сессий, созданных утилитой screen.

```
eltex-pg1-v6@eltex-2025-summer:~$ screen -ls
```

There are screens on:

8318.top	(07/07/2025 11:12:04 AM)	(Attached)
2694.pts-5.eltex-2025-summer	(07/07/2025 10:50:31 AM)	(Detached)
1399.pts-5.eltex-2025-summer	(07/07/2025 10:34:35 AM)	(Attached)

3 Sockets in /run/screen/S-eltex-pg1-v6.

```
eltex-pg1-v6@eltex-2025-summer:~$
```

5. Подсоединитесь к сессии top.

```
eltex-pg1-v6@eltex-2025-summer:~$ screen -r top
```

There is a screen on:

8318.top	(07/07/2025 11:12:05 AM)	(Attached)
----------	--------------------------	------------

There is no screen to be resumed matching top.

```
eltex-pg1-v6@eltex-2025-summer:~$
```

6. Создайте еще одно окно в сессии top, с помощью ctrl a c


```
0*$ bash 1-$ bash 2$ bash
```

7-8-9. Переходим в новое окно с помощью `ctrl a n`, вводим команду `watch /usr/bin/vmstat`

```
Every 2.0s: /usr/bin/vmstat                               eltex-2025-summer: Mon Jul  7 11:24:40 2025
procs -----memory----- --swap-- -----io---- -system-- -----cpu-----
 r b  swpd  free  buff  cache   si   so    bi   bo    in   cs us sy id wa st
 3 0      0 3241672 21980 247328    0    0     4    5   35   44  0  0 98  2  0
```

10. Переименовываем окно с помощью `ctrl a A`

```
Set window's title to: bash
```

```
eltex-pg1-v6@eltex-2025-summer:~$ ^C
```

```
0-$ bash 1*$ vmstat 2$ bash 3$ bash
```

11. Переходим в окно, в котором работает `top`.

```
daria@baelcost:~$ ssh eltex-pg1-v6@217.71.138.1 -p port 44556
Команда «ssh» не найдена. Возможно, вы имели в виду:
  команда 'shc' из deb-пакета shc (4.0.3-1)
  команда 'sh' из deb-пакета dash (0.5.12-6ubuntu1)
  команда 'ssh' из deb-пакета openssh-client (1:9.6p1-3ubuntu13.9)
Попробуйте: sudo apt install <имя deb-пакета>
daria@baelcost:~$ ssh eltex-pg1-v6@217.71.138.1 -p port 44556
Bad port 'port'
daria@baelcost:~$ ssh eltex-pg1-v6@217.71.138.1 -p 44556
The authenticity of host '[217.71.138.1]:44556 ([217.71.138.1]:44556)' can't be established.
ED25519 key fingerprint is SHA256:9EeAnPIp/wDj41XS55iG0Eff5a90ZLW9TTAI37NiBb0.
This key is not known by any other names.
Are you sure you want to continue connecting (yes/no/[fingerprint])?
Host key verification failed.
daria@baelcost:~$ ssh eltex-pg1-v6@217.71.138.1 -p 44556
The authenticity of host '[217.71.138.1]:44556 ([217.71.138.1]:44556)' can't be established.
ED25519 key fingerprint is SHA256:9EeAnPIp/wDj41XS55iG0Eff5a90ZLW9TTAI37NiBb0.
This key is not known by any other names.
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
Warning: Permanently added '[217.71.138.1]:44556' (ED25519) to the list of known hosts.
eltex-pg1-v6@217.71.138.1's password:
Linux eltex-2025-summer 6.1.0-32-amd64 #1 SMP PREEMPT_DYNAMIC Debian 6.1.129-1 (2025-03-06) x86_64

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permitted by applicable law.
eltex-pg1-v6@eltex-2025-summer:~$
```

```
eltex-pg1-v6@eltex-2025-summer:~$ screen -ls
```

13. Запускаем новую сессию и запускаем в окне команду: `vi report_part1.txt`

```

eltex-pg1-v6@eltex-2025-summer:~$ screen -ls
There are screens on:
    23076.pts-93.eltex-2025-summer  (07/07/2025 11:30:42 AM)      (Detached)
    8318.top                        (07/07/2025 11:12:05 AM)      (Detached)
    2694.pts-5.eltex-2025-summer    (07/07/2025 10:50:32 AM)      (Detached)
    1399.pts-5.eltex-2025-summer    (07/07/2025 10:34:36 AM)      (Attached)
4 Sockets in /run/screen/S-eltex-pg1-v6.
eltex-pg1-v6@eltex-2025-summer:~$

```

```
eltex-pg1-v6@eltex-2025-summer:~$  
logout  
Connection to 217.71.138.1 closed.  
daria@baelcost:~$
```

16. Подключаемся к серверу (как в п.1), и получаем список сессий screen

18 Закрываем редактор, сохранив файл и закрываем все сессии screen.

```
~  
"report_part1.txt" 1L, 127B written  
eltex-pg1-v6@eltex-2025-summer:~$  
eltex-pg1-v6@eltex-2025-summer:~$  
logout  
Connection to 217.71.138.1 closed.  
daria@baelcost:~$
```