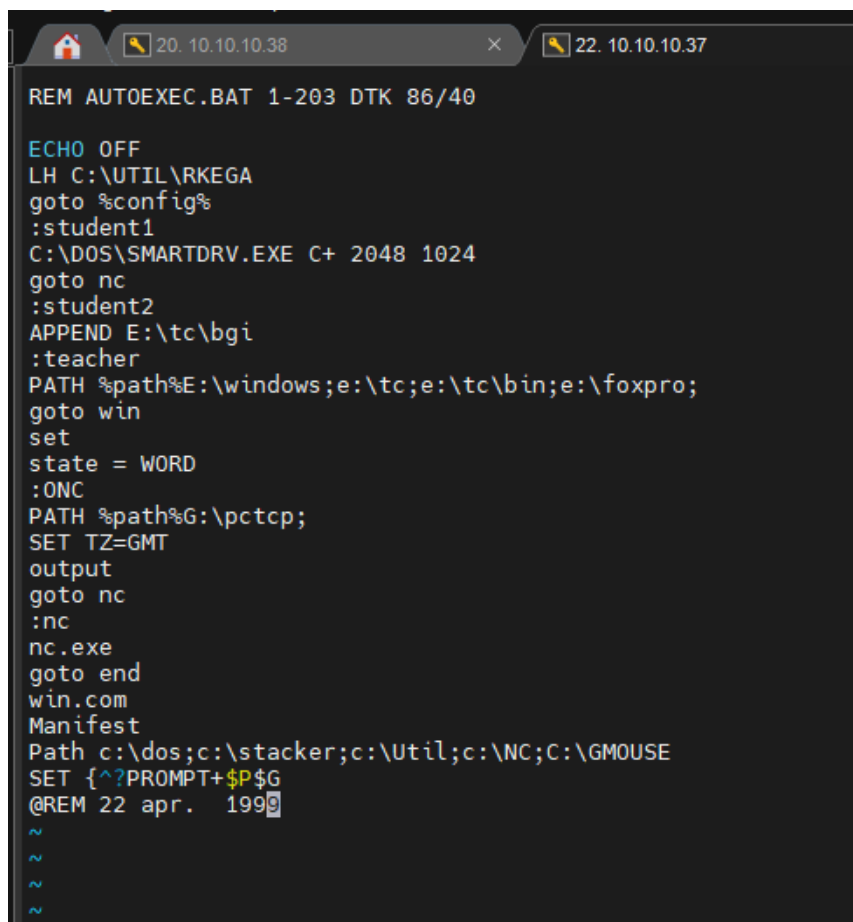
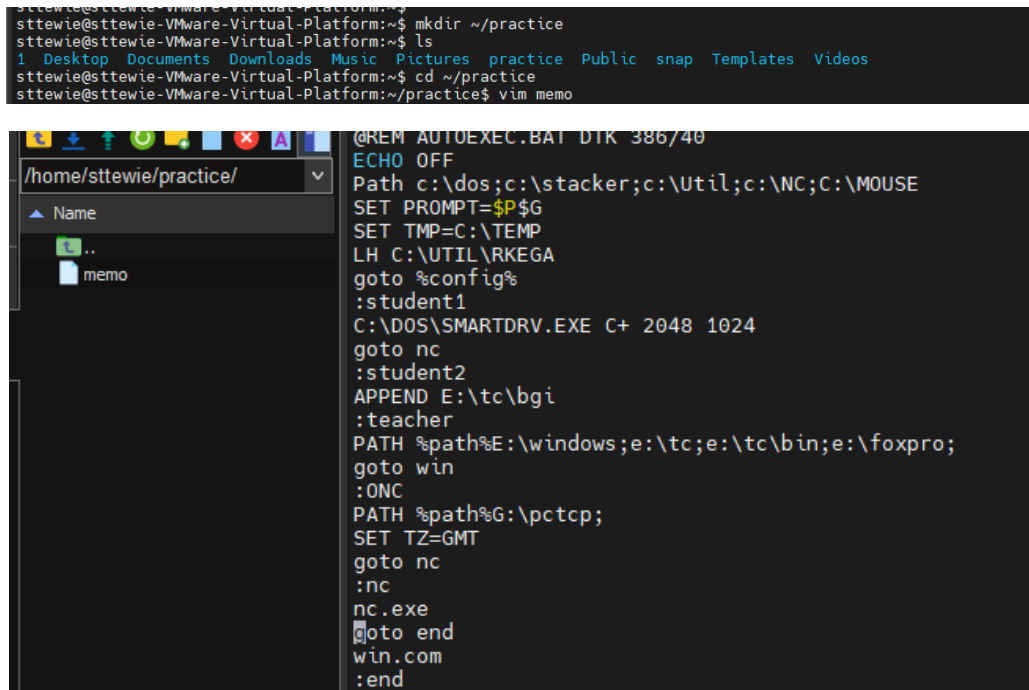


Homework_Lesson 9

Цель: освоить принципы работы текстового редактора Vim. Ознакомиться с процессом логирования в Linux. Научиться определять уровень загрузки системы.

Задание 1. Создание нового файла с использованием vim

```
sttewie@sttewie-VMware-Virtual-Platform:~$ mkdir ~/practice
sttewie@sttewie-VMware-Virtual-Platform:~$ ls
1 Desktop Documents Downloads Music Pictures practice Public snap Templates Videos
sttewie@sttewie-VMware-Virtual-Platform:~$ cd ~/practice
sttewie@sttewie-VMware-Virtual-Platform:~/practice$ vim memo
```



```
REM AUTOEXEC.BAT 1-203 DTK 86/40

ECHO OFF
LH C:\UTIL\RKEGA
goto %config%
:student1
C:\DOS\SMARTDRV.EXE C+ 2048 1024
goto nc
:student2
APPEND E:\tc\bgi
:teacher
PATH %path%E:\windows;e:\tc;e:\tc\bin;e:\foxpro;
goto win
set
state = WORD
:ONC
PATH %path%G:\pctcp;
SET TZ=GMT
output
goto nc
:nc
nc.exe
goto end
win.com
Manifest
Path c:\dos;c:\stacker;c:\Util;c:\NC;c:\GMOUSE
SET {^?PROMPT+$P$G
@REM 22 apr. 1999
~
~
~
~
```

Установить утилиту nginx, посмотреть ее логи и также уровень нагрузки на ОС. Просмотрите логи действий пользователей системы. Опционально : Установите веб-сервер Apache 2. Установите утилиту logrotate, которая помещает access.log и error.log веб-сервера Apache в /var/log/app/. В системе он работает как пользователь и группа www-data

Обновим систему и установим Nginx:

```
sttewie@sttewie-VMware-Virtual-Platform:~/practice$ sudo apt update && sudo apt upgrade -y
sudo apt install nginx -y
[sudo] password for sttewie:
Hit:1 http://ru.archive.ubuntu.com/ubuntu noble InRelease
Get:2 http://ru.archive.ubuntu.com/ubuntu noble-updates InRelease [126 kB]
Get:3 http://ru.archive.ubuntu.com/ubuntu noble-backports InRelease [126 kB]
Get:4 http://ru.archive.ubuntu.com/ubuntu noble-updates/main amd64 Packages [639 kB]
```

Убедимся, что Nginx запущен:

```
sttewie@sttewie-VMware-Virtual-Platform:~/practice$ sudo systemctl start nginx
sudo systemctl enable nginx
Synchronizing state of nginx.service with SysV service script with /usr/lib/systemd/systemd-sysv-install.
Executing: /usr/lib/systemd/systemd-sysv-install enable nginx
sttewie@sttewie-VMware-Virtual-Platform:~/practice$ sudo systemctl status nginx
● nginx.service - A high performance web server and a reverse proxy server
   Loaded: loaded (/usr/lib/systemd/system/nginx.service; enabled; preset: enabled)
   Active: active (running) since Fri 2024-11-15 15:26:32 MSK; 52s ago
     Docs: man:nginx(8)
    Main PID: 17796 (nginx)
      Tasks: 5 (limit: 4471)
    Memory: 3.7M (peak: 4.2M)
       CPU: 20ms
    CGroup: /system.slice/nginx.service
            └─17796 "nginx: master process /usr/sbin/nginx -g daemon on; master_process on;"
              └─17797 "nginx: worker process"
                └─17798 "nginx: worker process"
                  └─17799 "nginx: worker process"
                    └─17800 "nginx: worker process"

Nov 15 15:26:32 sttewie-VMware-Virtual-Platform systemd[1]: Starting nginx.service - A high performance web server and a reverse proxy server...
Nov 15 15:26:32 sttewie-VMware-Virtual-Platform systemd[1]: Started nginx.service - A high performance web server and a reverse proxy server.
sttewie@sttewie-VMware-Virtual-Platform:~/practice$
```

Просмотр логов Nginx:

```
sttewie@sttewie-VMware-Virtual-Platform:~/practice$ sudo tail -f /var/log/nginx/access.log
[sudo] password for sttewie:
::1 - - [15/Nov/2024:16:04:57 +0300] "GET / HTTP/1.1" 200 615 "-" "curl/8.5.0"
^C
sttewie@sttewie-VMware-Virtual-Platform:~/practice$ sudo tail -f /var/log/nginx/error.log
```

Проверим уровень нагрузки на ОС:

```
sttewie@sttewie-VMware-Virtual-Platform:~/practice$ sudo apt install htop -y
htop
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
Suggested packages:
  lm-sensors
The following NEW packages will be installed:
```

| 0% | | | | | | | | | | 0.0% Tasks: 153, 623 thr, 196 kthr; 1 running | | | | | | | | | |
|--------------|-------------|----|----|-------|-------|-------|----|-----|-----|---|---------|--|--|--|--|--|--|--|--|
| 1% | | | | | | | | | | 0.0% Load average: 0.06 0.02 0.00 | | | | | | | | | |
| 2% | | | | | | | | | | 0.0% Uptime: 17:50:26 | | | | | | | | | |
| 3% | | | | | | | | | | 0.0% | | | | | | | | | |
| 4% | | | | | | | | | | 1.705/3.710 | | | | | | | | | |
| 5% | | | | | | | | | | 200K/3.710 | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | |
| Top 10 / 100 | | | | | | | | | | | | | | | | | | | |
| PID | USER | PR | NI | VT | RES | SHR | SS | CPU | MEM | TIME+ | TIME- | Command | | | | | | | |
| 15845 | sttewie | 20 | 0 | 22372 | 14224 | 5413 | 5 | 3.2 | 0.2 | 0:02.51 | 0:00.00 | /usr/sbin/nginx | | | | | | | |
| 387 | root | 20 | 0 | 21368 | 14224 | 5413 | 5 | 0.4 | 0.1 | 0:04.05 | 0:00.00 | /usr/sbin/splash | | | | | | | |
| 622 | root | 19 | -1 | 50896 | 18176 | 16768 | 5 | 0.0 | 0.5 | 0:00.87 | 0:00.00 | /usr/lib/systemd/systemd-journald | | | | | | | |
| 423 | root | 20 | 0 | 1498 | 1420 | 1152 | 5 | 0.0 | 0.0 | 0:00.00 | 0:00.00 | vmware-vmblock-fuse /run/vmblock-fuse -o rw,subtyp=vmware-vmblock,default_permissions,allow_ether,dev,suid | | | | | | | |
| 425 | root | 20 | 0 | 1498 | 1420 | 1152 | 5 | 0.0 | 0.0 | 0:00.00 | 0:00.00 | vmware-vmblock-fuse /run/vmblock-fuse -o rw,subtyp=vmware-vmblock,default_permissions,allow_ether,dev,suid | | | | | | | |
| 447 | root | 20 | 0 | 32160 | 10112 | 4992 | 5 | 0.0 | 0.3 | 0:00.34 | 0:00.00 | /usr/lib/systemd/systemd-udevd | | | | | | | |
| 602 | systemd-oo | 20 | 0 | 17556 | 7680 | 8784 | 5 | 0.0 | 0.2 | 0:13.92 | 0:00.00 | /usr/lib/systemd/systemd-oomd | | | | | | | |
| 611 | systemd-rc | 20 | 0 | 21212 | 13184 | 16800 | 5 | 0.0 | 0.1 | 0:00.55 | 0:00.00 | /usr/lib/systemd/systemd-resolved | | | | | | | |
| 623 | systemd-tl | 20 | 0 | 91044 | 7808 | 8812 | 5 | 0.0 | 0.2 | 0:00.25 | 0:00.00 | /usr/lib/systemd/systemd-timesyncd | | | | | | | |
| 744 | root | 20 | 0 | 44736 | 22776 | 7840 | 5 | 0.0 | 0.0 | 0:00.01 | 0:00.00 | /usr/sbin/ModemManager | | | | | | | |
| 753 | root | 20 | 0 | 3198 | 9472 | 7936 | 5 | 0.0 | 0.2 | 0:49.63 | 0:00.00 | /usr/bin/vmtool | | | | | | | |
| 833 | root | 20 | 0 | 3198 | 9472 | 7936 | 5 | 0.0 | 0.2 | 0:00.00 | 0:00.00 | /usr/bin/vmtool | | | | | | | |
| 894 | root | 20 | 0 | 3198 | 9472 | 7936 | 5 | 0.0 | 0.2 | 0:02.26 | 0:00.00 | /usr/bin/vmtool | | | | | | | |
| 895 | root | 20 | 0 | 3198 | 9472 | 7936 | 5 | 0.0 | 0.2 | 0:00.00 | 0:00.00 | /usr/bin/vmtool | | | | | | | |
| 1137 | systemd-tl | 20 | 0 | 91044 | 7808 | 8812 | 5 | 0.0 | 0.2 | 0:00.00 | 0:00.00 | /usr/lib/systemd/systemd-timesyncd | | | | | | | |
| 1154 | avahi | 20 | 0 | 8800 | 4480 | 4896 | 5 | 0.0 | 0.1 | 0:00.21 | 0:00.00 | avahi-daemon: running [sttewie-VMware-Virtual-Platform-2.local] | | | | | | | |
| 1155 | dbus-daemon | 20 | 0 | 12140 | 7040 | 4880 | 5 | 0.0 | 0.2 | 0:01.37 | 0:00.00 | dbus-daemon -system -address=systemd: --nofork --nopidfile --systemd-activation --syslog-only | | | | | | | |
| 1158 | gnome-rsno | 20 | 0 | 5008 | 15236 | 13932 | 5 | 0.0 | 0.4 | 0:00.02 | 0:00.00 | /usr/libexec/gnome-remote-desktop-daemon --system | | | | | | | |
| 1162 | polkitd | 20 | 0 | 3758 | 10760 | 7740 | 5 | 0.0 | 0.3 | 0:00.36 | 0:00.00 | /usr/lib/polkit-1/polkitd --no-debug | | | | | | | |
| 1163 | root | 20 | 0 | 3148 | 7424 | 6784 | 5 | 0.0 | 0.2 | 0:00.02 | 0:00.00 | /usr/libexec/power-profiles-daemon | | | | | | | |
| 1174 | root | 20 | 0 | 19458 | 32252 | 20992 | 5 | 0.0 | 0.9 | 0:00.02 | 0:00.00 | /usr/lib/napd/napd | | | | | | | |
| 1176 | root | 20 | 0 | 3148 | 7424 | 6784 | 5 | 0.0 | 0.2 | 0:00.00 | 0:00.00 | /usr/libexec/power-profiles-daemon | | | | | | | |
| 1180 | root | 20 | 0 | 10092 | 2816 | 2880 | 5 | 0.0 | 0.1 | 0:00.19 | 0:00.00 | /usr/sbin/cron -f -s | | | | | | | |
| 1181 | root | 20 | 0 | 3118 | 6656 | 6272 | 5 | 0.0 | 0.2 | 0:00.02 | 0:00.00 | /usr/libexec/switcheroo-control | | | | | | | |
| 1183 | root | 20 | 0 | 16132 | 8784 | 7808 | 5 | 0.0 | 0.2 | 0:00.31 | 0:00.00 | /usr/lib/systemd/systemd-logind | | | | | | | |
| 1184 | root | 20 | 0 | 3148 | 7424 | 6784 | 5 | 0.0 | 0.2 | 0:00.00 | 0:00.00 | /usr/libexec/power-profiles-daemon | | | | | | | |
| 1185 | root | 20 | 0 | 19458 | 32252 | 20992 | 5 | 0.0 | 0.9 | 0:00.02 | 0:00.00 | /usr/lib/napd/napd | | | | | | | |
| 1187 | root | 20 | 0 | 19458 | 32252 | 20992 | 5 | 0.0 | 0.9 | 0:00.15 | 0:00.00 | /usr/lib/napd/napd | | | | | | | |
| 1187 | root | 20 | 0 | 19458 | 32252 | 20992 | 5 | 0.0 | 0.9 | 0:00.70 | 0:00.00 | /usr/lib/napd/napd | | | | | | | |
| 1188 | root | 20 | 0 | 19458 | 32252 | 20992 | 5 | 0.0 | 0.9 | 0:00.00 | 0:00.00 | /usr/lib/napd/napd | | | | | | | |
| 1189 | root | 20 | 0 | 4598 | 14528 | 11840 | 5 | 0.0 | 0.4 | 0:00.09 | 0:00.00 | /usr/libexec/udisks2/udisksd | | | | | | | |
| 1192 | root | 20 | 0 | 4598 | 14528 | 11840 | 5 | 0.0 | 0.4 | 0:00.00 | 0:00.00 | /usr/libexec/udisks2/udisksd | | | | | | | |
| 1192 | root | 20 | 0 | 3148 | 7424 | 6784 | 5 | 0.0 | 0.2 | 0:00.00 | 0:00.00 | /usr/libexec/power-profiles-daemon | | | | | | | |
| 1200 | root | 20 | 0 | 19458 | 32252 | 20992 | 5 | 0.0 | 0.9 | 0:00.63 | 0:00.00 | /usr/lib/napd/napd | | | | | | | |
| 1203 | root | 20 | 0 | 3148 | 7424 | 6784 | 5 | 0.0 | 0.2 | 0:00.00 | 0:00.00 | /usr/libexec/power-profiles-daemon | | | | | | | |
| 1203 | root | 20 | 0 | 3148 | 7424 | 6784 | 5 | 0.0 | 0.2 | 0:00.02 | 0:00.00 | /usr/libexec/power-profiles-daemon | | | | | | | |
| 1208 | avahi | 20 | 0 | 8800 | 4480 | 4896 | 5 | 0.0 | 0.1 | 0:00.00 | 0:00.00 | avahi-daemon: running [sttewie-VMware-Virtual-Platform-2.local] | | | | | | | |
| 1209 | root | 20 | 0 | 3148 | 7424 | 6784 | 5 | 0.0 | 0.2 | 0:00.00 | 0:00.00 | /usr/libexec/power-profiles-daemon | | | | | | | |
| 1210 | root | 20 | 0 | 3118 | 6656 | 6272 | 5 | 0.0 | 0.2 | 0:00.00 | 0:00.00 | /usr/libexec/switcheroo-control | | | | | | | |
| 1211 | root | 20 | 0 | 3118 | 6656 | 6272 | 5 | 0.0 | 0.2 | 0:00.00 | 0:00.00 | /usr/libexec/switcheroo-control | | | | | | | |
| 1212 | root | 20 | 0 | 3118 | 6656 | 6272 | 5 | 0.0 | 0.2 | 0:00.00 | 0:00.00 | /usr/libexec/switcheroo-control | | | | | | | |
| 1214 | root | 20 | 0 | 3908 | 10960 | 16340 | 5 | 0.0 | 0.5 | 0:00.77 | 0:00.00 | /usr/sbin/NetworkManager --no-daemon | | | | | | | |
| 1215 | root | 20 | 0 | 4598 | 14528 | 11840 | 5 | 0.0 | 0.4 | 0:00.83 | 0:00.00 | /usr/libexec/udisks2/udisksd | | | | | | | |
| 1216 | root | 20 | 0 | 4598 | 14528 | 11840 | 5 | 0.0 | 0.4 | 0:00.01 | 0:00.00 | /usr/libexec/udisks2/udisksd | | | | | | | |
| 1217 | root | 20 | 0 | 4598 | 14528 | 11840 | 5 | 0.0 | 0.4 | 0:00.01 | 0:00.00 | /usr/libexec/udisks2/udisksd | | | | | | | |
| 1219 | root | 20 | 0 | 17376 | 6400 | 5632 | 5 | 0.0 | 0.2 | 0:00.30 | 0:00.00 | /usr/sbin/wpa_supplicant -u -s -O Dfns/run/wpa_supplicant GROUP=netdev | | | | | | | |
| 1225 | gnome-rsno | 20 | 0 | 5008 | 15236 | 13932 | 5 | 0.0 | 0.4 | 0:00.00 | 0:00.00 | /usr/libexec/gnome-remote-desktop-daemon --system | | | | | | | |
| 1227 | gnome-rsno | 20 | 0 | 5008 | 15236 | 13932 | 5 | 0.0 | 0.4 | 0:00.00 | 0:00.00 | /usr/libexec/gnome-remote-desktop-daemon --system | | | | | | | |
| 1243 | polkitd | 20 | 0 | 3758 | 10760 | 7740 | 5 | 0.0 | 0.3 | 0:00.00 | 0:00.00 | /usr/lib/polkit-1/polkitd --no-debug | | | | | | | |
| 1244 | polkitd | 20 | 0 | 3758 | 10760 | 7740 | 5 | 0.0 | 0.3 | 0:00.00 | 0:00.00 | /usr/lib/polkit-1/polkitd --no-debug | | | | | | | |
| 1245 | root | 20 | 0 | 3908 | 10960 | 16340 | 5 | 0.0 | 0.5 | 0:00.97 | 0:00.00 | /usr/sbin/NetworkManager --no-daemon | | | | | | | |
| 1247 | polkitd | 20 | 0 | 3758 | 10760 | 7740 | 5 | 0.0 | 0.3 | 0:00.16 | 0:00.00 | /usr/lib/polkit-1/polkitd --no-debug | | | | | | | |
| 1248 | root | 20 | 0 | 3908 | 10960 | 16340 | 5 | 0.0 | 0.5 | 0:00.00 | 0:00.00 | /usr/sbin/NetworkManager --no-daemon | | | | | | | |
| 1249 | root | 20 | 0 | 3908 | 10960 | 16340 | 5 | 0.0 | 0.5 | 0:00.16 | 0:00.00 | /usr/sbin/NetworkManager --no-daemon | | | | | | | |
| 1254 | root | 20 | 0 | 19458 | 32252 | 20992 | 5 | 0.0 | 0.9 | 0:00.50 | 0:00.00 | /usr/lib/napd/napd | | | | | | | |
| 1260 | root | 20 | 0 | 19458 | 32252 | 20992 | 5 | 0.0 | 0.9 | 0:00.50 | 0:00.00 | /usr/lib/napd/napd | | | | | | | |
| 1264 | syslog | 20 | 0 | 2176 | 6656 | 6400 | 5 | 0.0 | 0.2 | 0:00.03 | 0:00.00 | /usr/sbin/rsyslogd -n -WONE | | | | | | | |
| 1291 | root | 20 | 0 | 3828 | 11488 | 11696 | 5 | 0.0 | 0.3 | 0:00.00 | 0:00.00 | /usr/sbin/ModemManager | | | | | | | |
| 1294 | root | 20 | 0 | 4598 | 14528 | 11840 | 5 | 0.0 | 0.4 | 0:00.00 | 0:00.00 | /usr/libexec/udisks2/udisksd | | | | | | | |
| 1295 | root | 20 | 0 | 4598 | 14528 | 11840 | 5 | 0.0 | 0.4 | 0:00.01 | 0:00.00 | /usr/libexec/udisks2/udisksd | | | | | | | |
| 1306 | root | 20 | 0 | 4598 | 14528 | 11840 | 5 | 0.0 | 0.4 | 0:00.00 | 0:00.00 | /usr/libexec/udisks2/udisksd | | | | | | | |

Просмотрите использование ресурсов

```
sttewie@sttewie-VMware-Virtual-Platform:~/practice$ free -h # Память
df -h # Диск
iostat # Нагрузка на диск (при необходимости, установить пакет sysstat)

Mem: 3.7Gi 2.0Gi 405Mi 49Mi 1.7Gi 1.8Gi
Swap: 3.7Gi 256Ki 3.7Gi
Filesystem Size Used Avail Use% Mounted on
tmpfs 380M 2.1M 378M 1% /run
/dev/sda2 26G 11G 14G 44% /
tmpfs 1.9G 0 1.9G 0% /dev/shm
tmpfs 5.0M 8.0K 5.0M 1% /run/lock
tmpfs 380M 136K 380M 1% /run/user/1000
/dev/sr0 5.8G 5.8G 0 100% /media/sttewie/Ubuntu 24.04.1 LTS amd64
Linux 6.8.0-48-generic (sttewie-VMware-Virtual-Platform) 11/15/2024 _x86_64_ (4 CPU)

avg-cpu:  %user  %nice %system %iowait  %steal   %idle
           0.14    0.01   0.07   0.00    0.00   99.78

Device            tps    kB_read/s    kB_wrtn/s    kB_dscd/s    kB_read    kB_wrtn    kB_dscd
loop0              0.00         0.00         0.00         0.00         17         0         0
loop1              0.00         0.02         0.00         0.00        1088         0         0
loop10             0.00         0.01         0.00         0.00         380         0         0
loop11             0.00         0.01         0.00         0.00         433         0         0
loop12             0.00         0.00         0.00         0.00         54         0         0
loop13             0.00         0.01         0.00         0.00         333         0         0
loop14             0.00         0.00         0.00         0.00         14         0         0
loop2              0.01         0.08         0.00         0.00        5072         0         0
loop3              0.00         0.02         0.00         0.00        1072         0         0
loop4              0.02         1.08         0.00         0.00       69708         0         0
loop5              0.00         0.01         0.00         0.00         347         0         0
loop6              0.00         0.03         0.00         0.00        2061         0         0
loop7              0.05         1.02         0.00         0.00       65454         0         0
loop8              0.04         0.19         0.00         0.00       12283         0         0
loop9              0.00         0.01         0.00         0.00         347         0         0
sda                0.99        19.12        18.13         0.00     1229525     1165908         0
sr0                0.00         0.03         0.00         0.00        2098         0         0
```

Просмотрите действия пользователей в системе:

```
sttewie@sttewie-VMware-Virtual-Platform:~/practice$ last # История входов в систему
who # Кто в данный момент находится в системе
sudo cat /var/log/auth.log | grep 'sudo' # Логи выполнения sudo команд
sttewie pts/0 192.168.21.225 Thu Nov 14 22:23 still logged in
sttewie tty2 tty2 Thu Nov 14 22:20 still logged in
sttewie seat0 login screen Thu Nov 14 22:20 still logged in
reboot system boot 6.8.0-48-generic Thu Nov 14 22:18 still running
sttewie pts/2 192.168.21.225 Thu Nov 14 21:58 - crash (00:19)
sttewie pts/2 192.168.21.225 Thu Nov 14 18:12 - 21:57 (03:45)
sttewie tty2 Wed Nov 13 17:15 - crash (1+05:02)
sttewie seat0 login screen Wed Nov 13 17:15 - crash (1+05:02)
```

Установите Apache 2:

```
sttewie@sttewie-VMware-Virtual-Platform:~/practice$ sudo apt install apache2 -y
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
  apache2-bin apache2-data apache2-utils libapr1t64 libaprutil1-dbd-sqlite3 libaprutil1-ldap libaprutil1t64
Suggested packages:
  apache2-doc apache2-suexec-pristine | apache2-suexec-custom
The following NEW packages will be installed:
  apache2 apache2-bin apache2-data apache2-utils libapr1t64 libaprutil1-dbd-sqlite3 libaprutil1-ldap libaprutil1t64
0 upgraded, 8 newly installed, 0 to remove and 19 not upgraded.
Need to get 1,900 kB of archives.
```

Убедитесь, что Apache запущен:

```
sttewie@sttewie-VMware-Virtual-Platform:~/practice$ sudo systemctl start apache2
sttewie@sttewie-VMware-Virtual-Platform:~/practice$ sudo systemctl status apache2.service
● apache2.service - The Apache HTTP Server
   Loaded: loaded (/usr/lib/systemd/system/apache2.service; enabled; preset: enabled)
   Active: active (running) since Fri 2024-11-15 16:17:37 MSK; 3s ago
     Docs: https://httpd.apache.org/docs/2.4/
   Process: 21534 ExecStart=/usr/sbin/apachectl start (code=exited, status=0/SUCCESS)
   Main PID: 21537 (apache2)
     Tasks: 55 (limit: 4471)
    Memory: 5.7M (peak: 6.2M)
       CPU: 28ms
   CGroup: /system.slice/apache2.service
           └─21537 /usr/sbin/apache2 -k start
             └─21539 /usr/sbin/apache2 -k start
               └─21540 /usr/sbin/apache2 -k start

Nov 15 16:17:37 sttewie-VMware-Virtual-Platform systemd[1]: Starting apache2.service - The Apache HTTP Server...
Nov 15 16:17:37 sttewie-VMware-Virtual-Platform apachectl[21536]: AH00558: apache2: Could not reliably determine the server's fully qualified domain name: /usr/sbin/apachectl -DFOQ
Nov 15 16:17:37 sttewie-VMware-Virtual-Platform systemd[1]: Started apache2.service - The Apache HTTP Server.
sttewie@sttewie-VMware-Virtual-Platform:~/practice$
```

Просмотр логов Apache:

```
sttewie@sttewie-VMware-Virtual-Platform:~/practice$ sudo tail -f /var/log/apache2/access.log

^X^C
sttewie@sttewie-VMware-Virtual-Platform:~/practice$ sudo tail -f /var/log/apache2/error.log
[Fri Nov 15 16:17:37.495055 2024] [mpm_event:notice] [pid 21537:tid 129730120607616] AH00489: Apache/2.4.58 (Ubuntu) configured -- resuming normal operations
[Fri Nov 15 16:17:37.495278 2024] [core:notice] [pid 21537:tid 129730120607616] AH00094: Command line: '/usr/sbin/apache2'
```

Установим и настроим logrotate для Apache 2

```
sttewie@sttewie-VMware-Virtual-Platform:~/practice$ sudo apt install logrotate -y
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
logrotate is already the newest version (3.21.0-2build1).
```

Создадим директорию для логов Apache:

```
sttewie@sttewie-VMware-Virtual-Platform:~/practice$ sudo mkdir -p /var/log/app
sudo chown www-data:www-data /var/log/app
sttewie@sttewie-VMware-Virtual-Platform:~/practice$
```

Настроим logrotate для переместим логи Apache:

Изменим файл конфигурации

```
/var/log/apache2/*.log {  
    daily  
    missingok  
    rotate 14  
    compress  
    delaycompress  
    notifempty  
    create 640 www-data www-data  
    olddir /var/log/app  
    sharedscripts  
    prerotate  
        if [ -d /etc/logrotate.d/httpd-prerotate ]; then \n  
            run-parts /etc/logrotate.d/httpd-prerotate; \n  
        fi \  
    endscrip  
    postrotate  
        if pgrep -f ^/usr/sbin/apache2 > /dev/null; then \  
            invoke-rc.d apache2 reload 2>&1 | logger -t apache2.logrotate; \  
        fi  
    endscrip  
}
```

Проверим работу logrotate:

```
sttewie@sttewie-VMware-Virtual-Platform:~/practices$ ls -l /var/log/app/
total 4
-rw-r----- 1 root adm 588 Nov 15 16:28 error.log.1
sttewie@sttewie-VMware-Virtual-Platform:~/practices$
```