

Lab 4

1. create script to list all files in /var/log every 5 seconds and append the list to /tmp/list.log file.

```
vboxuser@Ubuntu: /var/lab4$ cd /var/lab4
vboxuser@Ubuntu: /var/lab4$ nano sudo ./script.sh
vboxuser@Ubuntu: /var/lab4$ ls
vboxuser@Ubuntu: /var/lab4$ sudo nano script.sh
[sudo] password for vboxuser:
vboxuser@Ubuntu: /var/lab4$ sudo chmod +x script.sh
vboxuser@Ubuntu: /var/lab4$ sudo ./script.sh
```

```
vboxuser@Ubuntu: /var/lab4
GNU nano 6.2 script.sh
#!/bin/bash

while true; do
ls /var/log >> /tmp/list.log
sleep 5;
done
```

2. copy the script to /usr/local/bin directory and set the execution attribute to it.

```
vboxuser@Ubuntu: /var/lab4$ sudo cp script.sh /usr/local/bin/script.sh
vboxuser@Ubuntu: /var/lab4$ sudo chmod +x /usr/local/bin/script.sh
vboxuser@Ubuntu: /var/lab4$
```

3. create systemd service file to execute the the script as background service.

```
vboxuser@Ubuntu:~$ sudo nano bg_process.service
vboxuser@Ubuntu:~$ touch bg_script.service
vboxuser@Ubuntu:~$ sudo nano bg_process.service
vboxuser@Ubuntu:~$ sudo systemctl daemon-reload
vboxuser@Ubuntu:~$ sudo cp bg_process.service /etc/systemd/system/
vboxuser@Ubuntu:~$ sudo service bg_process start
vboxuser@Ubuntu:~$ sudo service bg_process status
● bg_process.service - bg_process
   Loaded: loaded (/etc/systemd/system/bg_process.service; disabled; vendor preset: enabled)
   Active: active (running) since Sat 2023-02-25 12:44:51 EET; 16s ago
     Main PID: 4099 (script.sh)
       Tasks: 2 (limit: 2288)
        Memory: 1.2M
           CPU: 95ms
      CGroup: /system.slice/bg_process.service
              └─4099 /bin/bash /usr/local/bin/script.sh
                └─4108 sleep 5

Feb 25 12:44:51 Ubuntu systemd[1]: Started bg_process.
Feb 25 12:45:07 Ubuntu systemd[1]: /etc/systemd/system/bg_process.service:1:
lines 1-13/13 (END)
```

```
GNU nano 6.2          bg_process.service
GNU nano 6.2          New Buffer *
[Unit]
Description=bg_process
After=syslog.target network.target

[Service]
Type=simple
User=root
Group=root
TimeoutStartSec=0
Restart=on-failure
RestartSec=30s
#ExecStartPre=
ExecStart=/usr/local/bin/script.sh
#ExecStop=
[Install]
WantedBy=multi-user.target
```

4. using cron, schedule a job every 5 minutes to copy /tmp/list.log file to /tmp/list.log.1 and compress the file using zip command crontab -e then:

```
vboxuser@Ubuntu:~$ crontab -e
no crontab for vboxuser - using an empty one

Select an editor. To change later, run 'select-editor'.
 1. /bin/nano          <---- easiest
 2. /usr/bin/vim.tiny
 3. /bin/ed

Choose 1-3 [1]: 1
```

```
GNU nano 6.2          /tmp/crontab.rQmfuE/crontab *
# Edit this file to introduce tasks to be run by cron.
#
# Each task to run has to be defined through a single line
# indicating with different fields when the task will be run
# and what command to run for the task
#
# To define the time you can provide concrete values for
# minute (m), hour (h), day of month (dom), month (mon),
# and day of week (dow) or use '*' in these fields (for 'any').
#
# Notice that tasks will be started based on the cron's system
# daemon's notion of time and timezones.
#
# Output of the crontab jobs (including errors) is sent through
# email to the user the crontab file belongs to (unless redirected).
#
# For example, you can run a backup of all your user accounts
# at 5 a.m every week with:
# 0 5 * * 1 tar -zcf /var/backups/home.tgz /home/
#
# For more information see the manual pages of crontab(5) and cron(8)
#
# m h  dom mon dow   command
*/5 * * * * zip -r /tmp/list.log.1.zip /tmp/list.log
```

^G Help	^O Write Out	^W Where Is	^K Cut	^T Execute
^X Exit	^R Read File	^_ Replace	^U Paste	^J Justify

