

POC TASK 5

Automated Security :

```
# Define log files
auth_log="/var/log/auth.log"
last_log="/var/log/wtmp"
systemd_units="/etc/systemd/system"
disk_usage="/bin/df"

# 1. Check user login attempts (last and auth.log)
echo "Checking recent login attempts..."
last | head -n 10 # Shows the last 10 login attempts

# Check for failed login attempts in auth.log
echo "Checking failed login attempts in auth.log..."
grep "Failed" $auth_log | tail -n 10 # Shows the last 10 failed login attempts

# 2. Detect failed SSH login attempts and send email alert
echo "Checking failed SSH login attempts..."
failed_logins=$(grep "Failed password" $auth_log)
if [ ! -z "$failed_logins" ]; then
    # Replace 'your_email@example.com' with your actual email address
    echo -e "Subject: Unauthorized SSH Login Attempts\n\n$failed_logins" | sendmail your_email@example.com
    echo "Security alert sent: Unauthorized SSH login attempt detected."
fi
```

- It develop and run basic configure systems
- It includes automating the script by scheduled task.

Here we use

- Login attempts
- Running services
- Disk usage
- Inactive users

Mitigation - Automating monitoring with cron:

1)

```
(kali@kali)-[~]  
$ crontab -e
```

Accessing the "crontab" configuration to check security

2)

```
(kali@kali)-[~]  
$ * * * * /home/kali/Desktop/security_audit.sh
```

* we use `* * * * /home/kali/Desktop/security_audit.sh` to automate monitoring with cron

*It schedules the script to run Hourly ensuring consistent monitoring.

3)

```
(kali@kali)-[~]  
$ sudo apt install mailutils  
mailutils is already the newest version (1:3.18-1).  
Summary:  
  Upgrading: 0, Installing: 0, Removing: 0, Not Upgrading: 1549
```

We should ensure to install "email service" to unauthorized SSH