Name	Scheduling : Cron Practice
URL	https://attackdefense.com/challengedetails?cid=1806
Type	Beginner Skills : Linux For Pentesters

Important Note: This document illustrates all the important steps required to complete this lab. This is by no means a comprehensive step-by-step solution for this exercise. This is only provided as a reference to various commands needed to complete this exercise and for your further research on this topic. Also, note that the IP addresses and domain names might be different in your lab.

Objective: Perform the following activities:

- 1. Create a cron job to delete all log files from the home directory of student user!
- 2. Create a cron job to create a text file in /tmp/routine.log and write the current timestamp to it every 2 minutes.
- 3. Create a cron job to add /tmp/routine.log to .tar archive, move this archive to /home/student/ and delete the original log file after every 10 minutes.

Solution:

Objective 1: Create a cron job to delete all log files from the home directory of student user!

Step 1: Check the home directory of the student user.

Command: Is -I

```
student@attackdefense:~$ ls -l
total 12
-rw-r--r-- 1 student student 46 Apr   4 12:12 noisy-6214784.22.log
-rw-r--r-- 1 student student 46 Apr   4 12:13 noisy-6214844.23.log
-rw-r--r-- 1 student student 46 Apr   4 12:14 noisy-6214904.24.log
student@attackdefense:~$
```

Step 2: Check the content of one of the log files.

Command: cat noisy-6214784.22.log

```
student@attackdefense:~$ cat noisy-6214784.22.log
log generated on Sat Apr  4 12:12:01 UTC 2020
student@attackdefense:~$
```

Step 3: Edit crontab entries

Command: crontab -e

```
student@attackdefense:~$ crontab -e
no crontab for student - using an empty one
crontab: installing new crontab
student@attackdefense:~$
```

Add the following line at the end of file

Line: */01 * * * * rm /home/student/*.log

```
# For more information see the manual pages of crontab(5) and cron(8)
#
# m h dom mon dow command
*/01 * * * * rm /home/student/*.log
~
~
~
~
"crontab.BX1DMy/crontab" [Modified] 23 lines --100%--
```

Step 4: The cron job will start running and deleting the log files from home directory of student user. This can be observed by checking the contents of the directory at different times.

Commands:

date

Is -I date Is -I

```
student@attackdefense:~$ date
Sat Apr 4 12:18:14 UTC 2020
student@attackdefense:~$
student@attackdefense:~$ ls -1
total 4
-rw-r--r-- 1 student student 46 Apr 4 12:18 noisy-6215144.28.log
student@attackdefense:~$
student@attackdefense:~$ date
Sat Apr 4 12:19:11 UTC 2020
student@attackdefense:~$ ls -1
total 4
-rw-r--r-- 1 student student 46 Apr 4 12:19 noisy-6215204.29.log
student@attackdefense:~$
```

Objective 1 is complete!

Objective 2: Create a cron job to create a text file in /tmp/routine.log and write current timestamp to it every 2 minutes.

Step 1: Edit crontab entries

Command: crontab -e

Add the following line at the end of file

Line: */02 * * * * date >> /tmp/routine.log

```
#
# For more information see the manual pages of crontab(5) and cron(8)
#
# m h dom mon dow command
*/01 * * * * rm /home/student/*.log
*/02 * * * * date >> /tmp/routine.log
~
~
~
"/tmp/crontab.FL3Mph/crontab" 24L, 962C
```

Step 2: Wait for a few minutes and check if the file is created. Also, check the contents of the file.

Command: cat /tmp/routine.log

```
student@attackdefense:~$ cat /tmp/routine.log
Wed Apr 8 12:28:01 UTC 2020
Wed Apr 8 12:30:01 UTC 2020
Wed Apr 8 12:32:01 UTC 2020
Wed Apr 8 12:34:01 UTC 2020
student@attackdefense:~$
```

Objective 2 is complete.

Objective 3: Create a cron job to add /tmp/routine.log to .tar archive, move this archive to /home/student/ and delete the original log file after every 10 minutes.

Step 1: Edit crontab entries

Command: crontab -e

Add the following line at the end of file

Line: */10 * * * * cd && tar -cvf archive.tar --absolute-names /tmp/routine.log && rm /tmp/routine.log

```
# For more information see the manual pages of crontab(5) and cron(8)
#
# m h dom mon dow command
*/01 * * * * rm /home/student/*.log
*/02 * * * * date >> /tmp/routine.log
*/10 * * * * cd && tar -cvf archive.tar --absolute-names /tmp/routine.log && rm /tmp/routine.log
~
~
```

Step 2: Wait for 10 minutes and check the /home/student/ directory.

"/tmp/crontab.fef9AX/crontab" 25L, 1060C

Command: Is -I

```
student@attackdefense:~$ ls -1
total 16
-rw-rw-r-- 1 student student 10240 Apr 8 13:40 archive.tar
-rw-r--r-- 1 student student 46 Apr 8 13:49 noisy-6566203.59.log
student@attackdefense:~$
```

Objective 3 is complete.