

Linux User Management Task

- 1) Create user "nikhil" with home directory set as "/home/nikhil"
- a) nikhil user should have "/bin/sh" shell for his environment
- b) His password should expire in 9 days and 2 days before password expiry, he should get warning. User account must expire in 1 month from creation date
- c) Give him root privileges to start/stop cron daemon.

```
ubuntu@ip-172-31-24-49:~$ sudo useradd -m -d /home/nikhil -s /bin/sh nikhil
ubuntu@ip-172-31-24-49:~$ getent passwd nikhil
nikhil:x:1004:1006:./home/nikhil:/bin/sh
```

```
ubuntu@ip-172-31-24-49:~$ sudo chage -M 9 nikhil
ubuntu@ip-172-31-24-49:~$ sudo chage -W 2 nikhil
ubuntu@ip-172-31-24-49:~$ sudo chage -E $(date -d "30 days" +%Y-%m-%d) nikhil
ubuntu@ip-172-31-24-49:~$ sudo chage -l nikhil
Last password change                : Oct 04, 2024
Password expires                    : Oct 13, 2024
Password inactive                   : never
Account expires                     : Nov 03, 2024
Minimum number of days between password change : 0
Maximum number of days between password change : 9
Number of days of warning before password expires : 2
```

```
GNU nano 7.2 /etc/sudoers.tmp *
nikhil ALL=(ALL) NOPASSWD: /usr/sbin/service cron start, /usr/sbin/service cron stop
# This file MUST be edited with the 'visudo' command as root.
#
# Please consider adding local content in /etc/sudoers.d/ instead of
# directly modifying this file.
#
# See the man page for details on how to write a sudoers file.
#
Defaults        env_reset
Defaults        mail_badpass
Defaults        secure_path="/usr/local/sbin:/usr/local/bin:/usr/sbin:/usr/bin:/sbin:/bin:/snap/bin"

# This fixes CVE-2005-4890 and possibly breaks some versions of kdesu
# (#1011624, https://bugs.kde.org/show_bug.cgi?id=452532)
Defaults        use_pty

# This preserves proxy settings from user environments of root
# equivalent users (group sudo)
#Defaults:%sudo env_keep += "http_proxy https_proxy ftp_proxy all_proxy no_proxy"

# This allows running arbitrary commands, but so does ALL, and it means
# different sudoers have their choice of editor respected.
#Defaults:%sudo env_keep += "EDITOR"

^G Help      ^O Write Out ^W Where Is  ^K Cut       ^T Execute   ^C Location  M-U Undo
^X Exit      ^R Read File ^\ Replace   ^U Paste     ^J Justify   ^_ Go To Line M-E Redo
```

```
ubuntu@ip-172-31-24-49:~$ sudo visudo
ubuntu@ip-172-31-24-49:~$ su nikhil
Password:
$ sudo service cron start
$ systemctl status cron
● cron.service - Regular background program processing daemon
   Loaded: loaded (/usr/lib/systemd/system/cron.service; enabled; preset: enabled)
   Active: active (running) since Fri 2024-10-04 05:40:25 UTC; 1h 20min ago
     Docs: man:cron(8)
  Main PID: 575 (cron)
    Tasks: 1 (limit: 1130)
   Memory: 500.0K (peak: 3.0M)
      CPU: 67ms
   CGroup: /system.slice/cron.service
           └─575 /usr/sbin/cron -f -P

Warning: some journal files were not opened due to insufficient permissions.
$ |
```

```
$ sudo service cron stop
$ systemctl status cron
○ cron.service - Regular background program processing daemon
   Loaded: loaded (/usr/lib/systemd/system/cron.service; enabled; preset: enabled)
   Active: inactive (dead) since Fri 2024-10-04 07:01:09 UTC; 18s ago
 Duration: 1h 20min 43.826s
     Docs: man:cron(8)
  Process: 575 ExecStart=/usr/sbin/cron -f -P $EXTRA_OPTS (code=killed, signal=TERM)
 Main PID: 575 (code=killed, signal=TERM)
      CPU: 67ms

Warning: some journal files were not opened due to insufficient permissions.
$ |
```

2) Inside folder "/", create new home directory as "nikhil" (/nikhil) and setup this folder as a home directory for user "nikhil"

```
ubuntu@ip-172-31-24-49:/$ sudo mkdir /nikhil
ubuntu@ip-172-31-24-49:/$ sudo chown nikhil:nikhil /nikhil
ubuntu@ip-172-31-24-49:/$ ls -ld /nikhil
drwxr-xr-x 2 nikhil nikhil 4096 Oct  4 07:03 /nikhil
ubuntu@ip-172-31-24-49:/$ |
ubuntu@ip-172-31-24-49:/$ sudo chmod 700 /nikhil
ubuntu@ip-172-31-24-49:/$ ls -ld nikhil
drwx----- 2 nikhil nikhil 4096 Oct  4 07:03 nikhil
ubuntu@ip-172-31-24-49:/$ |
ubuntu@ip-172-31-24-49:/$ sudo usermod -d /nikhil nikhil
ubuntu@ip-172-31-24-49:/$ su nikhil
Password:
$ cd ~
$ pwd
/nikhil
$ |
```