

Setting Permissions on Sensitive Files

1. `ls -l /etc/shadow sudo chmod 600 /etc/shadow`
2. `ls -l /etc/gshadow sudo chmod 600 /etc/gshadow`
3. `ls -l /etc/group`
4. `ls -l /etc/passwd`

Creating User Accounts

1. `sudo useradd sam, joe, amy, sara, and admin`
2. `usermod -aG sudo admin`

Creating User Groups & Collaborative Folder

1. `sudo groupadd engineers`
2. `sudo usermod -aG engineers sam, joe, amy, sara`
3. `sudo mkdir /home/engineers`
4. `sudo chgrp -R engineers /home/engineers`

Lynis Auditing & Reporting

1. `sudo apt-get install lynis`
2. `man lynis`
3. `sudo lynis audit system`

Lynis security scan details:

Hardening index : 60 [#####]
Tests performed : 241
Plugins enabled : 1

Components:

- Firewall [V]
- Malware scanner [V]

Lynis Modules:

- Compliance Status [?]
- Security Audit [V]
- Vulnerability Scan [V]

Files:

- Test and debug information : /var/log/lynis.log
- Report data : /var/log/lynis-report.dat

Notice: Lynis update available

Current version : 262 Latest version : 303

Lynis 2.6.2

Auditing, system hardening, and compliance for UNIX-based systems
(Linux, macOS, BSD, and others)

2007-2018, CISofy - <https://cisofy.com/lynis/>

Enterprise support available (compliance, plugins, interface and tools)

4.

CHKROOTKIT

1. sudo apt install chkrootkit -y
2. man chkrootkit
3. chkrootkit -x

```

! gdm 2075 tty1 /usr/lib/gnome-settings-daemon/gsd-datetime
! gdm 2080 tty1 /usr/lib/gnome-settings-daemon/gsd-housekeeping
! gdm 2081 tty1 /usr/lib/gnome-settings-daemon/gsd-keyboard
! gdm 2085 tty1 /usr/lib/gnome-settings-daemon/gsd-media-keys
! gdm 2088 tty1 /usr/lib/gnome-settings-daemon/gsd-mouse
! gdm 2090 tty1 /usr/lib/gnome-settings-daemon/gsd-power
! gdm 2091 tty1 /usr/lib/gnome-settings-daemon/gsd-print-notifications
! gdm 2094 tty1 /usr/lib/gnome-settings-daemon/gsd-rfkill
! gdm 2097 tty1 /usr/lib/gnome-settings-daemon/gsd-screensaver-proxy
! Help 2102 tty1 /usr/lib/gnome-settings-daemon/gsd-sharing
! gdm 2113 tty1 /usr/lib/gnome-settings-daemon/gsd-smartcard
! gdm 2121 tty1 /usr/lib/gnome-settings-daemon/gsd-sound
! gdm 2123 tty1 /usr/lib/gnome-settings-daemon/gsd-wacom
! gdm 2061 tty1 /usr/lib/gnome-settings-daemon/gsd-xsettings
! gdm 2015 tty1 ibus-daemon --xim --panel disable
! gdm 2025 tty1 /usr/lib/ibus/ibus-dconf
! gdm 2193 tty1 /usr/lib/ibus/ibus-engine-simple
! gdm 2028 tty1 /usr/lib/ibus/ibus-x11 --kill-daemon
! sysadmin 2285 tty2 /usr/lib/xorg/Xorg vt2 -displayfd 3 -auth /run/user/1000/gdm/Xauthority -background none -noreset -keeptty -verbose 3
! sysadmin 2283 tty2 /usr/lib/gdm3/gdm-x-session --run-script env GNOME_SHELL_SESSION_MODE=ubuntu gnome-session --session=ubuntu
! sysadmin 2297 tty2 /usr/lib/gnome-session/gnome-session-binary --session=ubuntu
! sysadmin 2470 tty2 /usr/bin/gnome-shell
! sysadmin 2952 tty2 /usr/bin/gnome-software --gapplication-service
! sysadmin 2629 tty2 /usr/lib/gnome-settings-daemon/gsd-a11y-settings
! sysadmin 2630 tty2 /usr/lib/gnome-settings-daemon/gsd-clipboard
! sysadmin 2625 tty2 /usr/lib/gnome-settings-daemon/gsd-color
! sysadmin 2640 tty2 /usr/lib/gnome-settings-daemon/gsd-datetime
! sysadmin 2709 tty2 /usr/lib/gnome-disk-utility/gsd-disk-utility-notify
! sysadmin 2642 tty2 /usr/lib/gnome-settings-daemon/gsd-housekeeping
! sysadmin 2644 tty2 /usr/lib/gnome-settings-daemon/gsd-keyboard
! sysadmin 2651 tty2 /usr/lib/gnome-settings-daemon/gsd-media-keys
! sysadmin 2594 tty2 /usr/lib/gnome-settings-daemon/gsd-mouse
! sysadmin 2596 tty2 /usr/lib/gnome-settings-daemon/gsd-power
! sysadmin 2598 tty2 /usr/lib/gnome-settings-daemon/gsd-print-notifications
! sysadmin 2609 tty2 /usr/lib/gnome-settings-daemon/gsd-printer
! sysadmin 2601 tty2 /usr/lib/gnome-settings-daemon/gsd-rfkill
! sysadmin 2602 tty2 /usr/lib/gnome-settings-daemon/gsd-screensaver-proxy
! sysadmin 2604 tty2 /usr/lib/gnome-settings-daemon/gsd-sharing
! sysadmin 2609 tty2 /usr/lib/gnome-settings-daemon/gsd-smartcard
! sysadmin 2611 tty2 /usr/lib/gnome-settings-daemon/gsd-sound
! sysadmin 2613 tty2 /usr/lib/gnome-settings-daemon/gsd-wacom
! sysadmin 2614 tty2 /usr/lib/gnome-settings-daemon/gsd-xsettings
! sysadmin 2513 tty2 ibus-daemon --xim --panel disable
! sysadmin 2517 tty2 /usr/lib/ibus/ibus-dconf
! sysadmin 2810 tty2 /usr/lib/ibus/ibus-engine-simple
! sysadmin 2519 tty2 /usr/lib/ibus/ibus-x11 --kill-daemon
! sysadmin 2704 tty2 nautilus-desktop
! root 11641 pts/0 /bin/sh /usr/sbin/chkrootkit -x
! root 12079 pts/0 ./chkutmp
! root 12081 pts/0 ps axk tty,ruser,args -o tty,pid,ruser,args
! root 12080 pts/0 sh -c ps axk "tty,ruser,args" -o "tty,pid,ruser,args"
! root 11640 pts/0 sudo chkrootkit -x
! sysadmin 3085 pts/0 bash
chkutmp: nothing deleted
not tested

```

4.