

## Relatório Auditoria de Segurança



```
[ Lynis 3.0.8 ]
Lynis comes with ABSOLUTELY NO WARRANTY. This is free software, and you are
  welcome to redistribute it under the terms of the GNU General Public License.
  See the LICENSE file for details about using this software.
  2007-2021, CISOfy - https
  Enterprise support available (compliance, plugins, interface and tools)
[+] Initializing program
- Detecting OS... [ DONE ]
- Checking profiles... [ DONE ]
  Program version: 3.0.8
Operating system: Linux
Operating system name: openSU
                                3.0.8
                                 openSUSE
  Operating system name: openSU:

Operating system version: 15.3

Kernel version: 5.3.18

Hardware platform: x86_64

Hostname:
  Hostname:
                                no-hostname
  Profiles:
                                 /etc/lynis/default.prf
                              /var/log/lynis.log
 Report file: /var/log/lynis.log
Report version: 1.0
Plugin directory: /usr/share/lymis/sl
  Log file:
                              B.E SecureIT
  Auditor:
  Language:
                           en
all
  Test category:
  Test group:
- Program update status... [ SKIPPED ]
[+] System tools
- Scanning available tools...
- Checking system binaries...
[+] Plugins (phase 1)
Note: plugins have more extensive tests and may take several minutes to complete
- Plugins enabled [ NONE ]
[+] Boot and services
- Service Manager [ systemd ]
- Checking UEFI boot [ DISABLED ]
- Checking presence GRUB2 [ FOUND ]
- Checking for password protection [ NONE ]
- Check running services (systemctl) [ DONE ]
Result: found 15 running services
- Check enabled services at boot (systemctl) [ DONE ]
Result: found 12 enabled services
- Check startup files (permissions) [ OK ]
- Running 'systemd-analyze security'
- after-local.service: [ UNSAFE ]
- auditd.service: [ UNSAFE ]
- cron.service: [ UNSAFE ]
- dbus.service: [ UNSAFE ]
- detect-part-label-duplicates.service: [ UNSAFE ]
- dm-event.service: [ UNSAFE ]
- emergency.service: [ UNSAFE ]
- getty@ttyl.service: [ UNSAFE ]
- haveged.service: [ MEDIUM ]
- lvm2-lvmpolld.service: [ UNSAFE ]
- rc-local.service: [ UNSAFE ]
- rescue.service: [ UNSAFE ]
- sshd.service: [ UNSAFE ]
- systemd-ask-password-console.service: [ UNSAFE ]
systemd-initctl.service: [ UNSAFE ]systemd-journald.service: [ PROTECTED ]
```

- systemd-logind.service: [ PROTECTED ]
- systemd-rfkill.service: [ UNSAFE ]
- systemd-udevd.service: [ MEDIUM ]
- user@1000.service: [ UNSAFE ]

```
vboxadd-service.service:
 wickedd-auto4.service: [ UNSAFE
 wickedd-dhcp4.service: [ UNSAFE wickedd-dhcp6.service: [ UNSAFE
- wickedd-nanny.service: [ UNS
- wickedd.service: [ UNSAFE ]
[+] Kernel
- Checking default runlevel [ runlevel 3 ]
 Checking CPU support (NX/PAE)
CPU support: PAE and/or NoeXecute supported [ FOUND ]
- Checking kernel version and release [ DONE ]
 Checking kernel type [ DONE ]
  Checking loaded kernel modules [ DONE ]
Found 58 active modules
  Checking Linux kernel configuration file [ FOUND ]
 Checking default I/O kernel scheduler [ NOT FOUND ]
 Checking core dumps configuration
 configuration in systemd conf files [ DEFAULT ]
 configuration in /etc/profile [ DEFAULT ]
  'hard' configuration in /etc/security/limits.conf [ DEFAULT ] 'soft' configuration in /etc/security/limits.conf [ DEFAULT ]
 Checking setuid core dumps configuration [ DISABLED ]
- Check if reboot is needed [ NO ]
[+] Memory and Processes
- Checking /proc/meminfo [ FOUND ]
 Searching for dead/zombie processes [ NOT FOUND ]
  Searching for IO waiting processes [ NOT FOUND ]
 Search prelink tooling [ NOT FOUND ]
[+] Users, Groups and Authentication
- Administrator accounts [ OK ]
 Unique UIDs [ OK ]
  Consistency of group files (grpck) [ OK ]
 Unique group IDs [ OK ]
 Unique group names [ OK ]
  Password file consistency [ OK ]
  Password hashing methods [ SUGGESTION ]
  Checking password hashing rounds [ DISABLED ]
 Query system users (non daemons) [ DONE ]
 NIS+ authentication support [ NOT ENABLED ]
 NIS authentication support [ NOT ENABLED ]
  Sudoers file(s) [ FOUND ]
  Permissions for directory: /etc/sudoers.d [ OK ]
 Permissions for: /etc/sudoers [ OK ]
  Permissions for: /etc/sudoers.d/vagrant [ OK ]
  PAM password strength tools [ OK ]
  PAM configuration file (pam.conf) [ NOT FOUND ]
  PAM configuration files (pam.d) [ FOUND ]
 PAM modules [ FOUND ]
LDAP module in PAM [ NOT FOUND ]
 Accounts without expire date [ SUGGESTION ]
 Accounts without password [ OK ]
 Locked accounts [ OK ]
  Checking user password aging (minimum) [ DISABLED ]
- User password aging (maximum) [ DISABLED ]
- Checking expired passwords [ \overline{\mathbf{OK}} ]
 Determining default umask
- umask (/etc/profile) [ NOT FOUND ]
- umask (/etc/login.defs) [ SUGGESTION ]
 LDAP authentication support [ NOT ENABLED ]
 Logging failed login attempts [ DISABLED ]
[+] Shells
  Checking shells from /etc/shells
Result: found 24 shells (valid shells: 6).
  Session timeout settings/tools [ NONE ]
- Checking default umask values
 Checking default umask in /etc/bash.bashrc [ NONE ]
- Checking default umask in /etc/csh.cshrc [ NONE ]
- Checking default umask in /etc/profile [ NONE ]
[+] File systems
- Checking mount points
 Checking /home mount point [ SUGGESTION ]
 Checking /tmp mount point [ SUGGESTION ] Checking /var mount point [ SUGGESTION ]
```

```
Query swap partitions (fstab) [ NONE ]
  Testing swap partitions [ OK ]
  Testing /proc mount (hidepid) [ SUGGESTION ]
 Checking for old files in /tmp [ OK ]
- Checking /tmp sticky bit [ OK ]
- Checking /var/tmp sticky bit [ OK ]
- ACL support root file system [ ENABLED ]
- Mount options of / [ OK ]
- Mount options of /dev [ HARDENED ]
- Mount options of /dev/shm [ PARTIALLY HARDENED ]
 Mount options of /run [ HARDENED ]
  Total without nodev:5 noexec:7 nosuid:4 ro or noexec (W^X): 7 of total 35
- Disable kernel support of some filesystems
[+] USB Devices
- Checking usb-storage driver (modprobe config) [ NOT DISABLED ]
- Checking USBGuard [ NOT FOUND ]
[+] Storage
- Checking firewire ohci driver (modprobe config) [ NOT DISABLED ]
[+] NFS
- Check running NFS daemon [ NOT FOUND ]
[+] Name services
- Checking search domains [ FOUND ]
 Searching DNS domain name [ UNKNOWN ]
- Checking /etc/hosts
- Duplicate entries in hosts file [ NONE ]
- Presence of configured hostname in /etc/hosts [ NOT FOUND ]
- Hostname mapped to localhost [ NOT FOUND ]
- Localhost mapping to IP address [ OK ]
[+] Ports and packages
- Searching package managers
- Searching RPM package manager [ FOUND ]
- Querying RPM package manager
  [WARNING]: Test PKGS-7328 had a long execution: 10.871059 seconds
- Using Zypper to find vulnerable packages [ NONE ]
- Checking package audit tool [ INSTALLED ]
Found: zypper
[+] Networking
- Checking IPv6 configuration [ ENABLED ]
Configuration method [ AUTO ]
IPv6 only [ NO ]
- Checking configured nameservers
 Testing nameservers
Nameserver: 10.0.2.3 [ SKIPPED ]
Nameserver: 2804:14d:1:0:181:213:132:2 [ SKIPPED ] Nameserver: 2804:14d:1:0:181:213:132:3 [ SKIPPED ]
- Minimal of 2 responsive nameservers [ SKIPPED ]
- Getting listening ports (TCP/UDP) [ DONE ]
Checking promiscuous interfaces [ OK ]Checking status DHCP client
- Checking for ARP monitoring software [ NOT FOUND ]
- Uncommon network protocols [ 0 ]
[+] Printers and Spools
- Checking cups daemon [ NOT FOUND ]
- Checking lp daemon [ NOT RUNNING ]
[+] Software: e-mail and messaging
[+] Software: firewalls
- Checking iptables kernel module [ NOT FOUND ]
- Checking host based firewall
[+] Software: webserver
- Checking Apache [ NOT FOUND ]
- Checking nginx [ NOT FOUND ]
```

```
[+] SSH Support
- Checking running SSH daemon [ FOUND ]
  Searching SSH configuration [ FOUND ]
- OpenSSH option: AllowTcpForwarding [ SUGGESTION ]
 OpenSSH option: ClientAliveCountMax [ SUGGESTION ] OpenSSH option: ClientAliveInterval [ OK ]
 OpenSSH option: Compression [ SUGGESTION ]
 OpenSSH option: FingerprintHash [ OK ]
  OpenSSH option: GatewayPorts [ OK ]
 OpenSSH option: IgnoreRhosts [ OK ]
 OpenSSH option: LoginGraceTime [ OK ]
 OpenSSH option: LogLevel [ SUGGESTION ]
 OpenSSH option: MaxAuthTries [ SUGGESTION ]
- OpenSSH option: MaxSessions [ SUGGESTION ]
 OpenSSH option: PermitRootLogin [ SUGGESTION ]
 OpenSSH option: PermitUserEnvironment [ OK ]
 OpenSSH option: PermitTunnel [ OK ]
- OpenSSH option: Port [ SUGGESTION ]
- OpenSSH option: PrintLastLog [ OK ]
- OpenSSH option: StrictModes [ OK ]
- OpenSSH option: TCPKeepAlive [ SUGGESTION ]
- OpenSSH option: UseDNS [ OK ]
- OpenSSH option: X11Forwarding [ SUGGESTION ]
- OpenSSH option: AllowAgentForwarding [ SUGGESTION ]
 OpenSSH option: AllowUsers [ NOT FOUND ]
- OpenSSH option: AllowGroups [ NOT FOUND ]
[+] SNMP Support
- Checking running SNMP daemon [ NOT FOUND ]
[+] Databases
No database engines found
[+] LDAP Services
- Checking OpenLDAP instance [ NOT FOUND ]
[+] PHP
- Checking PHP [ NOT FOUND ]
[+] Squid Support
- Checking running Squid daemon [ NOT FOUND ]
[+] Logging and files
- Checking for a running log daemon [ OK ]
- Checking Syslog-NG status [ NOT FOUND ]
- Checking systemd journal status [ FOUND ]
- Checking Metalog status [ NOT FOUND ]
- Checking RSyslog status [ NOT FOUND ]
- Checking RFC 3195 daemon status [ NOT FOUND ]
- Checking minilogd instances [ NOT FOUND ]
- Checking logrotate presence [ OK ]
- Checking remote logging [ NOT ENABLED ]
- Checking log directories (static list) [ DONE ]
- Checking open log files [ SKIPPED ]
[+] Insecure services
- Installed inetd package [ NOT FOUND ]
- Installed xinetd package [ OK ]
- xinetd status
- Installed rsh client package [ OK ]
 Installed rsh server package [ OK ]
- Installed telnet client package [ OK ]
- Installed telnet server package [ NOT FOUND ]
- Checking NIS client installation [ OK ]
- Checking NIS server installation [ OK ]
- Checking TFTP client installation [ OK ]
- Checking TFTP server installation [ OK ]
[+] Banners and identification
- /etc/issue [ NOT FOUND ]
- /etc/issue.net [ NOT FOUND ]
[+] Scheduled tasks
```

```
Checking crontab and cronjob files [ DONE ]
[+] Accounting
- Checking accounting information [ NOT FOUND ]
- Checking sysstat accounting data [ NOT FOUND ] - Checking auditd [ ENABLED ]
- Checking audit rules [ OK ]
- Checking audit configuration file [ \mathbf{OK} ]
- Checking auditd log file [ FOUND ]
[+] Time and Synchronization
[+] Cryptography
- Checking for expired SSL certificates [0/1] [ \ensuremath{\mathsf{NONE}} ]
- Kernel entropy is sufficient [ YES ] - HW RNG & rngd [ NO ]
- SW prng [ YES ]
- MOR variable not found [ WEAK ]
[+] Virtualization
[+] Containers
[+] Security frameworks
- Checking presence AppArmor [ NOT FOUND ]
- Checking presence SELinux [ NOT FOUND ]
- Checking presence TOMOYO Linux [ NOT FOUND ]
- Checking presence grsecurity [ NOT FOUND ]
- Checking for implemented MAC framework [ NONE ]
[+] Software: file integrity
- Checking file integrity tools
- Checking presence integrity tool [ NOT FOUND ]
[+] Software: System tooling
- Checking automation tooling
- Automation tooling [ NOT FOUND ]
- Checking for IDS/IPS tooling [ NONE ]
[+] Software: Malware
- Malware software components [ NOT FOUND ]
[+] File Permissions
- Starting file permissions check
File: /boot/grub2/grub.cfg [ OK ]
File: /etc/cron.deny [ OK ]
File: /etc/crontab [ OK ]
File: /etc/group [ OK ]
File: /etc/group- [ OK ]
File: /etc/hosts.allow [ OK ]
File: /etc/hosts.deny [ OK ]
File: /etc/motd [ OK ]
File: /etc/passwd [ OK ]
File: /etc/passwd- [ OK ]
File: /etc/ssh/sshd_config [ SUGGESTION ]
File: /etc/hosts.equiv [ OK ]
Directory: /etc/cron.d [ SUGGESTION ]
Directory: /etc/cron.daily [ SUGGESTION ]
Directory: /etc/cron.hourly [ SUGGESTION ]
Directory: /etc/cron.weekly [ SUGGESTION ]
Directory: /etc/cron.monthly [ SUGGESTION ]
[+] Home directories
- Permissions of home directories [ WARNING ]
- Ownership of home directories [ \mathbf{OK} ]
- Checking shell history files [ OK ]
[+] Kernel Hardening
- Comparing sysctl key pairs with scan profile
- dev.tty.ldisc_autoload (exp: 0) [ DIFFERENT ]
```

```
fs.protected fifos (exp: 2) [ DI
  fs.protected_hardlinks (exp: 1) [ OK ]
  fs.protected_regular (exp: 2) [ DIFFER
fs.protected_symlinks (exp: 1) [ OK ]
  fs.suid dumpable (exp: 0) [ OK ]
  kernel.core_uses_pid (exp: 1) [ DIFFERENT ]
  kernel.ctrl-alt-del (exp: 0) [ OK ] kernel.dmesg_restrict (exp: 1) [ OK ]
  kernel.kptr_restrict (exp: 2) [ DIFFERENT ]
kernel.modules_disabled (exp: 1) [ DIFFERENT ]
kernel.perf_event_paranoid (exp: 3) [ DIFFERENT ]
  kernel.randomize_va_space (exp: 2) [ OK ]
  kernel.suid_dumpable (exp: 0) [ OK ]
  kernel.sysrq (exp: 0) [ DIF
  kernel.unprivileged bpf disabled (exp: 1) [ DIFFERENT ]
  net.core.bpf_jit_harden (exp: 2) [ DIFFERENT ]
  net.ipv4.conf.all.accept redirects (exp: 0) [ OK ]
  net.ipv4.conf.all.accept_source_route (exp: 0) [ OK ]
- net.ipv4.conf.all.bootp_relay (exp: 0) [ OK ]
- net.ipv4.conf.all.forwarding (exp: 0) [ OK ]
- net.ipv4.conf.all.log_martians (exp: 1) [ DIFFERENT ]
- net.ipv4.conf.all.mc_forwarding (exp: 0) [ OK ]
- net.ipv4.conf.all.proxy_arp (exp: 0) [ OK ]
- net.ipv4.conf.all.rp_filter (exp: 1) [ DIFFE
- net.ipv4.conf.all.send redirects (exp: 0) [ DIF
net.ipv4.conf.all.send_redirects (exp: 0) [ DIFFERENT ]net.ipv4.conf.default.accept_redirects (exp: 0) [ OK ]net.ipv4.conf.default.accept_source_route (exp: 0) [ OK
- net.ipv4.conf.default.log_martians (exp: 1) [ DIFFE
- net.ipv4.icmp_echo_ignore_broadcasts (exp: 1) [ OK ]
- net.ipv4.icmp_ignore_bogus_error_responses (exp: 1) [ OK ]
- net.ipv4.tcp_syncookies (exp: 1) [ OK ]
- net.ipv4.tcp_timestamps (exp: 0 1) [ OK ]
- net.ipv6.conf.all.accept_redirects (exp: 0) [ OK ]
- net.ipv6.conf.all.accept_source_route (exp: 0) [ OK ]
- net.ipv6.conf.default.accept redirects (exp: 0) [ OK ]
- net.ipv6.conf.default.accept_source_route (exp: 0) [ OK ]
[+] Hardening
  Installed compiler(s) [ NOT FOUND ]

    Installed malware scanner [ NOT FOUND ]
    Non-native binary formats [ NOT FOUND ]

[+] Custom tests
- Running custom tests... [ NONE ]
[+] Plugins (phase 2)
  -[ Lynis 3.0.8 Results ]-
  Great, no warnings
  Suggestions (42):
  * This release is more than 4 months old. Check the website or GitHub to see if there is an update available. [LYNIS]
  * Set a password on GRUB boot loader to prevent altering boot configuration (e.g. boot in single user mode without
password) [B00T-5122]
  * Consider hardening system services [BOOT-5264]
     - Details : Run '/usr/bin/systemd-analyze security SERVICE' for each service
  * If not required, consider explicit disabling of core dump in /etc/security/limits.conf file [KRNL-5820]
  * Check PAM configuration, add rounds if applicable and expire passwords to encrypt with new values [AUTH-9229]
  * Configure password hashing rounds in /etc/login.defs [AUTH-9230]
  * When possible set expire dates for all password protected accounts [AUTH-9282]
```

\* Configure minimum password age in /etc/login.defs [AUTH-9286]

- \* Configure maximum password age in /etc/login.defs [AUTH-9286]
- \* Default umask in /etc/login.defs could be more strict like 027 [AUTH-9328]
- \* To decrease the impact of a full /home file system, place /home on a separate partition [FILE-6310]
- \* To decrease the impact of a full /tmp file system, place /tmp on a separate partition [FILE-6310]
- \* To decrease the impact of a full /var file system, place /var on a separate partition [FILE-6310]
- \* Disable drivers like USB storage when not used, to prevent unauthorized storage or data theft [USB-1000]
- \* Disable drivers like firewire storage when not used, to prevent unauthorized storage or data theft [STRG-1846]
- \* Check DNS configuration for the dns domain name [NAME-4028]
- \* Add the IP name and FQDN to /etc/hosts for proper name resolving [NAME-4404]
- \* Determine if protocol 'dccp' is really needed on this system [NETW-3200]
- \* Determine if protocol 'sctp' is really needed on this system [NETW-3200]
- \* Determine if protocol 'rds' is really needed on this system [NETW-3200]
- \* Determine if protocol 'tipc' is really needed on this system [NETW-3200]
- \* Configure a firewall/packet filter to filter incoming and outgoing traffic [FIRE-4590]
- \* Consider hardening SSH configuration [SSH-7408]
  - Details : AllowTcpForwarding (set YES to NO)
- \* Consider hardening SSH configuration [SSH-7408]
  - Details : ClientAliveCountMax (set 3 to 2)
- \* Consider hardening SSH configuration [SSH-7408]
  - Details : Compression (set YES to NO)
- \* Consider hardening SSH configuration [SSH-7408]
- Details : LogLevel (set INFO to VERBOSE)
- \* Consider hardening SSH configuration [SSH-7408]
- Details : MaxAuthTries (set 6 to 3)
- \* Consider hardening SSH configuration [SSH-7408]
  - Details : MaxSessions (set 10 to 2)
- \* Consider hardening SSH configuration [SSH-7408]
  - Details : PermitRootLogin (set YES to (FORCED-COMMANDS-ONLY|NO|PROHIBIT-PASSWORD|WITHOUT-PASSWORD))
- \* Consider hardening SSH configuration [SSH-7408]
  - Details : Port (set 22 to )
- \* Consider hardening SSH configuration [SSH-7408] - Details : TCPKeepAlive (set YES to NO)
- \* Consider hardening SSH configuration [SSH-7408]
  - Details : X11Forwarding (set YES to NO)

```
Consider hardening SSH configuration [SSH-7408]

    Details : AllowAgentForwarding (set YES to NO)

 * Enable logging to an external logging host for archiving purposes and additional protection [LOGG-2154]
 * Enable process accounting [ACCT-9622]
 * Enable sysstat to collect accounting (no results) [ACCT-9626]
 * Install a file integrity tool to monitor changes to critical and sensitive files [FINT-4350]
 * Determine if automation tools are present for system management [TOOL-5002]
 * Consider restricting file permissions [FILE-7524]
   - Details : See screen output or log file
   - Solution : Use chmod to change file permissions
 * Double check the permissions of home directories as some might be not strict enough. [HOME-9304]
 * One or more sysctl values differ from the scan profile and could be tweaked [KRNL-6000]
   - Solution : Change sysctl value or disable test (skip-test=KRNL-6000:<sysctl-key>)
 * Harden the system by installing at least one malware scanner, to perform periodic file system scans [HRDN-7230]
   - Solution : Install a tool like rkhunter, chkrootkit, OSSEC
 -----
 - Show details of a test (lynis show details TEST-ID)
   Check the logfile for all details (less /var/log/lynis.log)
   Read security controls texts (http:
 - Use --upload to upload data to central system (Lynis Enterprise users)
 Lynis security scan details:
 Hardening index : 63 [#########
 Tests performed: 229
 Plugins enabled: 0
 Components:
 - Firewall
 - Malware scanner
 Normal [ ] Forensics [ ] Integration [V] Pentest [ ]
 Lynis modules:
  Compliance status
   Security audit
                         [V]
 - Vulnerability scan
 - Test and debug information
                                : /var/log/lynis.log
                                 : /var/log/lynis-report.dat
 - Report data
 Lynis 3.0.8
 Auditing, system hardening, and compliance for UNIX-based systems
 (Linux, macOS, BSD, and others)
 2007-2021, CISOfy - h
 Enterprise support available (compliance, plugins, interface and tools)
```

[TIP]: Enhance Lynis audits by adding your settings to custom.prf (see /etc/lynis/default.prf for all settings)