

## Relatório Auditoria de Segurança



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[ Lynis 3.0.8 ]
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 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: CentOS
                             CentOS Linux
 Operating system version: 7
Kernel version: 3.10.0
Hardware platform: x86_64
Hostname: contex
 Hostname:
                             centos
 Profiles: /etc/lynis/default.prf
Log file: /var/log/lynis.log
Report file: /var/log/lynis-report.dat
Report version: 1.0
Plugin directory: /usr/share/lynis/plugins
 Auditor: B.E SecureIT
Language: en
Test category: all
Test group: all
- 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 [ \mathbf{OK} ]
- Check running services (systemctl) [ DONE ]
Result: found 17 running services
- Check enabled services at boot (systemctl) [ DONE ]
Result: found 29 enabled services
- Check startup files (permissions) [ OK ]
[+] 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 44 active modules
- Checking Linux kernel configuration file [ FOUND ]
- Checking default I/O kernel scheduler [ FOUND ]
- Checking core dumps configuration
- configuration in systemd conf files [ DEFAULT ]
- configuration in /etc/profile [ DEFAULT ]
- 'hard' configuration in /etc/security/limits.conf [ DEFAULT ]
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## [+] Memory and Processes

- Check if reboot is needed [ YES ]

- 'soft' configuration in /etc/security/limits.conf [ **DEFAULT** ]

- Checking setuid core dumps configuration [ **DISABLED** ]

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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 [ OK ]
  Checking Linux single user mode authentication [ OK ]
- Determining default umask
- umask (/etc/profile and /etc/profile.d) [ SUGGESTION ]
- umask (/etc/login.defs) [ OK ]
umask (/etc/init.d/functions) [ SUGGESTION ]LDAP authentication support [ NOT ENABLED ]
- Logging failed login attempts [ DISABLED ]
[+] Shells
- Checking shells from /etc/shells
Result: found 4 shells (valid shells: 4).
- Session timeout settings/tools [ NONE ]
 Checking default umask values
- Checking default umask in /etc/bashrc [ WEAK ]
- Checking default umask in /etc/csh.cshrc [ WEAK ]
 Checking default umask in /etc/profile [ WEAK ]
[+] File systems
- Checking mount points
 Checking /home mount point [ SUGGESTION ]
- Checking /tmp mount point [ SUGGESTION ]
 Checking /var mount point [ SUGGESTION ]
- Query swap partitions (fstab) [ OK ]
 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 [ PARTIALLY HARDENED ]
- Mount options of /dev/shm [ PARTIALLY HARDENED ]
- Mount options of /run [ HARDENED ]
  Total without nodev:11 noexec:13 nosuid:9 ro or noexec (W^X): 13 of total 30
- Disable kernel support of some filesystems
[+] USB Devices
- Checking usb-storage driver (modprobe config) [ NOT DISABLED ]
- Checking USB devices authorization [ DISABLED ]
- Checking USBGuard [ NOT FOUND ]
[+] Storage
- Checking firewire ohci driver (modprobe config) [ NOT DISABLED ]
[+] NFS
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Query rpc registered programs [ DONE ]
 Query NFS versions [ DONE ]
Query NFS protocols [ DONE ]
- 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 [ FOUND ]
- Presence of configured hostname in /etc/hosts [ 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-7308 had a long execution: 11.252600 seconds
  YUM package management consistency [ OK ]
  [WARNING]: Test PKGS-7383 had a long execution: 16.748528 seconds
- Checking package database duplicates [ OK ]
 Checking package database for problems [ OK ]
 Checking missing security packages [ OK ]
  [WARNING]: Test PKGS-7386 had a long execution: 14.782871 seconds
- Checking GPG checks (yum.conf) [ OK ]
- Checking package audit tool [ INSTALLED ]
Found: yum-security
- Toolkit for automatic upgrades [ NOT FOUND ]
[+] Networking
- Checking IPv6 configuration [ ENABLED ]
Configuration method [ AUTO ]
IPv6 only [ NO ]
- Checking configured nameservers
- Testing nameservers
Nameserver: 10.0.2.3 [ SKIPPED ]
- Minimal of 2 responsive nameservers [ SKIPPED ]
- Getting listening ports (TCP/UDP) [ DONE ]
- Checking promiscuous interfaces [ OK ] - Checking status DHCP client [ RUNNING ]
- 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
- Postfix status [ RUNNING ]
- Postfix configuration [ FOUND ]
- Postfix banner [ WARN:
[+] Software: firewalls
- Checking iptables kernel module [ FOUND ]
- Checking iptables policies of chains [ FOUND ]
- Checking chain INPUT (table:
filter, policy ACCEPT) [ ACCEPT ]
- Checking for empty ruleset [ WARNING ]
- Checking for unused rules [ OK ]
- Checking host based firewall [ ACTIVE ]
[+] Software: webserver
- Checking Apache [ NOT FOUND ]
- Checking nginx [ NOT FOUND ]
[+] SSH Support
- Checking running SSH daemon [ FOUND ]
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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: UsePrivilegeSeparation [ OK ]
- OpenSSH option: AllowUsers [ NOT FOUND ]
- OpenSSH option: AllowGroups [ NOT FOUND ]
[+] SNMP Support
- Checking running SNMP daemon [ NOT FOUND ]
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 [ 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 [ FOUND ]
- /etc/issue contents [ WEAK ]
- /etc/issue.net [ FOUND ]
- /etc/issue.net contents [ WEAK ]
[+] Scheduled tasks
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[+] Accounting
- Checking accounting information [ NOT FOUND ]
- Checking sysstat accounting data [ NOT FOUND ]
- Checking auditd [ ENABLED ]
- Checking audit rules [ OK ]
- Checking audit configuration file [ OK ]
- Checking auditd log file [ FOUND ]
[+] Time and Synchronization
- NTP daemon found: chronyd [ FOUND ]
- Checking for a running NTP daemon or client [ OK ]
[+] Cryptography
- Checking for expired SSL certificates [0/4] [ NONE ]
- Kernel entropy is sufficient [ YES ]
- HW RNG & rngd [ NO ]
- SW prng [ NO ]
- MOR variable not found [ WEAK ]
[+] Virtualization
[+] Containers
[+] Security frameworks
- Checking presence AppArmor [ NOT FOUND ]
- Checking presence SELinux [ FOUND ]
- Checking SELinux status [ ENABLED ]
- Checking current mode and config file [ OK ]
Current SELinux mode: enforcing
Found 0 permissive SELinux object types
Found 16 unconfined and 0 initrc_t processes
- Checking presence TOMOYO Linux [ NOT FOUND ]
- Checking presence grsecurity [ NOT FOUND ]
- Checking for implemented MAC framework [ OK ]
[+] 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 [ SUGGESTION ]
File: /etc/cron.deny [ OK ]
File: /etc/crontab [ SUGGESTION ]
File: /etc/group [ OK ]
File: /etc/group- [ OK ]
File: /etc/hosts.allow [ OK ]
File: /etc/hosts.deny [ OK ]
File: /etc/issue [ OK ]
File: /etc/issue.net [ OK ]
File: /etc/motd [ OK ]
File: /etc/passwd [ OK ]
File: /etc/passwd- [ OK ]
File: /etc/ssh/sshd config [ 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 [ OK ]
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Checking crontab and cronjob files [ DONE ]

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Checking shell history files [ OK ]
[+] Kernel Hardening
- Comparing sysctl key pairs with scan profile
- fs.protected_hardlinks (exp: 1) [ OK ]
- fs.protected_symlinks (exp: 1) [ OK ]
  fs.suid dumpable (exp: 0) [ OK ]
- kernel.core_uses_pid (exp: 1) [ OK ]
  kernel.ctrl-alt-del (exp: 0) [ OK ]
 kernel.dmesg_restrict (exp: 1) [ DIFFERENT ]
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.sysrq (exp: 0) [ DIFFERENT ]
  kernel.yama.ptrace_scope (exp: 1 2 3) [ DIFFERENT ]
- net.core.bpf_jit_harden (exp: 2) [ DIFFE
- net.ipv4.conf.all.accept_redirects (exp: 0) [ DIFFERENT ]
- 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) [ OK ]
- net.ipv4.conf.all.send_redirects (exp: 0) [ DIFFERENT ]
- net.ipv4.conf.default.accept_redirects (exp: 0) [ DIF
- net.ipv4.conf.default.accept_source_route (exp: 0) [ \textbf{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) [ DIFFERENT ]
- net.ipv6.conf.all.accept_redirects (exp: 0) [ OK ]
- net.ipv6.conf.all.accept_source_route (exp: 0) [ DIFFERENT ]
net.ipv6.conf.default.accept_redirects (exp: 0) [ DIFFERENnet.ipv6.conf.default.accept_source_route (exp: 0) [ OK ]
[+] Hardening
Installed compiler(s) [ 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 ]-
  ! Reboot of system is most likely needed [KRNL-5830]
     - Solution : reboot
  ! Found some information disclosure in SMTP banner (OS or software name) [MAIL-8818]
  ! iptables module(s) loaded, but no rules active [FIRE-4512]
  Suggestions (43):
  * This release is more than 4 months old. Check the website or GitHub to see if there is an update available. [LYNIS]
  * 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]
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\* Configure password hashing rounds in /etc/login.defs [AUTH-9230]

Ownership of home directories [ OK ]

- \* When possible set expire dates for all password protected accounts [AUTH-9282] https://cisofv.com/lvnis/controls/AUTH-9282/
- \* Configure minimum password age in /etc/login.defs [AUTH-9286] https://cisofy.com/lynis/controls/AUTH-9286/
- \* Configure maximum password age in /etc/login.defs [AUTH-9286]
- \* Default umask in /etc/profile or /etc/profile.d/custom.sh could be more strict (e.g. 027) [AUTH-9328] https://cisofv.com/lynis/controls/AUTH-9328/
- \* To decrease the impact of a full /home file system, place /home on a separate partition [FILE-6310] https://cisofy.com/lynis/controls/FILE-6310/
- \* To decrease the impact of a full /tmp file system, place /tmp on a separate partition [FILE-6310] https://cisofy.com/lynis/controls/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] https://cisofy.com/lynis/controls/USB-1000/
- \* Disable drivers like firewire storage when not used, to prevent unauthorized storage or data theft [STRG-1846] https://cisofy.com/lynis/controls/STRG-1846/
- \* Check DNS configuration for the dns domain name [NAME-4028]
- \* Remove duplicate lines in /etc/hosts [NAME-4402] https://cisofy.com/lynis/controls/NAME-4402/
- \* Consider using a tool to automatically apply upgrades [PKGS-7420] https://cisofy.com/lynis/controls/PKGS-7420/
- \* Determine if protocol 'dccp' is really needed on this system [NETW-3200] https://cisofy.com/lynis/controls/NETW-3200/
- \* Determine if protocol 'sctp' is really needed on this system [NETW-3200] https://cisofy.com/lynis/controls/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]
- \* You are advised to hide the mail\_name (option: smtpd\_banner) from your postfix configuration. Use postconf -e or change your main.cf file (/etc/postfix/main.cf) [MAIL-8818]

  https://cisofy.com/lynis/controls/MAIL-8818/
  - \* 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))
    https://cisofy.com/lynis/controls/SSH-7408/
  - \* Consider hardening SSH configuration [SSH-7408]
     Details : Port (set 22 to )
    https://cisefy.com/lynis/controls/SSH-7408/

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* 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]
* Add a legal banner to /etc/issue, to warn unauthorized users [BANN-7126]
* Add legal banner to /etc/issue.net, to warn unauthorized users [BANN-7130]
* 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
* 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 compilers like restricting access to root user only [HRDN-7222]
* 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
Follow-up:
- 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 (htt
 Use --upload to upload data to central system (Lynis Enterprise users)
 ______
Lynis security scan details:
Hardening index : 65 [##########
Tests performed : 242
Plugins enabled: 0
Components:
- Firewall
- Malware scanner
Normal [ ] Forensics [ ] Integration [ ] Pentest [V] (running privileged)
Lynis modules:
- Compliance status
 Security audit
- Vulnerability scan
- Test and debug information
                                : /var/log/lynis.log
- Report data
                                 : /var/log/lynis-report.dat
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**Lynis** 3.0.8

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

2007-2021, CISOfy - <a href="https://cisofy.com/lynis/">https://cisofy.com/lynis/</a>

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

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