Auto updates

Here's how to setup your debian to update automatically

This page describes how to set up automatic security updates with `unattended-upgrades` and email notifications via `msmtp` on Debian Linux systems.
[std](https://std.rocks/gnulinux_debian_auto_update.html)

1. Install unattended-upgrades and msmtp

```
apt update
apt install -y unattended-upgrades msmtp msmtp-mta mailutils
dpkg-reconfigure -plow unattended-upgrades
```

Notes:
[freundschafter](https://freundschafter.com/how-to-set-up-msmtp-on-debian-to-use-a-mailhoster-with-smtp/)

- `msmtp-mta` provides `/usr/sbin/sendmail` so system mail (cron, unattended-upgrades, etc.) goes through msmtp.
- `mailutils` provides the `mail` CLI for quick tests.

Check that `sendmail` points to msmtp:

```
readlink -f /usr/sbin/sendmail
# should be /usr/bin/msmtp or a msmtp-mta symlink
```

2. Configure msmtp

Create `/etc/msmtprc`:

```
cat >/etc/msmtprc <<'EOF'
# Global msmtp config

defaults
auth           on
tls            on
tls_trust_file /etc/ssl/certs/ca-certificates.crt
logfile        /var/log/msmtp.log

account        default
host           smtp.yourdomain.tld
port           587
from           unattended@yourdomain.tld
user           user@yourdomain.tld
```

```
password       CHANGE_ME
EOF

chmod 600 /etc/msmtprc
touch /var/log/msmtp.log
chmod 640 /var/log/msmtp.log
```

Adjust: `host`, `port`, `from`, `user`, and `password` for your SMTP provider.
[gist.github](https://gist.github.com/movd/7a9e3db63d076f85d16c7dcde62fe401)

For providers using SMTPS (465/SSL) instead of STARTTLS on 587, change:

- `port 465`
- keep `tls on`
- add `tls_starttls off`

Optional: aliases for local users

Create `/etc/msmtp-aliases`:

```
cat >/etc/msmtp-aliases <<'EOF'
root:    user@yourdomain.tld
default: user@yourdomain.tld
EOF

chmod 600 /etc/msmtp-aliases
```

Add the aliases line inside `/etc/msmtprc` (in the `account default` block):
[freundschafter](https://freundschafter.com/how-to-set-up-msmtp-on-debian-to-use-a-mailhoster-with-smtp/)

```
aliases /etc/msmtp-aliases
```

(optional) Make the mail(1) command use msmtp

Create `/etc/mail.rc`:

```
cat >/etc/mail.rc <<'EOF'
set sendmail="/usr/bin/msmtp -t"
set from=unattended@fortier.it
EOF
```

3. Test msmtp and CLI mail

Direct msmtp test

```
echo "Hello from $(hostname)" | msmtp -d user@yourdomain.tld
```

If there is a problem, inspect:

```
tail -n 50 /var/log/msmtp.log
```

for SMTP / TLS / auth errors.
[manpages.debian](https://manpages.debian.org/testing/msmtp/msmtp.1.en.html)

Test via mail(1) (what unattended-upgrades uses)

```
echo "Test via mail from $(hostname)" | mail -s "msmtp mail test
$(hostname)" arnaud@fortier.it
```

If this arrives, the system-wide mail path is working.

4. Configure unattended-upgrades mail and origins

Edit `/etc/apt/apt.conf.d/50unattended-upgrades` and make sure the following lines are present and not commented:
[techlabs](https://techlabs.blog/categories/debian-linux/automatically-install-updates-using-unattended-upgrades-on-debian-11)

```
Unattended-Upgrade::Mail "user@yourdomain.tld";
Unattended-Upgrade::MailReport "always";
```

Typical `Origins-Pattern` for Debian 13 (adjust for Raspbian or other origins):

```
Unattended-Upgrade::Origins-Pattern {
        "origin=Debian,codename=${distro_codename},label=Debian";
        "origin=Debian,codename=${distro_codename}-security,label=Debian-
Security";
        "origin=Debian,codename=${distro_codename}-updates,label=Debian";
};
```

5. Enable and check apt systemd timers

Enable the standard apt timers:
[exampleconfig](https://exampleconfig.com/default/apt/etc-systemd-apt-daily-upgrade-timer)

```
systemctl enable --now apt-daily.timer apt-daily-upgrade.timer
```

List timers:

```
systemctl list-timers 'apt-daily*'
```

You should see:

- `apt-daily.timer`
- `apt-daily-upgrade.timer`

with NEXT showing future times.

6. Live tests for unattended-upgrades

A. Manual debug run (immediate mail)

```
unattended-upgrades --dry-run --debug
```

At the end you should see lines similar to: [prezu](https://prezu.ca/post/unattended-upgrades-debian/)

- `Sending mail to …`
- `mail returned: 0`

A notification email should arrive even if there are:

- `No packages found that can be upgraded unattended and no pending auto-removals`

B. Simulate a real timer run

Trigger the same service that the timer calls:

```
systemctl start apt-daily-upgrade.service
journalctl -u apt-daily-upgrade.service -n 50
```

Then check the unattended-upgrades log:

```
tail -n 50 /var/log/unattended-upgrades/unattended-upgrades.log
```

You should see either:

- `Packages that will be upgraded: … All upgrades installed`
- or
- `No packages found that can be upgraded unattended and no pending auto-removals`

In both cases a mail report should have been sent.
[std](https://std.rocks/gnulinux_debian_auto_update.html)

If something fails:

- Mail errors:

```
tail -n 50 /var/log/msmtp.log
```

```
```

- Apt / unattended-upgrades errors:

```
journalctl -u apt-daily-upgrade.service -n 50
```

7. Minimal checklist

1. Install:
    1. apt install unattended-upgrades msmtp msmtp-mta mailutils
2. Configure /etc/msmtprc (and optional /etc/msmtp-aliases, /etc/mail.rc); test with:
    1. echo test | msmtp -d you@example.com
    2. echo test | mail -s “test” you@example.com
3. Set in /etc/apt/apt.conf.d/50unattended-upgrades:
    1. Unattended-Upgrade::Mail “you@example.com”;
    2. Unattended-Upgrade::MailReport “always”;
4. Enable timers:
    1. systemctl enable –now apt-daily.timer apt-daily-upgrade.timer
5. Test unattended-upgrades:
    1. unattended-upgrades –dry-run –debug
    2. systemctl start apt-daily-upgrade.service

[techlabs](https://techlabs.blog/categories/debian-linux/automatically-install-updates-using-unattended-upgrades-on-debian-11)

8. auto-reboot

In this example, timer for upgrade is at 2:00 AM then reboot if needed is at 4:00AM

```
sudo apt install update-notifier-common -y
sudo vim /etc/apt/apt.conf.d/51unattended-upgrades-local
```

add:

```
Unattended-Upgrade::Automatic-Reboot "true";
Unattended-Upgrade::Automatic-Reboot-Time "04:00";
# to avoid reboot while people logged in:
#Unattended-Upgrade::Automatic-Reboot-WithUsers "false";
```

```
sudo systemctl enable --now unattended-upgrades
```

Set time for upgrades (before?):

```
sudo systemctl edit apt-daily-upgrade.timer
```

```
### Editing /etc/systemd/system/apt-daily-upgrade.timer.d/override.conf
```

```
### Anything between here and the comment below will become the contents of
the drop-in file

[Timer]
OnCalendar=
OnCalendar=*-*-* 02:00:00
RandomizedDelaySec=0
Persistent=true
```

Relaunch/check:

```
 sudo systemctl restart apt-daily-upgrade.timer
sudo systemctl status apt-daily-upgrade.timer
```

:!: OLD :!: Below

Install

```
apt-get install -y unattended-upgrades apt-listchanges mailutils postfix
```

Config

```
vi /etc/apt/apt.conf.d/50unattended-upgrades
```

```
// Automatically upgrade packages from these (origin:archive) pairs
//
// Note that in Ubuntu security updates may pull in new dependencies
// from non-security sources (e.g. chromium). By allowing the release
// pocket these get automatically pulled in.
Unattended-Upgrade::Allowed-Origins {
        "${distro_id}:${distro_codename}";
        "${distro_id}:${distro_codename}-security";
        // Extended Security Maintenance; doesn't necessarily exist for
        // every release and this system may not have it installed, but if
        // available, the policy for updates is such that unattended-
upgrades
        // should also install from here by default.
        //"${distro_id}ESMApps:${distro_codename}-apps-security";
        //"${distro_id}ESM:${distro_codename}-infra-security";
        "${distro_id}:${distro_codename}-updates";
        //"${distro_id}:${distro_codename}-proposed";
        //"${distro_id}:${distro_codename}-backports";
        "Docker:{distro_codename}";
```

```
};
// Send email to this address for problems or packages upgrades
// If empty or unset then no email is sent, make sure that you
// have a working mail setup on your system. A package that provides
// 'mailx' must be installed. E.g. "user@example.com"
Unattended-Upgrade::Mail "arnaud+XXXXXXXXX@fortier-family.com";

// Set this value to one of:
//    "always", "only-on-error" or "on-change"
// If this is not set, then any legacy MailOnlyOnError (boolean) value
// is used to chose between "only-on-error" and "on-change
Unattended-Upgrade::MailReport "on-change";

// Remove unused automatically installed kernel-related packages
// (kernel images, kernel headers and kernel version locked tools).
Unattended-Upgrade::Remove-Unused-Kernel-Packages "true";
```

Automate:

```
dpkg-reconfigure -plow unattended-upgrades
```

Mails:

```
dpkg-reconfigure postfix
systemctl reload postfix
```

Test:

```
unattended-upgrade -d
```

Reboot automatic when needed

```
vi /etc/apt/apt.conf.d/20auto-upgrades
```

```
APT::Periodic::Update-Package-Lists "1";
APT::Periodic::Unattended-Upgrade "1";
```

Daily check packages & upgrade

```
vi /etc/apt/apt.conf.d/50unattended-upgrades
```

```
...
Unattended-Upgrade::Automatic-Reboot "true";
Unattended-Upgrade::Automatic-Reboot-Time "02:00";
...
```

```
systemctl restart unattended-upgrades
```

Mail via msmtp

```
 apt install msmtp msmtp-mta mailutils
vi /etc/msmtprc
```

```
defaults
auth           on
tls            on
tls_starttls   off
tls_trust_file /etc/ssl/certs/ca-certificates.crt

# SMTP server config
account        default
host           mail.fortier-family.com
port           465
from           arnaud+SERV@fortier-family.com
user           arnaud@fortier-family.com
password       ********LOL***********
```

Test:

```
echo "Test mail from $(hostname)" | mail -s "Test subject"
arnaud+srv1@fortier-family.com
```

Kali

Following https://bugs.kali.org/view.php?id=8587
Change in /etc/apt/apt.conf.d/50unattended-upgrades

```
//        "origin=Debian,codename=${distro_codename},label=Debian-Security";
//        "origin=Debian,codename=${distro_codename}-security,label=Debian-
Security";

        "origin=Kali,codename=${distro_codename}";
```

Ubuntu

A bug prevent SIGTERM to be sent properly to containers:
https://bugs.launchpad.net/ubuntu/+source/docker.io-app/+bug/2079006 Let's make a service for that:

```
 vi /etc/systemd/system/docker-graceful-stop.service
```

```
[Unit]
Description=Gracefully stop Docker containers before system shutdown or
reboot
DefaultDependencies=no
Before=shutdown.target reboot.target halt.target
Requires=docker.service
After=network.target docker.service

[Service]
Type=oneshot
ExecStart=/bin/true
ExecStop=/usr/bin/docker stop $(/usr/bin/docker ps -q)
RemainAfterExit=yes
TimeoutStopSec=300

[Install]
WantedBy=halt.target reboot.target shutdown.target
```

```
systemctl daemon-reload
systemctl enable docker-graceful-stop.service
```

As always it's not that simple...

apt-daily-upgrade.timer

```
systemctl list-timers apt-daily-upgrade.timer
```

```
systemctl edit apt-daily-upgrade.timer
```

```
[Timer]
OnCalendar=
OnCalendar=*-*-* 02:15
RandomizedDelaySec=0
Persistent=true
```

```
systemctl daemon-reload
systemctl restart apt-daily-upgrade.timer
systemctl list-timers apt-daily-upgrade.timer
```

apt-daily.timer

Of course... if you haven't apt-update before...

```
systemctl edit apt-daily.timer
```

```
[Timer]
OnCalendar=
OnCalendar=*-*-* 01:45
RandomizedDelaySec=0
Persistent=true
```

```
systemctl daemon-reload
systemctl restart apt-daily.timer
systemctl list-timers apt-daily.timer
```

Reference

- https://wiki.debian.org/UnattendedUpgrades

From:
https://wiki.fortier-family.com/ - **Warnaud's Wiki**

Permanent link:
https://wiki.fortier-family.com/os/debian/unattendedupgrades

Last update: **2026/06/07 11:13**