

Set up automatic unattended updates for Ubuntu 20.04

12.8.2020

Author: Vivek Gite Last updated: September 8, 2021 [14 comments](#)



How do I configure automatic unattended updates for Ubuntu Linux 20.04 LTS “Focal Fossa” server?

The Linux server security is indeed an essential task for sysadmins. One of the most fundamental ways to keep the Ubuntu server secure is by installing security updates on time to patch vulnerabilities. By default, the unattended-upgrades package installed, but you still need to configure a few options. It will automatically install software updates, including security updates. This page shows how to **configure security updates automatically** when released by the Ubuntu security team using an unattended-upgrades package.

Tutorial details

Difficulty level [Easy](#)
Root privileges [Yes](#)
Requirements Ubuntu Linux 20.04 LTS
Est. reading time 2 minutes

Automatic unattended updates for Ubuntu 20.04 LTS

1. Update the [Ubuntu 20.04 LTS server for security patches](#), run:

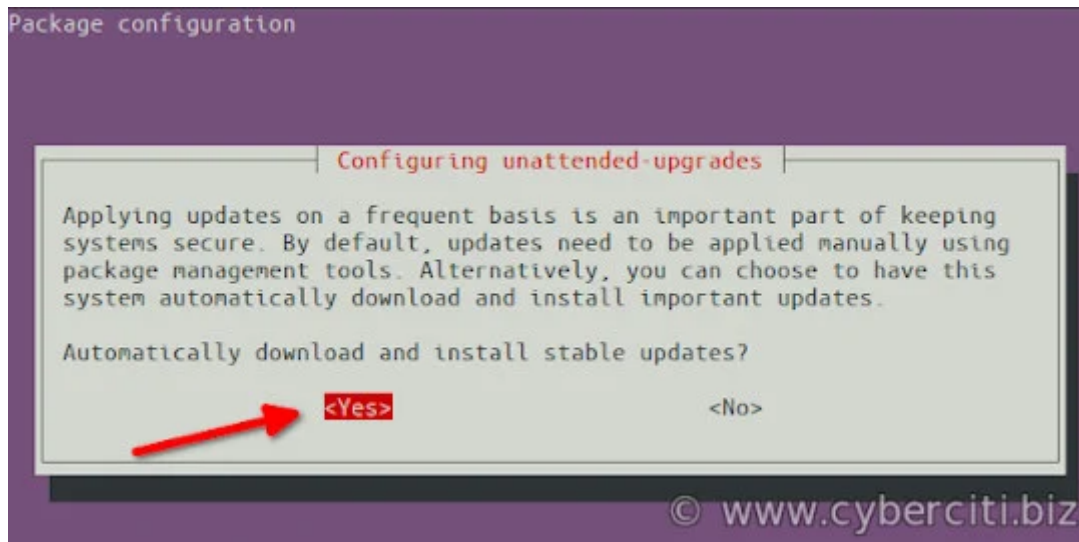
```
[admin@aws-ec2-007]$ sudo apt update && sudo apt upgrade
```

2. Install unattended upgrades on Ubuntu if not installed. Type the following [apt command](#)

```
[admin@aws-ec2-007]$ sudo apt install unattended-upgrades apt-listchanges  
bsd-mailx
```

3. Turn on unattended security updates, run:

```
[admin@aws-ec2-007]$ sudo dpkg-reconfigure -plow unattended-upgrades
```



4. Configure automatic unattended updates, enter:

```
[admin@aws-ec2-007]$ sudo vi /etc/apt/apt.conf.d/50unattended-upgrades
```

Set up alert email ID:

```
Unattended-Upgrade::Mail "vivek@server1.cyberciti.biz";
```

Automatically reboot Ubuntu box WITHOUT CONFIRMATION for kernel updates:

```
Unattended-Upgrade::Automatic-Reboot "true";
```

Finally edit the /etc/apt/listchanges.conf and set email ID:

```
email_address=vivek@server1.cyberciti.biz
```

Save and close the file.

5. Verify that it is working by running the following command:

It would be best if you have a working email server to get an alert. You can always use [AWS SES](#)

```
With Postfix MTA to route email safely
Packages that will be upgraded: libmspack0 linux-firmware
Writing dpkg log to /var/log/unattended-upgrades/unattended-upgrades-dpkg.log
applying set ['libmspack0']
apt-listchanges: Reading changelogs...
/usr/bin/dpkg --status-fd 11 --no-triggers --unpack --auto-deconfigure /var/cache/a
pt/archives/libmspack0_0.6-3ubuntu0.3_amd64.deb
/usr/bin/dpkg --status-fd 11 --configure --pending
left to upgrade {'linux-firmware'}
applying set ['linux-firmware']
apt-listchanges: Reading changelogs...
/usr/bin/dpkg --status-fd 11 --no-triggers --unpack --auto-deconfigure /var/cache/a
pt/archives/linux-firmware_1.173.9_all.deb
/usr/bin/dpkg --status-fd 11 --configure --pending
left to upgrade set()
All upgrades installed
InstCount=0 DelCount=0 BrokenCount=0
vivek@mum1-vpn1:~$
```

Ubuntu automatic unattended updates sample email alert

Configuring Unattended-Upgrade::Mail in 50unattended-upgrades file enables unattended-upgrades to email a sysadmin detailing any packages that need upgrading or have problems. The Ubuntu server sent

an update report via email as follows:

```
From: [REDACTED]
To: [REDACTED]
Subject: unattended-upgrades result for sg-vpn1: True

Unattended upgrade returned: True

Packages that were upgraded:
apt apt-utils libapt-inst2.0 libapt-pkg5.0

webmaster@nixcraft.com

11:54 (5 hours ago)

to me
Unattended upgrade returned: True

Packages that were upgraded:
apt apt-utils libapt-inst2.0 libapt-pkg5.0

Package installation log:
Log started: 2019-01-23 06:24:33
apt-listchanges: Reading changelogs...
(Reading database ...
(Reading database ... 5%
...
..
(Reading database ... 100%
(Reading database ... 107314 files and directories currently installed.)
Preparing to unpack .../apt-utils_1.6.6ubuntu0.1_amd64.deb ...
Unpacking apt-utils (1.6.6ubuntu0.1) over (1.6.6) ...
Setting up apt-utils (1.6.6ubuntu0.1) ...
Processing triggers for libc-bin (2.27-3ubuntu1) ...
Processing triggers for man-db (2.8.3-2ubuntu0.1) ...
Log ended: 2019-01-23 06:24:45

Unattended-upgrades log:
Initial blacklisted packages:
Initial whitelisted packages:
Starting unattended upgrades script
Allowed origins are: o=Ubuntu,a=bionic, o=Ubuntu,a=bionic-security, o=UbuntuESM,a=bionic
Packages that will be upgraded: apt apt-utils libapt-inst2.0 libapt-pkg5.0
Writing dpkg log to /var/log/unattended-upgrades/unattended-upgrades-dpkg.log
All upgrades installed
```

© www.cyberciti.biz

Displaying automatic updates logs from the CLI

Now that you set up automatic updates on Ubuntu Server 20.04 LTS. It is time to see logs. Hence, we can use command such as [grep command](#) or [cat command](#) or [more command](#)/[egrep command](#) as follows:

```
[admin@aws-ec2-007]$ sudo cat /var/log/unattended-upgrades/unattended-upgrades.log
[admin@aws-ec2-007]$ sudo tail -f /var/log/unattended-upgrades/unattended-upgrades.log
[admin@aws-ec2-007]$ sudo grep 'linux-image' /var/log/unattended-upgrades/unattended-upgrades.log
```

And you are done. I hope this helps you to keep the server or virtual machine running in cloud current with the latest security updates automatically.

Conclusion

You learned how to configure automatic unattended updates for your Ubuntu Linux based server up-to-date. It is a simple and easiest way to protect your server from vulnerabilities. This method is also beneficial when you administrate multiple servers. Manually updating the system and applying patches can be a very time-consuming process. However, for a large number of servers/VMs, I would recommend something like Ansible:

Patreon supporters only guides 🤖

- No ads and tracking
- In-depth guides for developers and sysadmins at [Opensourceflare](#) ✨
- Join my Patreon to support independent content creators and start reading latest guides:

[Join Patreon →](#)

- [Ansible apt update all packages on Ubuntu / Debian Linux](#)
- [Ansible reboot a Debian/Ubuntu Linux for kernel update and wait for it](#)

Do read the documentation using the [man command](#):

```
man 8 'dpkg-reconfigure(8)'
```

🙄 Was this helpful? Please add [your comment below ↓](#) to show your appreciation or feedback to the author.

🐧 Get the latest tutorials on Linux, Open Source & DevOps via

Related Tutorials [RSS feed →](#) [Weekly email newsletter →](#)

Category	List of Unix and Linux commands
Download managers	wget
Documentation	help • mandb • man • pinfo
Disk space analyzers	df • duf • ncdu • pydf
File Management	cat • cp • less • mkdir • more • tree
Firewall	Alpine Awall • CentOS 8 • OpenSUSE • RHEL 8 • Ubuntu 16.04 • Ubuntu 18.04 • Ubuntu 20.04
Linux Desktop apps	Skype • Spotify • VLC 3
Modern utilities	bat • exa
Network Utilities	NetHogs • dig • host • ip • nmap • ping
OpenVPN	CentOS 7 • CentOS 8 • Debian 10 • Debian 8/9 • Ubuntu 18.04 • Ubuntu 20.04

Category	List of Unix and Linux commands
Package Manager	apk • apt
Processes Management	bg • chroot • cron • disown • fg • glances • gtop • iotop • jobs • killall • kill • pidof • pstree • pwdx • time • vtop
Searching	ag • egrep • grep • whereis • which
Shell builtins	compgen • echo • printf
Text processing	cut • rev
User Information	groups • id • lastcomm • last • lid/libuser-lid • logname • members • users • whoami • who • w
WireGuard VPN	Alpine • CentOS 8 • Debian 10 • Firewall • Ubuntu 20.04
14 comments... add one	

- Pedro Aug 19, 2020 @ 9:28

When i run

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

It said pending. why?

```
apt-listchanges: Reading changelogs...
apt-listchanges: Reading changelogs...
/usr/bin/dpkg --status-fd 10 --no-triggers --unpack --auto-deconfigure
/var/cache/apt/archives/software-properties-common_0.98.9.2_all.deb
/var/cache/apt/archives/python3-software-properties_0.98.9.2_all.deb
/usr/bin/dpkg --status-fd 10 --configure --pending
apt-listchanges: Reading changelogs...
apt-listchanges: Reading changelogs...
/usr/bin/dpkg --status-fd 10 --no-triggers --unpack --auto-deconfigure
/var/cache/apt/archives/ubuntu-release-upgrader-core_1%3a20.04.24_all.deb
/var/cache/apt/archives/python3-distupgrade_1%3a20.04.24_all.deb
/usr/bin/dpkg --status-fd 10 --configure --pending
apt-listchanges: Reading changelogs...
apt-listchanges: Reading changelogs...
/usr/bin/dpkg --status-fd 10 --no-triggers --unpack --auto-deconfigure
/var/cache/apt/archives/wireguard-tools_1.0.20200513-1~20.04.2_amd64.deb
/var/cache/apt/archives/wireguard_1.0.20200513-1~20.04.2_all.deb
/usr/bin/dpkg --status-fd 10 --configure --pending
apt-listchanges: Reading changelogs...
apt-listchanges: Reading changelogs...
/usr/bin/dpkg --status-fd 10 --no-triggers --unpack --auto-deconfigure
/var/cache/apt/archives/sudo_1.8.31-1ubuntu1.1_amd64.deb
/usr/bin/dpkg --status-fd 10 --configure --pending
apt-listchanges: Reading changelogs...
apt-listchanges: Reading changelogs...
/usr/bin/dpkg --status-fd 10 --no-triggers --unpack --auto-deconfigure
/var/cache/apt/archives/xz-utils_5.2.4-1ubuntu1_amd64.deb
/usr/bin/dpkg --status-fd 10 --configure --pending
```

```
apt-listchanges: Reading changelogs...
apt-listchanges: Reading changelogs...
/usr/bin/dpkg --status-fd 10 --no-triggers --unpack --auto-deconfigure
/var/cache/apt/archives/bcache-tools_1.0.8-3ubuntu0.1_amd64.deb
/usr/bin/dpkg --status-fd 10 --configure --pending
apt-listchanges: Reading changelogs...
apt-listchanges: Reading changelogs...
/usr/bin/dpkg --status-fd 10 --no-triggers --unpack --auto-deconfigure
/var/cache/apt/archives/liblzma5_5.2.4-1ubuntu1_amd64.deb
/usr/bin/dpkg --status-fd 10 --no-triggers --configure liblzma5:amd64
/usr/bin/dpkg --status-fd 10 --configure --pending
```

[Reply Link](#)

- Remote the `--dry-run` option which just simulate installing updates, do not actually apply updates.

[Reply Link](#)

- Gabriel Sep 17, 2020 @ 15:53

Hello, I ran the command with and without debug mode and it didn't send me a notification mail (gmail). The configuration files are exactly the same as the publication

Please could you help me?

[Reply Link](#)

- You need working email server to send email.

[Reply Link](#)

- TOM Jan 5, 2021 @ 6:47

I did all as your tutorial but when I run command: `sudo unattended-upgrades --dry-run` There is nothing result, what does that mean?

[Reply Link](#)

- It means currently no updates available.

[Reply Link](#)

- RL Feb 3, 2021 @ 17:02

I dont have a personal email domain setup. What should I use as System mail name under Postfix Configuration?

[Reply Link](#)

- You can use gmail account. There is an app called ssmtp <https://www.cyberciti.biz/tips/linux-use-gmail-as-a-smarthost.html>

[Reply Link](#)

- Tato Feb 5, 2021 @ 10:35

is there a way to schedule it to happen on a specific weekday at given hour?

[Reply Link](#)

- I don't think so. But you can write a script. Then set up a cron job for that purpose, I guess.

[Reply Link](#)

- Milo Johnston Apr 9, 2021 @ 3:56

I am using this method to update my community forum hosted with Ubuntu 20.04 LTS server. So far worked like a charm. I love those email updates telling me about system updates installed.

[Reply Link](#)

- Glad you found it useful. Happy to help!

[Reply Link](#)

- Kostas May 4, 2021 @ 15:30

Is there a way to make it upgrade packages ONLY when there are security fixes for them? Because, doing it for every new version sounds more like asking for trouble for no obvious gain...

[Reply Link](#)

- The `"${distro_id}:${distro_codename}-security";` only apply security updates:

```
Unattended-Upgrade::Allowed-Origins {  
    "${distro_id}:${distro_codename}-security";  
};
```

[Reply Link](#)

Leave a Reply

Your email address will not be published. Required fields are marked *

Use HTML. `<pre>...</pre>` for code samples. Your comment will appear only after approval by the site admin.

Next FAQ: [How to add days to date and get new date on Linux](#)

Previous FAQ: [How to install htop on Arch Linux](#)

