

Debian Upgrade auf neuen Release

Quelle: <https://www.cyberciti.biz/faq/update-upgrade-debian-9-to-debian-10-buster/>

Upgrade Debian 9 to Debian 10 Buster

The procedure is as follows:

1. Backup your system.
2. Update existing packages and reboot the Debian 9.x system.
3. Edit the file `/etc/apt/sources.list` using a text editor and replace each instance of **stretch** with **buster**.
4. Update the packages index on Debian Linux, run: `sudo apt update`
5. Prepare for the operating system upgrade, run: `sudo apt upgrade`
6. Finally, update Debian 9 to Debian 10 buster by running: `sudo apt full-upgrade`
7. Reboot the Linux system so that you can boot into Debian 10 Buster
8. Verify that everything is working correctly.

Let us see all command in details.

Step 1. Backup your system

It is crucial to backup all data and system configurations. Cloud-based VMs can be quickly backup and restore using snapshots. I use [rsnapshot](#), which is the perfect solution for making backups on the local or remote servers. [Check os version in Linux:](#)

```
lsb_release -a
```

Sample outputs:

```
No LSB modules are available.  
Distributor ID: Debian
```

Description: `Debian GNU/Linux 9.9 (stretch)`

Release: `9.9`

Codename: `stretch`

Note down the [Linux kernel version](#) too:

```
uname -mrs
```

Sample outputs:

```
Linux 4.9.0-9-amd64 x86_64
```

Step 2. Update installed packages

Type the following [apt command](#) or [apt-get command](#):

```
sudo apt update
sudo apt upgrade
sudo apt full-upgrade
sudo apt --purge autoremove
```

OR

```
sudo apt-get update
sudo apt-get upgrade
sudo apt-get full-upgrade
sudo apt-get --purge autoremove
```

[Reboot the Debian 9.x stretch](#) to apply the kernel and other updates:

```
sudo reboot
```

Step 3. Update /etc/apt/sources.list file

Before starting the upgrade you must reconfigure APT's source-list files. To view current settings using the [cat command](#):

```
cat /etc/apt/sources.list
```

Sample outputs:

```
deb http://cdn-aws.deb.debian.org/debian stretch main
deb http://security.debian.org/debian-security stretch/updates main
deb http://cdn-aws.deb.debian.org/debian stretch-updates main
```

The stretch indicates that we are using an older version. Hence, we must change all the references in this file from Stretch to Buster using a text editor such as vim:

```
vi /etc/apt/sources.list
```

I prefer to use sed tool, but first backup all config files using the [cp command](#):

```
sudo cp -v /etc/apt/sources.list /root/  
sudo cp -rv /etc/apt/sources.list.d/ /root/  
sudo sed -i 's/stretch/buster/g' /etc/apt/sources.list  
sudo sed -i 's/stretch/buster/g' /etc/apt/sources.list.d/*  
### see updated file now ###  
cat /etc/apt/sources.list
```

```
admin@ip-172-26-10-123:~$ sudo sed -i 's/stretch/buster/g' /etc/apt/sources.list  
admin@ip-172-26-10-123:~$ cat /etc/apt/sources.list  
deb http://cdn-aws.deb.debian.org/debian buster main  
deb http://security.debian.org/debian-security buster/updates main  
deb http://cdn-aws.deb.debian.org/debian buster-updates main  
admin@ip-172-26-10-123:~$
```

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APT source-list files updated to use buster

Updating the package list

Simply run:

```
sudo apt update  
admin@ip-172-26-10-123:~$ sudo apt update  
Get:1 http://security.debian.org/debian-security buster/updates InRelease  
Get:2 http://security.debian.org/debian-security buster/updates/main amd  
Get:3 http://security.debian.org/debian-security buster/updates/main Tra  
Get:4 http://cdn-aws.deb.debian.org/debian buster InRelease [118 kB]  
Get:5 http://cdn-aws.deb.debian.org/debian buster-updates InRelease [46.  
Get:6 http://cdn-aws.deb.debian.org/debian buster/main amd64 Packages [7  
Get:7 http://cdn-aws.deb.debian.org/debian buster/main Translation-en [5  
Fetched 14.1 MB in 3s (3,778 kB/s)  
Reading package lists... Done  
Building dependency tree  
Reading state information... Done  
310 packages can be upgraded. Run 'apt list --upgradable' to see them.  
admin@ip-172-26-10-123:~$
```

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Step 4. Minimal system upgrade

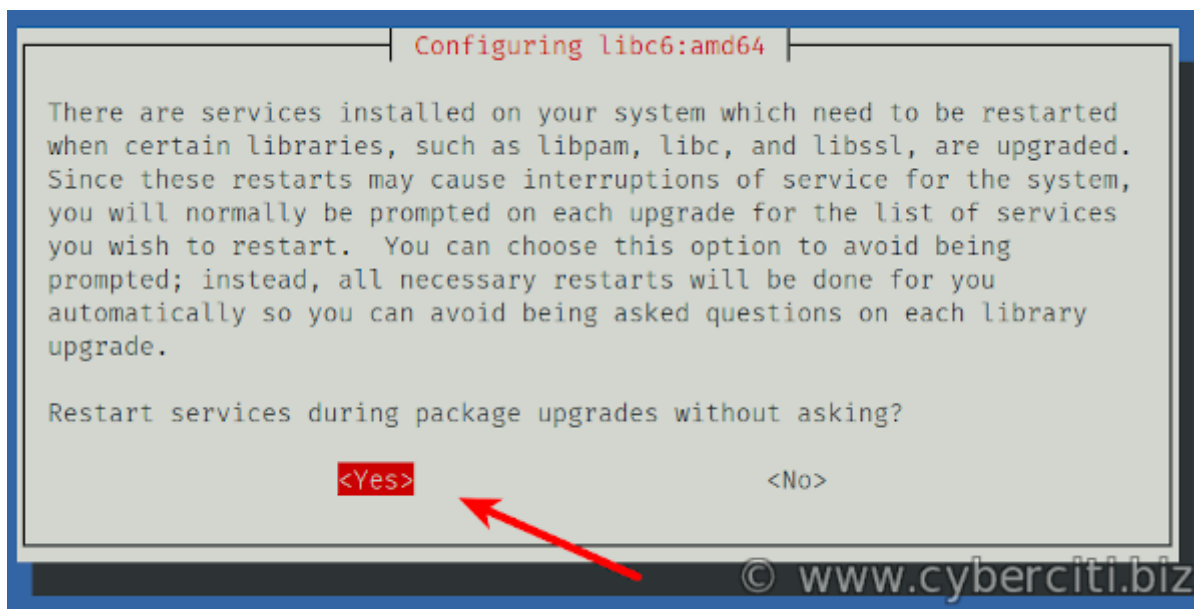
A two-part process is necessary to avoid the removal of large numbers of packages that you want to keep. Therefore, first run the following:

```
sudo apt upgrade
```

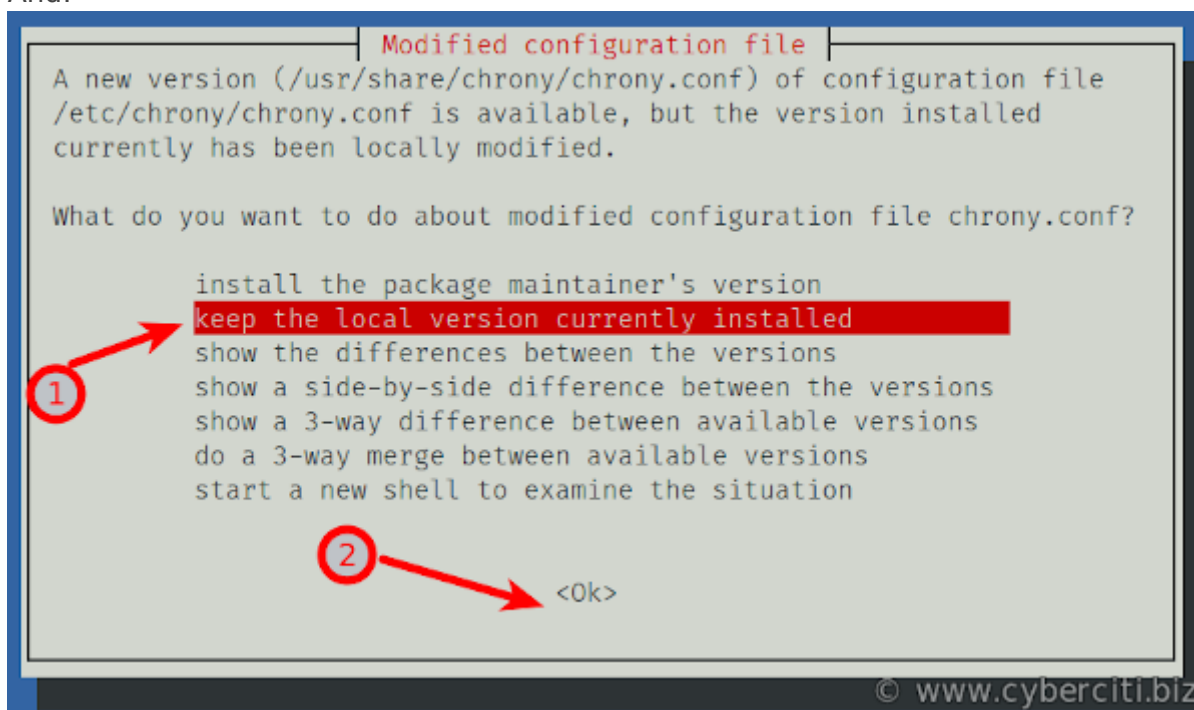
```
admin@ip-172-26-10-123:~$ sudo apt upgrade
Reading package lists... Done
Building dependency tree
Reading state information... Done
Calculating upgrade... Done
The following packages were automatically installed and are no longer required:
  dh-python libbind9-140 libdns162 libicu57 libisc160 libisccc140 libisccfg140 liblwres1
  libtomcrypt0 libtommath1 libwebpmux2 python-pyasn1 python3-prettytable python3.5 pytho
Use 'sudo apt autoremove' to remove them.
The following NEW packages will be installed:
  apparmor dirmgr e2fsprogs-l10n eatmydata exim4-base exim4-config exim4-daemon-light f
  gpg gpg-agent gpg-wks-client gpg-wks-server gpgconf gpgsm guile-2.2-libs libargon2-1 l
  libdns-export1104 libdns1104 libeatmydata1 libefivar1 libevent-2.1-6 libex
  libgirepository-1.0-1 libgnutls-dane0 libgpg-error-l10n libgsasl7 libicu63 libimagequa
  libisccfg163 libjansson4 libjson-c3 libkyotocabinet16v5 libltdb0 libltdl7 liblwres161
  libncursesw6 libnftables0 libnftnl11 libnss-systemd libntlm0 libpam-cap libpcre2-8-0 l
  libpython3.7-minimal libpython3.7-stdlib libtinfo6 libuchardet0 libunbound8 libunistri
  linux-image-4.19.0-5-amd64 mailutils mailutils-common mariadb-common mysql-common nfta
  python2-minimal python3-asn1crypto python3-certifi python3-dbus python3-debconf python
  python3-jsonschema python3-lib2to3 python3-olefile python3.7 python3.7-minimal runit-h
The following packages have been kept back:
  curl
The following packages will be upgraded:
  adduser apt apt-listchanges apt-transport-https apt-utils awscli base-files base-passw
  bzip2 ca-certificates chrony cloud-init coreutils cpio cron dash dbus debconf debconf-
  diffutils distro-info-data dmidecode dmsetup docutils-common dpkg e2fslibs e2fsprogs e
  gnupg gnupg-agent gpgv grep groff-base grub-common grub-pc grub-pc-bin grub2-common gz
  initramfs-tools initramfs-tools-core iproute2 iptables iputils-ping irqbalance isc-dhc
  krb5-locales less libacl1 libapparmor1 libapt-inst2.0 libapt-pkg5.0 libassuan0 libattr
  libbz2-1.0 libc-bin libc-l10n libc6 libcap-ng0 libcap2 libcomerr2 libcurl3-gnutls libd
  libedit2 libelf1 libestr0 libexpat1 libfastjson4 libfdisk1 libffi6 libfontconfig6 libf
  libgl2.0-data libgmp10 libgnutls30 libgpg-error0 libgpm2 libgssapi-krb5-2 libhogweed
  libjpeg62-turbo libk5crypto3 libkeyutils1 libklibc libkmod2 libkrb5-3 libkrb5support0
  liblocale-gettext-perl liblognorm5 liblz4-1 liblzma5 libmagic-mgc libmagic1 libmount1
  libnetfilter-contrack3 libnettle6 libnewt0.52 libnftnl0 libnftnl1 libnftnl2 libnftnl3 li
  libpam-runtime libpam-systemd libpam0g libpaper-utils libpaper1 libpcap0.8 libpcre3 li
  libpython-stdlib libpython2.7-minimal libpython2.7-stdlib libpython3-stdlib libreadlin
  libsasl2-modules-db libseccomp2 libselinux1 libsemanage-common libsemanage1 libsepol1
  libssl1.1 libstdc++6 libsystemd0 libtasn1-6 libtext-charwidth-perl libtext-iconv-perl
  libwebp6 libwebpdemux2 libwrap0 libxapian3 libxml2 libxtables12 libyaml-0-2 linux-bas
  lsb-base lsb-release man-db manpages mime-support mount multiarch-support nano ncurses
  openssh-client openssh-server openssh-sftp-server openssl passwd perl-base pinentry-cu
  python-cffi-backend python-chardet python-cryptography python-enum34 python-idna pytho
  python-pyasn1 python-requests python-setuptools python-six python-urllib3 python2.7 py
  python3-boto python3-botocore python3-cffi-backend python3-chardet python3-configobj p
  python3-debianbts python3-docutils python3-httplib2 python3-idna python3-jinja2 python
  python3-markupsafe python3-minimal python3-oauthlib python3-pil python3-pkg-resources
  python3-pygments python3-pysimplesoap python3-reportbug python3-requests python3-roman
  python3-six python3-urllib3 python3-yaml readline-common reportbug rsyslog screen sed
  systemd-sysv sysvinit-utils tar taskset taskset-data tcpdump tzdata ucf udev unattended
  vim-runtime vim-tiny wget whiptail xdg-user-dirs xml-core xxd xz-utils zlib1g
309 upgraded, 99 newly installed, 0 to remove and 1 not upgraded.
Need to get 205 MB of archives.
After this operation, 577 MB of additional disk space will be used.
Do you want to continue? [Y/n]
```

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Just follow on-screen instructions. During the upgrade process, you may get various questions, like “Do you want to restart the service?” OR “keep or erase config options” and so on.



And:



Step 5. Upgrading Debian 9 to Debian 10

In addition, minimum upgrades we need to do full upgrades to finish the whole Debian 9 to Debian 10 update process. This is the main part of the upgrade. In other words, execute the following command to perform a complete upgrade of the system, installing the newest available versions of all packages, and resolving all possible dependency:


```
sudo apt full-upgrade
```

```
admin@ip-172-26-10-123:~$ sudo apt full-upgrade
Reading package lists... Done
Building dependency tree
Reading state information... Done
Calculating upgrade... Done
The following packages were automatically installed and are no longer required:
  dh-python libbind9-140 libdns162 libicu57 libisc160 libisccc140 libisccfg140 libl
  libtomcrypt0 libtommath1 libwebpmux2 linux-image-4.9.0-8-amd64 python-pyasnl pyth
Use 'sudo apt autoremove' to remove them.
The following packages will be REMOVED:
  libcurl3
The following NEW packages will be installed:
  libcurl4
The following packages will be upgraded:
  curl
1 upgraded, 1 newly installed, 1 to remove and 0 not upgraded.
Need to get 596 kB of archives.
After this operation, 134 kB of additional disk space will be used.
Do you want to continue? [Y/n]
```

[Reboot the Linux system](#) to boot into Debian Linux 10 buster, issue:

```
sudo reboot
```

Step 6. Verification

It is time to confirm the upgrade. Run:

```
uname -r
```

```
lsb_release -a
```

Sample outputs:

```
No LSB modules are available.
Distributor ID: Debian
Description: Debian GNU/Linux 10 (buster)
Release: 10
Codename: buster
```

Finally, clean up outdated packages using the [apt command/apt-get command](#):

```
sudo apt --purge autoremove
```

```
admin@ip-172-26-10-123:~$ lsb_release -a
```

```
No LSB modules are available.
```

```
Distributor ID: Debian
```

```
Description:    Debian GNU/Linux 10 (buster)
```

```
Release:        10
```

```
Codename:       buster
```

```
admin@ip-172-26-10-123:~$ uname -r
```

```
4.19.0-5-amd64
```

```
admin@ip-172-26-10-123:~$ sudo apt --purge autoremove
```

```
Reading package lists... Done
```

```
Building dependency tree
```

```
Reading state information... Done
```

```
The following packages will be REMOVED:
```

```
dh-python* libbind9-140* libdns162* libicu57* libisc160* libisccc140* libiscfg  
libtomcrypt0* libtommath1* libwebpmux2* linux-image-4.9.0-8-amd64* python-pyasn
```

```
0 upgraded, 0 newly installed, 18 to remove and 0 not upgraded.
```

```
After this operation, 256 MB disk space will be freed.
```

```
Do you want to continue? [Y/n] y
```

```
(Reading database ... 47902 files and directories currently installed.)
```

```
Removing dh-python (3.20190308) ...
```

```
Removing libbind9-140:amd64 (1:9.10.3.dfsg.P4-12.3+deb9u5) ...
```

```
Removing libisccc140:amd64 (1:9.10.3.dfsg.P4-12.3+deb9u5) ...
```

```
Removing libdns162:amd64 (1:9.10.3.dfsg.P4-12.3+deb9u5) ...
```

```
Removing libicu57:amd64 (57.1-6+deb9u2) ...
```

```
Removing libisccc140:amd64 (1:9.10.3.dfsg.P4-12.3+deb9u5) ...
```

```
Removing libisc160:amd64 (1:9.10.3.dfsg.P4-12.3+deb9u5) ...
```

```
Removing liblwres141:amd64 (1:9.10.3.dfsg.P4-12.3+deb9u5) ...
```

```
Removing python3.5 (3.5.3-1+deb9u1) ...
```

```
Removing libpython3.5-stdlib:amd64 (3.5.3-1+deb9u1) ...
```

```
Removing python3.5-minimal (3.5.3-1+deb9u1) ...
```

```
Unlinking and removing bytecode for runtime python3.5
```

```
Removing libpython3.5-minimal:amd64 (3.5.3-1+deb9u1) ...
```

```
Removing libtomcrypt0:amd64 (1.17-9) ...
```

```
Removing libtommath1:amd64 (1.1.0-3) ...
```

```
Removing libwebpmux2:amd64 (0.5.2-1) ...
```

```
Removing linux-image-4.9.0-8-amd64 (4.9.110-3+deb9u6) ...
```

```
/etc/kernel/postrm.d/initramfs-tools:
```

```
update-initramfs: Deleting /boot/initrd.img-4.9.0-8-amd64
```

```
/etc/kernel/postrm.d/zz-update-grub:
```

```
Generating grub configuration file ...
```

```
Found linux image: /boot/vmlinuz-4.19.0-5-amd64
```

```
Found initrd image: /boot/initrd.img-4.19.0-5-amd64
```

```
Found linux image: /boot/vmlinuz-4.9.0-9-amd64
```

```
Found initrd image: /boot/initrd.img-4.9.0-9-amd64
```

```
done
```

```
Removing python-pyasnl (0.4.2-3) ...
```

```
Removing python3-prettytable (0.7.2-4) ...
```

```
Processing triggers for libc-bin (2.28-10) ...
```

```
Processing triggers for man-db (2.8.5-2) ...
```

```
Processing triggers for mime-support (3.62) ...
```

```
(Reading database ... 42652 files and directories currently installed.)
```

```
Purging configuration files for python3.5-minimal (3.5.3-1+deb9u1) ...
```

```
Purging configuration files for libpython3.5-minimal:amd64 (3.5.3-1+deb9u1) ...
```

```
Purging configuration files for linux-image-4.9.0-8-amd64 (4.9.110-3+deb9u6) ...
```

```
admin@ip-172-26-10-123:~$
```

Conclusion

And there you have it. We have successfully upgraded to Debian Linux 10. Debian project also posted an in-depth guide [here](#) that explains other issues one might face during installation.

Revision #1

Created 2 September 2019 08:20:09 by David

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