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# REMASTERING UBUNTU 17.10

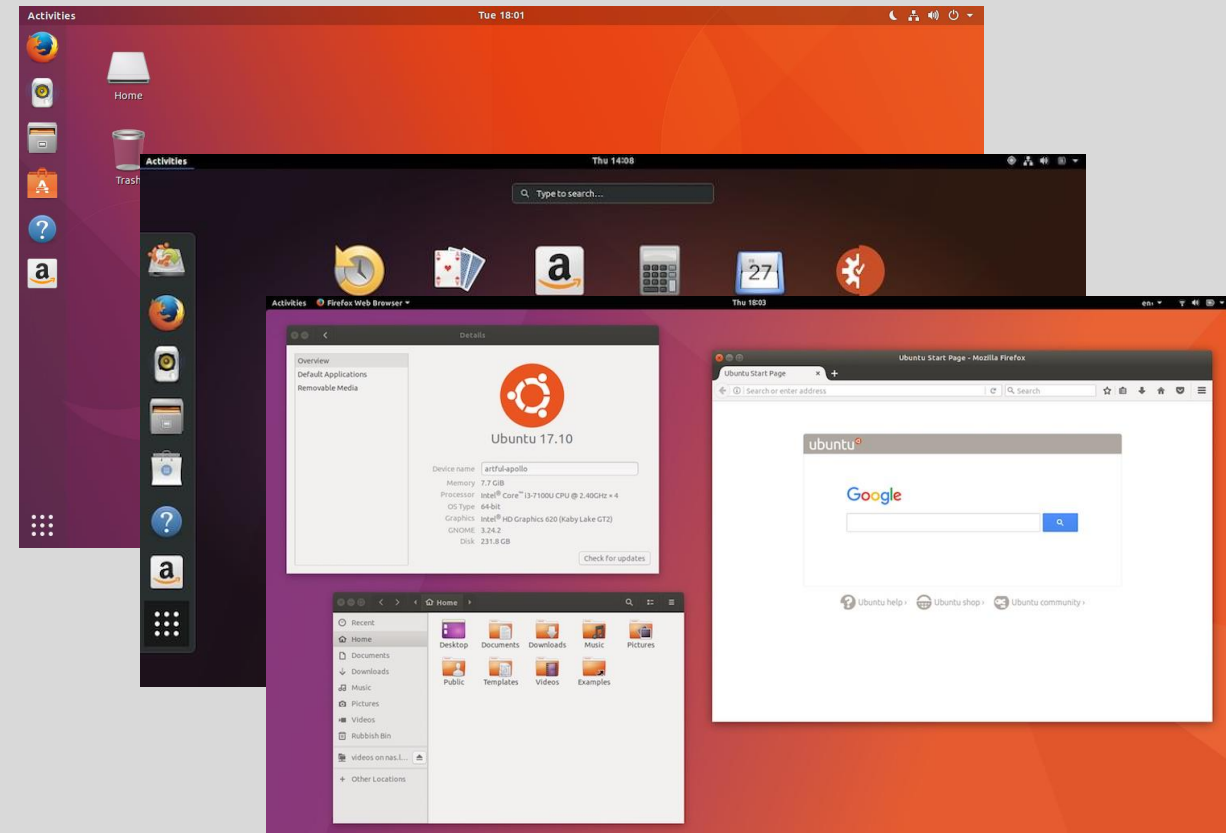
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DENGAN UBUNTU CUSTOMIZATION KIT

MUHAMMAD YUGA NUGRAHA

# UBUNTU 17.10 'ARTFUL AARDVARK'

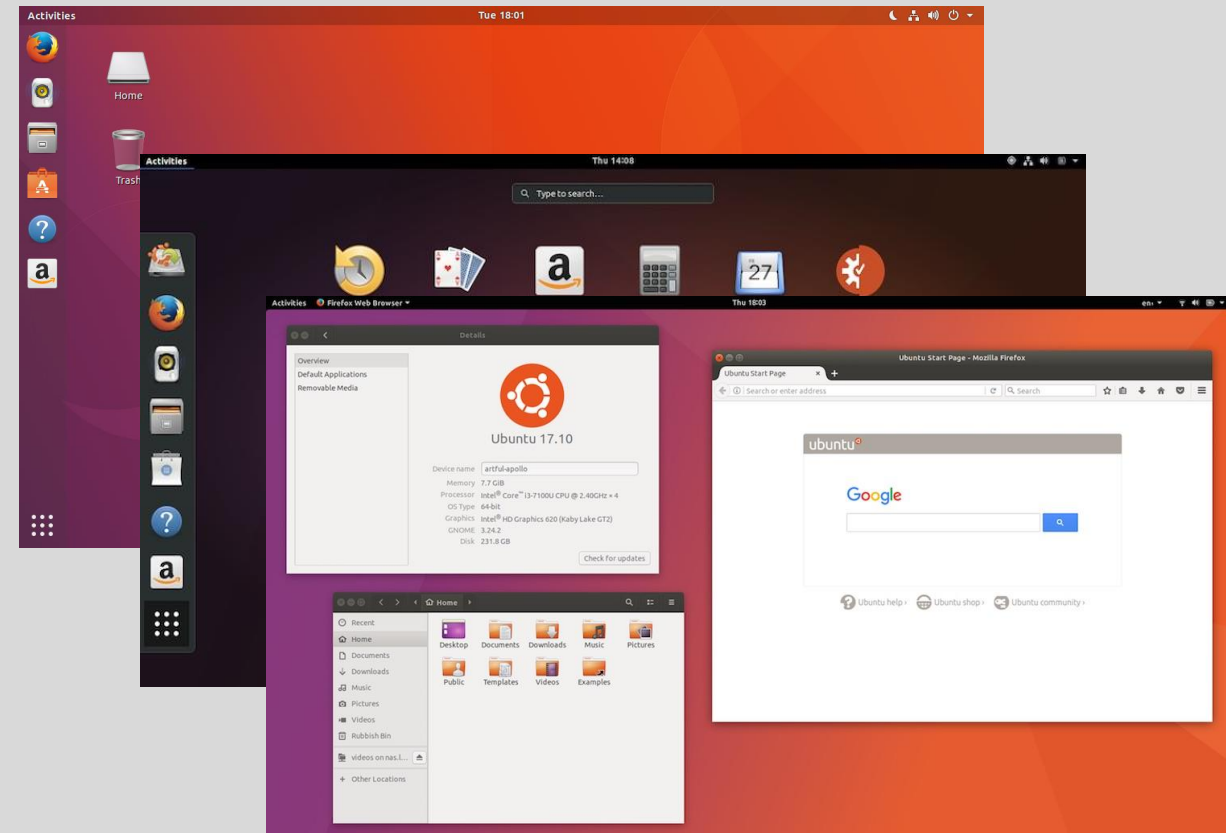
- ❖ Merupakan distribusi GNU/Linux turunan Debian yang disponsori oleh Canonical Ltd.
- ❖ *User friendly*
- ❖ Memiliki repositori yang sangat besar.
- ❖ Memiliki komunitas dan forum yang besar di dunia.



# UBUNTU 17.10 'ARTFUL AARDVARK'

Apa yang baru?

- ❖ GNOME sebagai default desktop
- ❖ GDM sebagai default display manager
- ❖ No 32 bit desktop images
- ❖ DII.



Apa itu Remastering?

Memodifikasi ISO yang sudah ada dengan menambahkan, menghapus paket dan mengubah konfigurasi sistem.



## UBUNTU CUSTOMIZATION KIT

Tools yang digunakan untuk membuat custom ISO Ubuntu dan turunannya sesuai kebutuhan pengguna.



# DASAR UNTUK REMASTERING?

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- ❖ Dasar perintah bash seperti cd, ls, mv, rm dll.
- ❖ Penggunaan paket manajemen.
- ❖ Tidak dibutuhkan skill bahasa pemrograman.

# PERINTAH DASAR APT

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## Menginstal paket

\$ sudo apt install *packagename*

## Memasang paket .deb

\$ sudo dpkg -i *packagename*

## Menghapus paket

\$ sudo apt remove *packagename*

## Mencari paket berdasarkan nama

\$ sudo apt search *packagename*

# PERSIAPAN REMASTERING

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- ❖ ISO Ubuntu 17.10
- ❖ Ubuntu Customization Kit
- ❖ Free space 10-20 Gb
- ❖ VirtualBox / VM Ware
- ❖ Notepad untuk **changelog**
- ❖ Dualboot / LiveCD turunan Ubuntu





# REMASTERING UNTUK APA?

# KATEGORI

KESEHARIAN



SERVER



EDUKASI



KEAMANAN



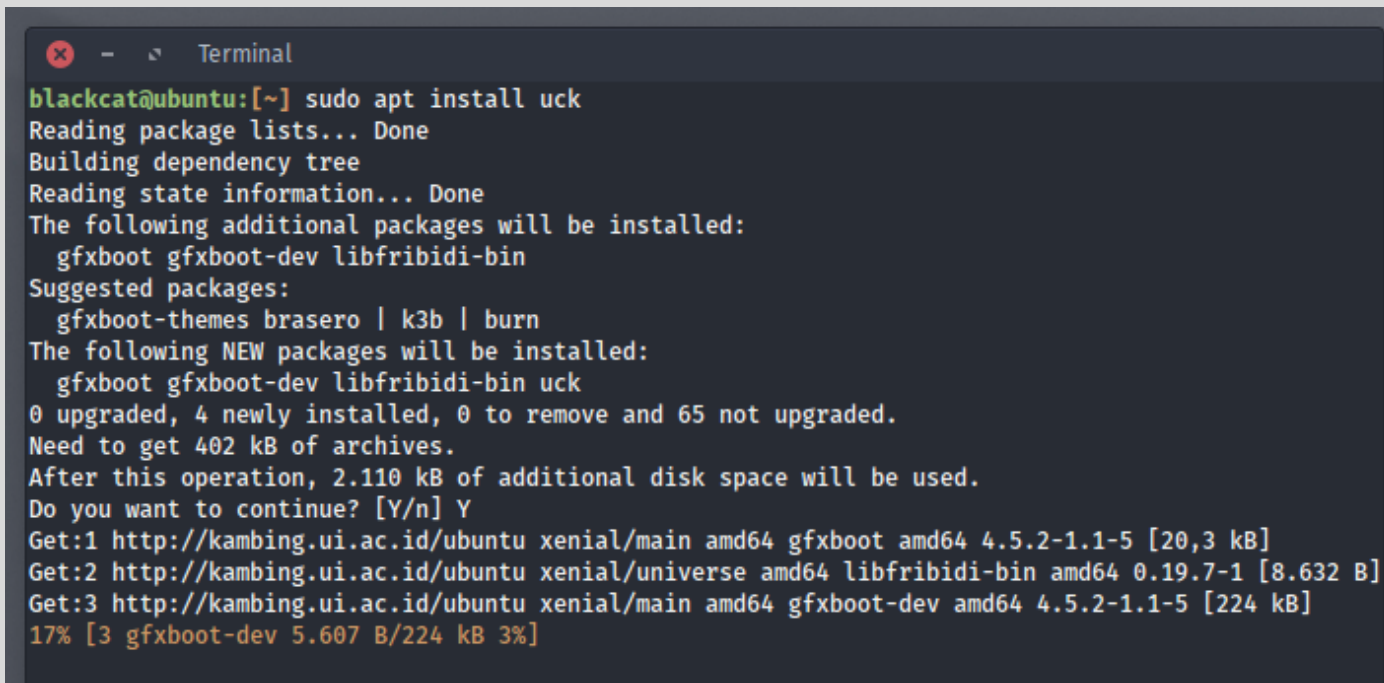
DLL

# MEMULAI REMASTERING

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## 1. Menginstal UCK

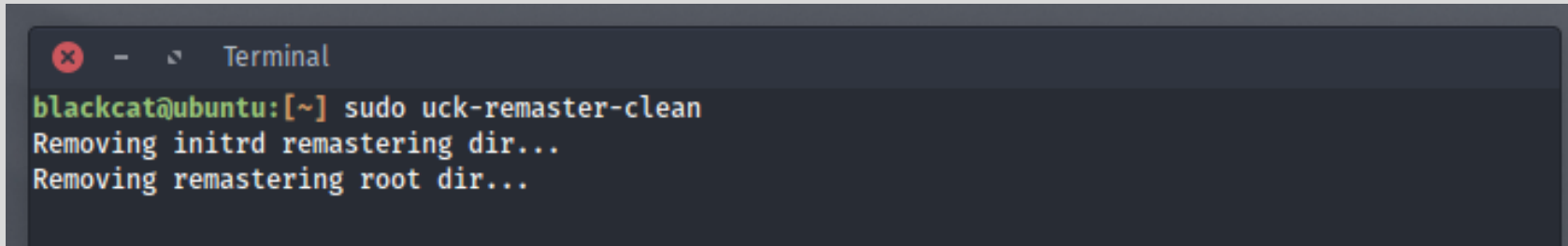
\$ sudo apt-get install uck

A terminal window titled "Terminal" with a dark background and light text. It shows the command "sudo apt install uck" being executed. The output includes package list reading, dependency tree building, and state information reading. It lists additional packages to be installed (gfxboot, gfxboot-dev, libfribidi-bin) and suggested packages (gfxboot-themes, brasero, k3b, burn). It shows the new packages to be installed (gfxboot, gfxboot-dev, libfribidi-bin, uck) and the disk space requirements (402 kB of archives, 2.110 kB of additional disk space). It asks for confirmation to continue, which is answered with 'Y'. Finally, it shows the progress of downloading the packages from the repository.

```
blackcat@ubuntu:~$ sudo apt install uck
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following additional packages will be installed:
  gfxboot gfxboot-dev libfribidi-bin
Suggested packages:
  gfxboot-themes brasero | k3b | burn
The following NEW packages will be installed:
  gfxboot gfxboot-dev libfribidi-bin uck
0 upgraded, 4 newly installed, 0 to remove and 65 not upgraded.
Need to get 402 kB of archives.
After this operation, 2.110 kB of additional disk space will be used.
Do you want to continue? [Y/n] Y
Get:1 http://kambing.ui.ac.id/ubuntu xenial/main amd64 gfxboot amd64 4.5.2-1.1-5 [20,3 kB]
Get:2 http://kambing.ui.ac.id/ubuntu xenial/universe amd64 libfribidi-bin amd64 0.19.7-1 [8.632 B]
Get:3 http://kambing.ui.ac.id/ubuntu xenial/main amd64 gfxboot-dev amd64 4.5.2-1.1-5 [224 kB]
17% [3 gfxboot-dev 5.607 B/224 kB 3%]
```

## 2. Membersihkan semua file remastering sebelumnya.

\$ sudo uck-remaster-clean

A screenshot of a terminal window titled "Terminal". The prompt is "blackcat@ubuntu:[~]". The command "sudo uck-remaster-clean" has been entered. The output shows two lines: "Removing initrd remastering dir..." and "Removing remastering root dir...".

```
blackcat@ubuntu:[~] sudo uck-remaster-clean
Removing initrd remastering dir...
Removing remastering root dir...
```

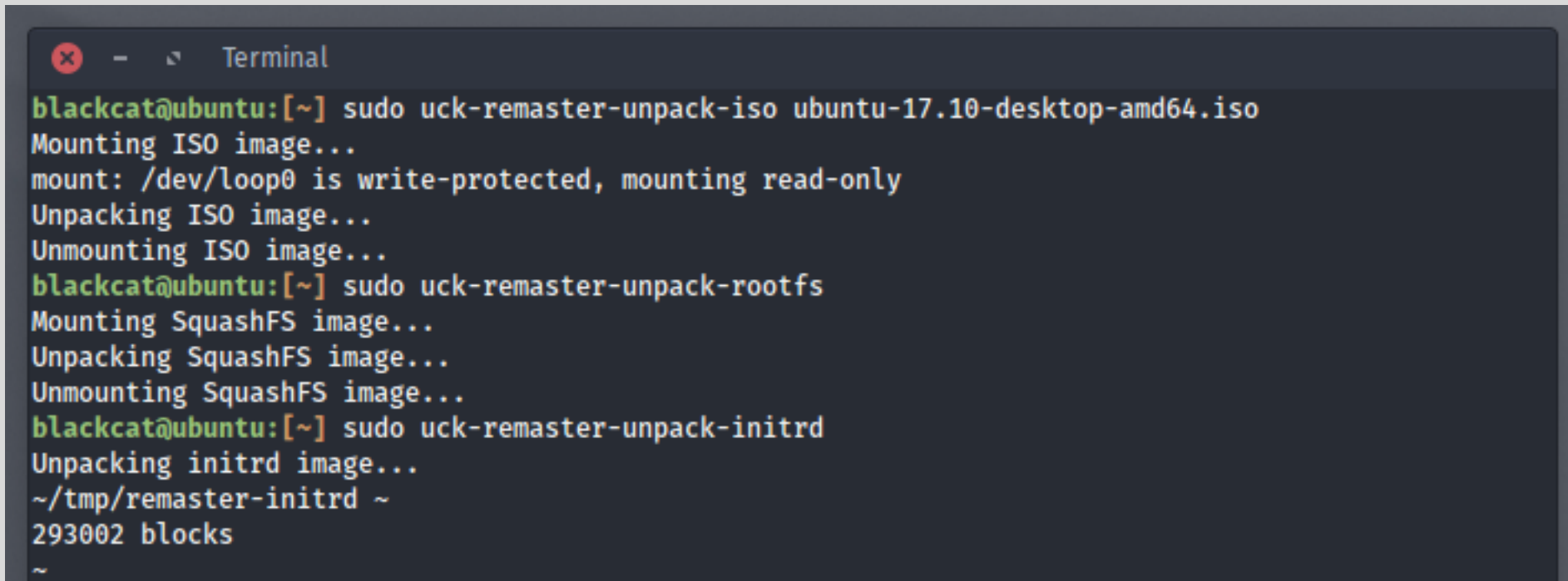
Perintah ini di lakukan jika sebelumnya anda melakukan remastering maka file remastering sebelumnya akan dibersihkan.

### 3. Unpack ISO untuk diremastering

\$ sudo uck-remaster-unpack-iso */path/to/ubuntu-17.10-desktop-amd64.iso*

\$ sudo uck-remaster-unpack-rootfs

\$ sudo uck-remaster-unpack-initrd

A terminal window titled "Terminal" with a dark background and light-colored text. It shows the execution of three commands to unpack an ISO image for remastering. The first command is "sudo uck-remaster-unpack-iso ubuntu-17.10-desktop-amd64.iso", which results in mounting the ISO image, a warning about write-protection, unpacking, and unmounting. The second command is "sudo uck-remaster-unpack-rootfs", which results in mounting and unpacking the SquashFS image. The third command is "sudo uck-remaster-unpack-initrd", which results in unpacking the initrd image and showing its size as 293002 blocks.

```
blackcat@ubuntu:~$ sudo uck-remaster-unpack-iso ubuntu-17.10-desktop-amd64.iso
Mounting ISO image...
mount: /dev/loop0 is write-protected, mounting read-only
Unpacking ISO image...
Unmounting ISO image...
blackcat@ubuntu:~$ sudo uck-remaster-unpack-rootfs
Mounting SquashFS image...
Unpacking SquashFS image...
Unmounting SquashFS image...
blackcat@ubuntu:~$ sudo uck-remaster-unpack-initrd
Unpacking initrd image...
~/tmp/remaster-initrd ~
293002 blocks
~
```

#### 4. Masuk ke sistem iso yang akan diremastering.

\$ sudo uck-remaster-chroot-rootfs

Prompt pada terminal akan berubah menjadi root.

```
Terminal
blackcat@ubuntu: [~/tmp] ls
remaster-apt-cache remaster-initrd remaster-iso remaster-root remaster-root-home
blackcat@ubuntu: [~/tmp] sudo uck-remaster-chroot-rootfs
[sudo] password for blackcat:
Mounting /proc
Mounting /sys
Mounting /dev/pts
Mounting /tmp
Mounting /home/blackcat/tmp/remaster-root-home
Mounting /home/blackcat/tmp/remaster-apt-cache
Mounting /run
Copying fstab/mtab...
Creating DBUS uuid...
Deactivating initctl...
mv: cannot stat '/sbin/initctl': No such file or directory
Deactivating update-grub...
Deactivating grub-probe...
Hacking grub-probe postinst/postrm...
Remembering kernel update state...
root@ubuntu: /# ping google.com
PING google.com (172.217.27.14) 56(84) bytes of data.
^C
--- google.com ping statistics ---
4 packets transmitted, 0 received, 100% packet loss, time 3022ms
```

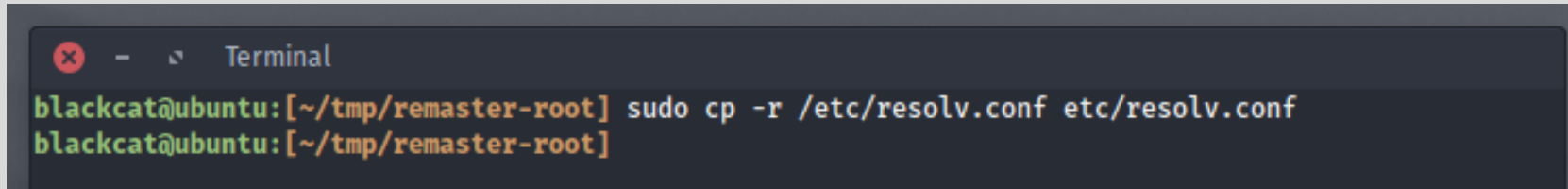
```
Terminal
blackcat@ubuntu:~$ sudo uck-remaster-chroot-rootfs
Creating root home...
Mounting /proc
Mounting /sys
Mounting /dev/pts
Mounting /tmp
Mounting /home/blackcat/tmp/remaster-root-home
Mounting /home/blackcat/tmp/remaster-apt-cache
Mounting /run
Copying resolv.conf...
cp: not writing through dangling symlink '/home/blackcat/tmp/remaster-root/etc/resolv.conf'
Failed to copy resolv.conf, error=1
Copying fstab/mtab...
Creating DBUS uuid...
Deactivating initctl...
mv: cannot stat '/sbin/initctl': No such file or directory
Deactivating update-grub...
Deactivating grub-probe...
Hacking grub-probe postinst/postrm...
Remembering kernel update state...
root@ubuntu:/#
```

Jika muncul error *Failed to copy resolv.conf* saat melakukan chroot, buka terminal baru dan lakukan perintah dibawah ini :

Buka terminal baru kemudian masuk ke direktori remaster-root.

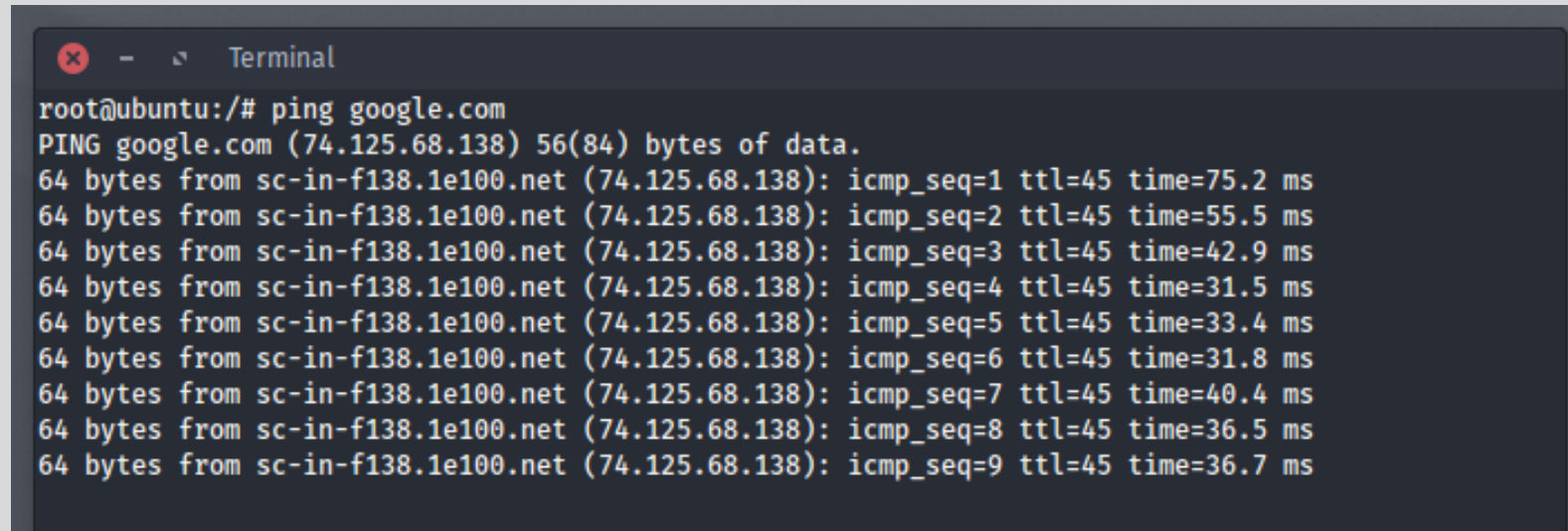
```
$ cd tmp/remaster-root
```

```
$ sudo cp -r /etc/resolv.conf etc/resolv.conf
```

A terminal window titled "Terminal" with a dark background. The prompt is "blackcat@ubuntu: [~/tmp/remaster-root]". The command "sudo cp -r /etc/resolv.conf etc/resolv.conf" has been entered and executed. The prompt now shows the user is still in the same directory.

```
blackcat@ubuntu: [~/tmp/remaster-root] sudo cp -r /etc/resolv.conf etc/resolv.conf
blackcat@ubuntu: [~/tmp/remaster-root]
```

Setelah itu lakukan ping pada sistem chroot.

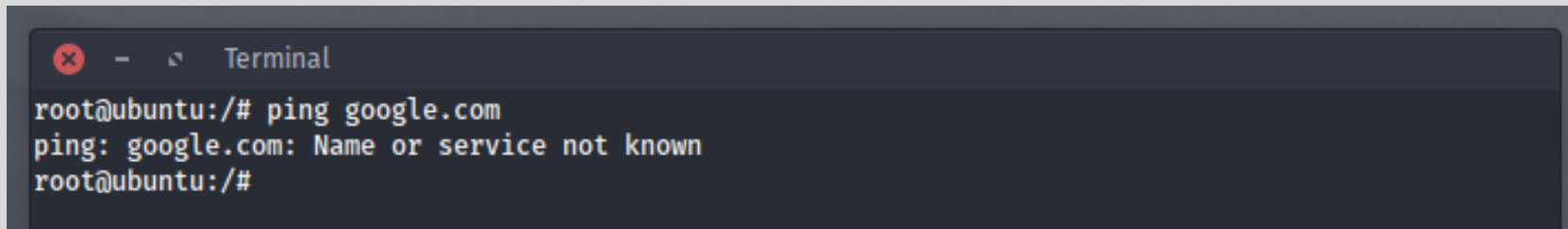
A terminal window titled "Terminal" with a dark background. The prompt is "root@ubuntu: /#". The command "ping google.com" has been entered and executed. The output shows the ping results for google.com (74.125.68.138).

```
root@ubuntu: /# ping google.com
PING google.com (74.125.68.138) 56(84) bytes of data:
64 bytes from sc-in-f138.1e100.net (74.125.68.138): icmp_seq=1 ttl=45 time=75.2 ms
64 bytes from sc-in-f138.1e100.net (74.125.68.138): icmp_seq=2 ttl=45 time=55.5 ms
64 bytes from sc-in-f138.1e100.net (74.125.68.138): icmp_seq=3 ttl=45 time=42.9 ms
64 bytes from sc-in-f138.1e100.net (74.125.68.138): icmp_seq=4 ttl=45 time=31.5 ms
64 bytes from sc-in-f138.1e100.net (74.125.68.138): icmp_seq=5 ttl=45 time=33.4 ms
64 bytes from sc-in-f138.1e100.net (74.125.68.138): icmp_seq=6 ttl=45 time=31.8 ms
64 bytes from sc-in-f138.1e100.net (74.125.68.138): icmp_seq=7 ttl=45 time=40.4 ms
64 bytes from sc-in-f138.1e100.net (74.125.68.138): icmp_seq=8 ttl=45 time=36.5 ms
64 bytes from sc-in-f138.1e100.net (74.125.68.138): icmp_seq=9 ttl=45 time=36.7 ms
```



## Apa fungsi resolv.conf?

Merupakan konfigurasi file untuk pengatur Domain Name System (DNS) agar dapat terhubung ke internet. Ketika tidak ada file ini maka sistem tidak bisa terkoneksi, ketika kita mencoba ping ke **google** maka hasilnya *service not known*.

A terminal window titled "Terminal" with a red close button. It shows a root user at an Ubuntu prompt. The user enters the command "ping google.com". The output is "ping: google.com: Name or service not known". The prompt returns to "root@ubuntu:/#".

```
root@ubuntu:/# ping google.com
ping: google.com: Name or service not known
root@ubuntu:/#
```

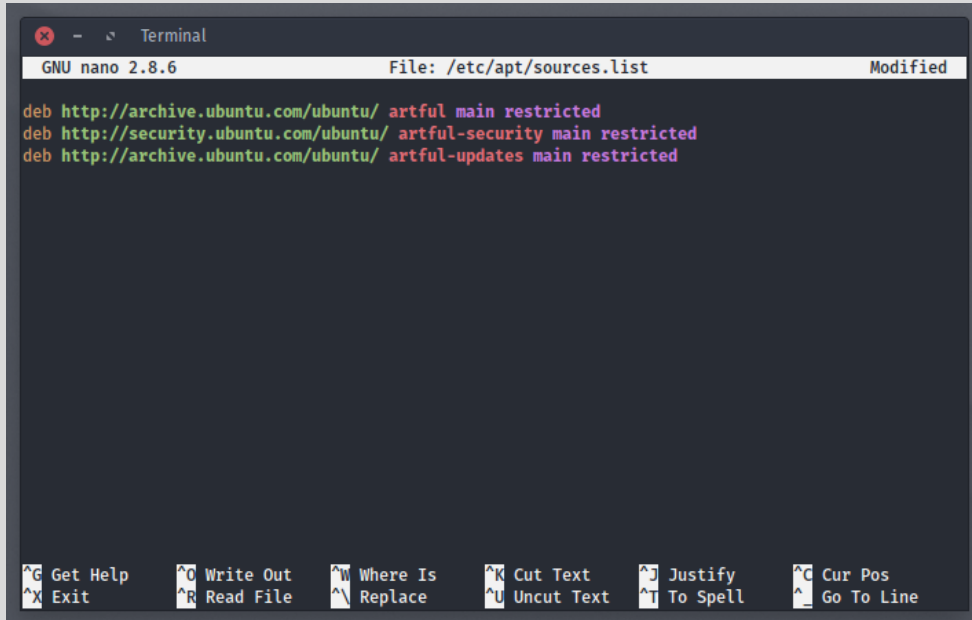
## 5. Meng-update dan meng-upgrade sistem.

# apt update

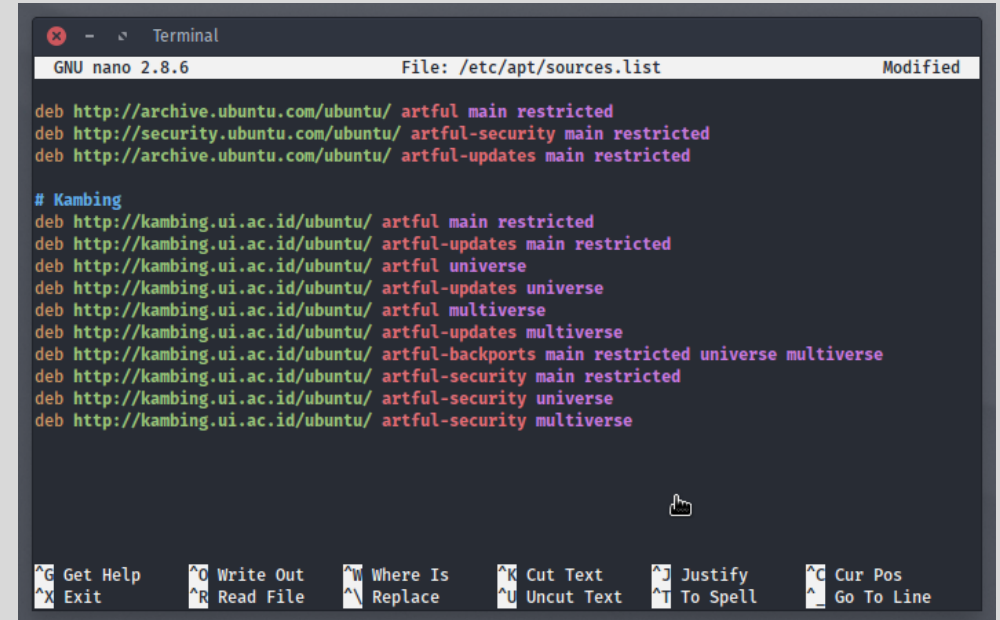
# apt upgrade -y (opsional)

```
Terminal
root@ubuntu:/# apt update
Get:1 http://archive.ubuntu.com/ubuntu artful InRelease [237 kB]
Get:2 http://security.ubuntu.com/ubuntu artful-security InRelease [70.3 kB]
Get:3 http://security.ubuntu.com/ubuntu artful-security/main amd64 Packages [8180 B]
Get:4 http://security.ubuntu.com/ubuntu artful-security/main Translation-en [4224 B]
Get:5 http://archive.ubuntu.com/ubuntu artful-updates InRelease [76.7 kB]
Get:5 http://archive.ubuntu.com/ubuntu artful-updates InRelease [76.7 kB]
Get:6 http://archive.ubuntu.com/ubuntu artful/main amd64 Packages [1071 kB]
Get:7 http://archive.ubuntu.com/ubuntu artful/main amd64 DEP-11 Metadata [397 kB]
Get:8 http://archive.ubuntu.com/ubuntu artful/main DEP-11 64x64 Icons [263 kB]
Get:9 http://archive.ubuntu.com/ubuntu artful-updates/main amd64 Packages [14.0 kB]
Get:10 http://archive.ubuntu.com/ubuntu artful-updates/main Translation-en [7032 B]
Get:11 http://archive.ubuntu.com/ubuntu artful-updates/main amd64 DEP-11 Metadata [8272 B]
Get:12 http://archive.ubuntu.com/ubuntu artful-updates/main DEP-11 64x64 Icons [3157 B]
Fetched 2155 kB in 46s (46.5 kB/s)
Reading package lists... Done
Building dependency tree
Reading state information... Done
29 packages can be upgraded. Run 'apt list --upgradable' to see them.
root@ubuntu:/#
```

Atau mengubah file konfigurasi repositori main ke lokal seperti repo kambing, itb, buaya dll.



```
GNU nano 2.8.6      File: /etc/apt/sources.list      Modified
deb http://archive.ubuntu.com/ubuntu/ artful main restricted
deb http://security.ubuntu.com/ubuntu/ artful-security main restricted
deb http://archive.ubuntu.com/ubuntu/ artful-updates main restricted
```

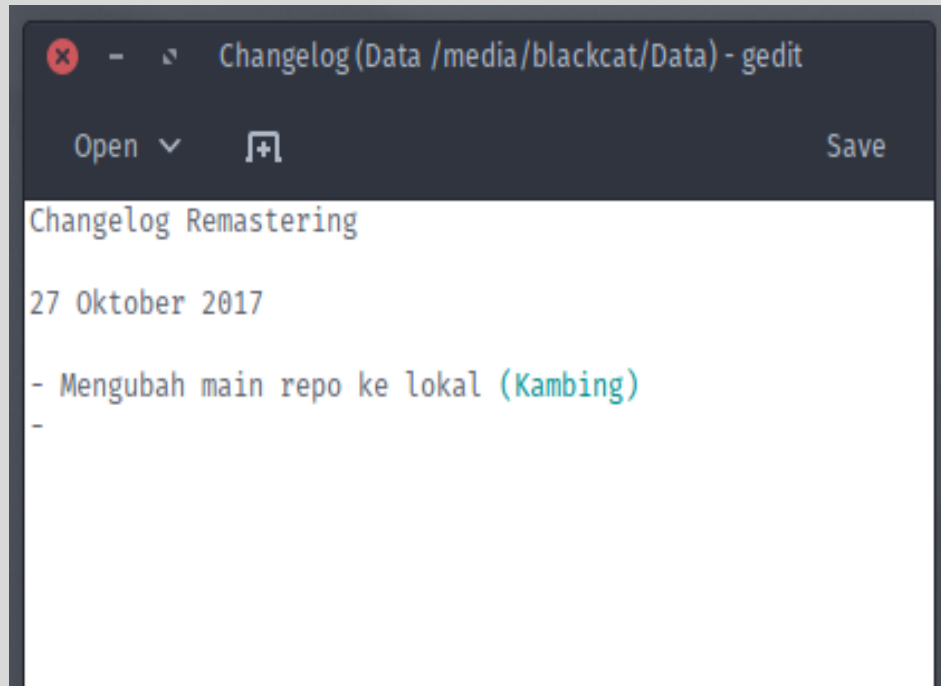


```
GNU nano 2.8.6      File: /etc/apt/sources.list      Modified
deb http://archive.ubuntu.com/ubuntu/ artful main restricted
deb http://security.ubuntu.com/ubuntu/ artful-security main restricted
deb http://archive.ubuntu.com/ubuntu/ artful-updates main restricted

# Kambing
deb http://kambing.ui.ac.id/ubuntu/ artful main restricted
deb http://kambing.ui.ac.id/ubuntu/ artful-updates main restricted
deb http://kambing.ui.ac.id/ubuntu/ artful universe
deb http://kambing.ui.ac.id/ubuntu/ artful-updates universe
deb http://kambing.ui.ac.id/ubuntu/ artful multiverse
deb http://kambing.ui.ac.id/ubuntu/ artful-updates multiverse
deb http://kambing.ui.ac.id/ubuntu/ artful-backports main restricted universe multiverse
deb http://kambing.ui.ac.id/ubuntu/ artful-security main restricted
deb http://kambing.ui.ac.id/ubuntu/ artful-security universe
deb http://kambing.ui.ac.id/ubuntu/ artful-security multiverse
```

Silahkan cek di : <https://kampungpenguin.com/daftar-mirror-repository-ubuntu-17-10-artful-aardvark/>

# NOTE :

A screenshot of a gedit text editor window. The title bar reads "Changelog (Data /media/blackcat/Data) - gedit". The menu bar shows "Open" with a dropdown arrow and "Save". The text area contains the following content:

```
Changelog Remastering  
  
27 Oktober 2017  
  
- Mengubah main repo ke lokal (Kambing)  
-
```

Jangan lupa untuk selalu dicatat setiap melakukan perintah.

Changelog ini nantinya akan berguna untuk membantu kita dalam *problem solving*. Kita bisa melihat aktivitas yang dilakukan sebelum terjadinya **error**.

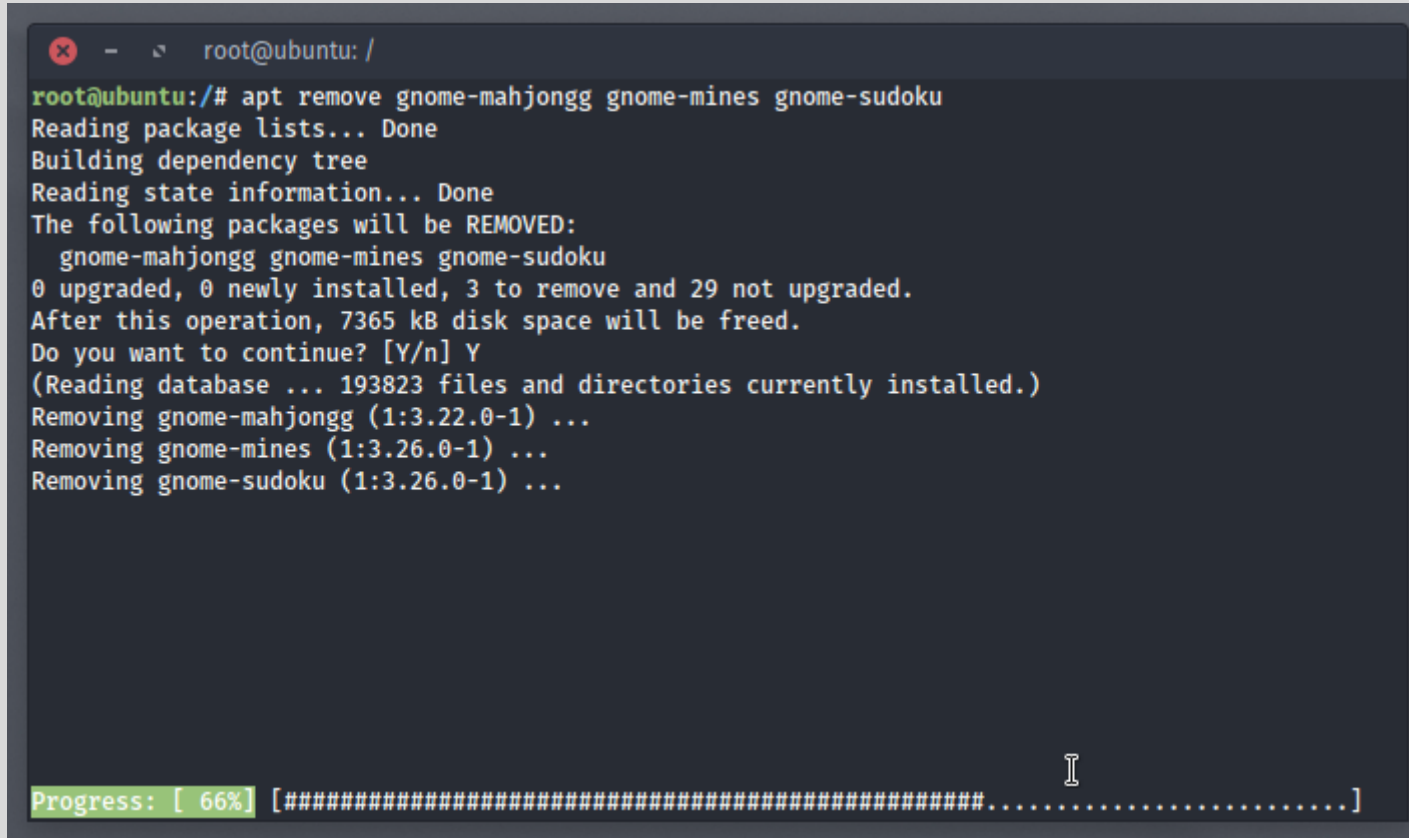
## 6. Menginstal aplikasi yang diperlukan.

```
# apt install libreoffice-gtk inkscape gimp vlc chromium-browser
```

```
root@ubuntu: /  
root@ubuntu:/# apt install libreoffice-gtk inkscape gimp vlc chromium-browser  
Reading package lists... Done  
Building dependency tree  
Reading state information... Done  
The following additional packages will be installed:  
chromium-browser-l10n chromium-codecs-ffmpeg-extra fig2dev gawk gimp-data i965-via-driver  
liba52-0.7.4 libaac0 libamd2 libass9 libavcodec57 libavformat57 libavutil55 libbabl-0.1-0  
libbasicusageenvironment1 libbdplus0 libblas3 libbluray2 libcamd2 libccolamd2 libccd2  
libcholmod3 libchromaprint1 libcrystalhd3 libdc1394-22 libdca0 libdvbpsi0 libdvnav4  
libdvdread4 libebml4v5 libfaad2 libgegl-0.3-0 libgfortran4 libgimp2.0 libgme0 libgroupsock8  
libgs123 libgslcblas0 libgsm1 libgtkspell0 libimage-magick-perl libimage-magick-q16-perl  
libiso9660-8 libkate1 liblapack3 liblivemedia58 liblua5.2-0 libmad0 libmagick++-6.q16-7  
libmatroska6v5 libmetis5 libmng2 libmp3lame0 libmpegdec6 libmpeg2-4 libmpeg2-4 libmpeg2-4 libopenjp2-7  
libopenmpt-modplug1 libopenmpt0 libpotrace0 libproxy-tools libqt5x11extras5 libquadmath0  
libreoffice-gtk2 libresid-builder0c2a libsdl-image1.2 libsdl1.2debian libshine3 libsidplay2  
libsigsegv2 libsnappy1v5 libsndio6.1 libsoxr0 libssh-gcrypt-4 libssh2-1 libswresample2  
libswscale4 libtwolame0 libumfpack5 libupnp6 libusageenvironment3 libva-drm1 libva-x11-1  
libva1 libvcdinfo0 libvdpau1 libvlc-bin libvlc5 libvlccore8 libwmf-bin libx264-148 libx265-130  
libxvidcore4 libzvb-common libzvb0 mesa-via-drivers mesa-vdpau-drivers python-bs4  
python-chardet python-html5lib python-lxml python-numpy python-pkg-resources python-scour  
python-six python-webencodings transfig va-driver-all vdpau-driver-all vlc-bin vlc-data  
vlc-l10n vlc-plugin-base vlc-plugin-notify vlc-plugin-qt vlc-plugin-samba vlc-plugin-skins2  
vlc-plugin-video-output vlc-plugin-video-splitter vlc-plugin-visualization  
Suggested packages:  
webaccounts-chromium-extension unity-chromium-extension adobe-flashplugin xfig gawk-doc
```

# Menghapus aplikasi yang tidak diperlukan.

```
# apt remove gnome-mahjongg gnome-mines gnome-sudoku
```

A terminal window with a dark background and light text. The window title bar shows a red close button, a minus sign, and the text 'root@ubuntu: /'. The terminal content shows the execution of the command 'apt remove gnome-mahjongg gnome-mines gnome-sudoku'. It displays the progress of reading package lists, building the dependency tree, and reading state information. It then lists the packages to be removed and the disk space to be freed. A confirmation prompt 'Do you want to continue? [Y/n]' is shown with 'Y' entered. The removal process for each package is shown with progress bars. At the bottom, a green progress bar indicates 66% completion, followed by a long string of hash characters and a cursor.

```
root@ubuntu: /
root@ubuntu:/# apt remove gnome-mahjongg gnome-mines gnome-sudoku
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following packages will be REMOVED:
  gnome-mahjongg gnome-mines gnome-sudoku
0 upgraded, 0 newly installed, 3 to remove and 29 not upgraded.
After this operation, 7365 kB disk space will be freed.
Do you want to continue? [Y/n] Y
(Reading database ... 193823 files and directories currently installed.)
Removing gnome-mahjongg (1:3.22.0-1) ...
Removing gnome-mines (1:3.26.0-1) ...
Removing gnome-sudoku (1:3.26.0-1) ...

Progress: [ 66%] [#####.....]
```

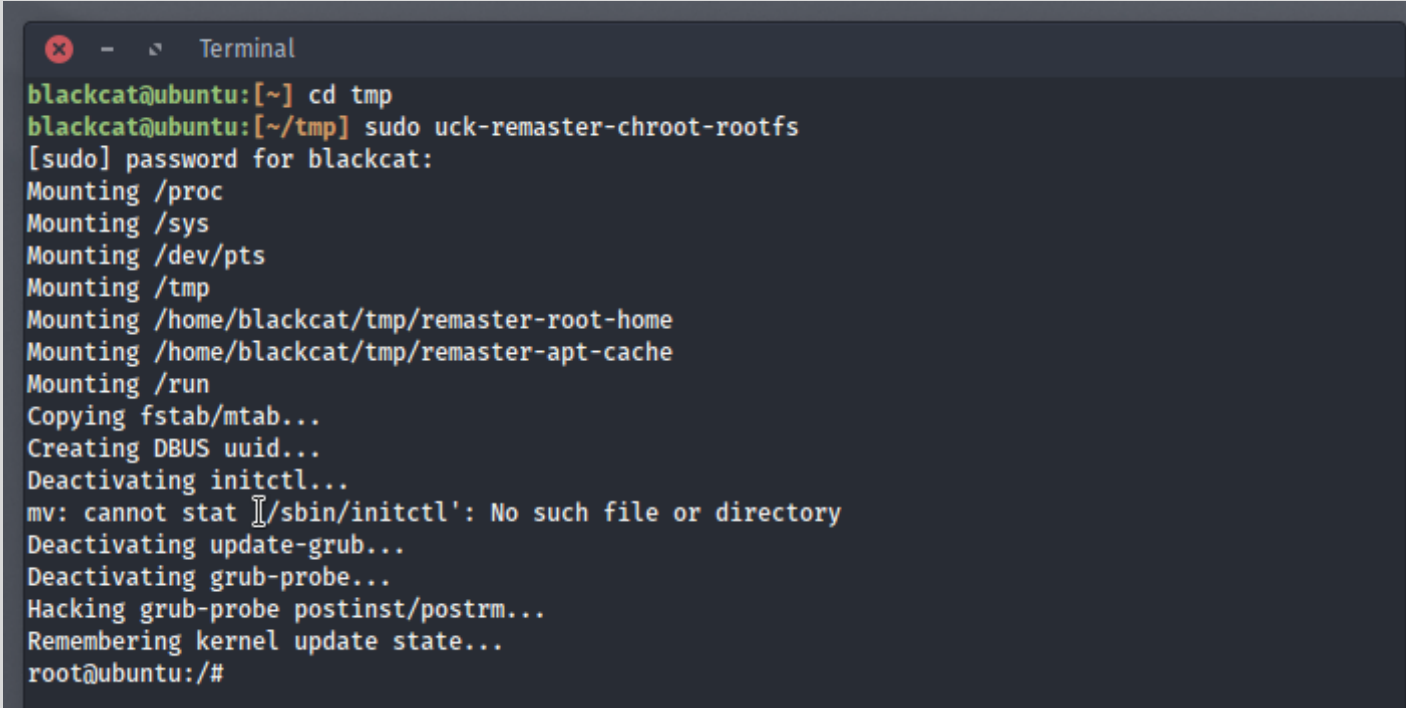
**REMASTERING**

**BERHENTI DITENGAH JALAN?**

Buka terminal baru kemudian masuk ke direktori ~/tmp dan chroot kembali.

\$ cd ~/tmp

\$ sudo uck-remaster-chroot-rootfs

A terminal window titled "Terminal" with a dark background and light text. It shows the execution of the command 'sudo uck-remaster-chroot-rootfs' from the directory ~/tmp. The terminal output includes mounting various filesystems, copying fstab, creating DBUS, deactivating initctl, and a warning about a missing file in sbin/initctl. The prompt changes from blackcat@ubuntu to root@ubuntu at the end.

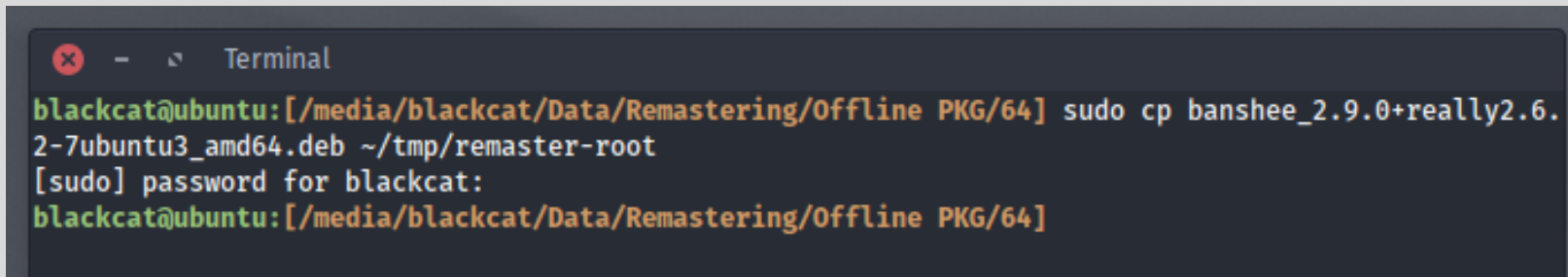
```
blackcat@ubuntu: [~] cd tmp
blackcat@ubuntu: [~/tmp] sudo uck-remaster-chroot-rootfs
[sudo] password for blackcat:
Mounting /proc
Mounting /sys
Mounting /dev/pts
Mounting /tmp
Mounting /home/blackcat/tmp/remaster-root-home
Mounting /home/blackcat/tmp/remaster-apt-cache
Mounting /run
Copying fstab/mtab...
Creating DBUS uuid...
Deactivating initctl...
mv: cannot stat '/sbin/initctl': No such file or directory
Deactivating update-grub...
Deactivating grub-probe...
Hacking grub-probe postinst/postrm...
Remembering kernel update state...
root@ubuntu: /#
```



## Menginstal paket manual

Buka terminal baru dan pindahkan pakatnya ke direktori chroot.

```
$ sudo cp /path/to/namapaket.deb ~/tmp/remaster-root/
```

A terminal window titled "Terminal" with a dark background. The prompt is "blackcat@ubuntu: [/media/blackcat/Data/Remastering/Offline PKG/64]". The command entered is "sudo cp banshee\_2.9.0+really2.6.2-7ubuntu3\_amd64.deb ~/tmp/remaster-root". The output shows the password prompt "[sudo] password for blackcat:" followed by the prompt "blackcat@ubuntu: [/media/blackcat/Data/Remastering/Offline PKG/64]".

```
blackcat@ubuntu: [/media/blackcat/Data/Remastering/Offline PKG/64] sudo cp banshee_2.9.0+really2.6.2-7ubuntu3_amd64.deb ~/tmp/remaster-root
[sudo] password for blackcat:
blackcat@ubuntu: [/media/blackcat/Data/Remastering/Offline PKG/64]
```

Setelah menginstall paket .deb, kalian bisa menghapus binary pakatnya dengan menggunakan perintah :

```
# rm namapaket.deb
```

Kembali ke terminal sebelumnya dan install paketnya.

# dpkg -i *namapaket.deb*

```
Terminal
root@ubuntu:/# ls
 banshee_2.9.0+really2.6.2-7ubuntu3_amd64.deb  dev      initrd.img  media  proc  sbin  sys  var
 bin                                           etc      lib         mnt    root  snap  tmp  vmlinuz
 boot                                         home    lib64      opt     run   srv   usr

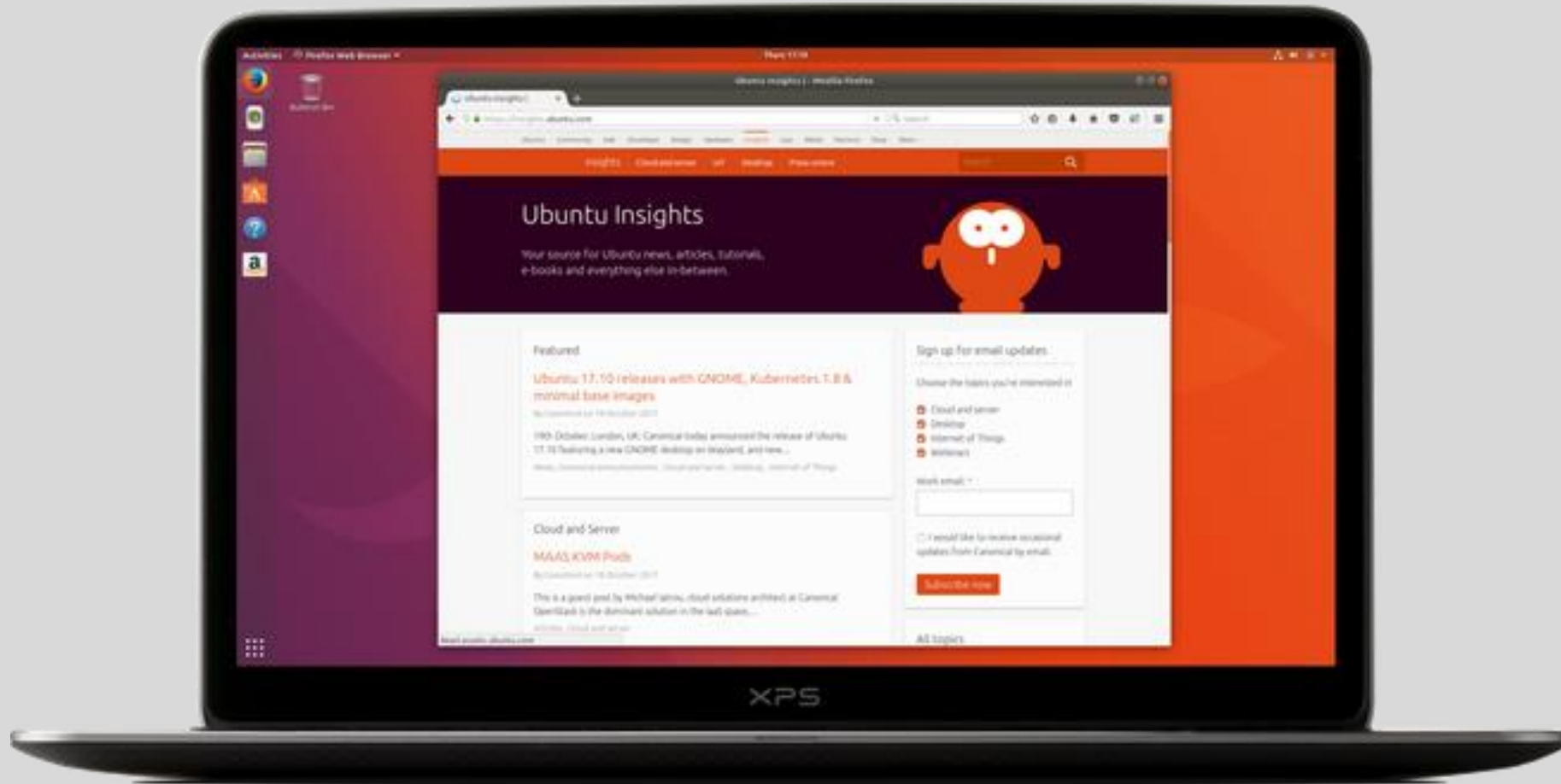
root@ubuntu:/# dpkg -i banshee_2.9.0+really2.6.2-7ubuntu3_amd64.deb
Selecting previously unselected package banshee.
(Reading database ... 145532 files and directories currently installed.)
Preparing to unpack banshee_2.9.0+really2.6.2-7ubuntu3_amd64.deb ...
Unpacking banshee (2.9.0+really2.6.2-7ubuntu3) ...
dpkg: dependency problems prevent configuration of banshee:
 banshee depends on mono-runtime (>= 3.0~); however:
   Package mono-runtime is not installed.
 banshee depends on libdbus-glib1.0-cil (>= 0.5); however:
   Package libdbus-glib1.0-cil is not installed.
 banshee depends on libdbus1.0-cil (>= 0.7); however:
   Package libdbus1.0-cil is not installed.
 banshee depends on libgconf2.0-cil (>= 2.24.0); however:
   Package libgconf2.0-cil is not installed.
 banshee depends on libgdata2.1-cil (>= 2.2.0.0); however:
   Package libgdata2.1-cil is not installed.
 banshee depends on libgkeyfile1.0-cil; however:
   Package libgkeyfile1.0-cil is not installed.
 banshee depends on libglib2.0-cil (>= 2.12.40); however:
   Package libglib2.0-cil is not installed.
 banshee depends on libgtk-sharp-beans-cil; however:
```

Jika muncul error pada depedensi seperti *broken package* maka lakukan perintah dibawah:

# apt install -f

```
Terminal
libwnck-common libwnck22 mono-4.0-gac mono-gac mono-runtime mono-runtime-common
mono-runtime-sgen
Suggested packages:
monodoc-gtk2.0-manual libmono-i18n4.0-all libgamin0
The following NEW packages will be installed:
binfmt-support ca-certificates-mono cli-common gconf-service gconf-service-backend
gconf2-common gnome-icon-theme libdbus-glib1.0-cil libdbus-glib2.0-cil libdbus1.0-cil
libdbus2.0-cil libgconf-2-4 libgconf2.0-cil libgdata2.1-cil libgdiplus libgif7
libgkeyfile1.0-cil libglib2.0-cil libgtk-sharp-beans-cil libgtk2.0-cil libgudev1.0-cil
libmono-addins0.2-cil libmono-cairo4.0-cil libmono-corlib4.5-cil libmono-data-tds4.0-cil
libmono-i18n-west4.0-cil libmono-i18n4.0-cil libmono-posix4.0-cil libmono-security4.0-cil
libmono-sharpzip4.84-cil libmono-system-configuration4.0-cil libmono-system-core4.0-cil
libmono-system-data4.0-cil libmono-system-drawing4.0-cil
libmono-system-enterpriseservices4.0-cil libmono-system-numeric4.0-cil
libmono-system-runtime-serialization4.0-cil libmono-system-security4.0-cil
libmono-system-servicemodel-internals0.0-cil libmono-system-transactions4.0-cil
libmono-system-xml-linq4.0-cil libmono-system-xml4.0-cil libmono-system4.0-cil
libmono-zeroconf1.0-cil libnewtonsoft-json5.0-cil libnotify0.4-cil libtaglib2.1-cil
libwnck-common libwnck22 mono-4.0-gac mono-gac mono-runtime mono-runtime-common
mono-runtime-sgen
0 upgraded, 54 newly installed, 0 to remove and 29 not upgraded.
1 not fully installed or removed.
Need to get 18.7 MB of archives.
After this operation, 56.6 MB of additional disk space will be used.
Do you want to continue? [Y/n]
```

## 7. Memperindah *user interface* (desktop)



## Memasang tema dan icons.

```
# apt install arc-theme moka-icon-theme
```

```
# git clone https://github.com/horst3180/arc-icon-theme
```

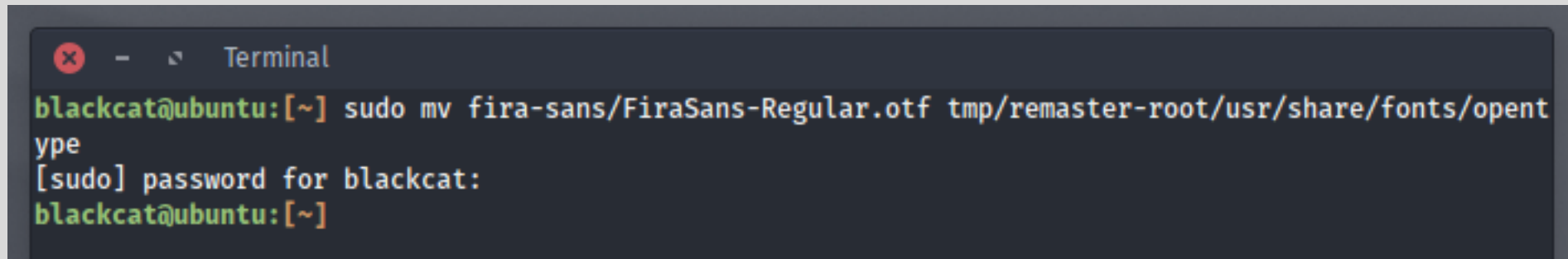
```
# cd arc-icon-theme
```

```
# mv Arc /usr/share/icons
```

```
# rm -r arc-icon-theme
```

Memasang font dengan memindahkannya dari host ke chroot seperti pada gambar:

```
$ sudo mv namafont tmp/remaster-root/usr/share/fonts/opentype
```

A terminal window titled "Terminal" with a dark background. It shows a user named "blackcat" at an "ubuntu" machine. The command being executed is "sudo mv fira-sans/FiraSans-Regular.otf tmp/remaster-root/usr/share/fonts/opentype". The terminal shows the command being entered, followed by a password prompt "[sudo] password for blackcat:", and then the command being executed successfully, returning to the prompt "blackcat@ubuntu: [~]".

```
blackcat@ubuntu: [~] sudo mv fira-sans/FiraSans-Regular.otf tmp/remaster-root/usr/share/fonts/opentype
[sudo] password for blackcat:
blackcat@ubuntu: [~]
```

## Mengganti tema, icons dan font pada sistem.

# nano usr/share/glib-2.0/schemas/10\_ubuntu-settings.gschema.override

```
root@ubuntu: /
GNU nano 2.8.6 File: usr/share/glib-2.0/schemas/10_ubuntu-settings.gschema.override

# ubuntu common session settings #
#####

[org.gnome.shell:ubuntu]
always-show-log-out = true
enable-hot-corners = false

[org.gnome.desktop.background:ubuntu]
show-desktop-icons = true

[org.gnome.desktop.interface:ubuntu]
gtk-theme = "Ambiance"
icon-theme = "ubuntu-mono-dark"
cursor-theme = "DMZ-White"
font-name = "Ubuntu 11"
monospace-font-name = "Ubuntu Mono 13"

[org.gtk.Settings.FileChooser:ubuntu]

^G Get Help      ^O Write Out     ^W Where Is      ^K Cut Text      ^J Justify       ^C Cur Pos
^X Exit          ^R Read File     ^\ Replace       ^U Uncut Text    ^I To Spell      ^_ Go To Line
```

Menjadi . . . . .

Edit pada bagian

[org.gnome.....]

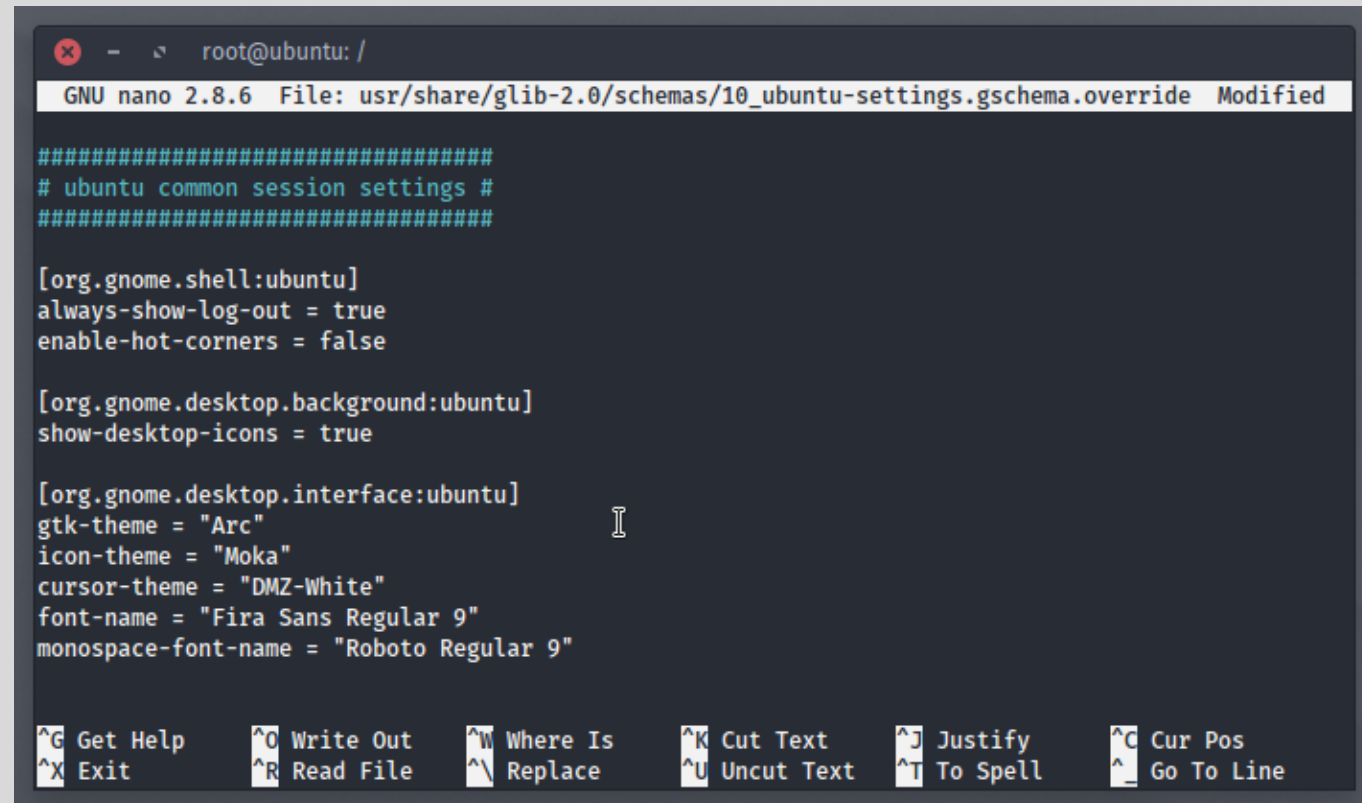
gtk-theme = ...

icon-theme = ...

cursor-theme = ...

font-name = ...

dan seterusnya menjadi seperti  
gambar disamping.



```
root@ubuntu: /
GNU nano 2.8.6 File: usr/share/glib-2.0/schemas/10_ubuntu-settings.gschema.override Modified

#####
# ubuntu common session settings #
#####

[org.gnome.shell:ubuntu]
always-show-log-out = true
enable-hot-corners = false

[org.gnome.desktop.background:ubuntu]
show-desktop-icons = true

[org.gnome.desktop.interface:ubuntu]
gtk-theme = "Arc"
icon-theme = "Moka"
cursor-theme = "DMZ-White"
font-name = "Fira Sans Regular 9"
monospace-font-name = "Roboto Regular 9"

^G Get Help  ^O Write Out  ^W Where Is   ^K Cut Text   ^J Justify    ^C Cur Pos
^X Exit       ^R Read File  ^\ Replace    ^U Uncut Text ^T To Spell   ^_ Go To Line
```

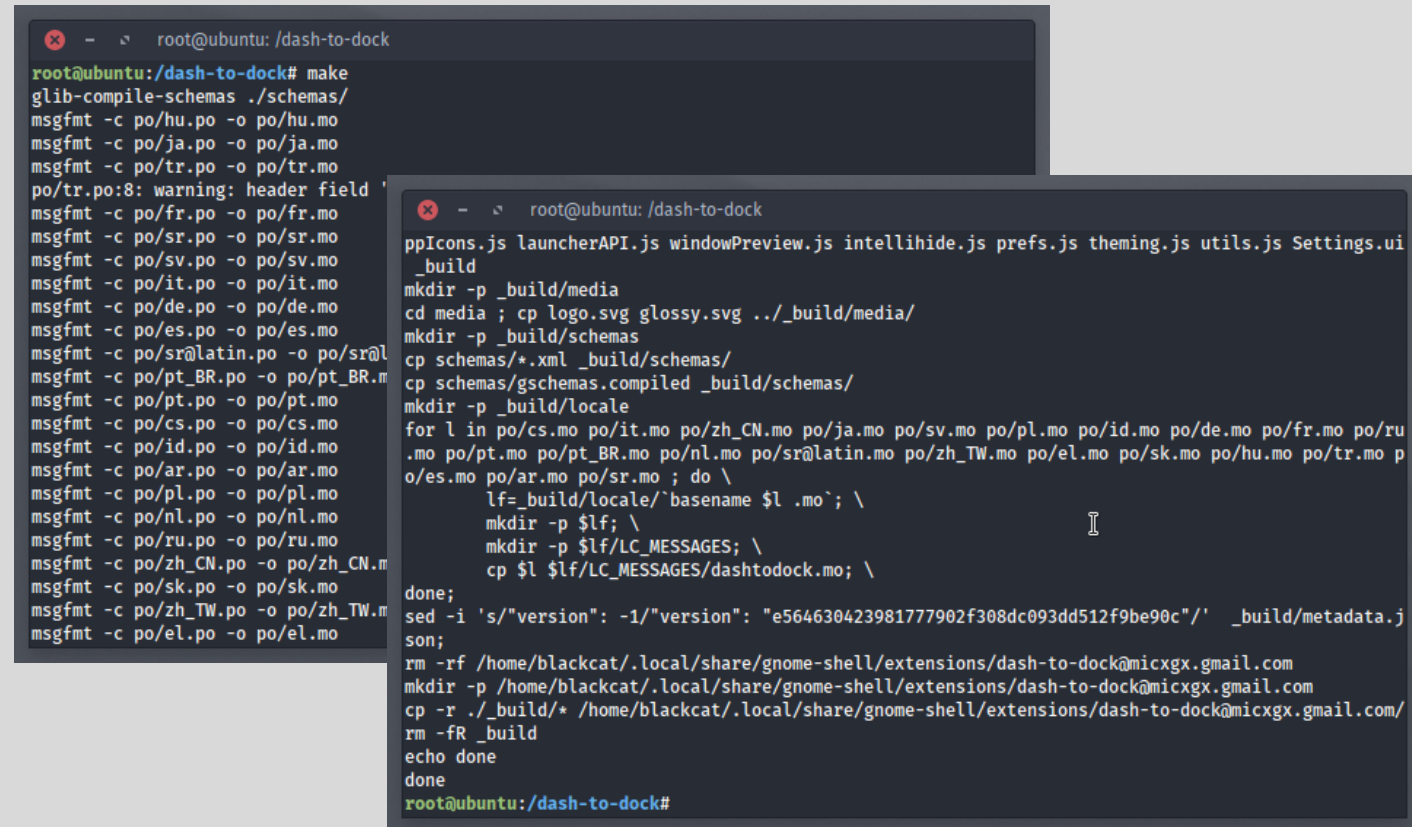
# Menambahkan gnome-extension

# git clone <https://github.com/micheleg/dash-to-dock.git>

# cd dash-to-dock

# make

# make install



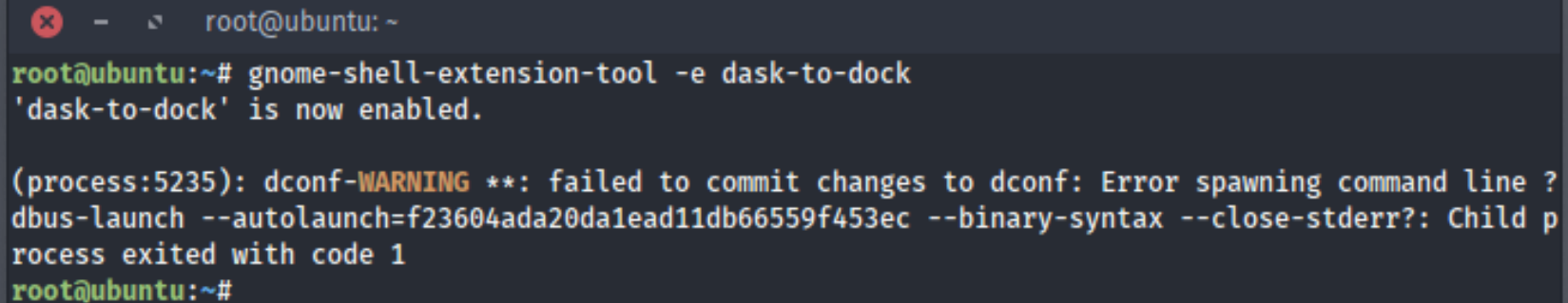
```
root@ubuntu: /dash-to-dock
root@ubuntu:/dash-to-dock# make
glib-compile-schemas ./schemas/
msgfmt -c po/hu.po -o po/hu.mo
msgfmt -c po/ja.po -o po/ja.mo
msgfmt -c po/tr.po -o po/tr.mo
po/tr.po:8: warning: header field
msgfmt -c po/fr.po -o po/fr.mo
msgfmt -c po/sr.po -o po/sr.mo
msgfmt -c po/sv.po -o po/sv.mo
msgfmt -c po/it.po -o po/it.mo
msgfmt -c po/de.po -o po/de.mo
msgfmt -c po/es.po -o po/es.mo
msgfmt -c po/sr@latin.po -o po/sr@latin.mo
msgfmt -c po/pt_BR.po -o po/pt_BR.mo
msgfmt -c po/pt.po -o po/pt.mo
msgfmt -c po/cs.po -o po/cs.mo
msgfmt -c po/id.po -o po/id.mo
msgfmt -c po/ar.po -o po/ar.mo
msgfmt -c po/pl.po -o po/pl.mo
msgfmt -c po/nl.po -o po/nl.mo
msgfmt -c po/ru.po -o po/ru.mo
msgfmt -c po/zh_CN.po -o po/zh_CN.mo
msgfmt -c po/sk.po -o po/sk.mo
msgfmt -c po/zh_TW.po -o po/zh_TW.mo
msgfmt -c po/el.po -o po/el.mo

root@ubuntu: /dash-to-dock
ppIcons.js launcherAPI.js windowPreview.js intellihide.js prefs.js theming.js utils.js Settings.ui
_build
mkdir -p _build/media
cd media ; cp logo.svg glossy.svg ../_build/media/
mkdir -p _build/schemas
cp schemas/*.xml _build/schemas/
cp schemas/gschemas.compiled _build/schemas/
mkdir -p _build/locale
for l in po/cs.mo po/it.mo po/zh_CN.mo po/ja.mo po/sv.mo po/pl.mo po/id.mo po/de.mo po/fr.mo po/ru
.mo po/pt.mo po/pt_BR.mo po/nl.mo po/sr@latin.mo po/zh_TW.mo po/el.mo po/sk.mo po/hu.mo po/tr.mo p
o/es.mo po/ar.mo po/sr.mo ; do \
    lf=_build/locale/'basename $l .mo'; \
    mkdir -p $lf; \
    mkdir -p $lf/LC_MESSAGES; \
    cp $l $lf/LC_MESSAGES/dashtodock.mo; \
done;
sed -i 's/"version": -1/"version": "e564630423981777902f308dc093dd512f9be90c"/' _build/metadata.j
son;
rm -rf /home/blackcat/.local/share/gnome-shell/extensions/dash-to-dock@micxgx.gmail.com
mkdir -p /home/blackcat/.local/share/gnome-shell/extensions/dash-to-dock@micxgx.gmail.com
cp -r ./_build/* /home/blackcat/.local/share/gnome-shell/extensions/dash-to-dock@micxgx.gmail.com/
rm -fr _build
echo done
done
root@ubuntu: /dash-to-dock#
```



Mengaktifkan gnome extension dengan perintah berikut :

# gnome-shell-extension-tool -e dash-to-dock



```
root@ubuntu: ~  
root@ubuntu:~# gnome-shell-extension-tool -e dash-to-dock  
'dash-to-dock' is now enabled.  
  
(process:5235): dconf-WARNING **: failed to commit changes to dconf: Error spawning command line ?  
dbus-launch --autolaunch=f23604ada20da1ead11db66559f453ec --binary-syntax --close-stderr?: Child p  
rocess exited with code 1  
root@ubuntu:~#
```

## Mengubah wallpaper desktop bawaan.

```
# nano /usr/share/gnome-background-properties/ubuntu-wallpaper.xml
```

Pindahkan wallpaper yang akan digunakan ke direktori */usr/share/background* dan mengganti nama wallpaper bawaan ke nama wallpaper yang sudah dipindahkan.

## Mengubah background pada GRUB.

```
# nano /etc/default/grub
```

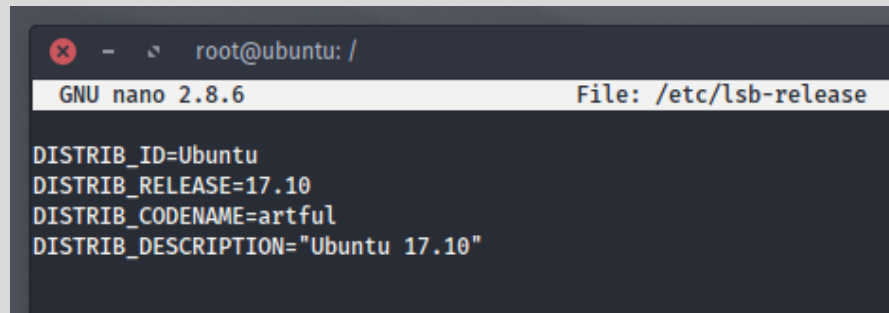
Edit lokasi direktori pada baris GRUB\_BACKGROUND ke direktori wallpaper, contohnya:  
~/Pictures/blue.png

## Mengubah text Ubuntu saat loading.

```
# nano /usr/share/plymouth/themes/ubuntu-text/ubuntu-text.plymouth
```

## 8. Mengubah nama sistem operasi.

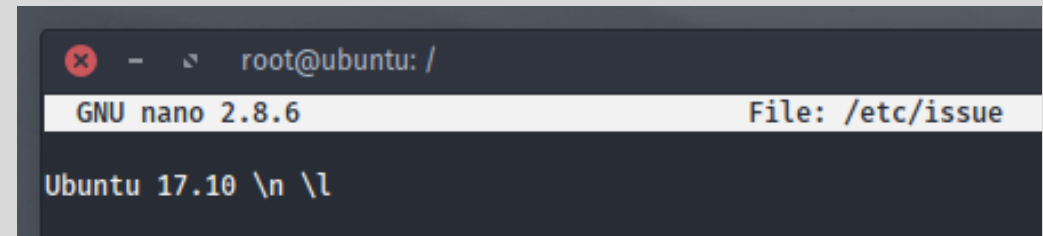
# nano /etc/lsb-release

A terminal window showing the nano text editor editing the file /etc/lsb-release. The editor's status bar at the top indicates 'GNU nano 2.8.6' and 'File: /etc/lsb-release'. The content of the file is displayed as follows:

```
DISTRIB_ID=Ubuntu
DISTRIB_RELEASE=17.10
DISTRIB_CODENAME=artful
DISTRIB_DESCRIPTION="Ubuntu 17.10"
```

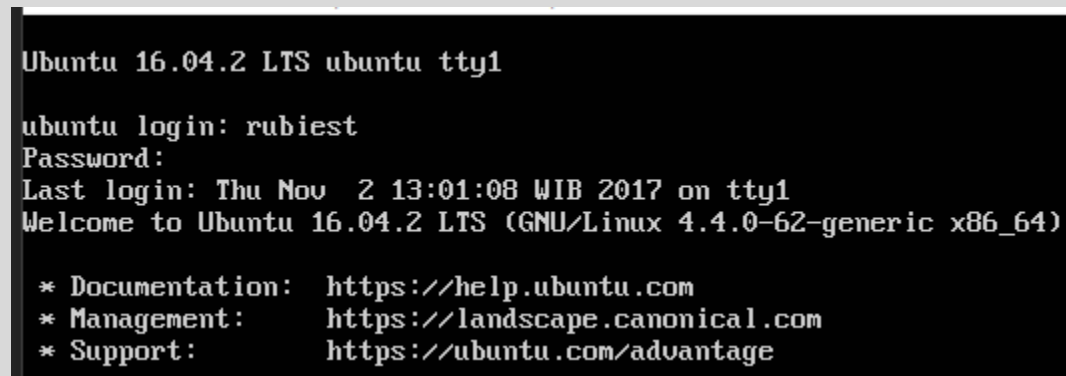
## Mengubah pre-login message.

# nano /etc/issue

A terminal window showing the nano text editor editing the file /etc/issue. The editor's status bar at the top indicates 'GNU nano 2.8.6' and 'File: /etc/issue'. The content of the file is displayed as follows:

```
Ubuntu 17.10 \n \l
```

Pre login message adalah pesan sebelum memasuki prompt pada distro GNU/Linux.

A terminal window showing the Ubuntu login process. The output is as follows:

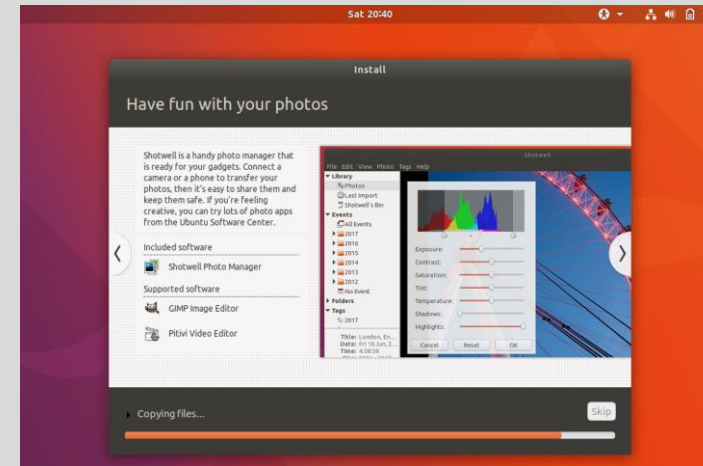
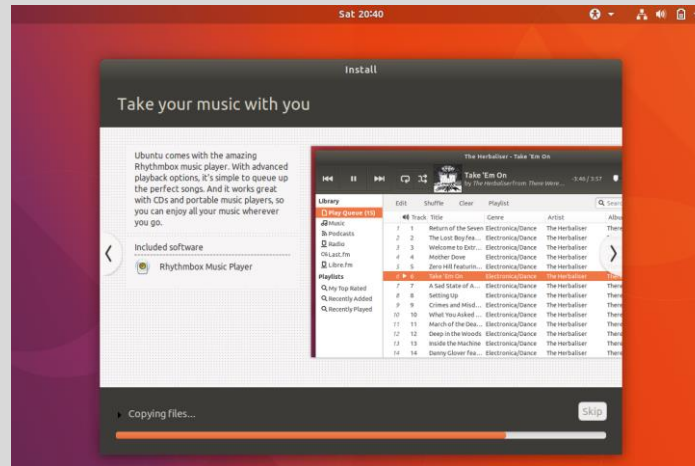
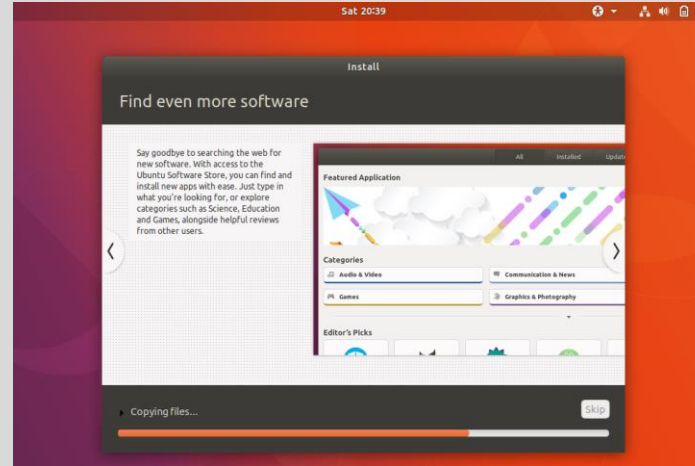
```
Ubuntu 16.04.2 LTS ubuntu tty1

ubuntu login: rubiest
Password:
Last login: Thu Nov  2 13:01:08 WIB 2017 on tty1
Welcome to Ubuntu 16.04.2 LTS (GNU/Linux 4.4.0-62-generic x86_64)

* Documentation:  https://help.ubuntu.com
* Management:    https://landscape.canonical.com
* Support:        https://ubuntu.com/advantage
```

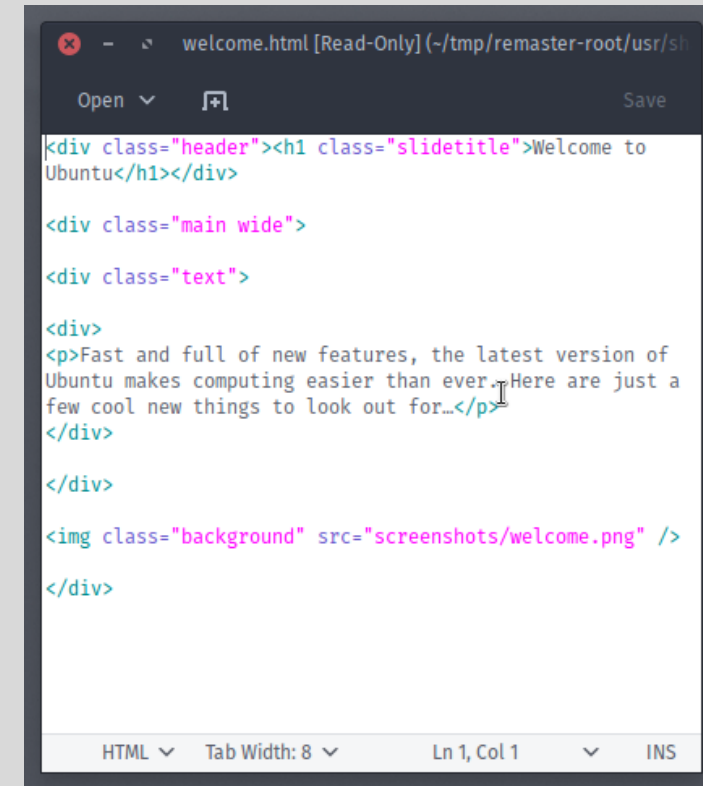
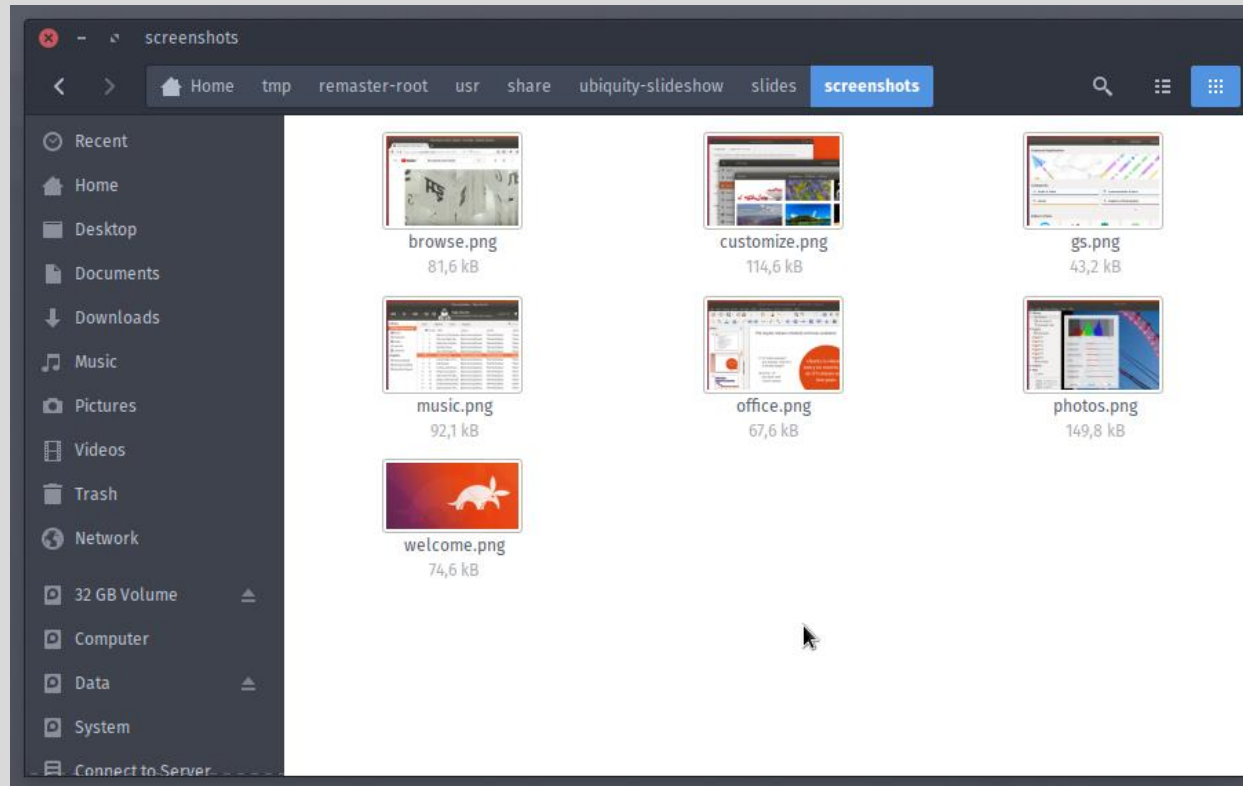
Referensi : <https://www.cyberciti.biz/faq/howto-change-login-message/>

## 9. Mengedit tampilan installer Ubiquity



Ini adalah lokasi untuk mengedit desain gambar dan deskripsi pada installer.

*/usr/share/ubiquity-slideshow/slides*



Untuk mengedit deskripsi, anda hanya perlu mengubah isi dari file html masing-masing.

## 10. Keluar dari chroot sistem kemudian cleaning dan packing menjadi ISO.

```
# umount -a
```

```
# exit
```

```
$ sudo uck-remaster-pack-rootfs
```

```
$ sudo uck-remaster-pack-initrd
```

```
$ sudo uck-remaster-pack-iso nama.iso
```

Hasil ISO akan tersimpan di direktori `~/tmp/remaster-new-files/`, jika sudah selesai maka kita lakukan pembersihan file temporary.

```
$ sudo uck-remaster-clean
```

## 11. Setelah hasil remastering menjadi ISO, maka kita lakukan testing pada VirtualBox / VM Ware.

**ERROR?**

**SOLVING SENDIRI :P**

**Jangan lupa selalu periksa changelog**

# REFERENSI

<https://www.slideshare.net/masparuk/presentasi-remastering-grombyangos>

[http://lms.onnocenter.or.id/wiki/index.php/UCK:\\_Remaster\\_Minimal\\_Ubuntu](http://lms.onnocenter.or.id/wiki/index.php/UCK:_Remaster_Minimal_Ubuntu)

<https://www.linux.com/learn/roll-your-own-customized-ubuntu-uck>