CyanogenMod

http://www.cyanogenmod.org/

Based on the Android Open Source Project.

Not to be confused with CyanogenMod OS
- Microsoft in 2015 invested in cyanogenmod –
which is found in cyanogenmod OS – ms office,
advertising, etc.

CyanogenMod features

- No Google
- Theming support
- FLAC audio
- OpenVPN
- Wifi / USB / bluetooth tethering
- Split screen support, call / sms blocking, ends up in android+1
- App permissions management
- No spyware or bloatware (apparently)
- Regular OTA updates, approx monthly for stable releases, daily for nightly releases

CyanogenMod annoyances

- No Google

- Poor voice TTS engine uses picoTTS – sounds bad

- Fancy camera settings unavailable, eg panorama, slow motion video, photosphere

- Asks to sign up for a cyanagenmod account after installation → this is skippable

- Is not arch linux, but debian is available on f-droid

Is my phone supported?

- Official ports:-
  https://wiki.cyanogenmod.org/w/Devices#vendor=;

- Unofficial ports:-
  https://wiki.cyanogenmod.org/w/Unofficial_Ports

Nexus 6p example

- Go to device page,
  https://wiki.cyanogenmod.org/w/Angler_Info

- Check to see if there are any "Known Issues"

- Check which builds are available, development nightlies or via the release channel

- Search internet for any issues with your phone model and CyanogenMod (yes, even bad youtube videos)

- BACKUP device to local storage, phone numbers, emails, photos, videos, notes, etc

- Follow installation guide for your phone model

Local backup

- Enable debugging mode (allows adb and fastboot tools to work while android / cyanogenmod is running):

  Settings → about phone → Tap 7 times on build number, go back to settings → developer options → enable Android debugging

- Backup applications / user files & settings (sorta works):

  adb backup -apk -shared -all -f ~/6p_backup_$(date +%F).ab

- Restore backup:

  adb restore ~/6p_backup_yyyy-mm-dd.ab

Installing

- https://wiki.cyanogenmod.org/w/Install_CM_for_angler
- Install android-tools (you'll need adb and fastboot utilities)
- Unlock phone's bootloader
- Install recovery – this is to allow easy formatting device, and easy installation of cyanogenmod and other Oses
  - Recommend using twrp rather than CyanogenMod recovery:-

  https://twrp.me/Devices/
- Install Cyanogenmod
- Install apps
- ???
- Profit!

Useful stuff

- Stock android downloads for nexus phones:-

  https://developers.google.com/android/nexus/images

- TWRP phone compatibility and downloads:-

  https://twrp.me/Devices/

- If you have issues with camera or other hardware, be sure to flash vendor.img (you'll find it in Stock android download for phone) after flashing CyanogenMod.

- GAPPS = Google applications, google play, better TTS, better camera etc, can flash afeter cyanogenmod installation, or manually extract apk files:-

  http://opengapps.org/

Other operating systems

- Replicant (fully OSS): http://www.replicant.us/

- Paronoid Android: http://aospa.co/

- Sailfish OS: https://sailfishos.org/

  - Actual Sailfish OS downloads:

    https://wiki.merproject.org/wiki/Adaptations/libhybris

- Ubuntu Touch: http://www.ubuntu.com/phone

  https://wiki.ubuntu.com/Touch/Devices

  https://developer.ubuntu.com/en/phone/devices/installing-ubuntu-for-devices/

adb command

adb only works when phone is booted in to OS / recovery

- Show phone screen on computer:-

  adb shell screenrecord --output-format=h264 - | ffplay -

- adb reboot bootloader

- adb push filename.zip /sdcard/

- adb --help

fastboot command

fastboot only works within bootloader

- fastboot devices
- fastboot flashing unlock

  fastboot flashing lock

- fastboot reboot-bootloader

- fastboot flash recovery recovery_image.img

- fastboot --help

f-droid

FOSS manager and repository for android apps

https://f-droid.org/

- Be sure Settings → Security → unknown sources is enabled first

- To conserve data usage, in f-droid settings be sure to check "Only on Wi-Fi" (Update app lists automatically only on Wi-Fi)

Installing stock android apps

- Download your preferred Variant

- If you want google play, then install via twrp

- If you don't want google play, then extract zip file, and search for the apk(s) you wish to install

  – Eg, GoogleTTS.apk & GoogleCamera.apk

  – Then install these with the file manager / via adb

Android N preview 2

For nexus phones, it's possible to grab the latest android n preview 2:-

https://developer.android.com/preview/download.html?utm_campaign=android_launch_npreview2_041316&utm_source=anddev&utm_medium=blog#flash

HTC shennanigans

- Device is locked, only way to unlock is to visit HTC's website and sign up for an account with them with an email address.

- While not using firefox in Linux or Windows, nor epihany. Chromium and IE works with HTC's website.

- Then copy and pasting output from fastboot and HTC's website with large encryption keys and stuff.