

# AsteroidOS



Free your wrist

AsteroidOS is an open-source linux distribution for smartwatches.



# Why?

- ◆ Privacy
  - ◆ No accounts, cloudservices, or data collection
- ◆ Freedom
  - ◆ No additional requirements
  - ◆ Open system with full access
- ◆ Tweaking
  - ◆ Optional, but fun



## What is it?

- ◆ Full Linux distro
- ◆ Using watches OG kernel + libhybris
- ◆ OPKG
- ◆ QT5 interface
  - ◆ QT6 in process



# Watch support - 24+6 watches



**TicWatch Pro 2018/20**  
(catfish, catfish\_ext, catshark)  
Support: ★★★★★



**OPPO Watch**  
(beluga)  
Support: ★★★★★



**Huawei Watch**  
(sturgeon)  
Support: ★★★★★



**LG Watch Urbane**  
(bass)  
Support: ★★★★★



**LG G Watch R**  
(lenok)  
Support: ★★★★★





# What can it do?

- ◆ Clock, timer, stopwatch
- ◆ Custom watchfaces
- ◆ Phone notifications
- ◆ Calendar
- ◆ Weather
- ◆ Music controller
- ◆ BPM (heartrate)
- ◆ Step Counter
- ◆ Running log (skedaddle)
- ◆ Diamond game

## Community examples:

- ◆ Voice recorder
- ◆ Maps
- ◆ OTP codes
- ◆ Pokédex
- ◆ Photogallery
- ◆ Bash script execute GUI
- ◆ TOP & QML tester
- ◆ More games
- ◆ More custom watchfaces



# It's a Linux!

- ◆ SSH or ADB into watch
- ◆ Attach a mouse, keyboard, controller
- ◆ Run bash scripts
- ◆ Install any Linux software you want
  - ◆ Practicallity being another subject 🤪



# Example:

- ◆ Auto-update calendars
  - ◆ Turn on Wi-Fi
  - ◆ Download .ics'
  - ◆ Import .ics'
  - ◆ Turn of Wi-Fi

```
04_update-agenda-full-auto.sh — Kate
File Edit Selection View Go Projects LSP Client Sessions Tools Settings Help
New Open Save Save As Undo Redo
home > jkhran > Documents > AsteroidOS > scripts > >_ 04_update-agenda-full-auto.sh
8
9
10 # import calendar function
11 function import() {
12     #return job message
13     echo "-> Downloading and importing calendars"
14
15     # download and import private calendar, overwrite old ones
16     curl -o ${privtarget} ${privurl}; icalconverter import ~/script-shell/priv.ics -d || echo "-> failed on priv"
17
18     # download and import together calendar & work calendar, add on top
19     curl -k ${worktarget} ${workurl}; icalconverter import ~/script-shell/work.ics || echo "-> failed on work"
20
21     # return success message
22     echo "-> Successfully imported calendars"
23 }
24
25 # disable wifi function
26 function disablewifi() {
27     echo "-> Disabling wifi"
28
29     result=$(connmanctl disable wifi)
30
31     if echo $result | grep "already"
32     then
33         echo "-> Wi-Fi Already disabled"
34     fi
35
36     result=$(ip a show dev wlan0)
37
38     if echo $result | grep DOWN;
39     then
40         echo "-> Disabled Wi-Fi"
41     fi
42 }
43
44 # enable wifi && import calendars
45 echo "-> Enabling Wi-Fi"
46
47 result=$(connmanctl enable wifi 2>&1)
48 if echo $result | grep already;
49 then
50     echo "-> Wi-Fi already enabled"
51     import
52     disablewifi
53     exit 0
54 fi
55
56 result=$(ip a show dev wlan0)
57 if echo $result | grep UP;
58 then
59     echo "-> Enabled Wi-Fi"
60     import
61     disablewifi
62     exit 0
63 fi
64
65 # this runs only on failure, as the rest returned exit 0
66 echo "-> Failed to import"
67 echo "-> Disabling wifi" # in case it was enabled then broke
68 disablewifi
69
70 exit 1
```



# Example:

```
(ceres) 192.168.2.15 — Konsole  
New Tab Split View Copy  
ssh ceres@192.168.2.15  
Last login: Tue Apr 28 17:47:40 2026 from 192.168.2.1  
ceres@catfish:~$ ls -a  
. .asteroid-sensorlogd .bashrc .config .profile .timed  
.. .bash_history .cache .local .profiled script-shell  
ceres@catfish:~$ cd script-shell  
ceres@catfish:script-shell$ ls -a  
. 01_enable-wifi.sh 03_update-agenda.sh priv.ics  
.. 02_disable-wifi.sh 04_update-agenda-full-auto.sh work.ics  
ceres@catfish:script-shell$ /home/ceres/script-shell/04_update-agenda-full-auto.sh
```



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```

Or run it automatic using cron or systemd



# Security

- ◆ No tracking, can run fully local!

But...

- ◆ Old kernels
- ◆ USB, Bluetooth, Wi-Fi
  - ◆ Minimise Wi-Fi usage
  - ◆ All in? Turn off all wireless!



**DOES IT RUN**

**DOOM?!?!**





## More info & updates

- ◆ Official website: [asteroidos.org](https://asteroidos.org)
- ◆ Matrix: [#asteroid:matrix.org](https://matrix.org/#asteroid:matrix.org)
- ◆ Mastodon: [@asteroidos@fosstodon.org](https://fosstodon.org/@asteroidos)
- ◆ Git repos: [github.com/AsteroidOS](https://github.com/AsteroidOS)