adb (Android Debug Bridge)

Android

device control

CONCEPTS

adb is a client talking to a server on host port 5037, which talks to adbd on each device. If a device acts up, restart the server.

adb client your command
↓ TCP 5037
adb server on the host
↓ USB or TCP
adbd on the device

DEVICES & SERVER

adb devices -l
List devices with model and product

adb -s *<serial>* *<command>*
Target one device

adb kill-server
Stop the adb server

WIRELESS

adb pair *<ip>*:*<port>*
Pair with a code (Android 11+)

adb connect *<ip>*:*<port>*
Connect over Wi-Fi

APPS

adb install *<apk>*
Install an APK

adb install -r *<apk>*
Reinstall, keep data

adb uninstall *<package>*
Remove an app

adb shell pm list packages
List installed packages

adb shell pm clear *<package>*
Wipe app data

ACTIVITY MANAGER

adb shell am start -n *<package>*/*<activity>*
Launch an activity

adb shell am start -a android.intent.action.VIEW -d *<uri>*
Open a URL or deep link

ACTIVITY MANAGER (cont.)

adb shell am force-stop *<package>*
Stop an app

FILES & SHELL

adb shell
Interactive device shell

adb shell *<command>*
Run one command on the device

adb push *<local>* *<remote>*
Copy a file to the device

adb pull *<remote>* [*<local>*]
Copy a file from the device

LOGS & DEBUGGING

adb logcat
Stream the log

adb logcat -c
Clear the log buffers

adb logcat -d
Dump the log and exit

adb logcat -s *<tag>*
Show only one tag

adb logcat *<tag>*:*<level>* ***:S**
Filter by tag and priority

adb shell dumpsys *<service>*
Dump a system service state

SCREEN & INPUT

adb exec-out screencap -p > *<file>*.png
Take a screenshot

adb shell screenrecord /sdcard/*<file>*.mp4
Record the screen (Ctrl+C stops)

PORTS & POWER

adb forward tcp:*<host>* **tcp:***<device>*
Host port to device port

adb reverse tcp:*<device>* **tcp:***<host>*
Device port to host port

adb reboot
Reboot the device