

# Android Debug Bridge

## Cheat Sheet

### Selecting a device

```
adb devices          List of devices
                    by serial number.
adb devices -l       List of devices
                    by product/model.
adb -s <serial> ...  Command line selection.
export ANDROID_SERIAL=<serial> Env. variable selection.
```

If a command starts with \$ it has to be run from the Android shell or via `adb shell <command>`, or even better `adb shell <command> | less`.

### Package installation

```
adb install <apk>    Installs app.
$ pm install <path>  Install app from phone path.
$ pm install -r <path> Reinstall app from phone path.
$ pm uninstall <name> Remove the app.
$ pm get-install-location Install location:
                    0 - Auto
                    1 - Internal
                    2 - External
```

### Package info

```
$ pm list packages  List package names.
$ pm list packages -f As above + path to apks.
$ pm list packages -3 Only third party packages.
$ pm list packages -s Only system packages.
$ pm list packages -u Also uninstalled packages.
$ dumpsys package packages List info on all apps.
$ pm dump <name>    List info on one package.
$ pm path <package> Path to the apk file.
```

### Permissions

```
$ pm permission groups Permission groups definitions.
$ pm list permissions -g -f List permissions details.
```

### File operations

```
adb push <local> <remote> Copy file/dir to device.
adb pull <remote> [<local>] Copy file/dir from device.
adb backup -f <file> [<packages...>]
                    Backup the phone.
```

If you want to access the private package files just use `run-as <package> cat <file>`.

### Paths

```
/data/data/<package> App data, as described below.
  databases/         App databases.
  shared_prefs/      Shared preferences.
/data/app            APK files installed by user.
/system/app         Pre-installed APK files.
/mnt/asec           Encrypted apps (App2SD).
/mnt/emmc           Internal SD Card.
/mnt/sdcard         External/Internal SD Card.
/mnt/sdcard/external_sd External SD Card.
```

### Phone info

```
$ sqlite3 /data/data/
  com.android.providers.settings/
  databases/settings.db .dump
                    Dump phone settings.
$ getprop           Get properties (e.g. model).
$ dumpsys iphonesubinfo Get the IMEI.
adb get-serialno    Get the serial number.
$ dumpsys battery   Battery status.
$ pm list users     Lists phone users (4.1+).
$ pm list features  List phone features.
```

### Services & activities

```
$ service list      List all services.
$ dumpsys activity <package>/<activity>
                    Activity info.
```

Activity Manager usage:

```
$ am start|startservice|broadcast <INTENT>
                    [<COMPONENT>]
```

where <INTENT> is specified with following options:

```
-a <ACTION>        e.g. android.intent.action.VIEW
-c <CATEGORY>      e.g. android.intent.category.LAUNCHER
```

### Common actions

To open the URL:

```
$ am start -a android.intent.action.VIEW -d URL
```

### Logs

All logs are accessed by using either

```
$ logcat [options] [filter] [filter] ...
```

or

```
adb logcat [options] [filter] [filter] ...
```

Useful options are:

```
-d           Only dump logs (do not block).
-c           Flush the buffers.
-b <buffer>  Buffer to display (default: system, main).
<tag>[:priority] filter spec at the end of command.
```

Available priorities are:

```
V Verbose
D Debug
I Info
W Warn
E Error
F Fatal
S Silent (suppress all output)
```

Other useful log information:

```
$ dumpstate  Dump current phone state.
$ dumpsys    Dump all system data.
```

### Miscellaneous

```
$ screencap -p <path>.png Screenshot (saved on device).
$ screenrecord <path>.mp4 Screen capture (path on device).
```

### ADB daemon

adb runs on TCP/5037.

```
adb kill-server  Kill the server if it is running.
adb start-server Ensure that there is a server running.
adb root         Restarts the adb with root permissions.
```

v 0.2 by @maldr0id

based on L<sup>A</sup>T<sub>E</sub>X cheat sheet by Winston Chang

<http://www.stdout.org/~winston/latex/>