

# Android Debugger Bridge (ADB) Shell Commands

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## Available commands

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$ adb
Android Debug Bridge version 1.0.39
Version 27.0.0-4455170
Installed as /Users/jagadeesh/Library/Android/sdk/platform-tools/adb

global options:
-a          listen on all network interfaces, not just localhost
-d          use USB device (error if multiple devices connected)
-e          use TCP/IP device (error if multiple TCP/IP devices available)
-s SERIAL   use device with given serial (overrides $ANDROID_SERIAL)
-t ID       use device with given transport id
-H          name of adb server host [default=localhost]
-P          port of adb server [default=5037]
-L SOCKET   listen on given socket for adb server
[default=tcp:localhost:5037]

general commands:
devices [-l]          list connected devices (-l for long output)
help                  show this help message
version               show version num

networking:
connect HOST[:PORT]   connect to a device via TCP/IP [default
port=5555]
disconnect [HOST[:PORT]]
    disconnect from given TCP/IP device [default port=5555], or all
forward --list         list all forward socket connections
forward [--no-rebind] LOCAL REMOTE
    forward socket connection using:
        tcp:<port> (<local> may be "tcp:0" to pick any open port)
        localabstract:<unix domain socket name>
        localreserved:<unix domain socket name>
        localfilesystem:<unix domain socket name>
        dev:<character device name>
        jdwp:<process pid> (remote only)
forward --remove LOCAL  remove specific forward socket connection
forward --remove-all   remove all forward socket connections
ppp TTY [PARAMETER...] run PPP over USB
reverse --list          list all reverse socket connections from device
reverse [--no-rebind] REMOTE LOCAL
    reverse socket connection using:
        tcp:<port> (<remote> may be "tcp:0" to pick any open port)
        localabstract:<unix domain socket name>
        localreserved:<unix domain socket name>
        localfilesystem:<unix domain socket name>
reverse --remove REMOTE remove specific reverse socket connection
```

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reverse --remove-all      remove all reverse socket connections from
device

file transfer:
push [--sync] LOCAL... REMOTE
    copy local files/directories to device
    --sync: only push files that are newer on the host than the device
pull [-a] REMOTE... LOCAL
    copy files/dirs from device
    -a: preserve file timestamp and mode
sync [system|vendor|oem|data|all]
    sync a local build from $ANDROID_PRODUCT_OUT to the device (default
all)
    -l: list but don't copy

shell:
shell [-e ESCAPE] [-n] [-Tt] [-x] [COMMAND...]
    run remote shell command (interactive shell if no command given)
    -e: choose escape character, or "none"; default '~'
    -n: don't read from stdin
    -T: disable PTY allocation
    -t: force PTY allocation
    -x: disable remote exit codes and stdout/stderr separation
emu COMMAND                run emulator console command

app installation:
install [-lrtsdg] PACKAGE
install-multiple [-lrtsdpg] PACKAGE...
    push package(s) to the device and install them
    -l: forward lock application
    -r: replace existing application
    -t: allow test packages
    -s: install application on sdcard
    -d: allow version code downgrade (debuggable packages only)
    -p: partial application install (install-multiple only)
    -g: grant all runtime permissions
uninstall [-k] PACKAGE
    remove this app package from the device
    '-k': keep the data and cache directories

backup/restore:
    to show usage run "adb shell bu help"

debugging:
bugreport [PATH]
    write bugreport to given PATH [default=bugreport.zip];
    if PATH is a directory, the bug report is saved in that directory.
    devices that don not support zipped bug reports output to stdout.
jdwp                        list pids of processes hosting a JDWP transport
logcat                      show device log (logcat --help for more)

security:
disable-verity              disable dm-verity checking on userdebug builds
enable-verity               re-enable dm-verity checking on userdebug builds

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## keygen FILE

generate adb public/private key; private key stored in FILE,  
public key stored in FILE.pub (existing files overwritten)

## scripting:

**wait-for**[-TRANSPORT]-STATE

**wait for** device to be in the given state

State: device, recovery, sideload, or bootloader

Transport: usb, **local**, or any [default=any]

**get-state** **print** offline | bootloader | device

**get-serialno** **print** <serial-number>

**get-devpath** **print** <device-path>

**remount**

remount /system, /vendor, and /oem partitions **read-write**

**reboot** [bootloader|recovery|sideload|sideload-auto-reboot]

reboot the device; defaults to booting system image but

supports bootloader and recovery too. sideload reboots

into recovery and automatically starts sideload mode,

**sideload-auto-reboot** is the same but reboots after sideloading.

**sideload** OTAPACKAGE **sideload** the given full OTA package

**root** restart addb with root permissions

**unroot** restart addb without root permissions

**usb** restart adb server listening on USB

**tcpip** PORT restart adb server listening on TCP on PORT

## internal debugging:

**start-server** ensure that there is a server running

**kill-server** **kill** the server **if** it is running

**reconnect** kick connection from host side to force

**reconnect**

**reconnect device** kick connection from device side to force

**reconnect**

**reconnect offline** reset offline/unauthorized devices to force

**reconnect**

## environment variables:

**\$ADB\_TRACE**

comma-separated list of debug info to **log**:

all,adb,sockets,packets,rwx,usb,sync,sysdeps,transport,jdwp

**\$ADB\_VENDOR\_KEYS** colon-separated list of keys (files or  
directories)

**\$ANDROID\_SERIAL** serial number to connect to (see -s)

**\$ANDROID\_LOG\_TAGS** tags to be used by logcat (see logcat --**help**)