

ADB(1)

adb Manuals

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NAME

adb - Android Debug Bridge

SYNOPSIS

adb [-d|-e|-s serialNumber] command

DESCRIPTION

WARNING: This manual might be outdated, please refer to the official documentation.

Android Debug Bridge (adb) is a versatile command line tool that lets you communicate with an emulator instance or connected Android-powered device. It is a client-server program that includes three components:

? A client, which sends commands. The client runs on your development machine. You can invoke a client from a shell by issuing an adb command. Other Android tools such as DDMS also create adb clients.

? A daemon, which runs commands on a device. The daemon runs as a background process on each emulator or device instance.

? A server, which manages communication between the client and the dae?

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If there's only one emulator running or only one device connected, the adb command is sent to that device by default. If multiple emulators are running and/or multiple devices are attached, you need to use the -d, -e, or -s option to specify the target device to which the command should be directed.

OPTIONS

- a Directs adb to listen on all interfaces for a connection.
- d Directs command to the only connected USB device. Returns an error if more than one USB device is present.
- e Directs command to the only running emulator. Returns an error if more than one emulator is running.
- s specific device
Directs command to the device or emulator with the given serial number or qualifier. Overrides ANDROID_SERIAL environment variable.
- p product name or path
Simple product name like sooner, or a relative/absolute path to

is not specified, the `ANDROID_PRODUCT_OUT` environment variable is used, which must be an absolute path.

-H Name of adb server host (default: localhost)

-P Port of adb server (default: 5037)

COMMANDS

adb devices [-l]

List all connected devices. `-l` will also list device qualifiers.

adb connect host[:port]

Connect to a device via TCP/IP. Port 5555 is used by default if no port number is specified.

adb disconnect [host[:port]]

Disconnect from a TCP/IP device. Port 5555 is used by default if no port number is specified. Using this command with no additional arguments will disconnect from all connected TCP/IP devices.

Device commands

adb push local... remote

adb pull [-a] remote [local]

Copy file/dir from device. -a means copy timestamp and mode.

adb sync [-l] [directory]

Copy host->device only if changed. -l means list but don?t copy.

If directory is not specified, /system, /vendor (if present), /oem (if present) and /data partitions will be updated.

If it is system, vendor, oem or data, only the corresponding partition is updated.

adb shell [-e escape] [-n] [-T|-t] [-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

adb emu command

Run emulator console command

adb logcat [filter-spec]

View device log.

adb forward ?list

List all forward socket connections. The format is a list of lines with the following format: serial " " local " " remote ??

adb forward local remote

Forward socket connections.

Forward specs are one of:

? tcp: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)

adb forward ?no-rebind local remote

Same as **?adb forward local remote?** but fails if local is already for-

warded

adb forward ?remove local

Remove a specific forward socket connection.

adb forward ?remove-all

Remove all forward socket connections.

adb reverse ?list

List all reverse socket connections from device.

adb reverse remote local

Reverse socket connections.

Reverse specs are one of:

? tcp:port

? localreserved:unix domain socket name

? localfilesystem:unix domain socket name

adb reverse ?no-rebind remote local

Same as `adb reverse remote local' but fails if remote is already reversed.

adb reverse ?remove remote

Remove a specific reversed socket connection.

adb reverse ?remove-all

Remove all reversed socket connections from device.

adb jdwp

List PIDs of processes hosting a JDWP transport.

adb install [-lrtsdg] file

Push this package file to the device and install it.

? -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).

? -g: Grant all runtime permissions.

adb install-multiple [-lrtsdpg] file...

Push this package file to the device and install it.

? -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.

? -g: Grant all runtime permissions.

adb uninstall [-k] package

Remove this app package from the device. -k means keep the data and cache directories.

adb bugreport [zipfile]

Return all information from the device that should be included in a bug report.

adb backup [-f file] [-apk|-noapk] [-obb|-noobb] [-shared|-noshared] [-all] [-system|-nosystem] [packages...]

Write an archive of the device's data to file. If no -f option is supplied then the data is written to backup.ab in the current directory.

-apk | -noapk enable/disable backup of the .apks themselves in the archive; the default is noapk.

-obb | -noobb enable/disable backup of any installed apk expansion (aka .obb) files associated with each application; the default is noobb.

-shared | -noshared enable/disable backup of the device's shared storage / SD card contents; the default is noshared.

-all means to back up all installed applications.

Linux UBUNTU Manual Pages

-system | -nosystem toggles whether **-all** automatically includes system applications; the default is to include system apps.

packages... is the list of applications to be backed up. If the **-all** or **-shared** flags are passed, then the package list is optional. Applications explicitly given on the command line will be included even if **-nosystem** would ordinarily cause them to be omitted.

adb restore file

Restore device contents from the file backup archive.

adb disable-verity

Disable dm-verity checking on USERDEBUG builds.

adb enable-verity

Re-enable dm-verity checking on USERDEBUG builds.

adb keygen file

Generate adb public/private key. The private key is stored in file, and the public key is stored in file.pub. Any existing files are overwritten.

adb help

Show help message.

adb version

Show version number.

Scripting

adb wait-for-[-transport]-state

Wait for device to be in the given state: device, recovery, sideload, or bootloader. transport is: usb, local or any (default = any)

adb start-server

Ensure that there is a server running.

adb kill-server

Kill the server if it is running.

adb get-state

Prints: offline | bootloader | device

adb get-serialno

Prints: serial-number.

adb get-devpath

Prints: device-path.

Remounts the /system, /vendor (if present) and /oem (if present) partitions on the device read-write.

adb reboot [bootloader|recovery]

Reboots the device, optionally into the bootloader or recovery program.

adb reboot sideload

Reboots the device into the sideload mode in recovery program (adb root required).

adb reboot sideload-auto-reboot

Reboots into the sideload mode, then reboots automatically after the sideload regardless of the result.

adb sideload file

Sideloads the given package.

adb root

Restarts the adbd daemon with root permissions.

adb unroot

Restarts the adbd daemon without root permissions.

Restarts the adbd daemon listening on USB.

adb tcpip port

Restarts the adbd daemon listening on TCP on the specified port.

Networking

adb ppp tty [parameters]

Run PPP over USB.

parameters: E.g. defaultroute debug dump local notty usepeerdns

Note: you should not automatically start a PPP connection. tty refers to the tty for PPP stream. E.g. dev:/dev/omap_csmi_tty1

Internal Debugging

adb reconnect

Kick current connection from host side and make it reconnect.

adb reconnect device

Kick current connection from device side and make it reconnect.

ENVIRONMENT VARIABLES

ADB_TRACE

Print debug information. A comma separated list of the follow?

deps, transport, jdwp

ANDROID_SERIAL

The serial number to connect to. **-s** takes priority over this if given.

ANDROID_LOG_TAGS

When used with the **logcat** option, only these debug tags are printed.

SEE ALSO

<https://developer.android.com/tools/help/adb.html>

AUTHORS

The Android Open Source Project.

android-platform-system-core

ADB(1)