**(ANDROID DEBUG BRIDGE)**

It is a command line tool used to communicate with a device (mobile, emulators, set top box etc). (only for android).It allows us to do a variety of device actions such as installation and debugging apps.

It is a client server program that has 3 components

1. CLIENT: Sends the commands. The laptop/pc.

2. SERVER: Manages the communication between the client and the daemon.

3. DEAMON: It is a background process which runs on a device. Also called ADBD, it runs or executes the command.

**PRE REQUISITE:**

1. PC/LAPTOP
2. USB
3. SMARTPHONE

**STEPS:**

1. Install adb (<https://forum.xda-developers.com> ) version 1.3
2. Open command prompt and navigate to adb folder and type the command adb to check installation is successful or not.
3. To check the version type adb version
4. In your phone go to settings>>on developer mode>>on USB debugging>>on shoe=w taps/show touches>>on stay awake>>make logger buffer size as 1M
5. Connect the phone to pc via USB
6. Allow transfer files option in the phone
7. Accept the RSA popup
8. Type adb devices in the cmd to see the connection is set or not

**How adb works?**

When we start adb client, the client first checks whether there is an adb server process already running . If there isn’t than it starts the server process. When the server starts it binds to local TCP port 5037 and listens for commands sent from adb clients- all adb clients use port 5037 to communicate with the adb server.

The server than sets up connection to all running devices. Once ther server sets up the connections to all devices, we can use adb commands to access those devices.

NOTE: If multiple devices are connected and running than we must specify the target device when we issue the adb command.

Example : adb –s device\_serial\_no adb\_command

adb –s 27g6735f install xyz.apk

**Common adb commands:**

1. adb --- list outs all commands

2. adb start-server -----starts the server

3. adb kill-server ----kills server/turning adb off

4. adb devices ----shows the connected device

5. adb shell pm list packages----if more than 1 device than error

so give serial no when sending commands

example: adb -s 9849639 shell pm list packages

\*sometimes the install button dont work when the build is new in first stage

so we use adb to install the app to test in the devices

6. adb install path\_o\_apk............to install the already present file

7. adb uninstall package\_name...[package name we will get in data folder in the files eg: com.jagfdj]

8. adb -r install path\_of\_ apk................to update the apk

9. adb shell screencap /sdcard/file.png [sdcard---internal memory]to take screenshot

10. adb pull /sdcard//file.png path\_of\_system

11. adb shell screenrecord /sdcard/file.mp4 [cntrl n to stop the screenrecord by default 3 mins, doesnt record sound]

12. adb pull /sdcard/file.mp4 path\_of\_destination

\*whatever happens in the phone ,activities, ........phone writes and keeps all the activities in lang only developers can understand

14. adb logcat > dest\aaa.txt -------saves the log

(when app crashes/stops working or when it is inconsistent

We try to reproduce the bug

And take the log and send to developer)

15. adb shell dumpsys > location\_of\_destination\sdad.txt

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