

Hello everyone! In this video, you will learn about Android Debug Bridge Tool and its setup.

Android Debug Bridge (ADB) is a versatile command-line tool that lets you communicate with a device. The ADB command facilitates a variety of device actions, such as installing and debugging apps, and it provides access to a Unix shell that you can use to run a variety of commands on a 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 command-line terminal by issuing an ADB command. **A daemon (adb)**, which runs commands on a device. The daemon runs as a background process on each device.

A server, which manages communication between the client and the daemon.

adb is included in the *Android SDK Platform-Tools* Package or if you want the standalone Android SDK Platform-Tools package, you can download it from the given link.

Let's see how ADB works. When you start an ADB client, the client first checks whether there is an ADB server process already running. If there isn't, 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 then sets up connections to all running devices.

Now you will learn to setup ADB tool.

Pre-Requirements to setup ADB are availability of an Android Emulator, Enabled USB Debugging and ADB Tool (Android SDK Package)

To allow using ADB on an emulated device, you must enable **USB debugging** in the device system settings, under **Developer options**. On Android 4.2 and higher, the Developer options screen is hidden by default. To make it visible, go to **Settings > About phone** and tap **Build number** seven times. Return to the previous screen to find **Developer options** at the bottom.

In a real Device like here, Mi A2, to enable USB Debugging, go to Settings>About phone>Tap on Build Number 5 times, Top up message will appear stating that now you are a developer and while going back to system settings you will find Developer options.

Under Developer options>Enable USB Debugging, When a device is actively connected to an ADB-installed system, two pops will occur, Allow USB Debugging and allow Computer RSA key fingerprint to establish ADB communication.

To set ADB PATH in windows, copy the adb.exe directory location and in My Computer's Properties, Click on Advanced System Settings.

Go to Advanced tab, click on Environment Variables, Under System Variables, click on Path and click on Edit, A new Window will appear where in Variable Value, after; paste adb.exe location and click on OK, ADB PATH will be set. Now in Command Prompt, enter >>adb devices, android device id is shown that means adb is working fine in any location.

Thank You.