

# File System

- There are mainly **6 partitions** in Android phones, tablets and other Android devices.
- Note that **there might be some other partitions available**, it **differs from Model to Model**. But logically below 6 partitions can be found in any Android devices.

# File System

- **/boot**
- **/system**
- **/recovery**
- **/data**
- **/cache**
- **/misc**

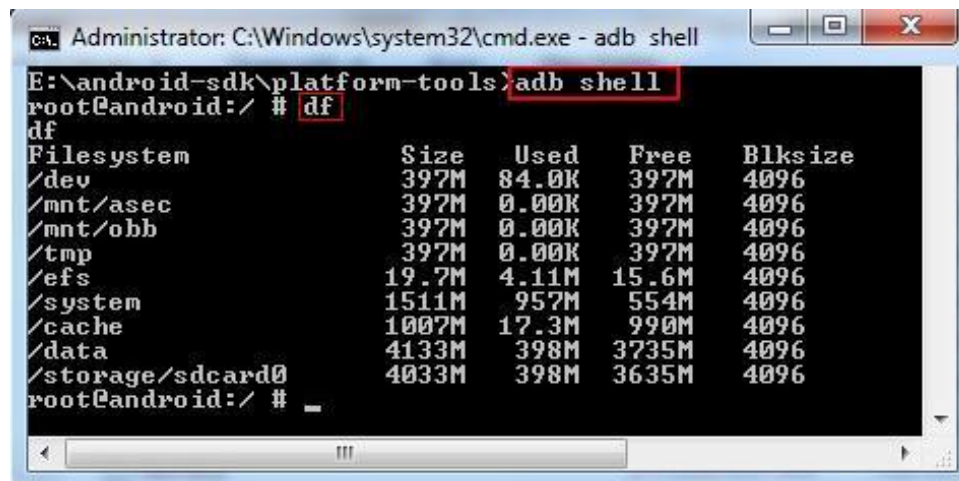


Also Below are the for SD Card File System Partitions.

- **/sdcard**
- **/sd-ext**

# File System

- You can know which partitions are available along with the partition size for all partition in your android device. Go through the below image and run the **adb** command as shown in that image.



```
Administrator: C:\Windows\system32\cmd.exe - adb shell
E:\android-sdk\platform-tools>adb shell
root@android:/ # df
df
Filesystem      Size  Used  Free  Blksize
/dev            397M  84.0K  397M  4096
/mnt/asec       397M   0.00K  397M  4096
/mnt/obb        397M   0.00K  397M  4096
/tmp            397M   0.00K  397M  4096
/efs            19.7M  4.11M  15.6M  4096
/system         1511M  957M  554M  4096
/cache          1007M  17.3M  990M  4096
/data           4133M  398M  3735M  4096
/storage/sdcard0 4033M  398M  3635M  4096
root@android:/ #
```

- Note: boot and recovery partition is not displayed in the above image.

# /boot

- This is the boot partition of your Android device, as the name suggests.
- It includes the android **kernel** and the **ramdisk**.
- The device will not boot without this partition.
- Wiping this partition from recovery should only be done if absolutely required and once done, **the device must NOT be rebooted before installing a new one**, which can be done by installing a ROM that includes a /boot partition.

# /system

- As the name suggests, this partition contains the entire Android OS.
- This includes the **Android GUI** and **all the system applications that come pre-installed on the device.**
- Wiping this partition will **remove Android** from the device without rendering it unbootable, and you will still be able to put the phone into recovery or **bootloader** mode to install a new ROM.

# /recovery

- This is specially designed for **backup**.
- The recovery partition can be considered as an **alternative boot partition**, that lets the device boot into a recovery console for performing **advanced recovery and maintenance operations** on it.

# /data

- It is called **userdata** partition.
- This partition contains the user's data like your **contacts, sms, settings** and all **android applications** that you have installed.
- While you are **doing factory reset** on your device, **this partition will wipe out**, Then your device will be in the state, when you use for the first time, or the way it was after the last official or custom ROM installation.

# /cache

- This is the partition where Android stores frequently accessed data and app components.
- Wiping the cache **doesn't effect** your personal data but simply **gets rid** of the existing data there, which gets automatically rebuilt as you continue using the device.



# /misc

- This partition contains **miscellaneous system settings** in form of on/off switches.
- These settings may include CID (Carrier or Region ID), USB configuration and certain hardware settings etc.
- This is an important partition and if it is corrupt or missing, **several of the device's features will not function normally.**

# /sdcard

- This is **not a partition** on the internal memory of the device but rather the SD card.
- In terms of usage, **this is your storage space** to use as you see fit, to store your media, documents, ROMs etc. on it.
- **Wiping it is perfectly safe** as long as you backup all the data you require from it, to your computer first.
- Though several **user-installed apps** save their data and settings on the SD card and wiping this partition will make you lose all that data.

# /sd-ext

- This is not a standard Android partition, but has become popular in the custom ROM scene.
- It is basically an **additional partition on your SD card that acts as the /data partition.**
- It is especially useful on devices with little internal memory allotted to the /data partition.
- Thus, users who want to install more programs than the internal memory allows can make this partition and use it for installing their apps.