

WELCOME

Mobile Applications Testing



Platforms / OS :

ANDROID FILE FORMAT .APK

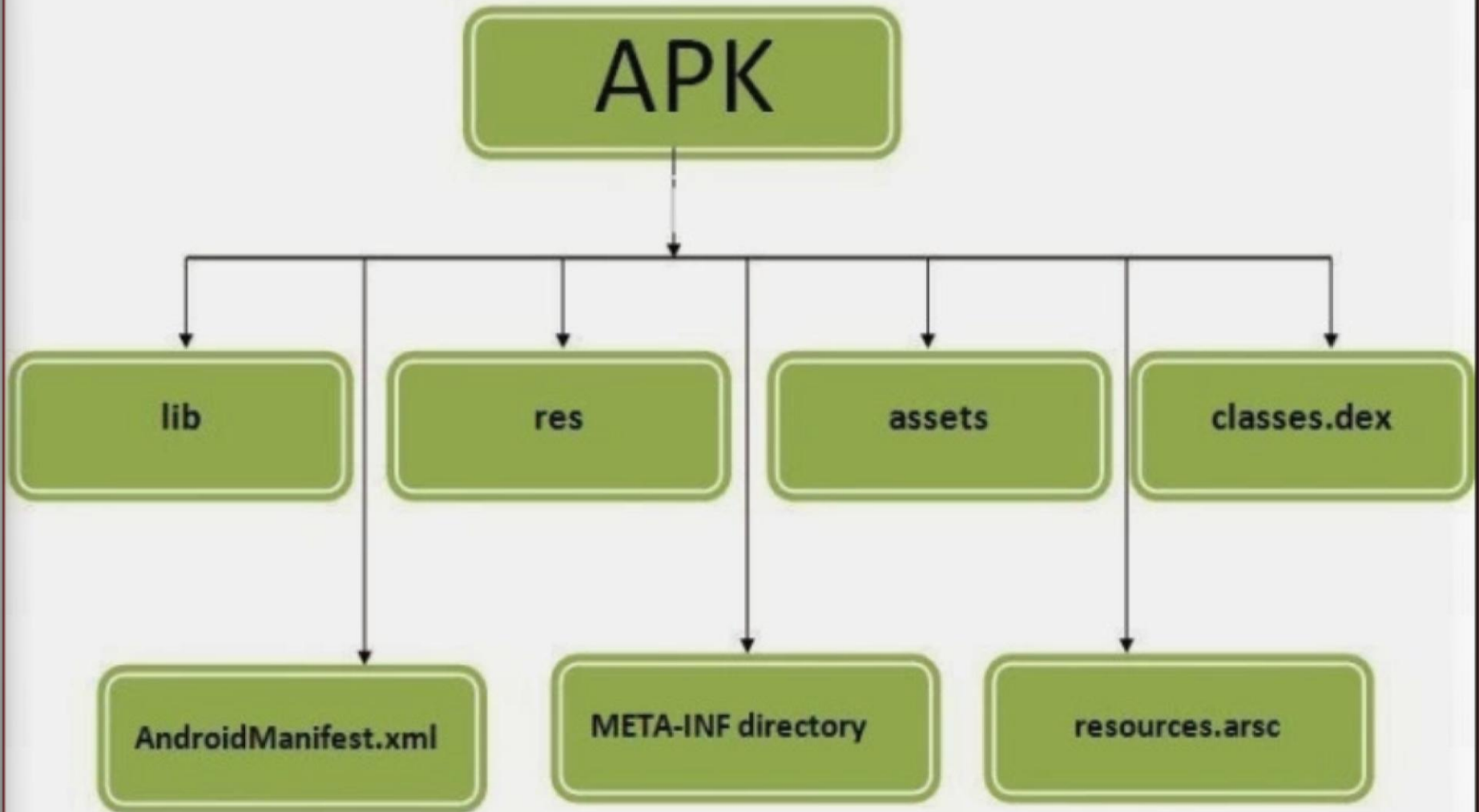
Android Package Kit (APK for short) is the package file format used by the Android operating system for distribution and installation of mobile apps.

What is an APK File?

Just like Windows (PC) systems use an **.exe** file for installing software, Android does the same. An **APK** file is the file format used for installing software on the Android operating system.

Platforms / OS :

APK STRUCTURE : general



Platforms / OS :

APK STRUCTURE : detailed

AndroidManifest.xml

Every APK file includes an AndroidManifest.xml file which declares the application's package name, version components and other metadata.

The manifest file in binary XML format

META-INF directory

folder containing the MANIFEST.MF file, which stores meta data about the contents of the JAR. which sometimes will be store in a folder named original.

The signature of the APK is also stored in this folder.

lib

optional folder containing compiled code - i.e. native code libraries.

res

optional folder containing compiled code - i.e. native code libraries.

assets

optional folder containing applications assets, which can be retrieved by AssetManager

resources.arsc

file containing precompiled application resources, in binary XML.

classes.dex

application code compiled in the dex format



Manifest tag

- Contains android installation mode, package name, build versions

Permissions

- Custom permission and protection level

uses-permissions

- Requests a permission that must be granted in order for it to operate

uses-feature

- Declares a single hardware or software feature that is used by the application.

Application

- The declaration of the application. Will contains all the activity



Activity

- Declares an activity that implements part of the application visual user interface

intent-filter

- Specifies the types of intents that an activity, service, or broadcast receiver can respond to

service

- Declare a service as one of the application components

receiver

- Broadcast receivers enable applications to receive intents that are broadcast by the system or by other applications, even when other components of the application are not running

provider

- Declares a content provider component. A content provider is a subclass of `ContentProvider` that supplies structured access to data managed by the application