

LAB - 11

Aim :- converting apk into jar file.

Definition:

Converting an APK into a JAR file is a process used to extract and convert the compiled Dalvik bytecode (.dex files inside an APK) into a Java Archive (.jar) format using tools like dex2jar. This allows developers or security analysts to view the Java-like source code using a decompiler (e.g., JD-GUI). It's commonly used for reverse engineering Android applications to understand their logic or behavior.

```
(kali㉿kali)-[~]
└─$ git clone https://github.com/pxb1988/dex2jar.git
Cloning into 'dex2jar'...
remote: Enumerating objects: 13803, done.
remote: Counting objects: 100% (1262/1262), done.
remote: Compressing objects: 100% (449/449), done.
remote: Total 13803 (delta 997), reused 813 (delta 813), pack-reused 12541 (from 2)
Receiving objects: 100% (13803/13803), 9.64 MiB | 163.00 KiB/s, done.
Resolving deltas: 100% (2212/2212), done.

(kali㉿kali)-[~]
└─$ cd Desktop
└─$ ls
DivaApplication Osi.ig beta.apk beta.apk.idsig dex2jar my-release-key.keystore zphisher

(kali㉿kali)-[~/Desktop]
└─$ cd dex2jar
└─$ ls
DivaApplication.apk NOTICE.txt build.gradle d2j-jasmin dex-ir dex-reader-api dex-tools-v2.4 dex-writer gradlew settings.gradle
LICENSE.txt README.md d2j-base-cmd d2j-smali dex-reader dex-tools dex-translator gradle gradlew.bat

(kali㉿kali)-[~/Desktop/dex2jar]
└─$ chmod +x dex-tools-v2.4/d2j-dex2jar.sh

(kali㉿kali)-[~/Desktop/dex2jar]
└─$ ./dex-tools-v2.4/d2j-dex2jar.sh DivaApplication.apk
dex2jar DivaApplication.apk → ./DivaApplication-dex2jar.jar

(kali㉿kali)-[~/Desktop/dex2jar]
└─$ ls
DivaApplication-dex2jar.jar NOTICE.txt d2j-base-cmd dex-ir dex-tools dex-writer gradlew.bat
DivaApplication.apk README.md d2j-jasmin dex-reader dex-tools-v2.4 gradle settings.gradle
LICENSE.txt build.gradle d2j-smali dex-reader-api dex-translator gradlew
```

Conclusion :-

Converting an APK into a JAR file allows you to reverse engineer an Android application and understand its internal logic by converting Dalvik bytecode (.dex) into Java bytecode (.jar). Using tools like dex2jar and JD-GUI, developers and security researchers can analyze app functionality or debug issues. This process should always be done ethically and with proper authorization to respect intellectual property and privacy.