

MobileAppTesting

■<http://pen-testing.sans.org/blog/pen-testing/2013/12/02/mobile-device-tips-tricks-and-resources>

----- Mobile Application Test Notes (iPhone)

Prepping Device and Application:

- [+] Jailbreak iPhone/iPad - Green Poison / Absinthe 2.04
- [+] Enable SSH on iPhone/iPad
- [+] Install iFunbox to install the application (<http://www.i-funbox.com>)
- [+] Connect device to lab wireless network
- [+] Add web proxy settings - IP address of attacking machine port 8080
- [+] Ensure connection and SSH is working

Prepping Burp Suite:

- [+] Open Burp Suite and navigate to Proxy->Options,
- [-] Edit proxy listeners - enter 'port' as 8080, disable 'loopback only' and select 'support invisible'.
- [+] Download and install burp certificate (.crt) onto ipad.

Mobile Application Penetration Testing:

- [+] Browse the following Directory for insecure storage
- [-] /private/var/mobile/applications/

Notes:

- [+] Application file type - x.ipa
- [+] Easy way:
 - Place attacking machine and apple device on wireless network with app installed.
 - Email burps .cer to apple device and install
 - Start burp and disable firewall on listening machine.
 - Change proxy settings on apple device to point to listening burp machine/port.

----- Mobile Application Test Notes (Android)

Prepping the application

- (After Android Nougat, Apps need to be repackaged since they don't trust user certificates by default)
- <https://android-developers.googleblog.com/2016/07/changes-to-trusted-certificate.html>

- [+] apktool d <path of the .apk file>
- [+] Update AndroidManifest.xml
- [-] Add android:networkSecurityConfig="@xml/network_security_config" to application tag in xml
- [+] Add network_security_config.xml to res/xml folder
- [-] "Trusting user-added CAs for all secure connections" section in
- <https://android-developers.googleblog.com/2016/07/changes-to-trusted-certificate.html>
- [+] Repackage the application
- [-] apktool b unpacked_apk_folder -o <output path to new apk file>
- [+] Signing the application
- [-] Create a keystore using keytool
- [-] jarsigner -keystore <path to your keystore> -storepass <password> -keypass <password> <path to apk> android

Creating an emulator and installing the application

- [+] Create a virtual device:
 - [-] android avd
- [+] Start the emulator:
 - [-] emulator -avd testavd
- [+] Install the application:
 - [-] adb install <path of the .apk file>
- [+] Open Burp Suite and navigate to Proxy->Options,
- [-] Edit proxy listeners - enter 'port' as 8080, disable 'loopback only' and select 'support invisible'.

[+] Start the emulator and proxy:

■[-] emulator -avd testavd -http-proxy http://localhost:8080

[+] Download and install burp certificate (.crt) onto the emulator using the push shell command.

Notes:

[+] Application file type - x.apk

Install Certs: <http://www.realmmb.com/droidCert/>

SQLite Database Browser: <http://sourceforge.net/projects/sqlitebrowser/?source=pdlp>

<http://www.mcafee.com/uk/resources/white-papers/foundstone/wp-pen-testing-android-apps.pdf>