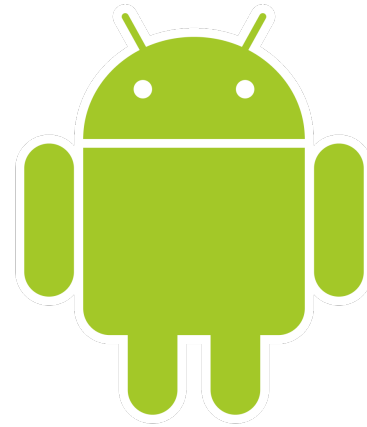


Android Security & Exploitation



Aditya Gupta (@adi1391)

Founder, Attify (<http://attify.com>)

adi@attify.com

Certifications : <http://securitytube-training.com>
Pentester Academy : <http://PentesterAcademy.com>

Android App Components

Android App Components

- Activities
- Services
- Broadcast Receivers
- Shared Preferences
- Intents
- Content Providers

Activities

- Visual Screens of an Android application
- Contains of different layouts
- Anything you could interact with
- Wallet applications

Services

- Background events in an Android application
- Eg : Downloading files / Playing Music

Intents

- To bind different android components
- Used to perform different kind of actions
- Changing activities, invoking activities in another application, starting an action etc.
- Intent Filters

Activity Manager

- Activity Manager
- Could be used to launch applications and pass data while launching
- Could also be used to launch specific activities within the application

Activity Manager

- `am start [package name]`
- `am start -n com.package.name/
com.package.name.ActivityName`
- <http://developer.android.com/tools/help/adb.html>

Working with Intent filters

- **am start -a android.intent.action.VIEW
http://google.com**
- **am start -a android.intent.action.MAIN \
> --es "sms_body" "Hello there" \
> --es "address" "1234567789898" \
> com.android.mms/.ui.ComposeMessageActivit
y**

Content Providers

- Storing and Sharing application data
- Acts as a middle layer
- SQLite, XML, PlainText
- Often Vulnerable

Shared Preferences

- Way of storing data in Android Applications
- Generally Small values with name value pairs
- Located in the shared_prefs folder inside the app directory

Broadcast Receivers

- Receives broadcast from various events
- Could be from the phone or another app
- Used by a lot of malwares