

Ex.No.7 Use AFLogical OSE to extract data from an Android device

AIM:

To extract logical data such as contact , SMS, MMS, and call logs from an Android device using AFLogical OSE,an open-source forensic tool that allows secure collection of data Without requiring root access.

Procedure:

AFLogical OSE (Open Source Edition) is a tool used to extract data from Android devices. It's part of the Open Source Android Forensics project and is often used for logical extraction, which means pulling data like contacts, messages, and call logs without directly accessing the file system. Here's a step-by-step guide to using AFLogical OSE to extract data from an Android device.

Step 1: Prepare Your Environment

1. Download AFLogical OSE:

- Visit the [AFLogical OSE GitHub page](#) and download the latest release. Alternatively, you can clone the repository using Git.

2. Install Java (if not already installed):

- AFLogical OSE requires Java to run. Make sure you have Java installed on your machine. You can download it from the [official Java website](#).

3.

```
(kali㉿kali)-[~]
└─$ adb version
java -version

Android Debug Bridge version 1.0.41
Version 34.0.5-debian
Installed as /usr/lib/android-sdk/platform-tools/adb
Running on Linux 6.12.25-amd64 (x86_64)
openjdk version "21.0.9-ea" 2025-10-21
OpenJDK Runtime Environment (build 21.0.9-ea+8-Debian-1)
OpenJDK 64-Bit Server VM (build 21.0.9-ea+8-Debian-1, mixed mode, sharing)
```

```
(kali@kali)-[~]
$ kdeconnect-app

virtual const QPalette* Qt6CTPlatformTheme::palette(QPlatformTheme::Palette) const QPlatformTheme::SystemPalette
virtual const QPalette* Qt6CTPlatformTheme::palette(QPlatformTheme::Palette) const QPlatformTheme::ToolButtonPalett
e
virtual const QPalette* Qt6CTPlatformTheme::palette(QPlatformTheme::Palette) const QPlatformTheme::ButtonPalette
virtual const QPalette* Qt6CTPlatformTheme::palette(QPlatformTheme::Palette) const QPlatformTheme::CheckBoxPalette
virtual const QPalette* Qt6CTPlatformTheme::palette(QPlatformTheme::Palette) const QPlatformTheme::RadioButtonPalet
te
```

4. Install Android Debug Bridge (ADB):

- ADB is a command-line tool that allows communication with Android devices. Download it from the [Android Developer's website](#) and install it on your system.
- Add ADB to your system's PATH environment variable to easily run ADB commands from the terminal or command prompt.

5.

```
(kali@kali)-[~/Desktop/Emulated_Android/sdcard/aflogical]
$ ls
calllogs.csv  contacts.csv  extraction_time.txt  sms.csv
```

```
(kali@kali)-[~]
$ adb pull /sdcard/DCIM
adb shell
```

```
(kali@kali)-[~]
$ sudo apt update
sudo apt install kdeconnect

[sudo] password for kali:
Sorry, try again.
[sudo] password for kali:
Hit:1 http://http.kali.org/kali kali-rolling InRelease
1352 packages can be upgraded. Run 'apt list --upgradable' to see them.
kdeconnect is already the newest version (25.04.2-1).
Summary:
  Upgrading: 0, Installing: 0, Removing: 0, Not Upgrading: 1352

(kali@kali)-[~]
```

```

(kali㉿kali)-[~]
$ cd ~/Desktop/Emulated_Android/sdcard/aflogical/

(kali㉿kali)-[~/Desktop/Emulated_Android/sdcard/aflogical]
$ cat callogs.csv
Number,Type,Duration
876543210,Incoming,2min
123456789,Outgoing,5min
988776655,Missed,0min
012345678,Incoming,1min
876501234,Outgoing,3min
900112233,Missed,0min

(kali㉿kali)-[~/Desktop/Emulated_Android/sdcard/aflogical]
$ cat contacts.csv
Name,Number
Siva,9876543210
Anita,9123456789
Ravi,9988776655
Teena,9012345678
Arthik,9876501234
Priya,9900112233

(kali㉿kali)-[~/Desktop/Emulated_Android/sdcard/aflogical]
$ cat extraction_time
cat: extraction_time: No such file or directory

```

6.

Result:

```

(kali㉿kali)-[~/Desktop/Emulated_Android/sdcard/aflogical]
$ cat extraction_time.txt
Extraction Date: 2025-10-25 11:35:52
Tool: AFLogical OSE (Simulated) | Location: /sdcard/aflogical/

(kali㉿kali)-[~/Desktop/Emulated_Android/sdcard/aflogical]
$ cat sms.csv
From,Message,Date
Siva,Hello Siva,2025-10-25
Anita,Are you coming today?,2025-10-24
Ravi,Meeting at 5 PM,2025-10-24
Teena,Happy Birthday!,2025-10-23
Arthik,Call me when free,2025-10-23
Priya,Lunch at 1 PM?,2025-10-22

```

```
—(kali@kali)-[~]
—$ ls ~/Desktop/Emulated_Android/sdcard/aflogical/

calllogs.csv  contacts.csv  extraction_time.txt  sms.csv

—(kali@kali)-[~]
—$ cd ~/Desktop/Emulated_Android/sdcard/aflogical/

—(kali@kali)-[~/Desktop/Emulated_Android/sdcard/aflogical]
—$ cat calllogs.csv
Number,Type,Duration
9876543210,Incoming,2min
9123456789,Outgoing,5min
9988776655,Missed,0min
9012345678,Incoming,1min
9876501234,Outgoing,3min
9900112233,Missed,0min

—(kali@kali)-[~/Desktop/Emulated_Android/sdcard/aflogical]
—$ cat contacts.csv
Name,Number
Siva,9876543210
Anita,9123456789
Ravi,9988776655
Leena,9012345678
Arthik,9876501234
Priya,9900112233

—(kali@kali)-[~/Desktop/Emulated_Android/sdcard/aflogical]
—$ cat extraction_time
cat: extraction_time: No such file or directory
```