

Day 5: Android Hacking with ADB and Vysor

Date: June 23, 2025

Topics Covered:

- ADB (Android Debug Bridge) setup and usage
 - Connecting Android to PC over WiFi using TCP/IP
 - File transfer using ADB commands
 - Exploring Android's internal shell via terminal
 - Screen mirroring using **Vysor**
 - Enabling Developer Options and USB Debugging in Android
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What I Did:

Today I learned how to access and control an Android device from a PC using **ADB**. I also explored how to perform basic file transfers between the Android device and PC, and how to mirror the Android screen on the computer using **Vysor**.

Prerequisites:

1. A Windows laptop and an Android phone
 2. Both devices connected to the **same WiFi network**
 3. Downloaded and extracted **Android SDK Platform Tools** on the PC
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Setup Process:

1. Enable Developer Options on Android

To do this, I navigated to the phone's "About Phone" section and tapped on the "Build Number" multiple times to unlock Developer Options. Then, I enabled **USB Debugging** from the Developer Options menu.

2. Prepare the ADB Environment

I went to the folder containing the Platform Tools and opened a terminal window inside that directory to issue ADB-related commands.

3. Connect the Android Device

I connected my phone to the computer using a USB cable and set the connection mode to "File Transfer". Once the device was detected, I authorized the connection when prompted on the phone.

4. Switch to Wireless (WiFi) Connection

I enabled ADB over TCP/IP to allow the computer to connect to the phone using its local IP address. After identifying the IP address of the phone from the WiFi settings, I used it to connect wirelessly. Once the connection was successful, I unplugged the USB cable.

ADB Capabilities I Explored:

- **Device Detection** – Checking which Android devices are connected to the computer
 - **Android Shell Access** – Opening a command-line interface to interact directly with the Android operating system
 - **File Transfers** –
 - Pulling files from the Android device to the computer
 - Pushing files from the computer to a specified location on the Android device
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Android Screen Mirroring using Vysor:

I used **Vysor**, a third-party tool, to mirror the Android screen on my PC. It allowed me to see and control the Android interface using the keyboard and mouse, making interaction more convenient, especially for security testing and demonstrations.

Key Learnings:

- ADB is a powerful tool for Android device management via terminal
 - USB Debugging provides deep access to the Android system
 - WiFi-based ADB connections make remote interaction possible
 - Vysor is useful for real-time testing and remote access to mobile interfaces
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Tools Used:

- ADB (Android Platform Tools)
 - Android phone with Developer Mode enabled
 - Vysor for screen mirroring
 - Windows or Kali Linux terminal
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