

How Mobile Apps, Location, MAID and VPNs Work

A simple explanation in plain English

The Journey of Your Data (in simple terms)

1 On Your Phone



Apps on your phone collect location from your device (such as GPS, Wi-Fi or cell signals) if you have granted permission.

This happens on your phone before any data is sent out.

2 App Creates Data

The app combines the location with a Mobile Advertising ID (MAID) and other info like time.



Example of data created on your phone:

MAID: ABC123 | Location: 33.85, -84.35
Time: 3:42 PM

3 Sent Through the Internet (With VPN)

Your data travels from your device, through your ISP/carrier, and then through an encrypted VPN tunnel.



Your ISP/carrier sees that you are connected to a VPN server (and can see the IP address of that VPN server).

The VPN encrypts your data, so your ISP cannot see the app or the data it contains.

4 VPN Server



The VPN server receives your data and forwards it to the app or data provider.

To the outside world, traffic appears to come from the VPN server—not your real IP address.

5 App / Data Provider



The app or data provider receives your data.

- They see the MAID
- They see the location the app collected
- They see the time
- They see the VPN server's IP address (not yours)

What VPN Changes vs. What It Doesn't

VPN CHANGES (What the destination sees)



IP Address Seen by the App or Website

They see the VPN server's IP address, not your real IP address.



IP-Based Geolocation

The location may reflect the VPN server's location, not yours.



ISP Visibility into Your Browsing or App Usage

Your ISP sees the VPN server you connect to, not the specific apps or sites you visit.



Bottom line: ERAD sees the location data from the mobile app at the device level—before it goes through the VPN—so we have the IP and location regardless of what happens downstream.



Key Takeaway

A VPN improves online privacy by hiding your identity and IP address from websites and apps on the other end, but it does not stop apps from collecting your location or MAID on the device.

Because location is captured by the device before it leaves the phone, we can still deliver accurate, deidentified location intelligence—even when a VPN is in use.



Important Note

Data companies may combine many signals (like MAID, device location, time, and other device attributes) to understand patterns of movement and presence.

VPNs do not prevent your data from being collected and used in aggregated, deidentified form.



In short: VPN = more privacy for your internet connection. It does not change the location your phone knows or the ID your apps use.