

Location technology

A location-based service is any technology that depends on real-time location tracking to function. The technology persistently identifies the user's physical and geographical location, which is then used to perform services and functions. Location-based technology is commonly used with mobile devices, but it can be applied to any device able to provide a location, including desktop PCs.

Location Technology Track your Movements

Several mechanisms inside a typical mobile device can provide location information. The most common technologies are GPS, RFID, Wi-Fi, and cellular technology. A mobile device communicates with other devices and hubs – such as satellites, routers and towers – to function. Because the mobile device pings off multiple communication hubs, its precise location can be triangulated.

Examples of technologies used to track location

A few examples will clarify how these location-tracking methods work. The most precise location tracking services incorporate more than one of these technologies

Global Positioning System (GPS)

The Global Positioning System is an array of satellites that exist solely to help find items across the planet. Any device with a GPS receiver (including most smartphones) can ping these satellites. This capability lets the device communicate with at least four satellites. The satellites compare the signal delay to pinpoint where the signal originated.

This process lets your phone know precisely where you are and provide turn-by-turn navigation. A widespread business use for GPS technology is GPS fleet management software, which businesses use to remotely keep tabs on their company vehicles and their drivers' performance.