



ANDROID APP PERMISSIONS - SECURITY FOR YOUR DEVICE



Browsing through the Market for the latest and greatest can be quite addictive, especially when you get something awesome before everyone else. The one problem with Android Apps is all the permissions they can ask for when you download them. While you want to be on the cutting edge of technology, you don't want to get caught at the sharp end.

Why do these apps need permissions and what should you watch out for so they're not doing something they shouldn't?



It should take under 30 mins



Article Ease

WHAT YOU'LL NEED



Computer



Mobile telephone

The Knowhow

While most apps are completely safe to download and use, you should always pay attention to the permissions they request. All Android applications need to ask your permission before they access certain functions on the device. An example of this is a photography app asking for permission to modify data on the SD card when it saves images. This is an ordinary request but it would be unusual if it then requested to be able to make phone calls.

Comments and reviews by other users and Android forums are very good guide to the reliability of an app. It's a good idea to read as many of these as you can, as it will give you an understanding if there are any problems. You can also leave your own rating and comments on the Android Market app listing.

Always consider what the app will be doing when granting permissions and if you see no logical reason why it needs to use or do some things, contact the developer directly to ask. In the very rare case where an app turns out to be dangerous to download, you can report it directly to Google who run the Android Market.

Android Permissions

There are 22 different permissions; here are some of the most important permissions an app may ask for and the reasons a program may need them:

Phone calls: Read phone state and identity

Some apps will need this so they can see when you receive a phone call e.g. games will automatically pause when a phone call begins. Other apps like Google voice, or similar telephone-based software would also need legitimate access.

Things to look out for: When an app is granted this permission, they also have access to the numbers which identify your phone. In some cases, this can be used to give to a third-party. It's also possible, although unlikely, that an app could make calls through a premium rate number.

Example apps: Angry Birds, Argos, 118

Services that cost you money: Send SMS/MMS messages



This allows an app to send text or picture messages on your behalf, for example, there might be an option to contact the manufacturer by text from the app itself. Other apps, may also need consent to send pictures to social networking sites.

Things to look out for: The SMS/MMS messages sent through the app might cost you money and can be sent at higher rates. Also, there's a small risk an app can spam others with unwanted messages.

Example apps: Facebook, WhatsApp Messenger, Google Translate

Storage: Modify/delete SD card contents

This permission allows the app to read, change or delete any data that's on the SD card. There are several reasons why an app will need to do this, including; storing information on the SD card instead of taking up phone memory, or editing photos that are stored on the memory card. This permission is legitimately needed by apps that create images, notes, save games, backup data etc...

Example apps: PicSay - Photo Editor, ASTRO File Manager, Evernote

Your personal information: Read contact data/sensitive log data

Giving apps consent for this permission means they'll be able to view and use your full address book. Reasons for the right to use could be for quick-dialling, note taking or for use with social networks. The same is true for the *read/write calendar data* permission.

Things to look out for: The app should give legitimate details on why they need access, otherwise it's best to avoid downloading it until you know it's trustworthy.

Example apps: Smooth Calendar, Dialer One, Twitter

Network Communication: Full internet access

Allowing an app to have full internet access means it can transmit information to and from your phone via the web. A lot of apps will rightfully need this e.g. social media, cloud computing, internet radio and web browsers. This is different to *View Network/Wi-Fi*, which just lets the app know how you're currently connected.



Things to look out for: Quite a lot of apps will ask for this without necessarily needing full access; before downloading the app, check to see if it really needs to connect to the internet.

Example apps: Opera Web Browser, KNOWHOW Cloud, TuneIn Radio

Your Location: Fine (GPS) / Coarse (Network-Based) location

This will let an app locate where you are, so it's useful when trying to find local bars, restaurants or even historic places. Only apps like maps, real-world 'treasure hunts', directories or similar, should be requesting this.

Example apps: Google Maps, Tastecard, ODEON

System Tools: Modify global system settings

Apps with this will be able to change your phone settings, which includes setting up notifications, creating widgets or turning off Wi-Fi. There isn't too much to worry about as you can always change these configurations again through the **Settings** menu on your phone or tablet.

Example apps: Juice Defender, Noom, Where's My Water?

With a little research and evaluation, you can see what to trust and enjoy all the variety your Android device can bring you.