

Dale Ducommun
Information Security Officer, Privacy Officer
OPEN SOLUTIONS INC.

SMARTPHONE HACKING 101

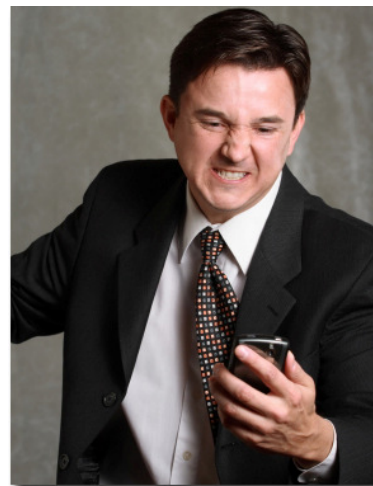
Smartphones are now the mobile phone of choice. Droids, BlackBerrys and iPhones, all are popular and have their individual purposes and individual preferences. For example, the RIM Blackberry is geared towards business and commerce. The iPhone tends to lean towards business but has captured a large market of personal users, thanks to all the hype from Apple.

Since my previous newsletter from September 2010, Volume 1 Issue 12, the risks and the occurrences of viruses and smartphone hacks have increased notably. All you have to do is go to Google and search for "hack a smartphone". I think you will be amazed at the number of articles, "How to" both written and in video formats. There is a video on YouTube that shows you how to hack someone else's phone and the instructor is a 15 year old kid.

So what do I need to hack your smartphone ?

What kind of information do you have on your business card? Company name? Check. Your name and title? Check. Business address? Check. Mobile work phone number? Check . . . Wait a minute . . .

Now go to YouTube and search for "hack a smartphone" and see what comes up. Pretty amazing !



- * *How to hack a smartphone using SMS Text*
- * *Modded and hacked blackberry smart phone*
- * *An Alternative Way to Hack Into an iPhone*
- * *How To Hack A Smartphone (Ben's Tech News 7.3.2010)*
- * *Cell Phone Spying: Hacking Smart Phones*
- * *3 Simple Steps to Hack a Smartphone (Includes Video)*

and so on . . .

LESSON 1

The more you dig into this subject and follow some of the hotlinks in these articles the more intense the articles get, to the point of video instructions and downloadable scripts. One of these "training" videos looked so easy, I decided to try it. I used my own personal equipment at home. My wife's phone was the target, left on in the living room.

You need a laptop with WiFi connectivity, and two phones. One phone acts as a GSM modem for the laptop, the other phone is used to receive the information.

One of the easiest ones I tried is commonly done at night, hence the name "Midnight Raid". The attacker is looking for smartphones that

are still turned on as the owner is asleep and the device is charging, or simply not turned off but left on the nightstand.

By sending a simple SMS, invoked Internet Explorer on the device being attacked.

"Short Message Service (SMS) is the text communication service component of phone, web, or mobile communication systems, using standardized communications protocols that allow the exchange of short text messages between fixed line or mobile phone devices " (Wikipedia)

I sent a graphic to my wife's phone that simply said "been hacked". I then went to look at her phone. That was quick and too easy to get into another user's phone with SMS.

Carrying on, I ran an application on the target phone that could retrieve data. The SMS came back with my wife's phone's INSI number, the phone's unique ID. Using the same application I was able to download her contact list, both personal and business. And again, there were instructions to use the same app to push viruses to the device or even initiate a denial of service attack.

ALL TOO EASY!

First Line of Defense

Mobile devices get smarter every day and more of us than ever depend on them. But there is a drawback to our increasing dependence on smartphones - they have the potential to be even more risky than laptop computers.

Here's some things you should **not do**:

Disabling the lock feature on the phone and/or not establishing a password to unlock an idled phone

This is how lost mobiles become dangerous mobiles. Using a password is the most basic security precaution for mobile devices and often the first line in defense.

Keeping information that could compromise personal or company security in 'plain sight' on the phone

Many of us are starting to use our mobile phones as tiny computers and are keeping all sorts of data on these devices. To make matters worse, this critical company data is being kept on unsecured devices.

Opening an application from an unsecured/ unknown source

A mobile device is basically just a phone. But not all applications are created equal. Downloading/ or opening a bad application can cause all sorts of problems.

Using the phone to access dangerous/risky Web sites and Net locations

Most mobile devices provide Internet access, making it just as easy to access risky Web sites and Internet content on a phone as it is to access this content on a computer. We all know what sort of havoc some Web sites and Internet locations can wreak on a computer—from crashes due to viruses and malware, to unsolicited content that affects performance. This issue is now a problem for mobile phones as well.

Leaving the device open to access, such as WiFi or Bluetooth

Some of the most prevalent mobile viruses and worms use an unprotected Bluetooth connection to get into mobile devices or to spread to other devices. It's also possible for external sources to hijack an open, unsecured connection to enter into corporate networks, where they could cause harm to corporate systems or data. When not in use turn off your WiFi and Bluetooth.

Leaving the device on 24 – 7 even while charging

As show in the example above from my own experience, I now ensure I turn my phone off whenever it is charging. When I know I won't need my smartphone, I now turn it off. I let my voicemail take any calls. That way you can rest comfortably knowing there is no access point available.

Second Line Of Defense

With it being so easy to access any idle device that is capable of some sort of communication, be it phone only, texting, e-mail, internet, etc., there is a need for some internal protection.

Lookout Mobile Security - FREE (Android, Blackberry, Windows Mobile)

Lookout Mobile Security is a free antivirus application which is compatible with Android, BlackBerry and Windows Mobile Phone. This software provides free virus and malware protection, it scans the micro SD each time a user connects and tries to transfer files.

It can self-activate and can scan all applications installed in your phone and verify its integrity. An additional anti-theft feature is also added, in case a user's device gets misplaced or stolen. Lookout Mobile Security website allows locating the device using GPS. <https://www.mylookout.com/>

AVG Antivirus - FREE (Android, Blackberry, Windows Mobile)

AVG is a very popular antivirus for PCs and now for android smartphones. This Internet security corporation is offering antivirus for Androids and Blackberry's as a software application that has two variants, free and "Pro". AVG has very

recently released a new version which offers faster scans, easier to use and has better performance. This smart antivirus offers smart scanning which skips known scanned safe files. AVG antivirus "Free" has all the features of protecting Droids and Berry's from viruses, malware and exploits with real time scanning.

<http://www.avg.com/ca-en/antivirus-for-android?cmpid=666avfa>

Trend Smart Surfing (iPhone, iPad and iPod)

Trend Smart Surfing for iPhone, iPad and iPod Touch devices provides a smarter, safer experience when surfing the Web. It is the first secure browser to protect you from Web pages with malicious intent. If you attempt to access a bad or malicious URL, Smart Surfing is designed to block access to the URL and a notification will appear in the browser.

<http://itunes.apple.com/WebObjects/MZStore.woa/wa/viewSoftware?id=306657316&mt=8>

BullGuard Mobile antivirus (Android, Blackberry, Windows Mobile)

BullGuard Mobile antivirus is in fact one of the best mobile antivirus. It provides your phones with virus and spyware protection. If your cellphone is stolen or lost, you are still able to track it and protect your private information from misuse. This is regarded as one of the best mobile antivirus apps, because it provides remote admittance to your handset if it is stolen or lost. It provides you with the features like wipe, lock, backup, alarm, GPS functions, and SIM card protection.

BullGuard Mobile antivirus has got the mobile security features like mobile antivirus, antitheft, parental control, spam filter, firewall, mobile anti spyware, essential remote mobile backup storage.

<https://www.bullguard.com/shop/chooseproduct>