Remote Application via Sms Invocation

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Abstract— **The idea behind this project is to initiate resources available in an android smart phone by using another non android phone using the facility of SMS. This application allows the smart phone applications to be invoked by other via SMS and return the result back via SMS. This will cause no security threat like it sounds as only trusted friends who have been added to the list of friends can invoke the applications. For this application there will be an android smart phone where this application will be installed, and a non android phone that will be used for SMS invocation. So the non android phone can send an SMS specifying the requirement to the android phone and the android phone will send the result back to the sender via SMS. The entire process will happen in the background without disturbing the person who uses android application. There will be a friend list in the android phone, only those people can access the application in this android phone.**

Index Terms— **android, android2.2, malware ,java, remote wipe**

I. INTRODUCTION

This application allows its application to be invoked by others via sms and return the result back via sms. It pauses no security threat like sounds; only trusted friends who have been added to the list of friends can invoke the applications. It identify the correct location of the android phone, any ordinary phone can access the contact details, device details and also set alarm on the android phone by sending an SMS. Downloading, web services, recording are also provided by this system only by sending SMS to the android phone. . At present there is no such a system having all these application.

Such a system is currently not available in the market. Attempts have been unsuccessfully made by smart phone giants like the Blackberry, O2, etc to provide a facility of sharing its resources with other phones in an efficient way that should be both effective as well as secured. While the principles of phone to phone resource sharing had been tried out almost successfully at the hardware level using, such aspects found to be very much impossible as this amounts to security threats to the mobile phone users.

II. BODY TEXT

In the proposed system, an android user can store the information regarding the users that is to be sharing the resources of the smart phone. Using these aspects, threats of any intruder can be denied as access is restricted to users within the contact list. The whole paradigms of this project is, a user with the non android phone just sending an SMS to android OS phone while this phone replies as SMS itself. The

software is to be installed only in the android phone. The user has the facility to add friends to this application, only those friends can access the facilities of this application in the android phone. Features included in the paper are the location tracking facility where in the non android users will be able track the current location of the android smart phone user. On request by the non android phone user the application will send a link back as SMS. Clicking on that link or typing that URL, on a browser will open up a Google map showing the current location, another feature of this paper is to get details about a particular contact that is already available in the android phone. This paper also provides a facility to know the device details of an android phone, set an alarm in the android phone, inform the application to download a particular file from an android phone, generate the dictionary service, and initiate automatic call facility and voice recording. What makes this paper out of the ordinary is that the above stated features will be requested as SMS to the android OS phone which in turn will respond back as SMS itself, which makes this application highly appealing.

II.1. SURVEY TECHNOLOGIES

A) ANDROID

The number of android based smart phones is growing rapidly. They are increasingly used for security critical private and business applications, such as online banking or to access corporate networks. This makes them a very valuable target for an adversary. Up to date, significant or large scale attacks have failed, but attacks are becoming more sophisticated and successful. Thus, security is of paramount importance for both private and corporate users. In this paper, we give an overview of the current state of the art of android security and present our extensible automated exploit execution frame work. First, we provide a summary of the android platform, current attack techniques, and publicly known exploits. Then, we introduce our extensible exploit execution framework which is capable of performing automated vulnerability tests of android smart phones. It incorporates currently known exploits, but can be easily extended to integrate future exploits. Finally, we discuss how malware can propagate to android smart phones today and in the future and which possible threats arise.

B) ANDROID 2.2

The android 2.2 platform introduces many new and exciting features for users and developers. Its new Home screen tips widget assists new users on how to configure the home screen with shortcuts and widgets and how to make use of multiple home screens. The various highlights of android 2.2 platforms include

- Improved security with the addition of numeric pin or alpha-numeric password options to unlock device. Exchange can enforce password policy across devices.
- Remote wipe- Exchange administrators can remotely reset the device to factory defaults to secure data in case device is lost or stolen.
- Exchange calendars are now supported in the Calendar application.
- Auto-discovery- To know the user name and passwords to easily set up and sync an exchange account.
- Global Address Lists Look-up- is now available in the Email application, enabling users to auto-complete recipient names from the discovery.

C) JAVA

It is a programming language originally developed by James Gosling at Sun Micro Systems. The language derives much of its syntax from C and C++, but has fewer low-level facilities than either of them. Java applications are typically compiled to byte code that can run on any java virtual machine regardless of computer architecture. Java is a general purpose, Concurrent, Class-based, object-oriented language that is specially designed to have as a few implementation dependencies as possible.

One characteristics of java is portability, which means that computer programs written in the java language must run similarly on any hardware/ operating system platform. This achieved by compiling the java language code to an intermediate representation called java bye code, instead of directly to platform specific machine code. Java byte code instructions are analogous to machine code, but are intended to be interpreted by a virtual machine written specifically for the host hardware. End-users commonly use a java runtime environment installed on their own machine for standard java applications, or in the web browser for java applets.

II.2. FEATURES

a) GPS

If user B (ordinary phone) sends a message with "**location**" to the android phone. If the application is turned on then the android phone will obtain the latitude and longitude coordinates of the location where user A (android phone user) is right now and sends a URL link back to B via SMS. Clicking on that link or typing that URL on a browser will open up a Google map showing the current location of A. This can be of some help if your phone is lost and you want to straight away know where your friend is right now without disturbing him. So if suppose B sends location to A then A's phone will send back something like this **www.google.com/search?q=9.99558992,76.2906285** without A's interference. This helps when A is travelling and B periodically wants to know where A has reached right now.

b) CONTACTS

This allows A's friend to obtain contacts from his phone book. B if sends a SMS with the following format "**get Sajna**", then the android phone sends a SMS back containing that name with their phone numbers. This could some help of A has forgotten to take their cell phone and they need's someone's number. In this situation just doing what is mentioned above.

c) DEVICE DETAILS

This allows A's friends to obtain device details of A's phone by just sending a SMS of the format "**device**", then the android phone will send back a message to B and listing the phone OS, model, service provider's name etc.

d) ALARM

This application has more to do with a friend circle in a way. This module allows A's friend to set alarm on A's phone by just sending message with the format "**alarm n**" where "**n**" represents the number of hours after which the alarm should set off.

e) DICTIONARY

This allows A's friends to use A's phone and its internet connection to get the information they need and send that information back to them via SMS in the background without disturbing A. A's friends can send message of the following format "**define word**" or "**cdefine word**". The android phone after receiving this message downloads the xml file to extract the meaning of the word send by B and then sends the word meaning back to B via SMS. Define stands for the word meaning in Oxford dictionary and cdefine stands for the word meaning from a computer dictionary. Define register might return the meaning of register in the context of CPU and memory.

f) AUTOMATED CALL

This allows a call to be made after sending an SMS of the form "**call me**". This module may not sound to be of great help, but imagine in a situation where you lost your phone or you kept it somewhere and don't remember. Initiating a call from that mobile by sending a message will let you to hear conversation and sounds around your phone and this may help you to figure it out.

g) RECORDING

This allows A's friend to initiate a voice recording on A's android phone by just sending a message "**rec**". So if B sends a message "**rec**" onto A's phone, then android phone will start voice recording in the background for a specific period of time.

h) PROFILE CHANGE

This allows A's friend's to change the profile of A's phone from silent to general or general to silent by just sending a message "**profile**". So if B sends a message "**profile**" on to A's phone, then the android phone will change the profile.

i) MESSAGE BOX

This allows A's friend's to access inbox details of A;s phone by just sending a message "**sms**" onto A's phone, then the android phone will send last received message to B's phone.

III. EXPERIMENTAL RESULTS

The user A (ordinary phone user) will send the request message to the user B (android phone user) for enabling the application. Then the corresponding application will run at the android phone and the user A obtains the details of output of the requested application. The advantage of this paper is that the application on android phone is runs in background and the result will obtain as an SMS without disturbing any others.

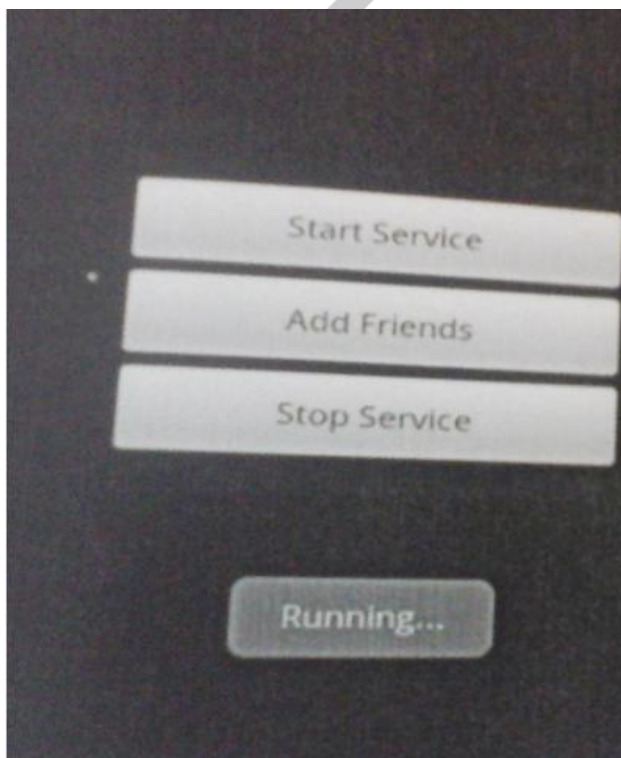The below screen shot shows the service running in android phone

Fig 1

The below screen shot shows the service running in android phone

Fig 2

IV. CONCLUSION

This paper has big scope to do. The system provides many facilities to carry out these applications. We get the different services by only sending SMS to the android phone. This system will provide more flexibility and freedom to users of the system. This application allows its features to be invoked by others via SMS and return the result back via SMS. It pauses no security threat like it sounds; only trusted friends who have been added to the list of friends can invoke the applications. The main features of our paper are get contact, set alarm, device details, call recording, dictionary and some more. What makes this paper out of the ordinary is that the above stated features will be requested as SMS to the Android Phone which in turn will, respond back as SMS itself, which makes this paper highly appealing.

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