RESEARCH ARTICLE

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Remote Access Tool With Offline Messenger

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ABSTRACT

Messaging is a very useful utility which is leading currently in the field of communication. Our project is an offline messenger which can serve as a remote access tool. The project is built using android and wamp server for remote access. This project has the central idea of luring criminals by providing a very useful utility in the form of an offline messenger which is very unique and does not require a constant internet connection. As soon as the criminal downloads the app via the link and installs it, a 'trojan' will get automatically installed in the background which will give us nearly complete access to the android mobile. So it will become very easy to mine information from that mobile and also can be used as a spying or surveillance tool. This project is meant to be used by ethical hackers for the benefit of the society. Our project is based on android and the back end used will be php. Our project can revolutionize the entire ethical hacking space as there is no such tool available yet in the market.

Keywords:- Wifi-Direct, Offline Messaging, Remote Access Tool, Kali Linux, Port Forwarding, Android, Victim, Attacker.

I. INTRODUCTION

Cyber security has become one of the major concerns in today's technology. Nearly everyone on earth has access to the internet, but every coin has two sides. The internet does provide a lot of information but it also opens doors to unauthorized access to computer systems or networks and even android mobile phones. Black hat and grey hat hackers and cyber criminals and terrorists perform this activity. This project is created for spying and hacking these criminals. Our project works on the concept of honeytrap. The offline messenger is a utility, it can be used to send messages, files to others without the need of an internet connection. This works as a honeytrap as this functionality is very useful and the hacker will surely install this app. As soon as the criminal installs this app, the Trojan behind it will automatically get installed and thus provide us access to the criminal's android phone. The main aim behind creating this app is, use of it by ethical hackers as a hacking and spying tool. Additionally, it can work as a remote access tool in companies. In addition, this app works as a good offline messenger.

I.I Offline messaging

Offline messaging is a utility, which can be very useful in saving huge amount of mobile data. This concept works as follows a connection is set between two nearby devices through Wi-Fi. The following apps work as an offline messenger: jot, fire chat, hike, etc. The range of this connection is within a classroom. As soon as the devices are connected, both the devices can send and receive messages, audio, video files. This is how without use of internet, instant messaging can be performed.

I.II Remote Access Tool

Remote access tool, also called as remote administration tool is a software which is used to access a computer located at a distant location. It always has two parts a client side and second is the server side. Server side is the system or computer over which the remote access tool is installed and the client side is used to access the remote computer over which the remote access tool is installed. If it is used for malicious purposes, it is called as Remote access Trojan(RAT). It is similar to a backdoor, which includes a server and a client program.

I.III WiFi-Direct

This utility allows two android device users to connect to each other without the need of a wireless access point (eg: router). To perform this, both the devices create their own ad-hoc network and after creating it, both devices are visible to each other, so that a connection can be established. WiFi Direct is an official standard. It has working similar to Bluetooth, but the data transfer speed is a lot faster. The major advantage of wifi-direct is that it does not require an active internet connection to send and receive data.

I. IV Kali Linux

Kali linux is based on the debian linux distribution. It is specifically created to focus on penetration testing and security auditing. It includes a wide variety of tools which can be used in computer forensics and reverse engineering. Kali linux is an open source operating system, so it is distributed free of cost over the internet and also the source code is freely available for modification. Kali linux is Filesystem Heirarchy Standard compliant, it allows users to locate binaries, support files very easily. Kali linux supports a wide number of wireless devices and usb devices, making it compatible with most of the hardware available. The kernel includes injection patches, so that penetration testing can be performed easily.

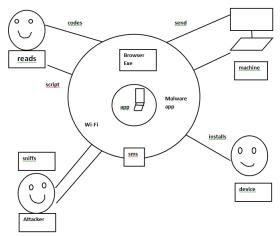
I.V Port Forwarding

Port forwarding is a type of network address translation(NAT), which is used to forward a connection from a port, over which the packets are entering currently, to a specific port number, over the router or gateway. Port forwarding is mostly used to make services on the internal network, easily availale to the computer outside the network. It allows, remote computers to connect to a specific computer in a protected network.

II. REMOTE ACCESS TOOL WITH OFFLINE MESSENGER

The offline messenger is an android app which works on wifi direct, to send and receive data. This messenger acts as a utility which can be very useful. A remote access tool or RAT is binded with this app at the back. When the criminal installs the messenger, this RAT is automatically installed in the background without the user knowing it. Now whenever, the criminal connects to the internet, the Trojan creates a connection back to the server on port 81. Through this connection, entire data of the criminal can be accessed. The server part gets installed on the criminal's device, while the client part is used to access the device. Port forwarding is used to forward the connection from the router to the laptop. Kali linux is used for port forwarding and creation of the RAT.

III. ARCHITECTURE



V. APPLICATIONS

- For spying
- To access data from criminals or terrorists
- To reduce infrastructure of company
- For basic chatting without internet
- Can be used as an effective hacking tool

VI. CONCLUSION

Cyber terrorism and crime are increasing at an alarming rate day by day. It is important to stop these activities for the benefit of the society. We have created this tool, so that ethical hackers can use it to hack into devices of cyber terrorists and cyber criminals, to extract valuable information for the defence systems. Alternatively, it can also be used as a offline messenger, to send and receive data without an internet connection, within the range of wifi direct. This tool can also be used as a spying tool , which can be very useful for the police department. We conclude that this tool has a lot of applications in a variety of areas.

REFERENCES

- What is the difference between viruses, worms and Trojans?". Symantec Corporation Retrieved 2009-01-10
- [2] VIRUS-L/comp.virus frequently ask questions (FAQ)Version 2.00".9 October 19, 2016, 1995 retrieved 2015-02-01
- [3] Remote server administration tools for windows7". Microsoft TechNet June 4,2009. Retrieved 4 February 2011.

Website:-

- [1] www.wikipedia.com
- [2] https://developer.android.com/guide/topics /connectivity/wifip2p.html
- [3] http://www.in.techradar.com/news/phoneand-communications/mobile-phones/wi-fidirect-what-it-is-and-why-you-shouldcare/articleshow/38591621.cms

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