An Outlook on Bluejacking Technology

Pragya Bhatia, Richa Bisht
Department of Computer Science & Engineering
Dronacharya College of Engineering, Greater Noida, India

Abstract: - The technology of mobile phones is developing day by day. Initially, it was used merely as a communicating device for mediated conversation, but the usage of mobiles phones has been developed tremendously and progressively.
One of the features of mobiles phones is "Bluetooth". A Bluetooth is a wireless technology standard for exchanging data over short distances (usually limited range around 10m on mobile phones, but laptops can reach up to 100m).
This research paper is about the technology which uses Bluetooth. It is known as "BLUEJACKING"- a harmless technique of sending messages or electronic business cards. It is mainly used to advertise any company or business.
Definition of Bluejacking:
Bluejacking is sending nameless, unwanted messages to other users with Bluetooth-enabled mobile phones, PDA's or laptops. It is a fun way to send messages to other people using Bluetooth and without their pairing. It uses a vCard functionality and OBEX (OBject EXchange) protocol for sending unsolicited short messages.

Origin:
Bluejacking was reportedly first carried out by a Malaysian IT consultant. He used this technology to advertise Sony Ericsson. He also coined the name, which is an amalgam of "Bluetooth" and "Ajack".

Characteristics of Bluejacking:
1. It is originally proposed for exchanging contacts or electronic business cards.
2. It does not literally mean Hacking of phones or laptops using Bluetooth.
3. It does not alter or delete any data from the device.
4. A Bluejacker or Bluejackaddict (an attacker who instigates Bluejacking) can send text messages, images or sounds.
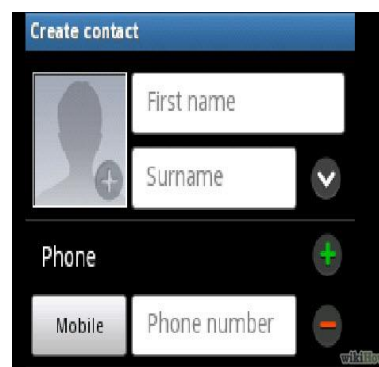5. Bluejacker can disable a Bluetooth's ability to discover other nearby Bluetooth devices.

How To Bluejack:
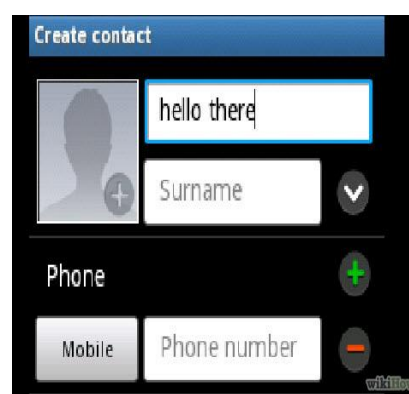The Bluejacking is quite harmless process.
1. Select an area with plenty of mobile users or laptop users.
2. Go to contacts in your Address Book (if using mobile) or Address Book program like Outlook (if using PCs/Laptops).
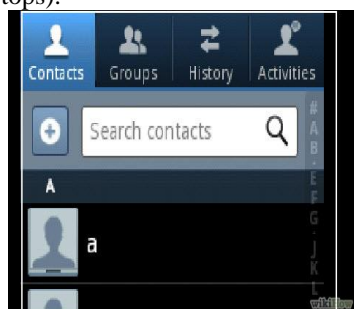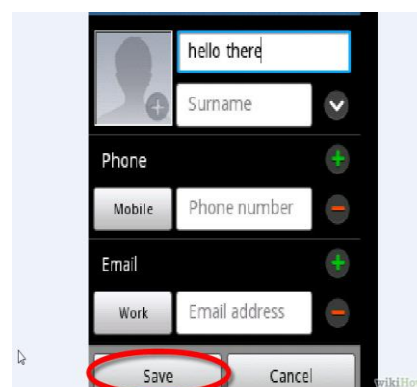

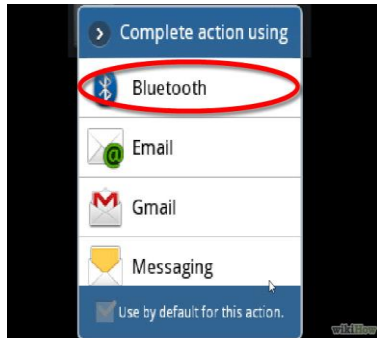3. Create a new contact in it.

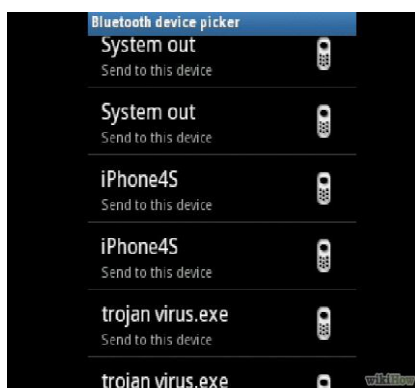4. Enter the message you want to send into the name section.

5. Then save the new contact.

6. Choose "send via Bluetooth" option. This will search the other Bluetooth devices in the range.

7.

8. Choose the device and send the contact
.

9. The message will be sent and you will get the acknowledgment message "card sent".
10. You can notice the weird and shock look on the victim's face.

If you want to advertise any business, you can simply type the message in the name part and can send it to all the devices come in your Bluetooth range.

Tools for Bluejacking:

There are sundry tools for making Bluejacking much easier. Some of them are as follows:

1. Bluespam: It searches for discoverable Bluetooth devices and sends them a default file or small message if they support OBEX.
2. Meeting Point: One can set a meeting point to a certain channel and meet up with different new users or people and can combine this with bluejacking tool to have fun. This software is compatible with PC, palm, Windows.
3. Freejack: It is compatible with java phones.

Pros of Bluejacking:

1. A Bluejacker used to send only text messages but with the advancement in technology, he can now also send images as well as sounds too.
2. It is a fast media for communication and we can easily transfer the data from one device to another within minutes or even seconds.
3. We can even enjoy songs or music through this technology without using headphones.
4. We cannot send the copyright sound files without the consent.

5. It can be used for fun and small pranks.
6. People can advertise their business.
7. We can share different messages through this wireless technology.

Cons of Bluejacking:

Where there is an advantage of any technology, there is a drawback also.

1. A Bluejacker may use this feature to annoy someone.
2. People can even use this to send unwanted messages or jokes so as to irritate others.
3. A Bluejacker can send a message which may contain a virus or link (having virus) and if this message or link is opened by a user, his mobile may get infected.
4. More the Bluetooth devices, more they will be vulnerable to virus attacks.
5. Some bad pranks can be played to disturb someone.
6. Some fake advertisements can also be sent.

Applications of Bluejacking:

It can be used at sundry places and fields for sundry purposes. Different applications of it are:

- Mobile phone shops
- Train stations
- Café/restaurants/pub
- Movie halls
- Shopping malls
- Electronics shop(e.g. Dixons)
- Starbucks
- On a train/bus
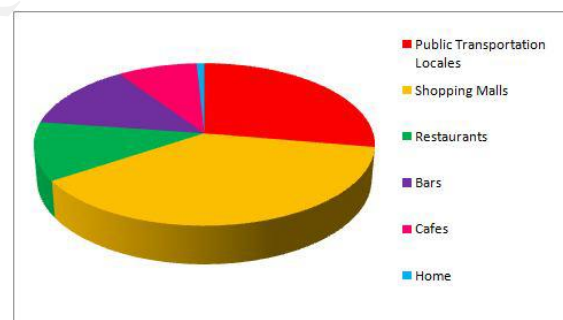
Maximum % usage is at shopping malls because it can be used by different shops to advertise messages or latest schemes they are providing on that day.

Minimum % usage is at homes which mean Bluejackers never use this technology at homes because they prefer and target populated public spaces.

Prevent yourself from getting Bluejack:

There is no such software made which protect you from getting bluejack. But there are sundry ways to prevent it:

1. You can set your device as invisible/hidden or in an undiscoverable mode.
2. Turn off your Bluetooth devices at specific populated public areas like shopping malls, bars, cinemas etc. so as to avoid getting messages, sounds or images.
3. Turn on your Bluetooth when in need else make sure it is always in off mode or undiscoverable mode.
4. Don't accept the requests from unknown people and never add the bluejack messages into your address book.

CONCLUSION:

Bluejacking is a harmless and secure technology. It does have some drawbacks but they can be prevented by using certain measures. It does have many advantages also. It is can be used to interact with different people. It is now a day used for promoting sales or sale tools or any electronic business cards.

It is used in various fields like shopping malls, bars, cinemas, cafes, restaurants, mobile shops to advertise messages or any latest schemes. A bluejacker can target any Bluetooth discoverable device whether it is a phone or any laptops so different preventive measures were discussed to protect yourselves from getting Bluejacked. If a bluejacker hacks any device, he is supposed to commit an offence under the computer misuse act 1990, which means it is an offence to obtain unauthorized access to any computer.

So use the most out of this technology in the good manner instead of using it in bad aspect as it can provide many important messages and use also.

REFERENCES:

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2. http://en.wikipedia.org/wiki/Bluejacking
3. http://en.wikipedia.org/wiki/Bluetooth
4. http://www.wikihow.com/Bluejack