

Gettin' Vishy with it

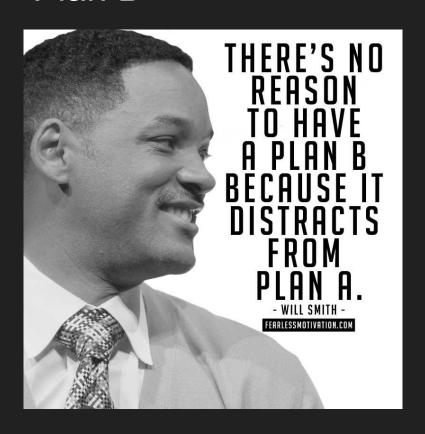
Snide / Owen / @LinuxBlog

Introduction

Owen / Snide

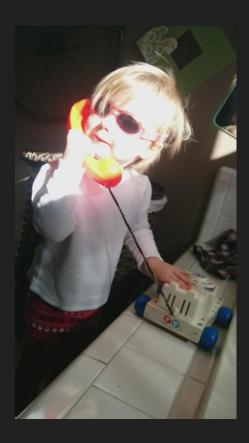
@LinuxBlog

Plan B





Introduction Continued.



What's this about then?



Phishing, vishing and smishing, and Pharming Oh my!

Phishing

So what is vishing?

According to Google:

Vishing is the act of using the telephone in an attempt to scam the user into surrendering private information that will be used for identity theft. The scammer usually pretends to be a legitimate business, and fools the victim into thinking he or she will profit.

What is vishing? A Webopedia Definition www.webopedia.com/TERM/V/vishing.html

Feedback

Voice phishing is the criminal practice of using social engineering over the telephone system to gain access to private personal and financial information from the public for the purpose of financial reward. Sometimes referred to as 'vishing',[1] the word is a combination of "voice" and phishing. Voice phishing exploits the public's trust in landline telephone services, which have traditionally terminated in physical locations known to the telephone company, and associated with a bill-payer. Voice phishing is typically used to steal credit card numbers or other information used in identity theft schemes from individuals.

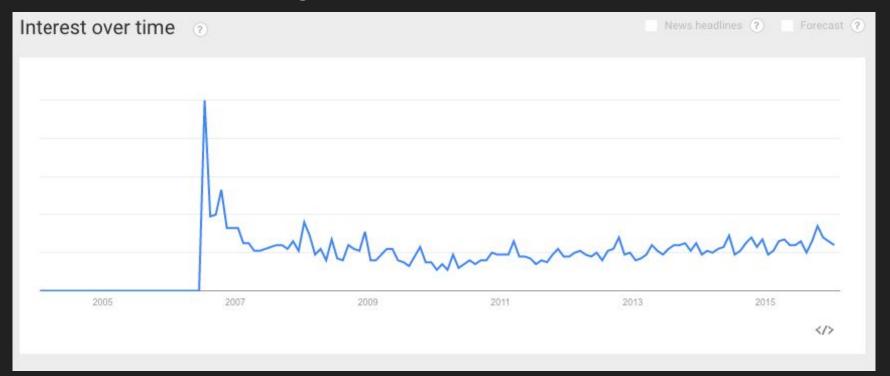
Some fraudsters use features facilitated by Voice over IP (VoIP). Features such as caller ID spoofing (to display a number of their choosing on the recipients phone line), and automated systems (IVR).

Voice phishing is difficult for legal authorities to monitor or trace. To protect themselves, consumers are advised to be highly suspicious when receiving messages directing them to call and provide credit card or bank numbers — vishers can in some circumstances intercept calls that consumers make when trying to confirm such messages.

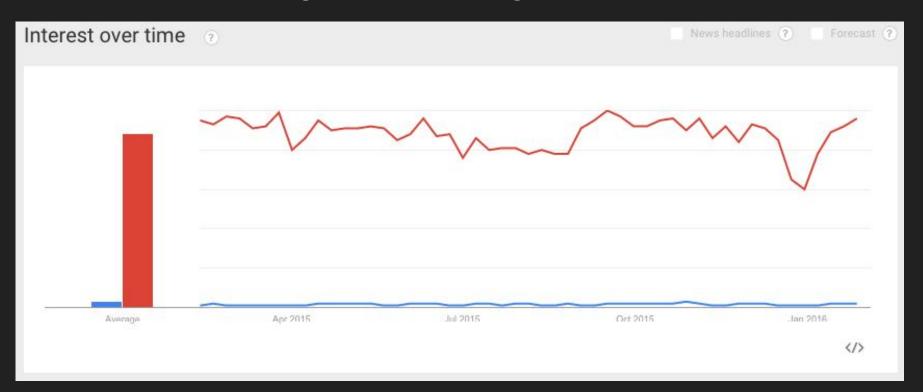
Smishing & Pharming



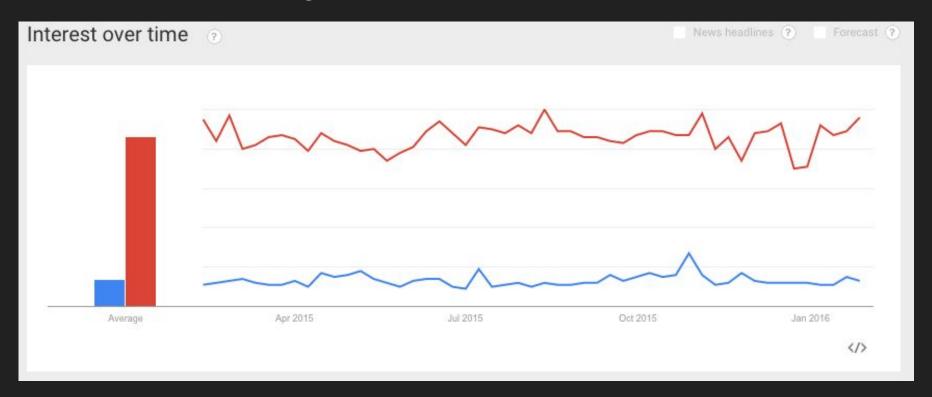
Statistics: Vishing



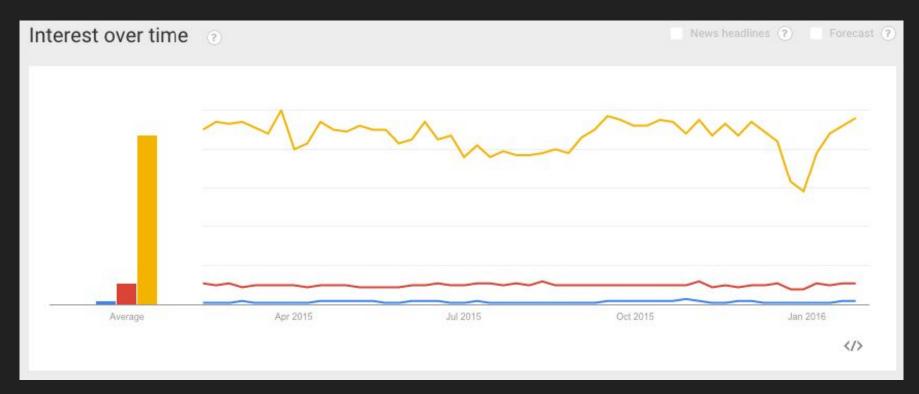
Statistics: Vishing vs. Phishing



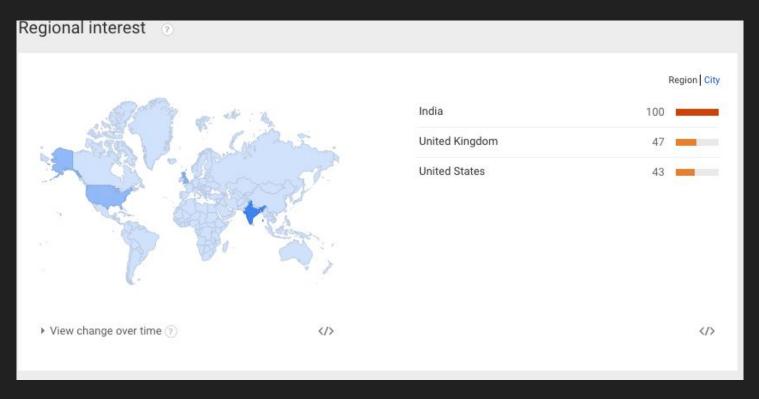
Statistics: Vishing vs. Phone Fraud



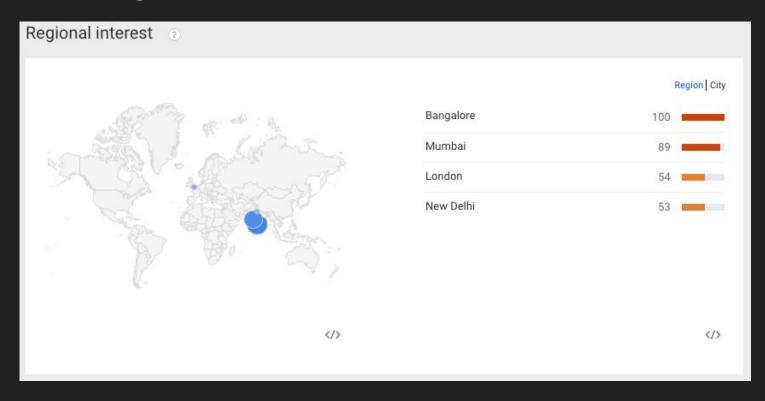
Statistics: Vishing, Phone Fraud, Phishing

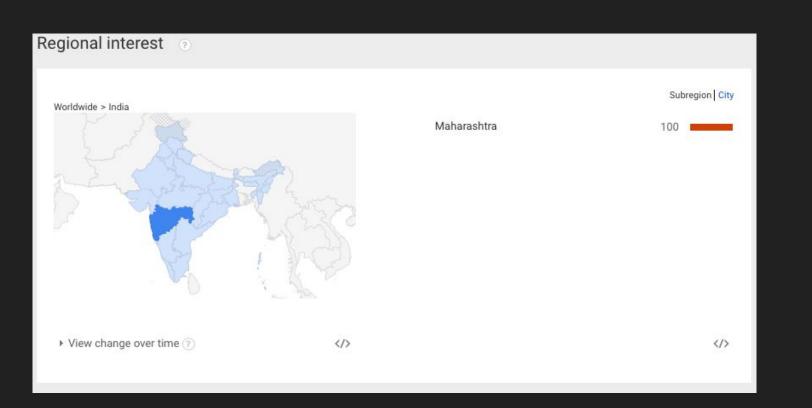


Vishing Regional Interest



Vishing Cities





Regional interest 🕝



Mumbai

...

City

</>

Regional interest ②



Worldwide > United States



Subregion | Metro | City

Virginia	100	E 5
Texas	47	_
California	37	

▶ View change over time ?

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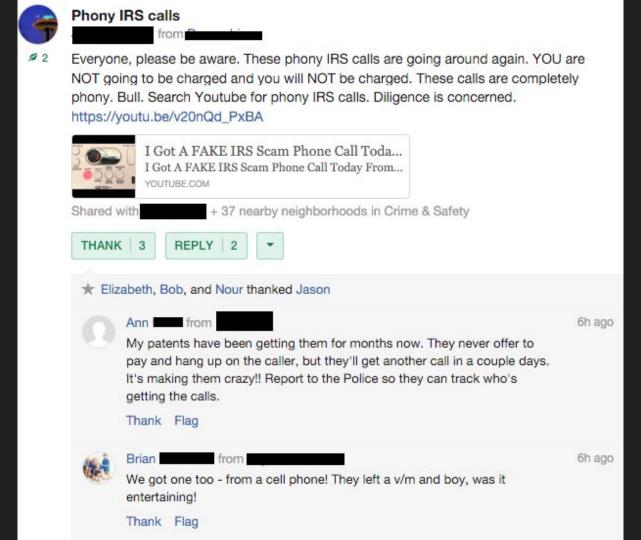
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Vishing Schemes

- Malware
 - Tech Support
- ID Theft / Fraud
 - Banking
 - Rewards
 - Bogus Companies / Products
 - Jury Duty
 - Calling Cards
 - Collect Calls
 - Prison
- Extorsion
 - o Phone "Locking"
- Courier Fraud

Bonus

Tax Season



Other Applications Relevant to interests

- Token Serial Number Gathering
- One Time Pass OTP
- 2 Factor Authentication
- Conferencing Services

So how do they do it?

Technical

Spoofing Caller ID

Calling

Compromising PBX's

Non-Technical

Do their research

OSINT

Advertising Agencies

By Volume

How do we do it?

Same Methods as the baddies.

Make a call

Register a CNAM

Spoof Caller ID

On outbound route...

exten => INXXNXXXXXX,n,Set(CALLERID(num)=17045551212)

In the ".call" files used for automation just set...

CallerID: <17045551212>

PhreakMe - Overview

PhreakMe - History

Phony Business (CarolinaCon 2015)

Sorry, Wrong Number (Defcon 2015)

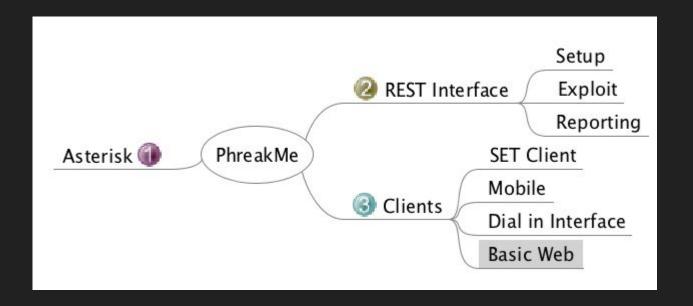
The Phony Pony (DerbyCon 2015)

Here we are

PhreakMe - Use Cases

- Learn
- Testing
 - Offense
 - Defense
 - Clients
- Pranks

PhreakMe - Architecture



PhreakMe - Updates

Source Code in Repo

- Vagrant VM
- Or run debian and run the script
- Web Interface

PhreakMe - Demos

Setup Box

Caller ID Spoof

SET Client

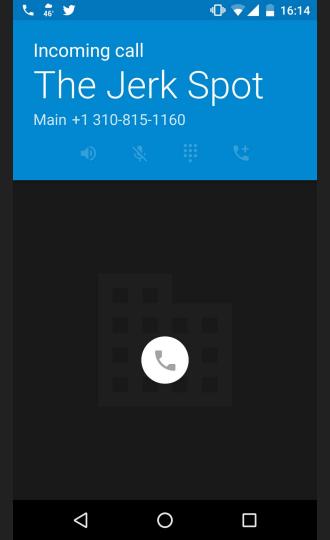
WEB Client

Setup Box

CID Spoof

REST Call to /service/exploit/<phone number>/<caller id>



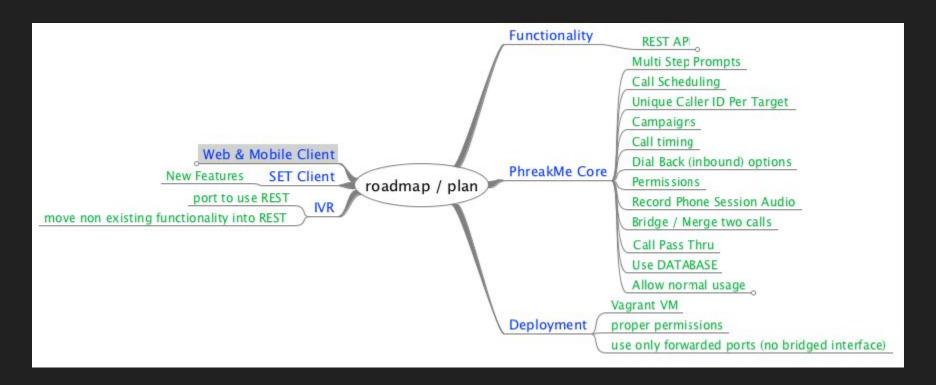


SET Client

- Setup
- Dial
- Reporting

Web Client

PhreakMe - Future Plans



Vishing Defense

Awareness / Education

Testing

Verification / Validation

Lenny!

https://www.reddit.com/r/itslenny/





Help Wanted

Ideas

Enhancement

Development

- Web Interface (PHP)
- Rest API (PHP)
- SET (Python)

Graphics / PR

Github

github.com/phreakme

References, Links ETC.

https://en.wikipedia.org/wiki/Voice_phishing

https://en.wikipedia.org/wiki/Phone_fraud

http://www.consumer.ftc.gov/articles/0076-phone-scams

http://cfca.org/pdf/survey/Global%20Fraud_Loss_Survey[2011][2013].pdf - Replace

https://www.treasury.gov/tigta/contact_report_scam.shtml

http://www.fraud.org/learn/telemarketing-fraud

https://www.fbi.gov/scams-safety/fraud

https://www.verizon.com/pages/securityalerts/

https://www.irs.gov/uac/Newsroom/IRS-Warns-of-Pervasive-Telephone-Scam

https://www.irs.gov/uac/Newsroom/Phone-Scams-Continue-to-be-a-Serious-Threat,-Remain-on-IRS-Dirty-

<u>Dozen-List-of-Tax-Scams-for-the-2016-Filing-Season</u>

http://patch.com/new-jersey/gloucestertownship/beware-law-enforcement-phone-scam-gloucester-

township-police

Thanks!



Scratch Space

Scratch

Abstract Yo'

Criminals use Vishing to trick victims in order to commit fraud or for other nefarious purposes. In this presentation we'll will cover a bit of background, the current state of Vishing attacks along with how fraudsters use these tactics for their benefit.

As a result of the last CarolinaCon, I wrote PhreakMe; an open source tool that lowers the bar for security professionals to add the Vishing vector to their toolkit. Using this I'll demonstrate how penetration testers can use open source software to utilize vishing tactics in their tests and how organizations can use this to their benefit.

http://www.imdb.com/name/nm0000226/bio?ref_=nm_dyk_qt_sm#quotes







