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COMPROMISING FORTUNE 500 BUSINESSES WITHOUT HACKING A THING!

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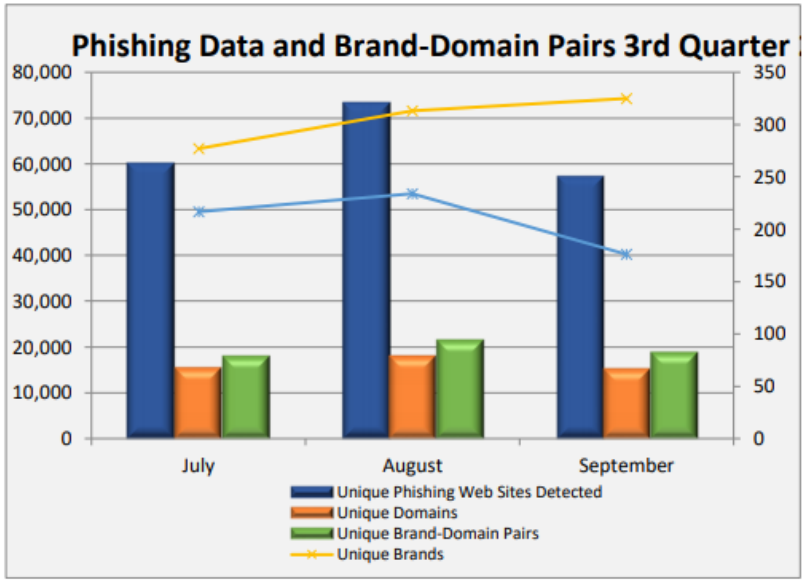
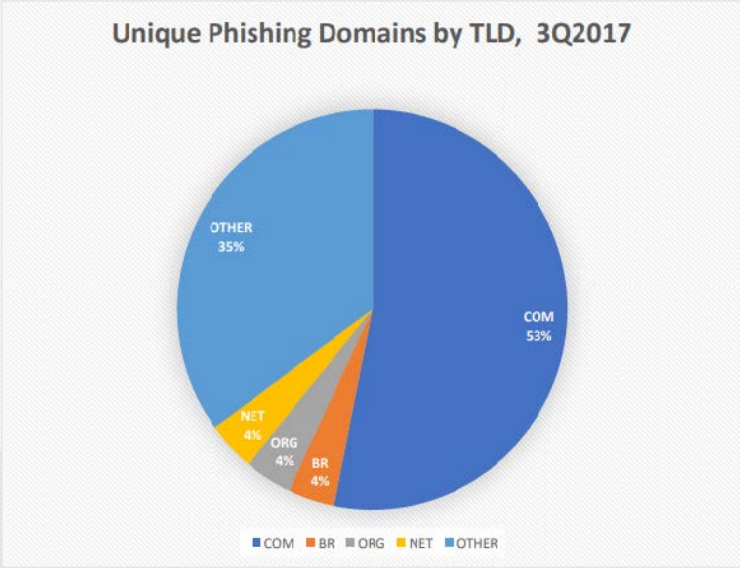
@hackingglass

The Cold Hard Facts

Phishing Statistics





Source: APWG 3Q2017 Report

Statistic Highlights

Statistical Highlights for 3rd Quarter 2017

	July	August	September
Number of unique phishing websites detected	60,232	73,393	57,317
Number of unique phishing e-mail reports (campaigns) received by APWG from consumers	99,024	99,172	98,012
Number of brands targeted by phishing campaigns	277	313	325

Source: APWG 3Q2017 Report

About Rachel @RachelTobac

SOCIAL PROOF SECURITY

@RachelTobac

About Joe

DERBYCON VII (2017) CLOSING CEREMONY

Chris Hadnagy presenting me with the Trophy

Apply! What will you learn today?

- OSINT concepts and how they lead to social engineering (SE) attacks
- Common social engineering attack methods
- How we won SECTFs
- Examples of what social engineering sounds like
- How to get your organization prepared for SE

HOW WE DO OPEN SOURCE INTELLIGENCE

OSINT against the business and its users

Advanced Persistent Security

What is OSINT?

Publicly available material:

- The Internet
- Traditional mass media
- Specialized journals, conference proceedings, and think tank studies
- Photos
- Geospatial information
- Social media

What OSINT info do SEs target?

- VPN
- ESSID name
- Make and model of computer
- OS info + service pack/version
- PDF reader
- Browser and version
- Mail client
- Disk encryption
- Any/all software/versions

How I use social media for most OSINT



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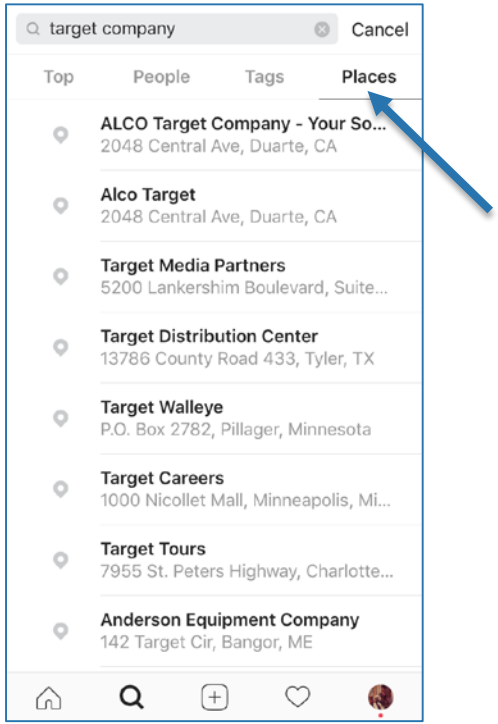
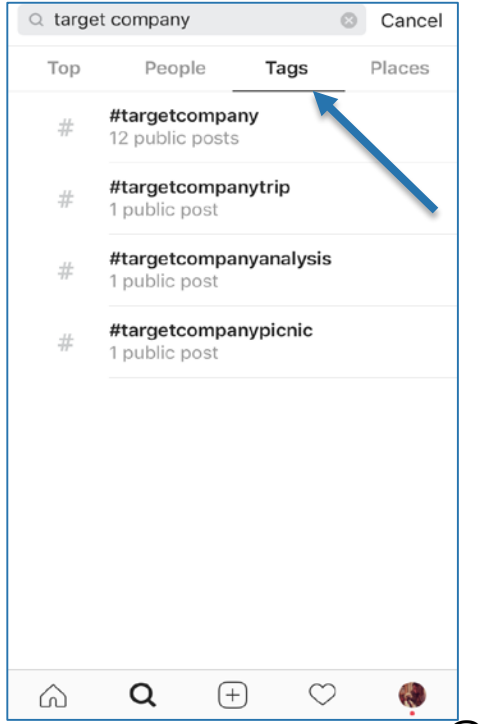
Instagram OSINT Example





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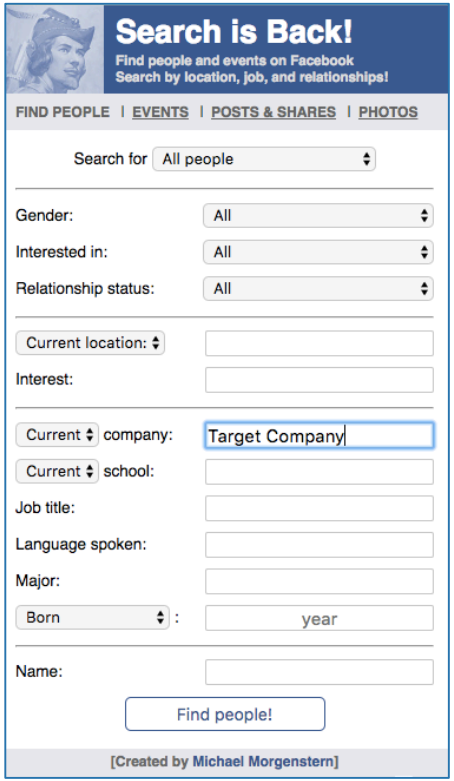
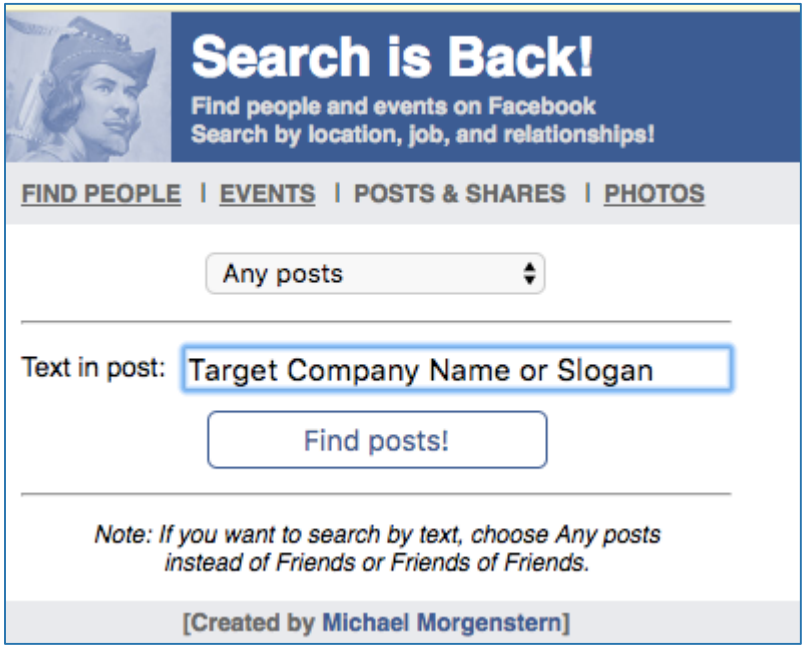
Facebook OSINT Example





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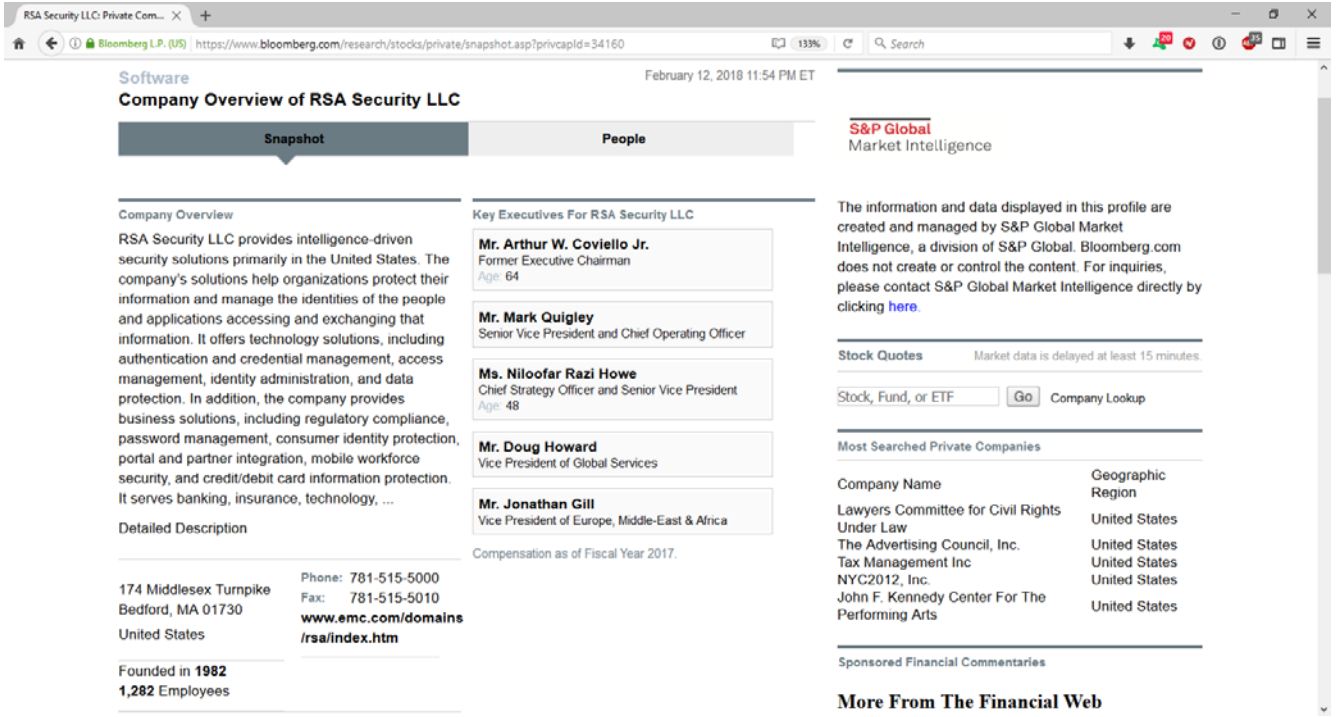
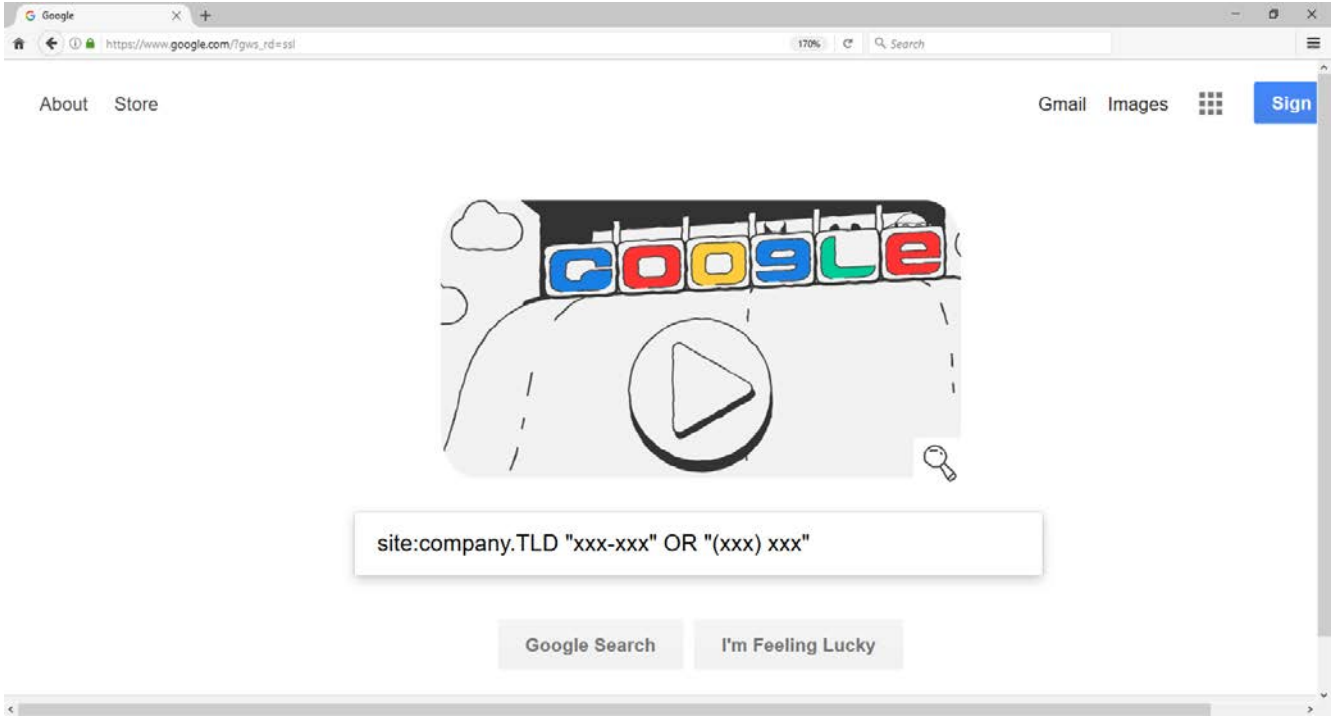
Gaining Initial Information



OSINT for Phone Numbers

- Block your number and sweep the organization
- Call outside hours to get names from voicemail
- If you find the directory, search for common last names

Google-Fu


Google
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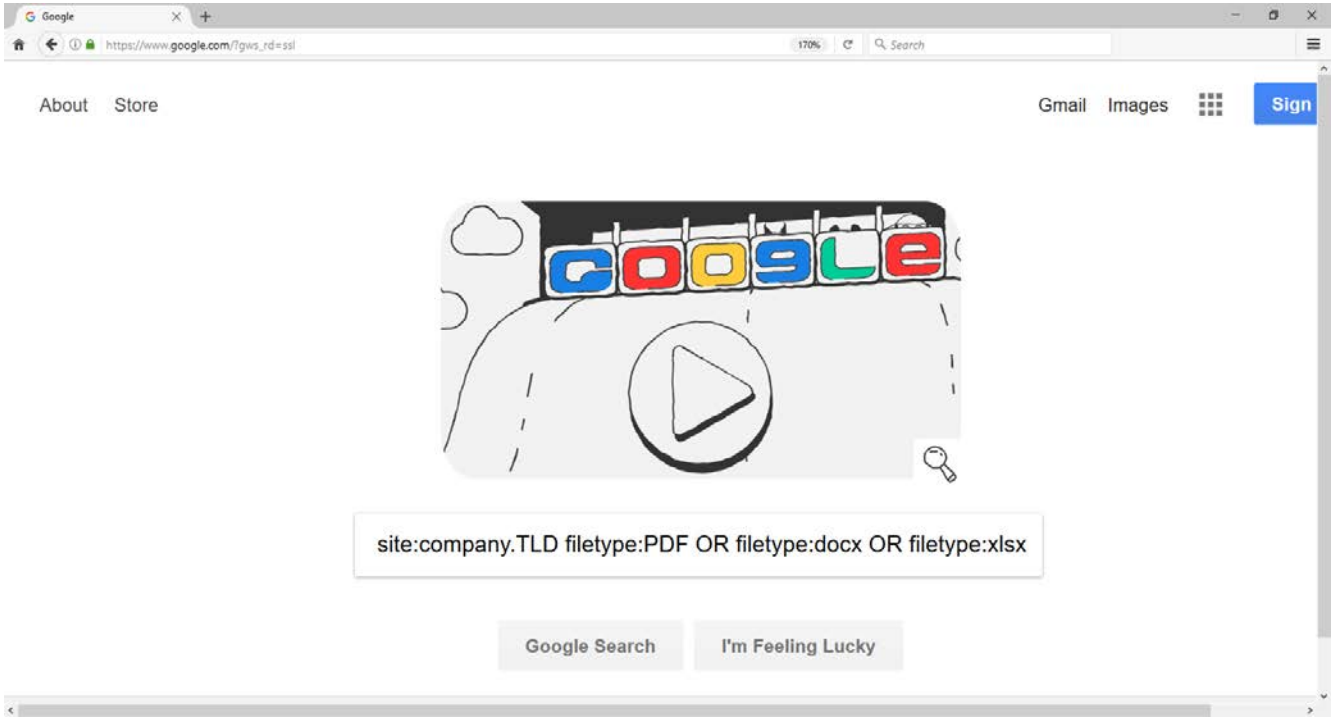
Google Search
I'm Feeling Lucky

Google-Fu Next Step



Finding Info on People

- Build a repository of people
- Enumerate the people

Finding Info on People Continued

- See what user names they use
- Look for goldmines
- Use this data to build dossiers and leverage it to build rapport

About the domains

- Enumerate information about domains
  - Subdomains
  - MX records
  - SPF
  - Technologies used
    - Remote.target.tld
    - VPN.target.tld

We Take a Tour

How do SEs use these data points later?

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SOCIAL ENGINEERING

Any act that convinces someone to do something that may or may not be in their best interest.

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Picking Targets

- I vish the phone numbers I can find
- 3rd party vendors posting and tagging you
- You help people? You're getting a call
- You posted on social media about your company

Picking Pretexts

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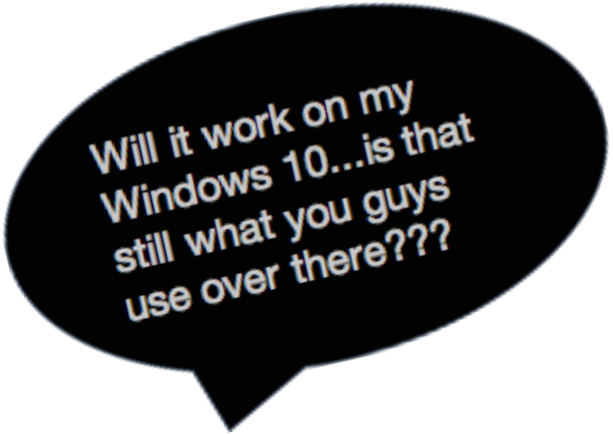
Why does SE work on people so well?

- **Cialdini's 6 Principles of Persuasion:**
  - Reciprocity
  - Commitment & Consistency
  - Social Proof
  - Liking
  - Authority
  - Scarcity

DEFCON SE calls



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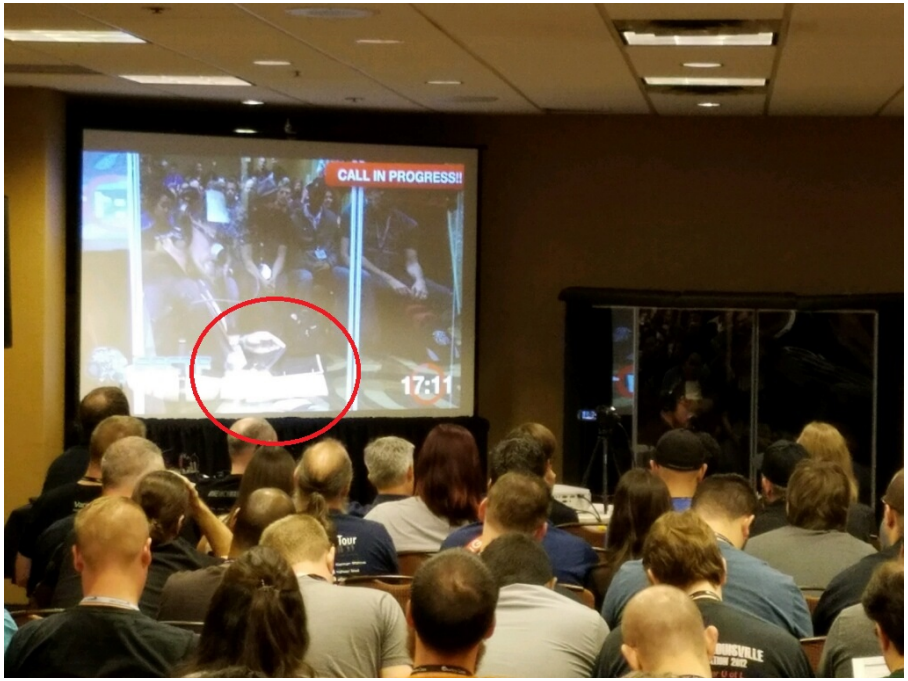
Derbycon SE Calls



Props

- Office Noises
- Uniforms
- Toolboxes
- Ladders
- Donuts and/or Coffee
- Badges

BRINGING IT ALL TOGETHER: NEXT STEPS

Emoji Takeaways

SOCIAL PROOF SECURITY

Training should be timely

Tips for Training

- Do more than the annual training for compliance purposes
- Employ role based training
- Integrate into Incident Response Plan
- Use automated solutions or external contractors to attempt attacks
- Ensure social engineering (specifically phishing, pretexting, and vishing) are included in your penetration tests

Applying what you've learned

- Next week you should:
  - OSINT survey on your company
  - talk with management about SE
  - talk with IR team for integration
- In the first three months following this presentation you should:
  - quarterly training scheduled in a shorter format
  - baseline phishing simulation
- Within six months you should:
  - adapt training to current trends and testing results
  - have a second training session
  - OSINT survey and Social Engineering pentest

Resources

- https://github.com/jocephus/RSAC_Resources/

QUESTIONS?

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