

RSA® Conference 2020 Asia Pacific & Japan

A Virtual Learning Experience | 15–17 July

HUMAN
ELEMENT

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Inside the Mind of a Hacker: How a Light Bulb Almost Stopped Christmas

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- 25+ years experience in enterprise security
- (ISC)² Information Security Leadership Award (ISLA[®]) Winner 2018
- Security Professional of the Year 2020 & Blogger Finalist
- Frequent speaker at cyber security events globally
- Adviser to several governments, critical infrastructure, finance & maritime industries
- Author of 4 books, including Cybersecurity for Dummies & Least Privilege for Dummies



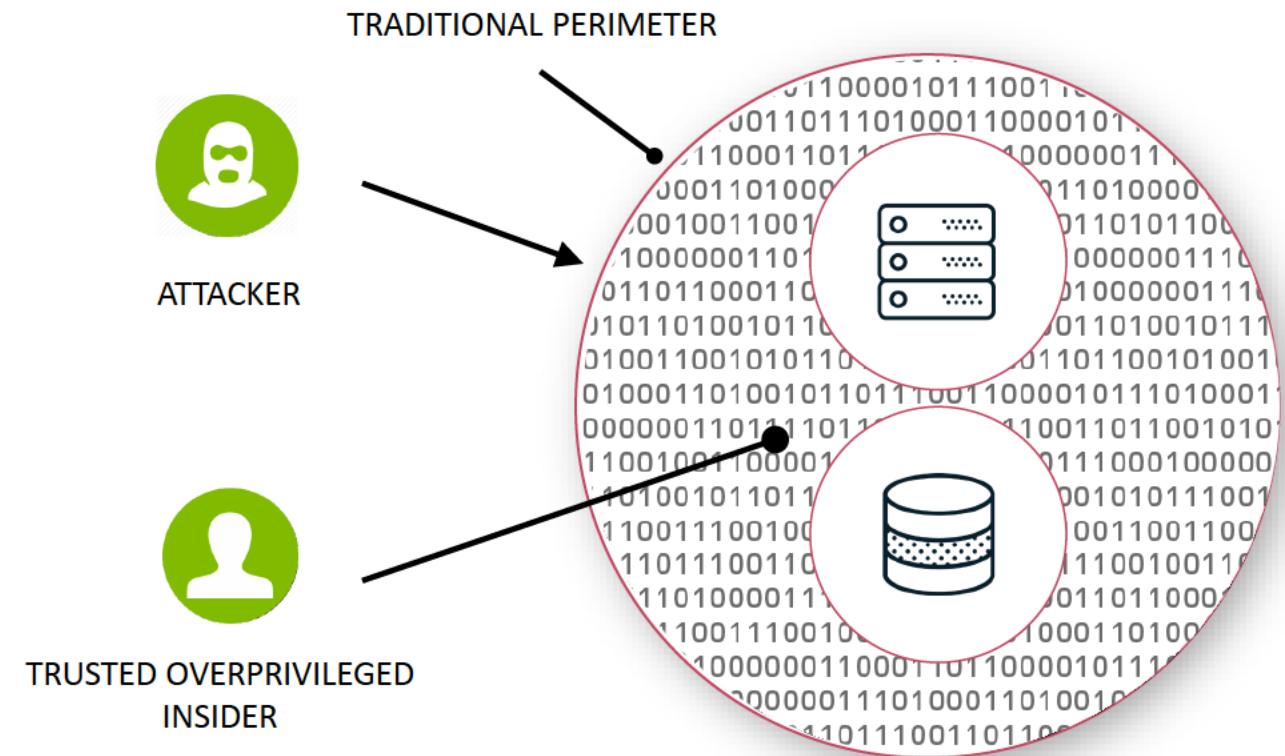
Cybersecurity has not changed much?





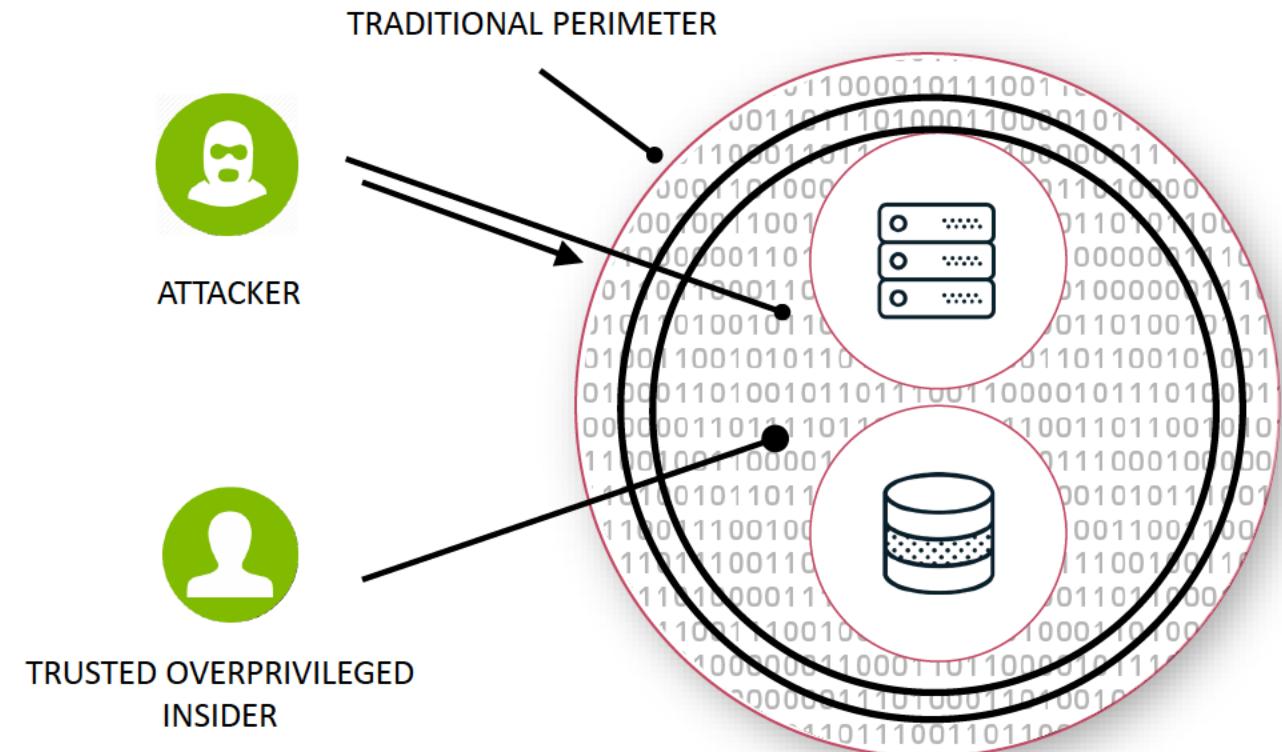
Traditional Perimeter

- Build a fence around the data. This approach has fundamental flaws
- You can't be 100% sure the fence is working
- Cloud and Mobile computing blurs the perimeter
- Over 60% of breaches fraud is conducted by stolen credentials



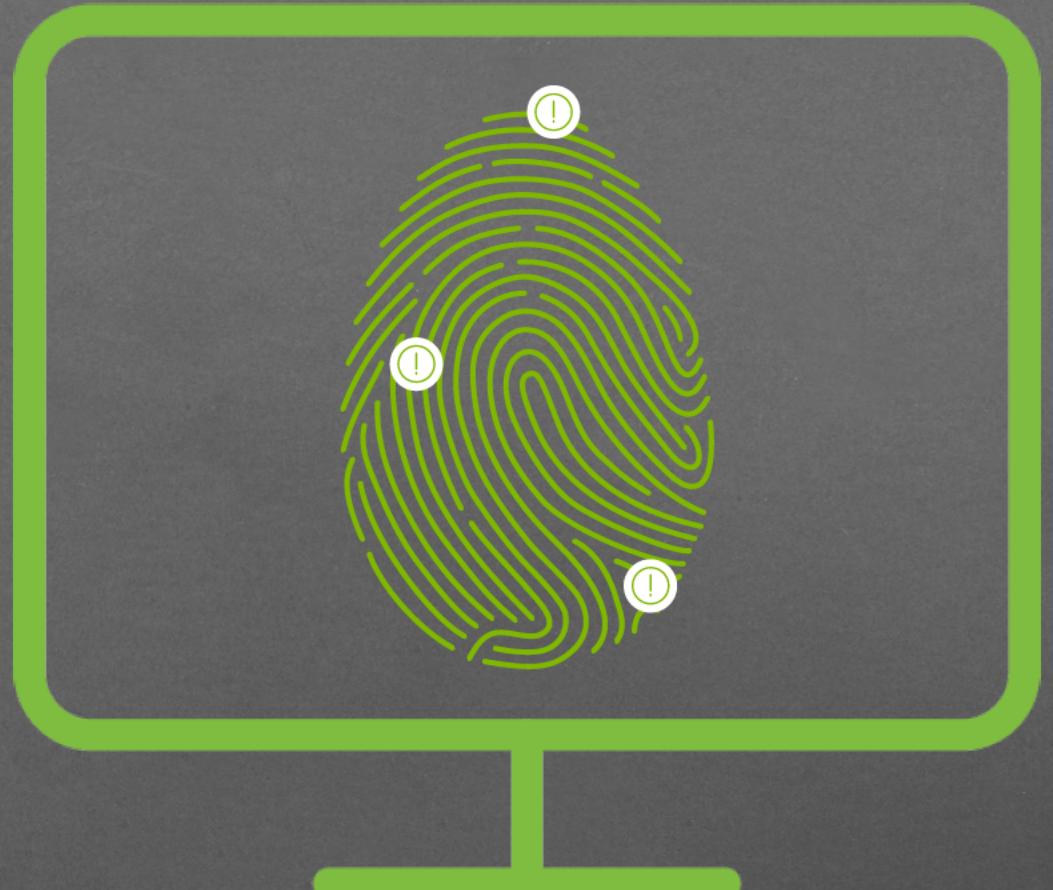
Add Layers and Layers?

1. Perimeter control
2. Trusted Insiders
3. Data in Secure vaults
4. Firewalls and Network
5. IDS and IPS
6. SIEM



Hacker Techniques

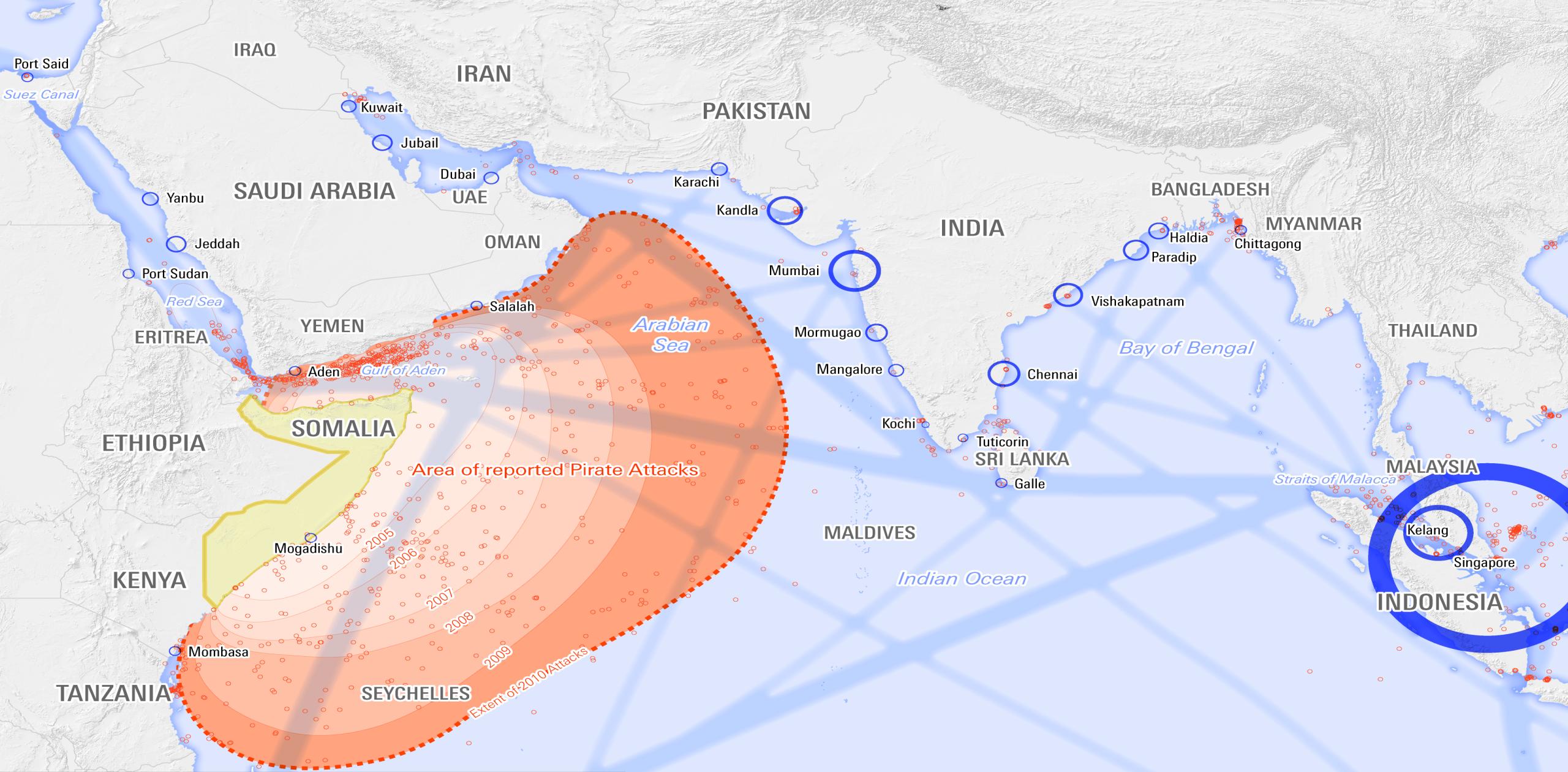
It is critically important to know how cyber criminals target their victims, what you can do to reduce the risk and make it more challenging for the attackers who steal your information, your identity, or your money.











Somalian Piracy Threat Map (2005-2010)

- Major Port
50 Million Tonnes handled / year
 - Anti-Shipping Activity Message Location
- Extent of 2010 Pirate Attacks





Inside the Mind of an Ethical Hacker

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STEP
1

90 %

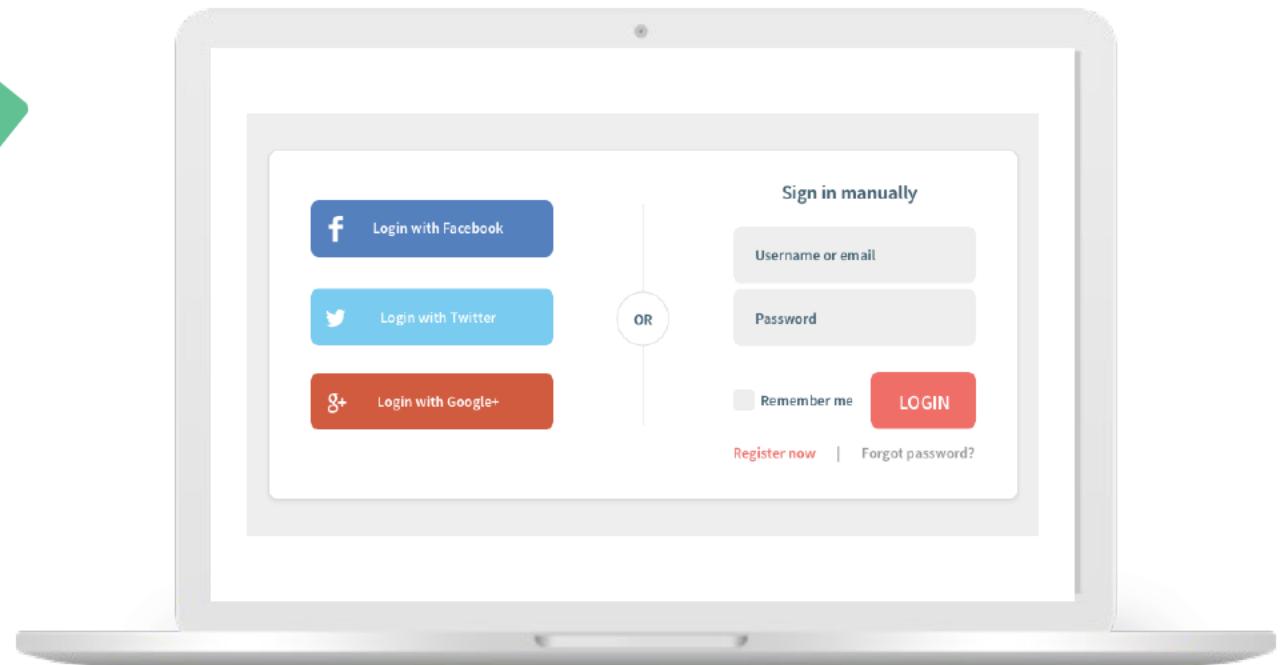
Reconnaissance

The Phishing Scams

Gaining Access

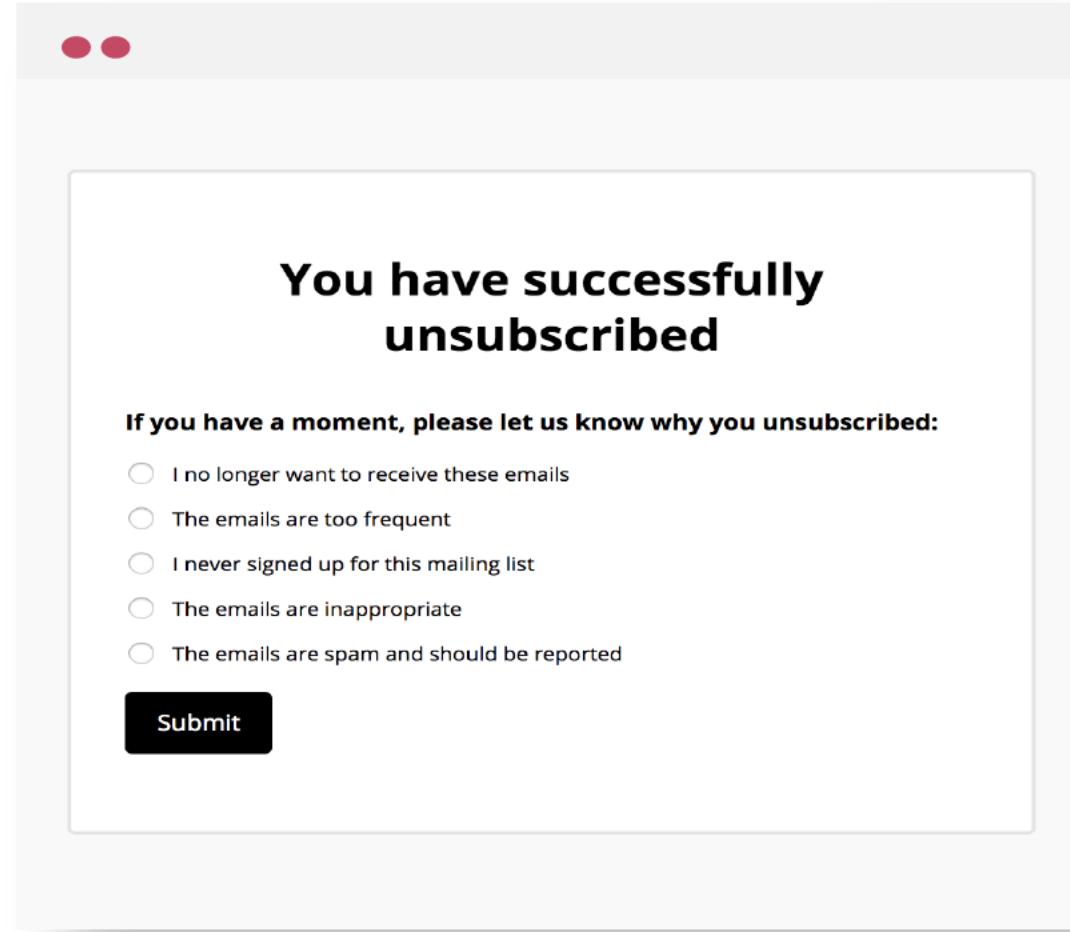


Not an
attachment but
hyperlink



Give Me Your Password, Please

- Speeding Tickets
- Parking Fines
- Health Insurance
- Health Information
- COVID-19
- Delivery Scams
- Unsubscribe
- IT Surveys
- Bad phishing emails





Time

URGENT



Fear

ILLEGAL



Impact

MONEY



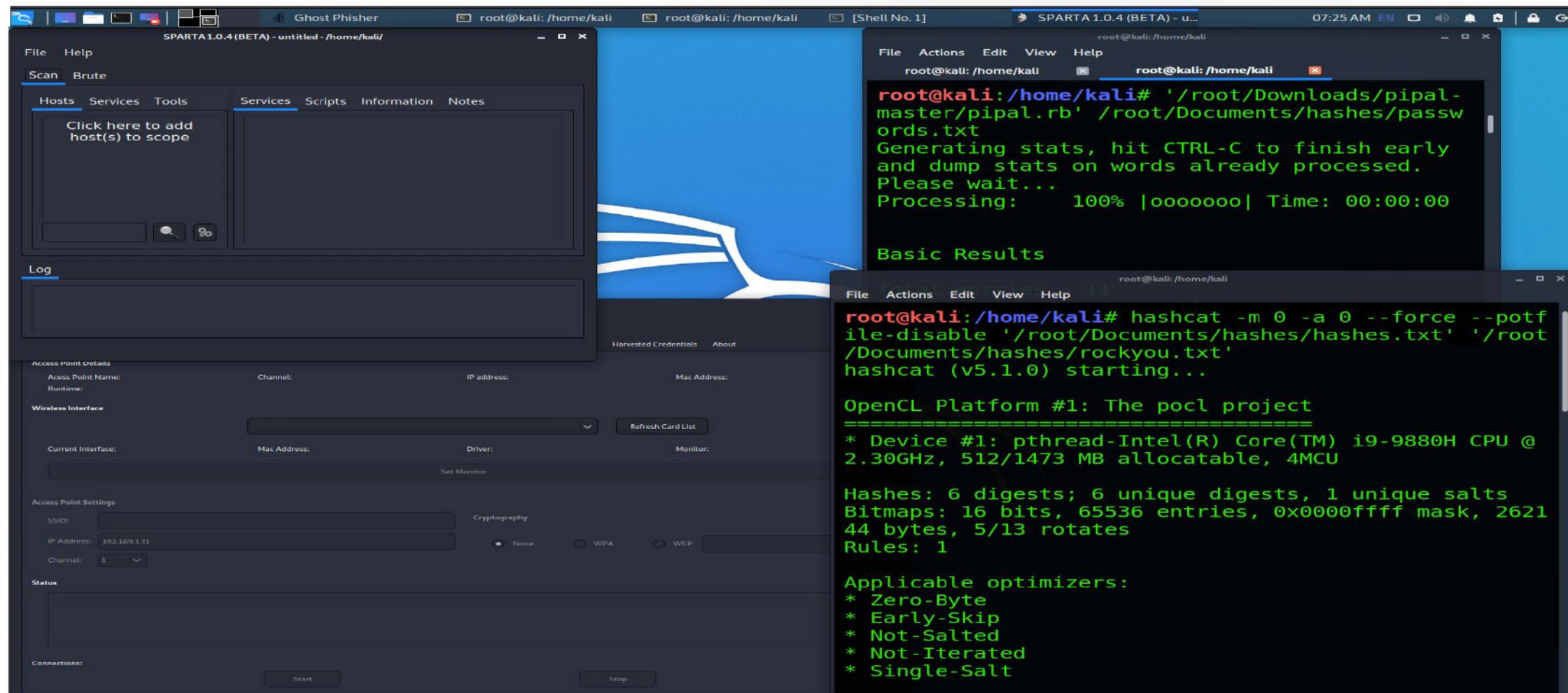
The Anatomy of a Privileged Account HACK

STEP
3

Explore the
IT environment
under the guise
of a legitimate user



NETWORK SCANNING





ELEVATE PRIVILEGES

**STEP
4**



STEP
5



STEP 6





STEP
7



A PASSWORD

**Is sometimes the only Security between you and
a Cybercriminal**

CYBER SECURITY

The background of the image is a solid black. Overlaid on it is a massive, sprawling pile of shattered glass shards. These shards vary in size and shape, from small fragments to larger, more jagged pieces. They are scattered across the entire frame, creating a sense of chaotic destruction. The light reflects off the edges of the shards, giving them a metallic, crystalline appearance against the dark background.



5 Important Lessons Learned

- 1 A RISK ASSESSMENT for ALL IoT Devices
- 2 Segmentation of Networks is Critical
- 3 Patch and Update ALL Systems
- 4 Strong Unique Passwords
- 5 Business and People Centric – Create a Cyber Aware Culture