The Year of the defender

Cybersecurity Predictions for 2018

Our Speakers

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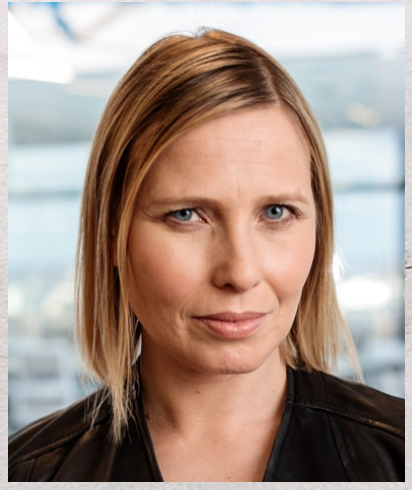

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Setting The Stage

- A lookback at 2017
- Our predictions for 2018
- Recommended action steps

2017 Security Look Back

2018 PREDICTIONS

2018 Predictions

1. Supply Chain Attacks increase
2. Destructive Attacks do not let up
3. The line blurs between APT Actors and Cyberecriminals
4. Fileless malware attacks become ubiquitous
5. The Year of the Defender!

1. CHAIN, CHAIN – SUPPLY CHAIN ATTACKS INCREASE, AND REMAIN UNDER-REPORTED

Intro: Supply Chain Attacks

- Attacks in which the victim is not the ultimate target of the attack, but rather a stepping stone to other networks.
- Usually targeting the less secure elements in the supply network.
- In 2017 most supply chain attacks (other than M.E.Doc) targeted software used by IT and developers.

Why are they growing

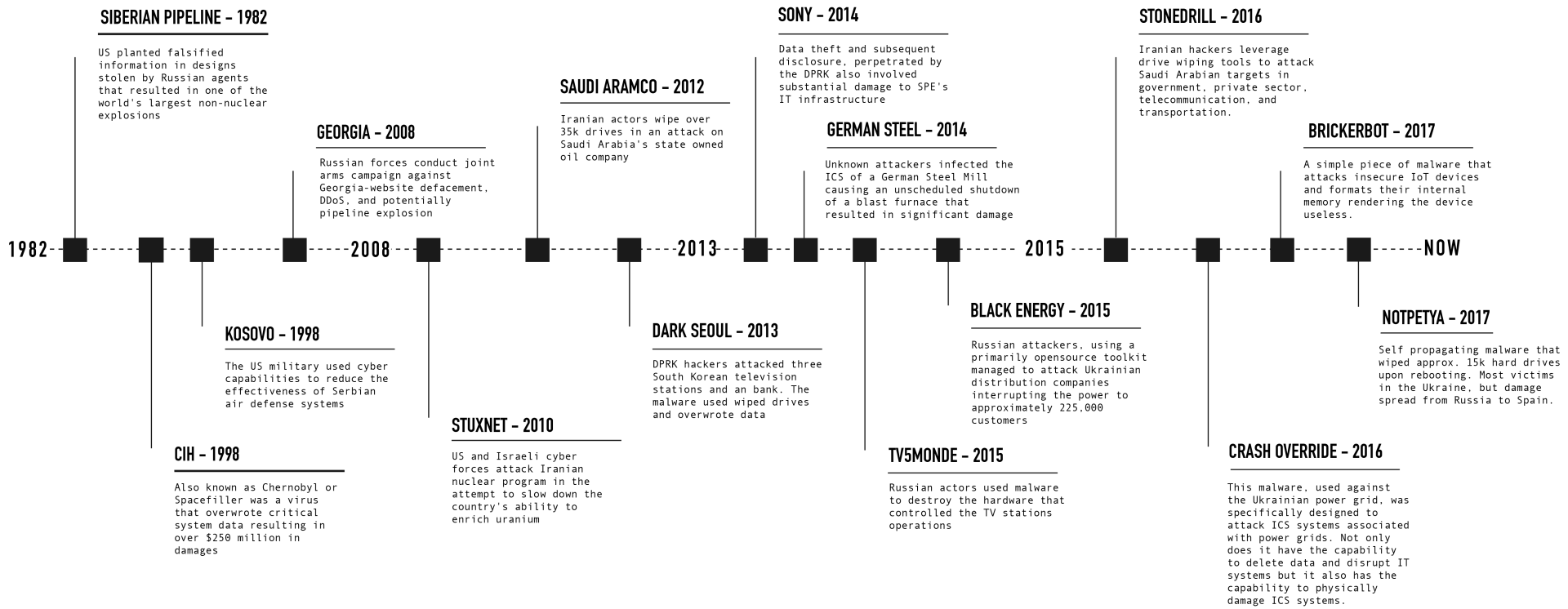
- Increased security defenses make attackers look for the weakest link
- Decreasing price of leaked data -> attackers looking for better efficiencies in their hacking operations
- Supply chain attacks can be scaled up, allowing many organizations to be compromised at the same time
- Robust spread mechanism with high persistence

Mitigating the Risk of Supply Chain Attacks

- Monitor vendor access to internal data and networks
- Establish boundaries and adhere to these boundaries strictly
- Log and monitor any external vendor access,
- Be knowledgeable of third-party providers' incident response and disaster recovery plans
- Decrease your attack surface by limiting users' ability to install third party software on machines, primarily freeware.
- Create Resilience IT infrastructure: Redundancy in supply chain, Good Recovery and Backup system

2. HIGHWAY TO THE DESTRUCTIVE ZONE

Destructive Attacks – A Growing Trend



Why Are Destructive Attacks Growing?

- Lack of consequences
- A variety of basic tools can cause severe damage
- Very effective in causing disruption and driving attention
- Cheap, dirty and effective is all any actor needs to play in this arena, a realization that many are having.

For the private sector this means an increased risk of being hit by unsophisticated, yet destructive attacks.

Minimizing the Risk of Destructive Attacks

- Create an effective data backup system
- Develop an effective patch management process
- Maintain a zero-trust environments and network segmentation

3. APT-ACTORS:
GOING FROM FINE DINING TO FAST FOOD

The Reasons Behind the Development

- The commoditization of advanced toolset
- Public disclosure of attack techniques – by leaks and security research
- Talent migration
- Availability of hacking tools

The Result

» A Breaking Point for Attack Attribution

» Everyone is a target

e.g. corporate espionage, data theft, financial motivetion

How to Minimize the Risk

- Don't ignore low-level threats
- Work from Risk and Threat Vector analysis
- Develop hunting capabilities
- Assume a breach
- Look for SPF
- Get above the system level (Endpoint myopia)

4. FILELESS ATTACKS ARE THE NEW NORMAL

What are Fileless Malware Attacks?

- AKA memory-based or living-off-the-land attacks
- Leverage built-in mechanisms in the OS such as WMI and PowerShell
- Initially used by nation-state actors
- Currently used by common cybercriminals thanks to the availability of attack toolkits

Why are Fileless Attacks Common?

- Plethora of free tools and free scripts that can be abused to create malicious payloads
- Very few security tools are able to detect fileless attacks
- Scripting languages are notoriously flexible, making them easy to obfuscate
- Since PowerShell is as ubiquitous as Windows OS, these tactics are very effective, especially as malware droppers.

Minimizing the Risk of Fileless Malware

- Upgrade to PowerShell 5, require PowerShell signing, and explore the option of activating new Windows features to mitigate PowerShell downgrade attacks.
- Implement and stick with a patch management process.
- Restrict unnecessary scripting languages, limit user access to WMI
- Implement endpoint security solutions with active monitoring and granular control and authorization (as available)

5. THE YEAR OF THE DEFENDER!

Why We Believe this Trend is Real?

- Organizations have made small, yet meaningful strides:
  - No. of days to detect a breach is down from 201 (2016) to 191 (2017)
  - No. of days to contain a breach is down from 70 (2016) to 61 (2017)
- Fileless malware attacks finally get the attention of defenders and security vendors
- GDPR makes Cybersecurity everyone's problem
- If security wasn't already a board-level topic of discussion in 2016, damaging attacks like NotPetya undoubtedly made it one in 2017. During earnings calls, C-suite executives from global corporations discussed how NotPetya impacted quarterly and yearly revenue.

HOW TO MAKE IT THE YEAR OF THE DEFENDER?

Questions?

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