# Resolve and Evolve: Global Cyber Threats of 2021



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## **2021 Evolving Themes**



- Increasing levels of Sophistication, Customization and Personalization
- Finding more Legitimate services to abuse
- Capitalizing on global trends
- Evolving to fill the void left behind by operational disruptions

# Why are we still discussing email security?



Malware delivered by email



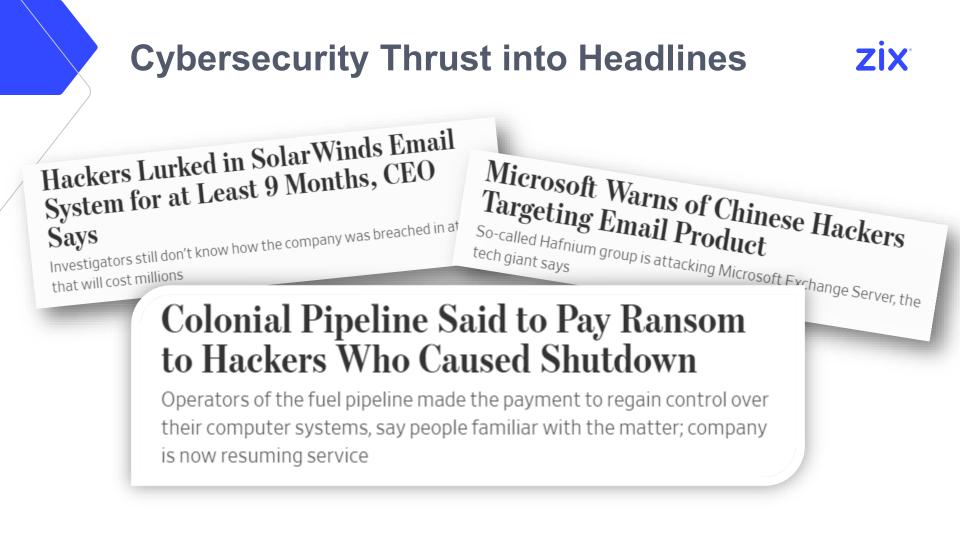
Cyberattacks that being with a spear phishing email

57%

Spam, Phishing, or Malware

2020 Crime Types Continued (by victim loss)			
Crime Type	Loss	Crime Type	Loss
BEC/EAC	\$1,866,642,107	Overpayment	\$51,039,922
Confidence Fraud/Romance	\$600,249,821	Ransomware	**\$29,157,405
Investment	\$336,469,000	Health Care Related	\$29,042,515
Non-Payment/Non-Delivery	\$265,011,249	Civil Matter	\$24,915,958
Identity Theft	\$219,484,699	Misrepresentation	\$19,707,242
Spoofing	\$216,513,728	Malware/Scareware/Virus	\$6,904,054
Real Estate/Rental	\$213,196,082	Harassment/Threats Violence	\$6,547,449
Personal Data Breach	\$194,473,055	IPR/Copyright/Counterfeit	\$5,910,617
Tech Support	\$146,477,709	Charity	\$4,428,766
Credit Card Fraud	\$129,820,792	Gambling	\$3,961,508
Corporate Data Breach	\$128,916,648	Re-shipping	\$3,095,265
Government Impersonation	\$109,938,030	Crimes Against Children	\$660,044
Other	\$101,523,082	Denial of Service/TDos	\$512,127
Advanced Fee	\$83,215,405	Hacktivist	\$50
Extortion	\$70,935,939	Terrorism	\$0
Employment	\$62,314,015		
Lottery/Sweepstakes/Inheritance	\$61,111,319		
Phishing/Vishing/Smishing/Pharming	\$54,241,075		

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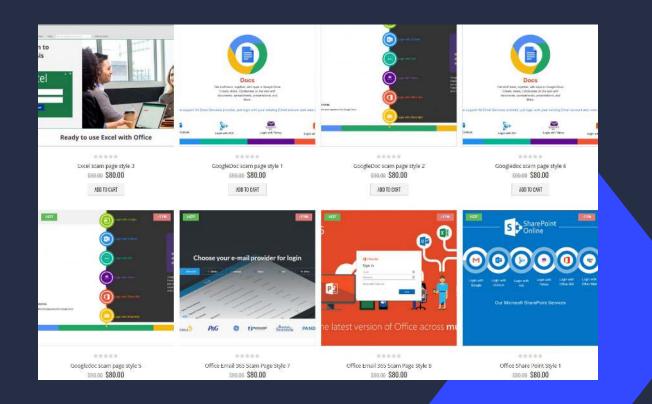
### **Ransomware-as-a-Service**





### Phishing Kits





# Emotet Takedown... aka Operation Ladybird





Orchestrated By Europol



Quarantined over 1 million infected systems



Disrupted future operations





## **Email Threat Protection**



Legitimate senders



Malicious actors



Link protection: Rewrites links with click analysis



Attachment Assurance: Disarms or inspects



any email service such as... Office 365 E Exchange M Gmail

**Delivered** to



#### **Threat Protection**

- Stop spam, phishing, zero-hour malware, and business email compromise without user intervention
- Dynamic time-of-click defense and attachment sandboxing
- 24/7/365 security technicians proactively adjust defenses
- Flexible routing, email policies, and on-demand message retraction expedites enforcement
- Daily configuration checks for optimized routing and protection

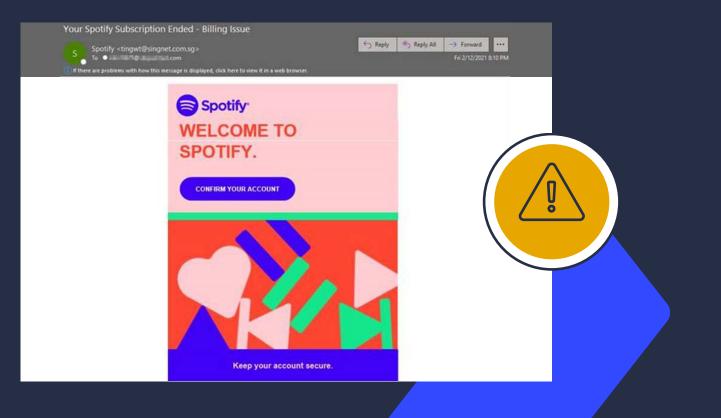


arantine Email Recipient

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# Email Attack Examples

## More Obfuscation – Captcha Phishing zix



### More Obfuscation – Captcha Phishing zix

#### Security Challenge

Enter Captcha Code

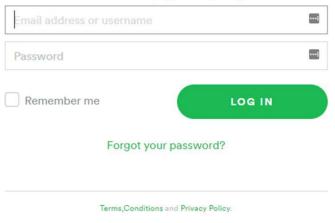




Submit

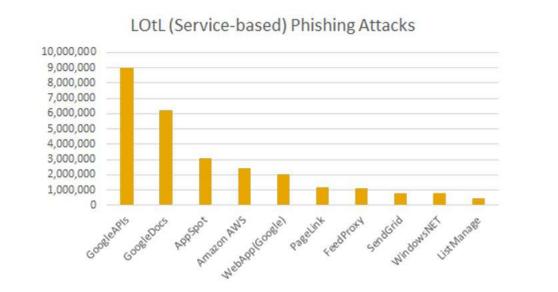


#### To continue, log in to Spotify.



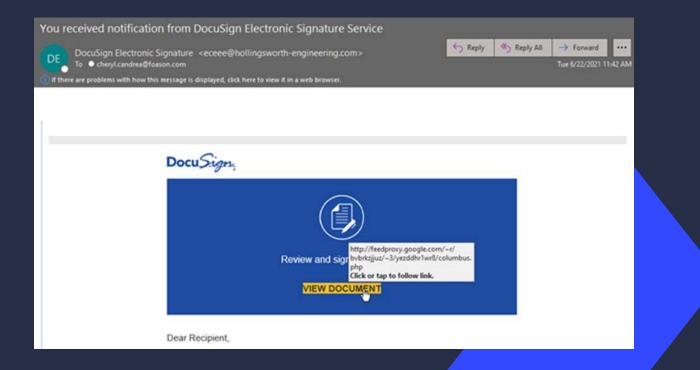
### Living off the Land (LOtL) Phishing Attacks





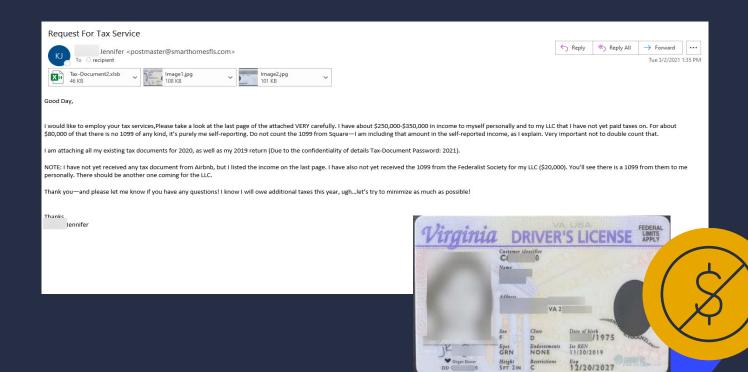
### Living off the Land (LOtL) Phishing Attacks





#### **Remcos RAT -Tax Scam**





## **Security Tips**



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**Never reuse the same password** on different services, if the service is compromised attackers will try that same password for others.



**Implement a VPN** for all remote workers but resist using a free VPN service as they often monetize your private data



Limit use of third-party services



**Use end to end email encryption** for any message containing confidential or personally identifiable information



**Ensure your solution** is capable of dynamically analyzing email attachments



**Audit your email environment** for O365 users our Security audit can provide critical insights

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If there is any suspicion about a message or transaction, it never hurts to call the sender. Most will be glad of your security protocols in place to help prevent fraud

### **Security Tips**



#### Attack the target

Using collected intel, launch attack for initial compromise

#### **Evade and move**

Hide presence as attacker conducts internal recon

#### The Cyber Threat Cycle

#### Identify a target

Initial recon to select the weak target and determine how best to attack

#### Infiltrate the target

Once breached, establish an internal foothold

#### **Complete mission**

Using collected intel, execute mission goal





#### **Protect**

Identify at

Advanced Email Threat Protection Multi-factor Authentication Advanced Email Encryption

Attack the

#### **Detect**

Security Audit Threat Analysis Team / Tools Data Loss Prevention Scanning

Evade

#### Respond

comple

Threat Investigation / Analysis Vulnerability Remediation Backup and Recovery

#### minastrate The Cyber Threat Cycle

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## Thank you.



Andrew Murphy Director of Product Marketing



# **Questions?**