SEQRITE

HOW DOES A RANSOMWARE INFECT YOUR COMPUTER? & WHAT YOU CAN DO TO STAY SAFE.

RANsomWaRe is the 5th most common form of malware in 2017.

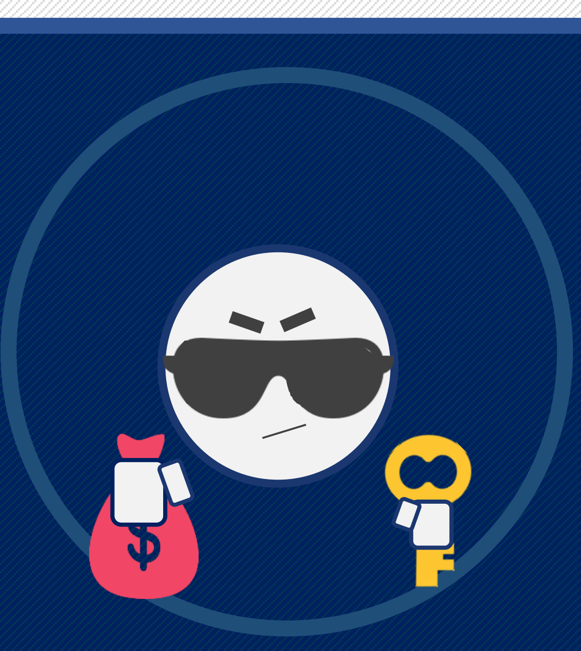
Verizon Data Breach Investigation Report 2017

a malicious software that locks your computer or encrypts your data and demands a ransom in exchange and thus the name 'ransomware'
= ransom + malware

Money demanded in some of the recent ransomware attacks of 2017 ranged from **79$** to **4000$** (mostly in Bitcoins)

THE 2 MOST COMMON CHANNELS

ransomware use to infiltrate your computer



#1. EMAIL

Emails serve as the most resourceful tool to deliver ransomware.

"93% of all phishing emails contained encryption ransomware in 2016."
PhishMe Q1 2016 Malware Review

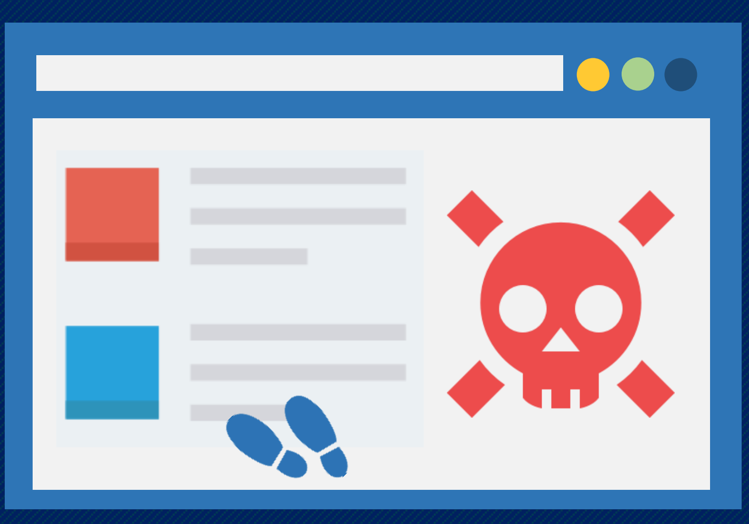
How is a phishing email used to infect your computer with a ransomware?

- **A phishing email containing links to malicious websites** - visiting such sites can drop a ransomware on your PC.
- **A phishing email carrying attachments hiding ransomware -** Downloading such attachments will execute a ransomware on your PC. *These attachments are usually MS Office docs such as Word, Excel, and PPTs, and PDFs.*

To make a phishing email look more genuine and convincing, it is disguised as something that you'd expect – invoices, tax forms, letters from a co-employee or your boss, purchase receipts, etc.

#2. COMPROMISED WEBSITES

An infected or a compromised website (in this case) is a webpage(s) where the attacker has hidden an exploit kit (a software designed to misuse software vulnerabilities).



When you visit such a site, this exploit kit will scan your web browser or other software for security vulnerabilities it is designed to exploit *(security vulnerability is a weakness in your computer that an attacker can misuse)*. And if a vulnerability is found, the kit will drop the ransomware.

How do you land up on a site compromised with an exploit kit?

By clicking on a link in a phishing email – the most common way

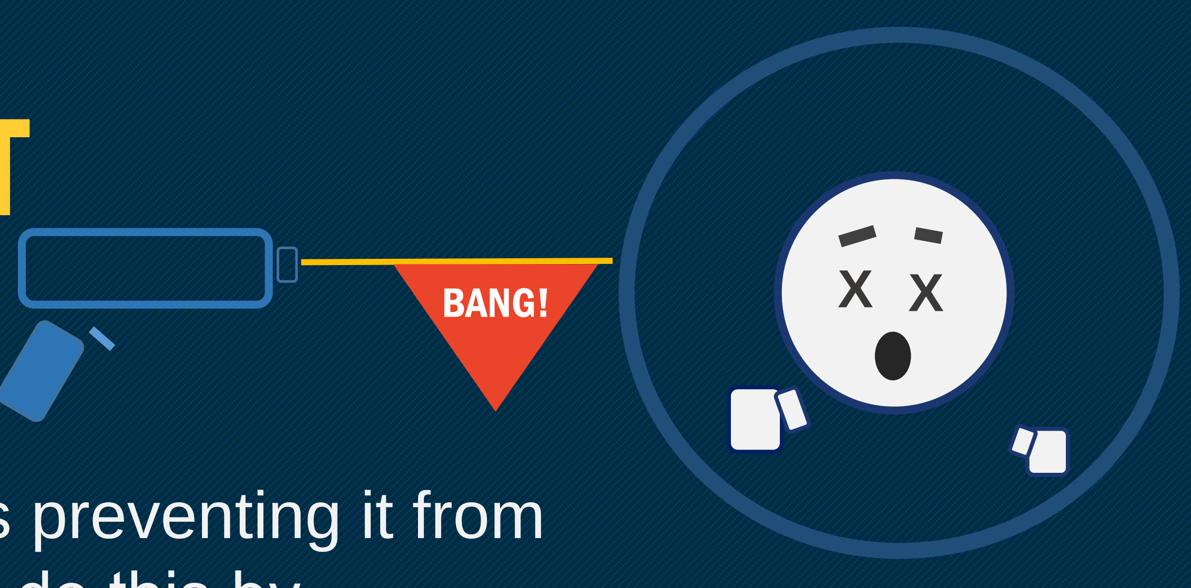
By clicking on a malicious advertisement

This attack is called **malvertisement** – ads loaded with malware.

Malicious ads do not only appear on shady websites, they target genuine websites too. This means, clicking on an ad on a legitimate website can also infect your computer with a ransomware.

Case in point: Malicious ads (containing the Angler exploit kit) appeared on The New York Times, the BBC, AOL, and the MSN homepage in 2016, delivering ransomware to the people visiting these websites.

HOW DO YOU DEFEAT RANSOMWARE?



Staying safe from ransomware means preventing it from getting inside your computer. You can do this by…

#1. **NOT CLICKING** on links or downloading attachments from unknown or unexpected sources (even if the sender looks familiar).

#2. **PATCHING** all vulnerabilities in your Operating System and software by applying all recommended security updates.

#3. **PROTECTING** your computer with an antivirus that can block access to compromised websites and prevent ransomware from getting downloaded on the system.

#4. **BACKUP YOUR DATA** regularly. Consider storing them securely in multiple, offline locations. Should a ransomware infection occur, you can restore your data from these backups.

#5. **INSTALL AD-BLOCKERS** on your web browsers. This will reduce your risk on clicking on malicious or harmful advertisements.

STAY AWARE
STAY SAFE

Sources
blogs.quickheal.com | phishme.com | www.us-cert.gov | www.wired.com | www.securityaffairs.co

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www.seqrite.com
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