

system  
Security identity multimedia  
**CYBER**  
networks secure attack hack  
information encryption



# The Risks

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Legal liability to others for computer/network security breaches

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Legal liability to others for privacy breaches

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Loss or damage to data / information

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Loss of revenue due to a computer attack

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Extra expense to recover / respond to a computer attack

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Loss or damage to reputation

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Regulatory actions and scrutiny

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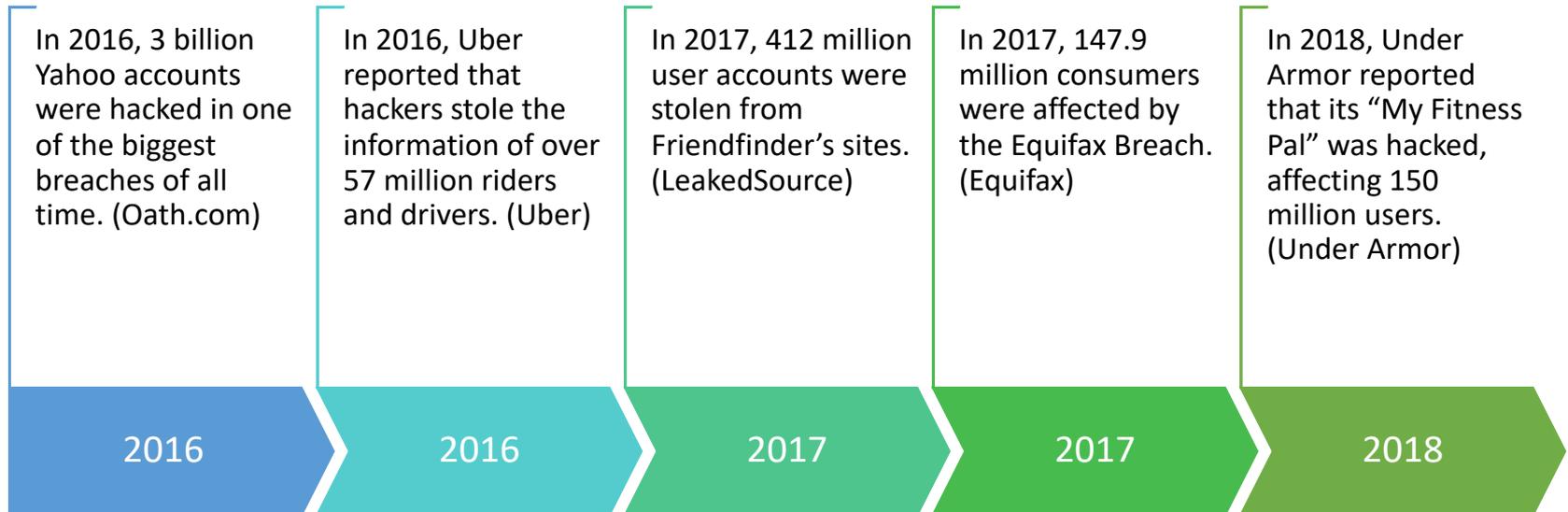
Cyber-extortion

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Cyber-terrorism

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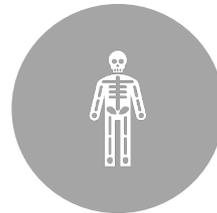
# Large Company Breaches



# What about the little guys.....



61 percent of breach victims in 2017 were businesses with under 1,000 employees. ([Verizon](#))



21 percent of all files are not protected in any way. ([Varonis](#))



41 percent of companies have over 1,000 sensitive files including credit card numbers and health records left unprotected. ([Varonis](#))



Nearly half of the security risk that organizations face stems from having multiple security vendors and products. ([Cisco](#))

How often is  
this  
happening....

Thirty-one percent of organizations have experienced cyber attacks on operational technology infrastructure. ([Cisco](#))

There are around 24,000 malicious mobile apps blocked every day. ([Symantec](#))

Cryptojacking increased by 8,500 percent in 2017. ([Symantec](#))

In 2017, 5.4 billion attacks by the WannaCry virus were blocked. ([Symantec](#))

# What's the cost.....

- The Equifax breach cost the company over \$4 billion in total. ([Time Magazine](#))
- The average cost per lost or stolen records per individual is \$141 — but that cost varies per country. Breaches are most expensive in the United States (\$225) and Canada (\$190). ([Ponemon Institute's 2017 Cost of Data Breach Study](#))
- In companies with over 50k compromised records, the average cost of a data breach is \$6.3 million. ([Ponemon Institute's 2017 Cost of Data Breach Study](#))
- Including turnover of customers, increased customer acquisition activities, reputation losses and diminished goodwill the cost of lost business globally was highest for U.S. companies at \$4.13 million per company. ([Ponemon Institute's 2017 Cost of Data Breach Study](#))

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In 2017, cyber crime costs accelerated with organizations spending nearly 23 percent more than 2016 — on average about \$11.7 million. ([Accenture](#))

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The average cost of a malware attack on a company is \$2.4 million. ([Accenture](#))

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The average cost in time of a malware attack is 50 days. ([Accenture](#))

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From 2016 to 2017 there was an 22.7 percentage increase in cybersecurity costs. ([Accenture](#))

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The average global cost of cyber crime increased by over 27 percent in 2017. ([Accenture](#))

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The most expensive component of a cyber attack is information loss, which represents 43 percent of costs. ([Accenture](#))

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Ransomware damage costs exceed \$5 billion in 2017, 15 times the cost in 2015. ([CSO Online](#))

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## What does the future look like....

- Damage related to cybercrime is projected to hit \$6 trillion annually by 2021. ([Cybersecurity Ventures](#))
- Ransomware attacks are growing more than 350 percent annually. ([Cisco](#))
- IoT attacks were up 600 percent in 2017. ([Symantec](#))
- The industry with the highest number of attacks by ransomware is the healthcare industry. Attacks will quadruple by 2020. ([CSO Online](#))
- Ransomware damage costs will rise to \$11.5 billion in 2019 and a business will fall victim to a ransomware attack every 14 seconds at that time. ([Cybersecurity Ventures](#))
- Variants of mobile malware increased by 54 percent in 2017. ([Symantec](#))



# The Cyber Market

WOW!!!!!!

DID I PEAK YOUR  
INTEREST YET???

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# CYBER TERMS



A word cloud of various cyber security terms. The words are arranged in a roughly rectangular shape, with some words being larger and more prominent than others. The colors of the words include shades of blue, green, orange, and red. The terms include: RANSOMWARE, CYBERSECURITY, ATTACK, SMISHING, SOCIAL, SPYWARE, UTM, MALWARE, TROJAN, SPOOFING, VULNERABILITY, BRICKING, BCDR, ADWARE, BOTNET, WORM, LAYERED, PHISHING, DDOS, FIREWALL, ZERO DAY, ENGINEERING, and VISHING.

RANSOMWARE  
CYBERSECURITY  
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PHISHING  
DDOS  
FIREWALL  
ZERO DAY  
ENGINEERING  
VISHING

# CLOUD COMPUTING

## Top 10 Cloud Providers









Corporate  
Blog

Corporate  
Blog

Bl

## CORPORATE BOGGING

Creating or editing a web log, discussion forum post, online comment, or other associated social media activity where the primary purpose of that activity is to promote the insured or the individual's position within insureds industry even if the nature of the content is not directly associated with insureds business activities

Corporate Blog

BLOG

Corporate

Corporate

The image features a dark blue, monochromatic background of a complex circuit board. The board is covered in intricate patterns of copper traces, numerous small circular components, and larger soldered joints. In the center, the words "DATA BREACH" are prominently displayed in two rows. The letters are large, bold, and have a three-dimensional, metallic appearance, as if they are raised from the surface of the board. The lighting creates highlights and shadows on the letters, emphasizing their texture and depth. The overall aesthetic is technical and digital, conveying a sense of a critical security incident in a high-tech environment.

**DATA  
BREACH**



## HACKING ATTACK

Any malicious or unauthorized electronic attack including but not limited to any fraudulent electronic signature, brute force attack, phishing, denial of service attack, that has been initiated by any third party or by any employee and that is designed to damage, destroy, corrupt, overload, circumvent or impair the functionality of computer systems.



DENIAL-OF-SERVICE  
DoS ATTACK

DoS ATTACK

DoS ATTACK

DoS ATTACK

DENIAL-OF-SERVICE  
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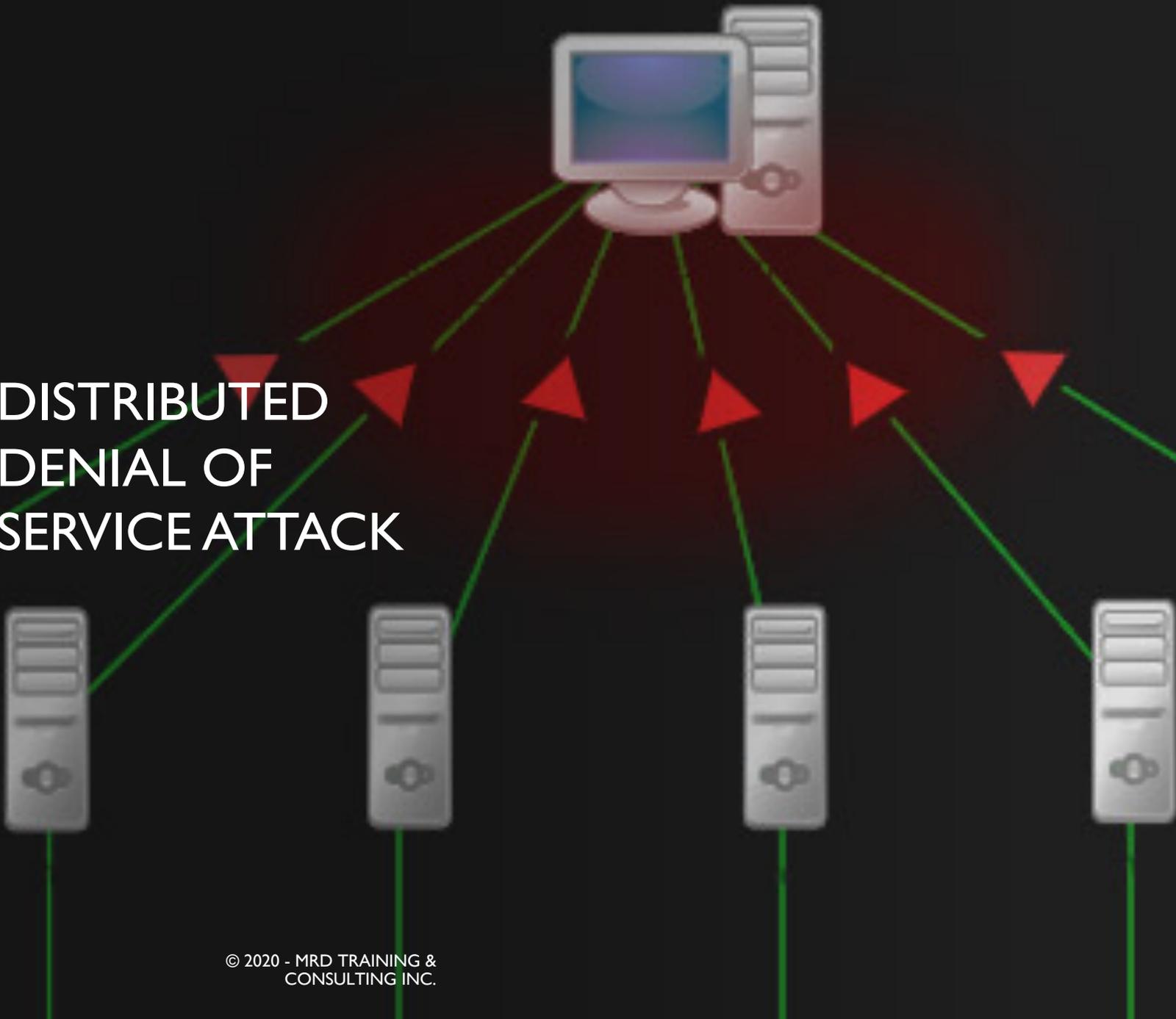
DoS ATTACK

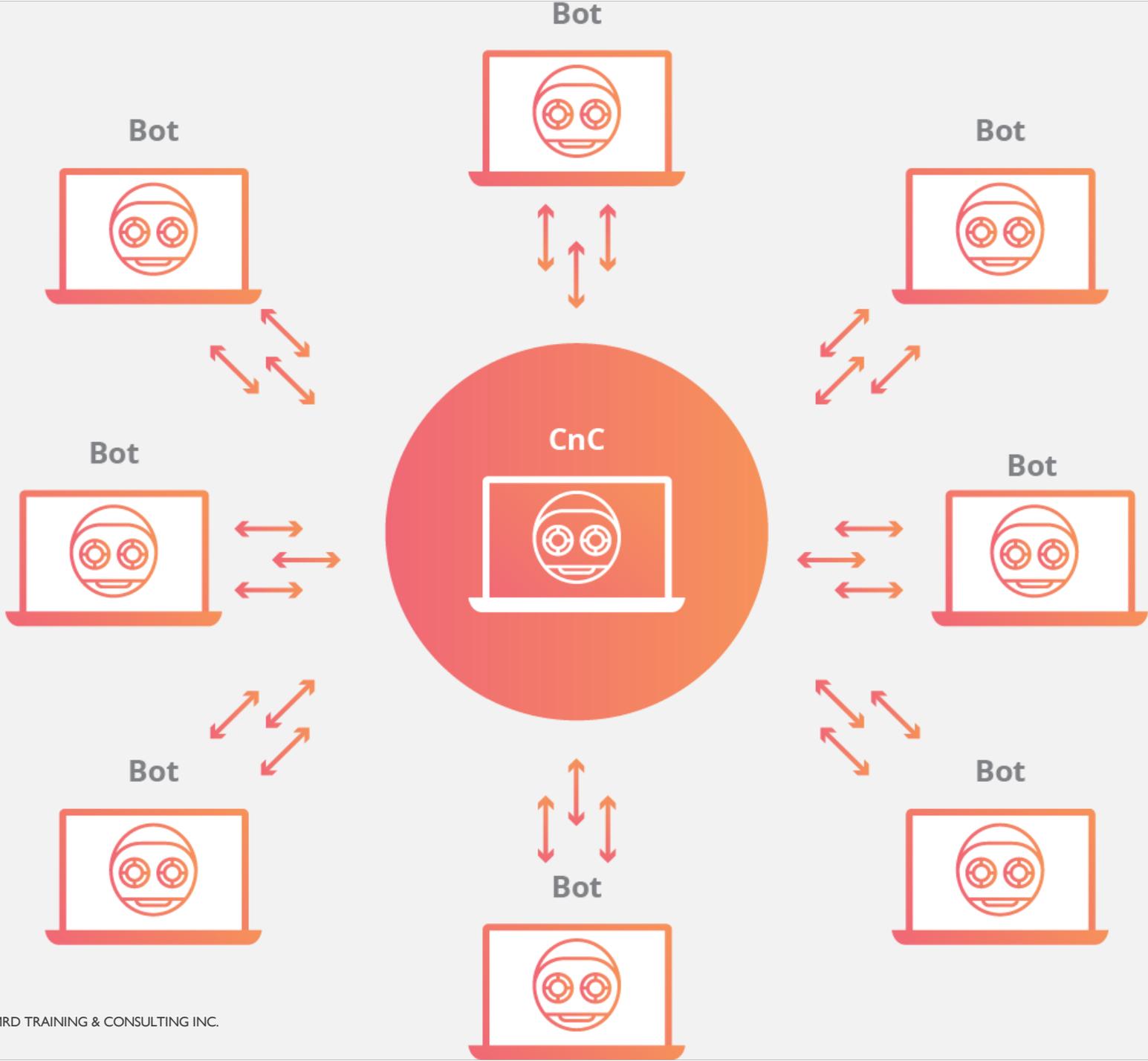
DENIAL-OF-SERVICE  
DoS ATTACK

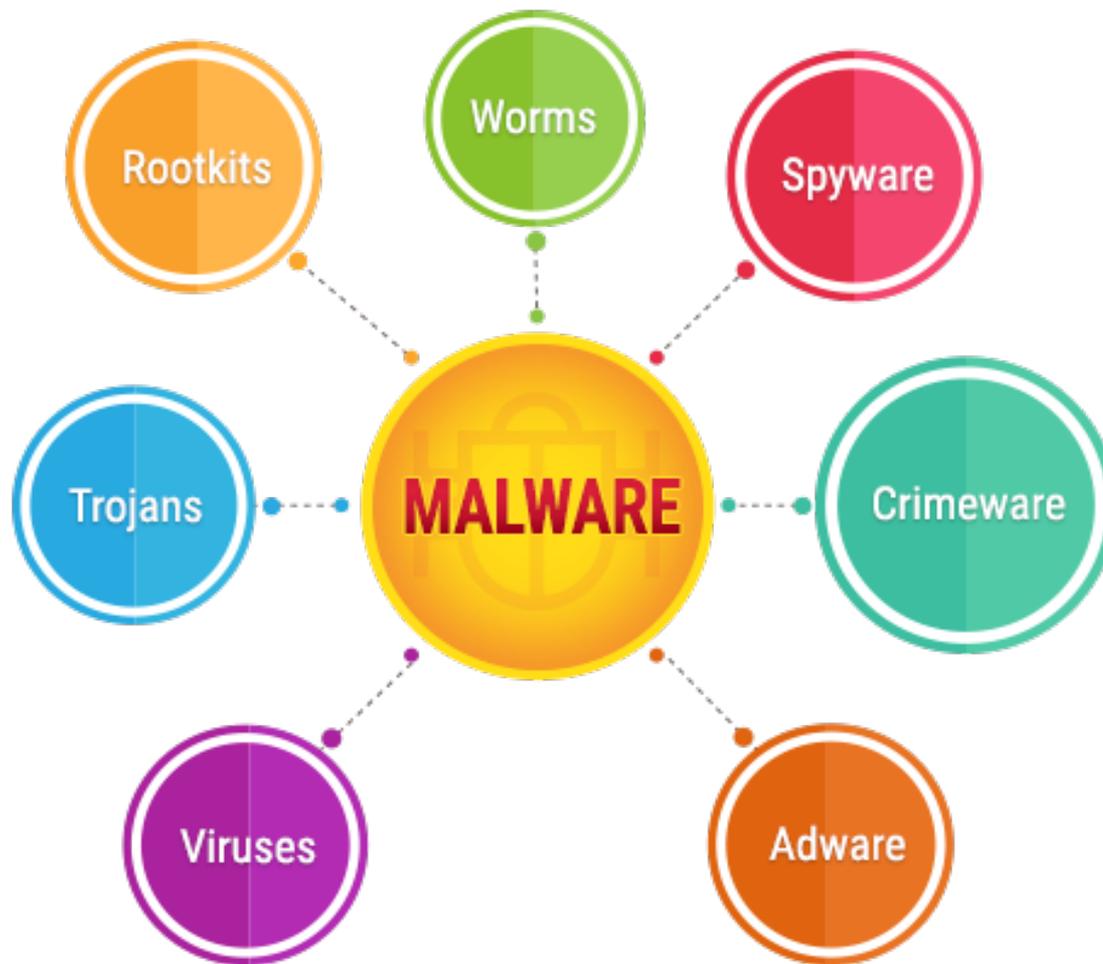
DENIAL-OF-SERVICE

DoS ATTACK

# DISTRIBUTED DENIAL OF SERVICE ATTACK

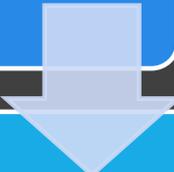






## SYSTEM OUTAGE PERIOD

Means the period during which the insured's computer systems or a cloud computing provider's systems are unavailable or operating at less than full operational capacity as a direct result of the cyber peril.



In the event of an intermittent problem causing repeated unavailability of systems as a direct result of the same proximate cause this will be deemed to be one continuous period.



The maximum system outage period is as stated in the Declarations and varies between companies.

# USER GENERATED CONTENT

An illustration featuring the text 'USER GENERATED CONTENT' in large, bold letters. The word 'USER' is in black, 'GENERATED' is in yellow, and 'CONTENT' is in blue. Several stylized human figures in business attire are positioned around the text, interacting with it: one stands to the left holding a phone; another sits on the 'O' of 'CONTENT' with a laptop; two others stand between 'GENERATED' and 'CONTENT', one pointing at the text; a woman stands on top of the 'A' in 'GENERATED' holding a phone; a man sits on the 'E' in 'GENERATED' with a laptop; and a woman sits on a stool to the right of 'CONTENT' with a laptop. The background is white with scattered colorful geometric shapes (squares, triangles, circles) and dashed lines.



**WE KEPT  
CALM  
AND WE  
FINISHED STRONG**

[KeepCalmAndPosters.com](http://KeepCalmAndPosters.com)

A person in a dark suit and white shirt is shown from the chest down, holding a glowing digital network structure. The structure is composed of numerous blue and white nodes connected by thin lines, forming a complex web. In the center of this network, the words "CYBER INSURANCE" are displayed in a bold, white, sans-serif font. The background is a dark blue gradient with abstract digital patterns, including glowing cubes and lines, creating a futuristic and technological atmosphere.

**CYBER  
INSURANCE**



Let's Talk First Party First....

# Crisis Event Management Expenses



- Coverage for public relations services to mitigate negative publicity as a result of cyber liability

# Security Breach Remediation and Notification Expenses



- Costs incurred to determine whose identity information was accessed
- Notification to those individuals of the security breach
- Credit monitoring
- Identity fraud expense reimbursement for those individuals affected by the security breach



## Computer Program And Electronic Data Restoration

- Coverage for expenses incurred to restore data lost from damage to computer systems due to computer virus or unauthorized access



## Computer Fraud & Funds Transfer Fraud

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- Coverage for loss of money, securities or other property due to unauthorized access to computer system
- Coverage for loss of money or securities due to fraudulent transfer instructions to a financial institution

# Reputation Guard



**Reputation**  
is “everything”

- Provides costs to restore Insured's reputation

# Cyber Extortion



- Coverage for money paid due to threats made regarding an intent to fraudulently transfer funds, destroy data, introduce a virus or attack a computer system, or disclose electronic customer information
- Coverage for extortion demands by employees
- Network Extortion Demands - what is the currency language in the wording - will policy pay for demands for bitcoin, or only for government issued/regulated currency?



# Cyber Media

- Coverage provided for numerous perils including copyright infringement, trademark infringement, defamation and invasion of privacy



## Business Interruption

- Coverage for loss of income, and the extra expense incurred to restore operations, as a result of computer system disruption to the company's computer system caused by a virus or other unauthorized computer attack
- Coverage for loss of income, and the extra expense incurred to restore operations, as a result of a disruption to a service provider's computer system that the company relies on caused by a virus or other unauthorized computer attack

# Social Engineering

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- The use of deceptive tactics to manipulate people into volunteering sensitive information that is then leveraged for fraudulent purposes. Often, perpetrators use social engineering to harvest credentials for Account Takeover (ATO) or Corporate Account Takeover (CATO).





Let's Talk Third Party  
Next....



## Network and Information Security Liability

- Network and Information Security Liability
- Transmission of computer viruses
- Communications and Media Liability
- Regulatory and Defence Expenses



# Let's Talk About Exclusions

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Claims and circumstances known at inception arising out of any security breach, crime, hacking attack or virus of which a senior executive officer was aware, or ought reasonably to have been aware, prior to the Inception Date of the Policy, whether notified under any other insurance or not.



RICO - for any actual or alleged violations of the Racketeer Influenced and Corrupt Organisation Act 18 USC Sections 1961 et seq and any amendments thereto, or any rules and regulations promulgated thereunder.



SEC - for any actual or alleged violation of any of the provisions of the Securities Act of 1933, the Securities Exchange Act 1934 or any similar regional, provincial, territorial, federal or state law or any common law relating thereto.

# UNLAWFUL SURVEILLANCE



A close-up photograph of a hand turning a silver dial. The dial has a central black circle with the word 'RISK' in white capital letters. The dial's outer ring is marked with risk levels: 'LOW' at the bottom, 'MEDIUM' on the left, and 'HIGH' at the top. The dial is set against a dark blue background. The hand is shown from the right side, with fingers gripping the dial.

# UNDERWRITING THE RISK

## CHALLENGES TO UNDERWRITING CYBER

THE EVOLVING  
NATURE OF  
CYBER RISK

LIMITED CYBER  
LOSS  
EXPERIENCE

DIFFICULTIES IN  
ASSESSING  
POLICYHOLDER  
VULNERABILITIES

ACCUMULATION  
RISK

NON-  
AFFIRMATIVE  
EXPOSURE

# Let's Talk About The Legal Stuff

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# PIPEDA/PHIPA



PIPEDA applies to Canadian companies.



Governs collection, use, and disclosure of personal information.



PHIPA deals with freedom of information and the protection of certain private (medical) information.



Neither PIPEDA nor PHIPA provide a civil remedy for privacy infringement.

# Bill S-4: Digital Privacy Act

Amendment to PIPEDA.

Requires organizations to inform consumers when their personal information has been lost or stolen.

Companies that fail to inform consumers or that destroy these records of a data breach will face fines up to \$100,000.

Commissioner could publicly name organizations that are non-compliant if in the public interest.

# U.S. Patriot Act



Allows U.S. law enforcement officials to seek a court order that allows access to the personal records of any person without that person's knowledge.



Officials could access information about citizens of other countries, including Canada, if that information is physically within the United States or accessible electronically.



Canadian companies that store information on American servers might have little control over that information.



Disclosure to U.S. officials might contravene PIPEDA or PHIPA.



THANK YOU!!!