

# Computer Threats



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“We’re worried — at the FBI and with our partners — about a wider range of threat actors, from multi-national cyber syndicates and insider threats to hacktivists and we’re concerned about a wider gamut of methods, from botnets to ransomware, from spearfishing and business e-mail compromise, to illicit cryptomining and APTs.”

FBI Director Chris Wray

CYBER RISK

MAY 15, 2018 / 5:25 PM / A MONTH AGO

# Cyber attack delays Atlanta mayor's first budget pitch

CYBER RISK

JUNE 19, 2018 / 3:06 PM / 7 DAYS AGO

# China-based campaign breached satellite, defense companies: Symantec

BUSINESS NEWS

JUNE 20, 2018 / 12:00 PM / 6 DAYS AGO

# Tesla accuses former employee of hacking and transferring data

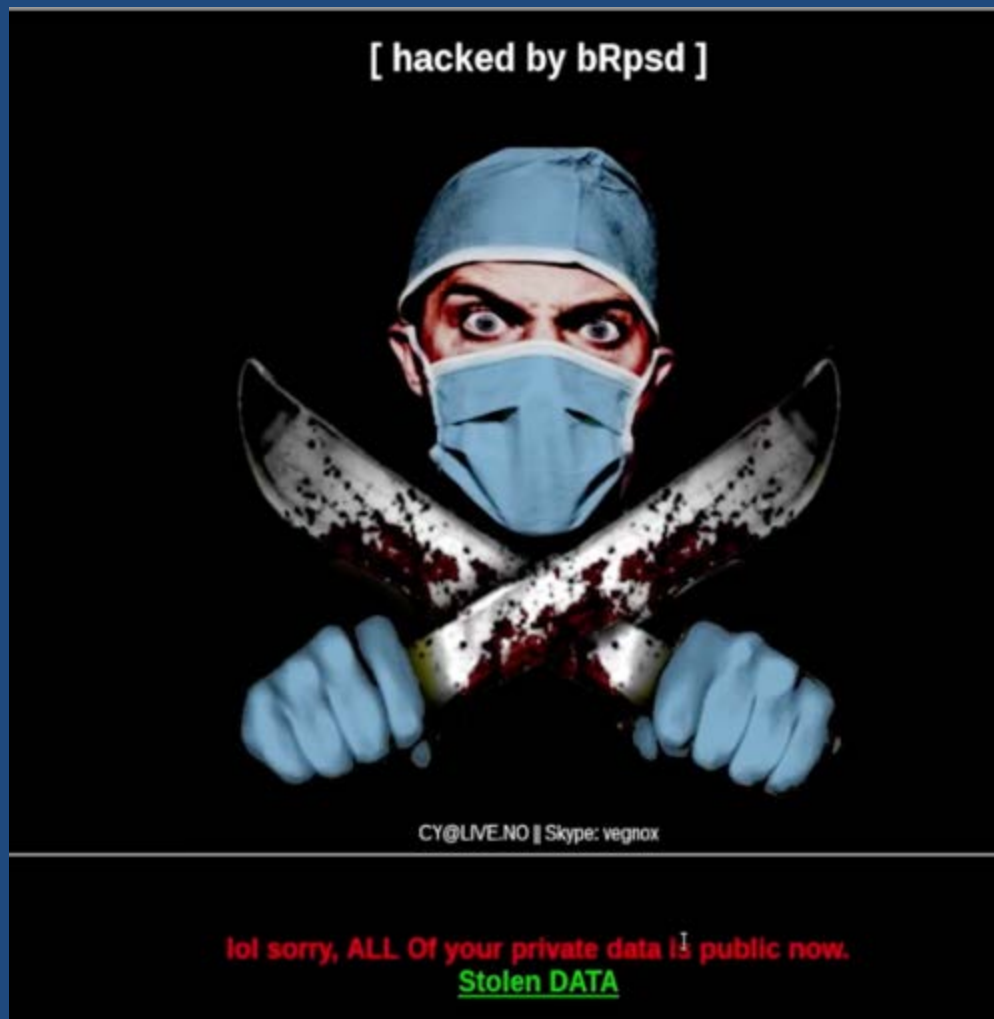
# Risks

- Risk from infrastructure
- Danger from partners
- The potential costs of security breaches
- Specific IT security regulations
- How institutions comply with regulations

# Threats

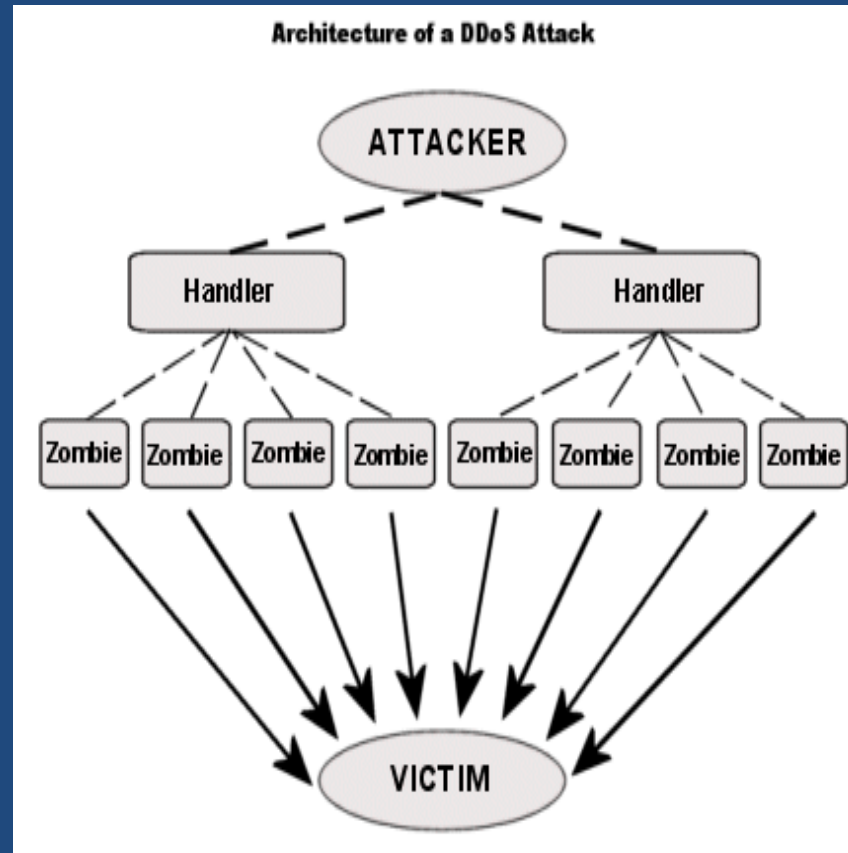
- Website Defacing
- DDOS
- Destruction of Service (DeOS)
- Phishing
- Ransomware
- Unauthorized Disclosure

# Website Defacement

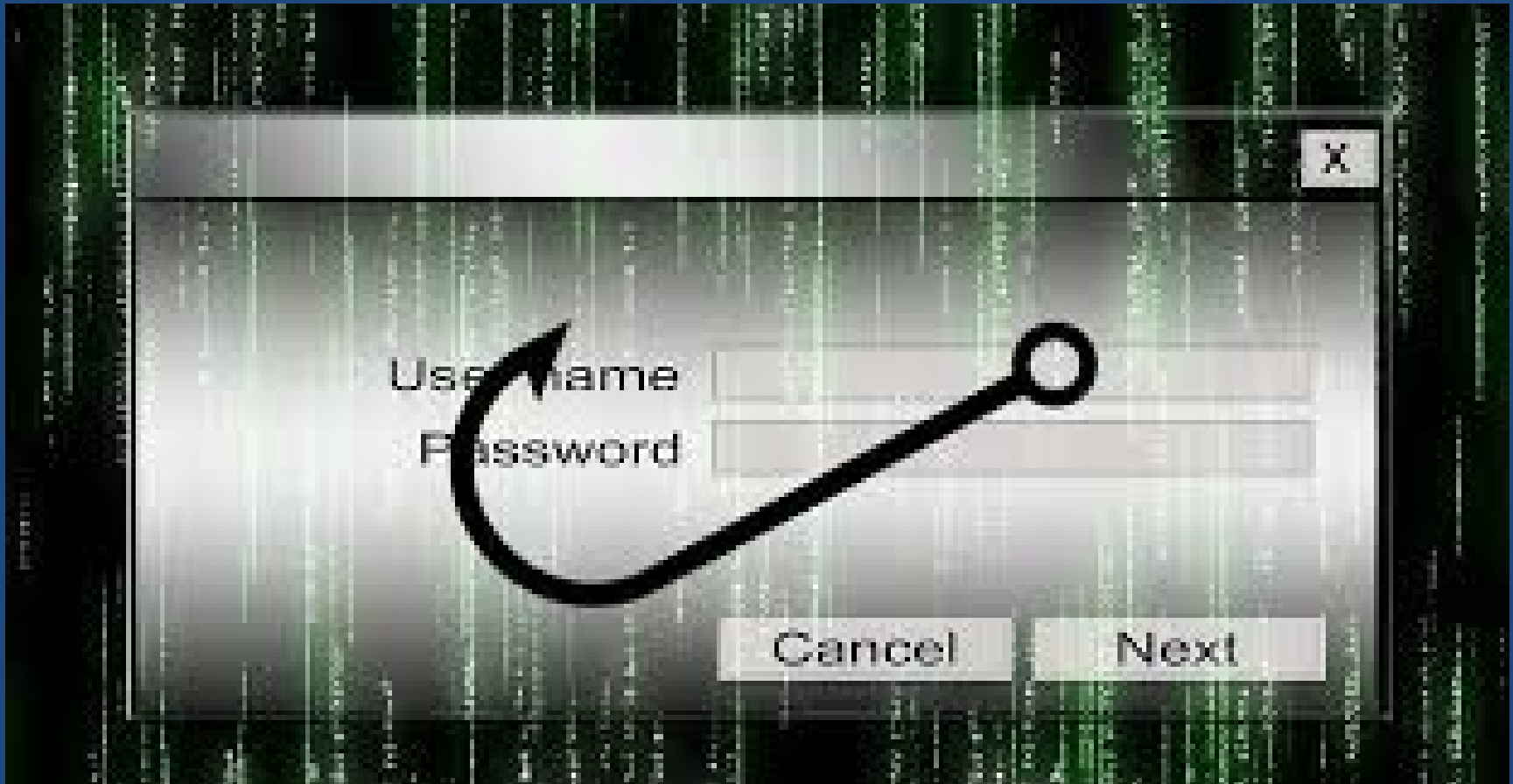


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# Distributed Denial of Service – (DDoS)



# Phishing





# Ransomware

## YOUR COMPUTER HAS BEEN LOCKED!

This operating system is locked due to the violation of the federal laws of the United States of America! (Article 1, Section 8, Clause 8; Article 202; Article 210 of the Criminal Code of U.S.A. provides for a deprivation of liberty for four to twelve years.)

Following violations were detected:

Your IP address was used to visit websites containing pornography, child pornography, zoophilia and child abuse. Your computer also contains video files with pornographic content, elements of violence and child pornography! Spam-messages with terrorist motives were also sent from your computer.

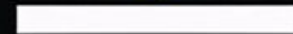
This computer lock is aimed to stop your illegal activity.

**To unlock the computer you are obliged to pay a fine of \$200.**

You have **72 hours** to pay the fine, otherwise you will be arrested.

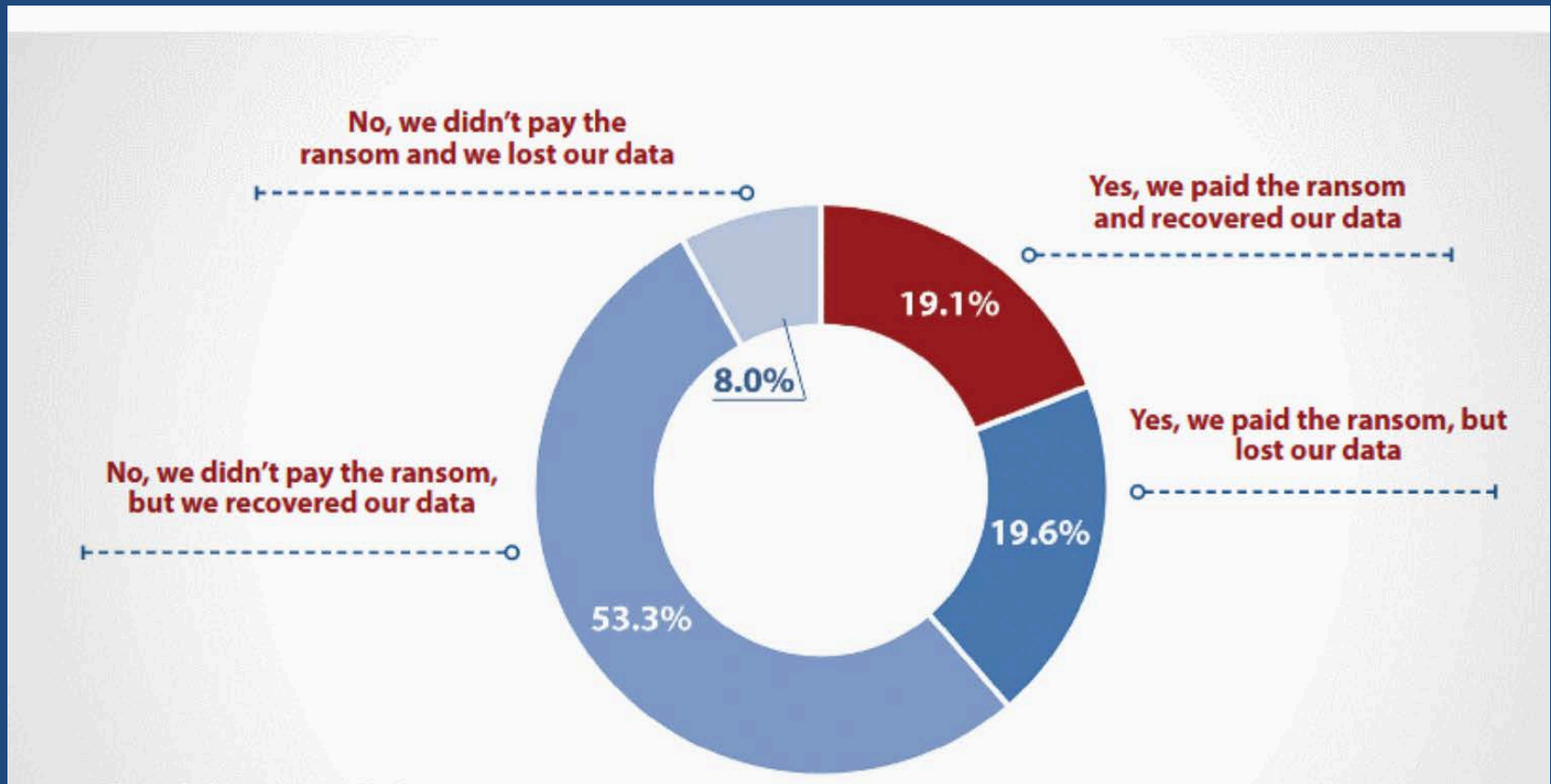
You must pay the fine through [REDACTED]

To pay the fine, you should enter the digits resulting code, which is located on the back of your [REDACTED] in the payment form and press OK (if you have several codes, enter them one after the other and press OK).



OK

# Ransomware Reactions



# Identity Crimes

**12.7 Million** Consumers suffered identity fraud\*  
**\$16 Billion** Total losses due to fraud\*

## Identity Crimes



### Lost/Stolen PII

**13%** Breach victims became a victim of fraud in 2014\*

**85,611,528** Records exposed through breaches\*\*



### Identity Fraud (Existing Account Fraud)

**4.64%** Incidence Rate\*

**\$14** Billion Annual Losses\*

**7** Mean Resolution Hours\*



### Identity Theft (New Account Fraud)

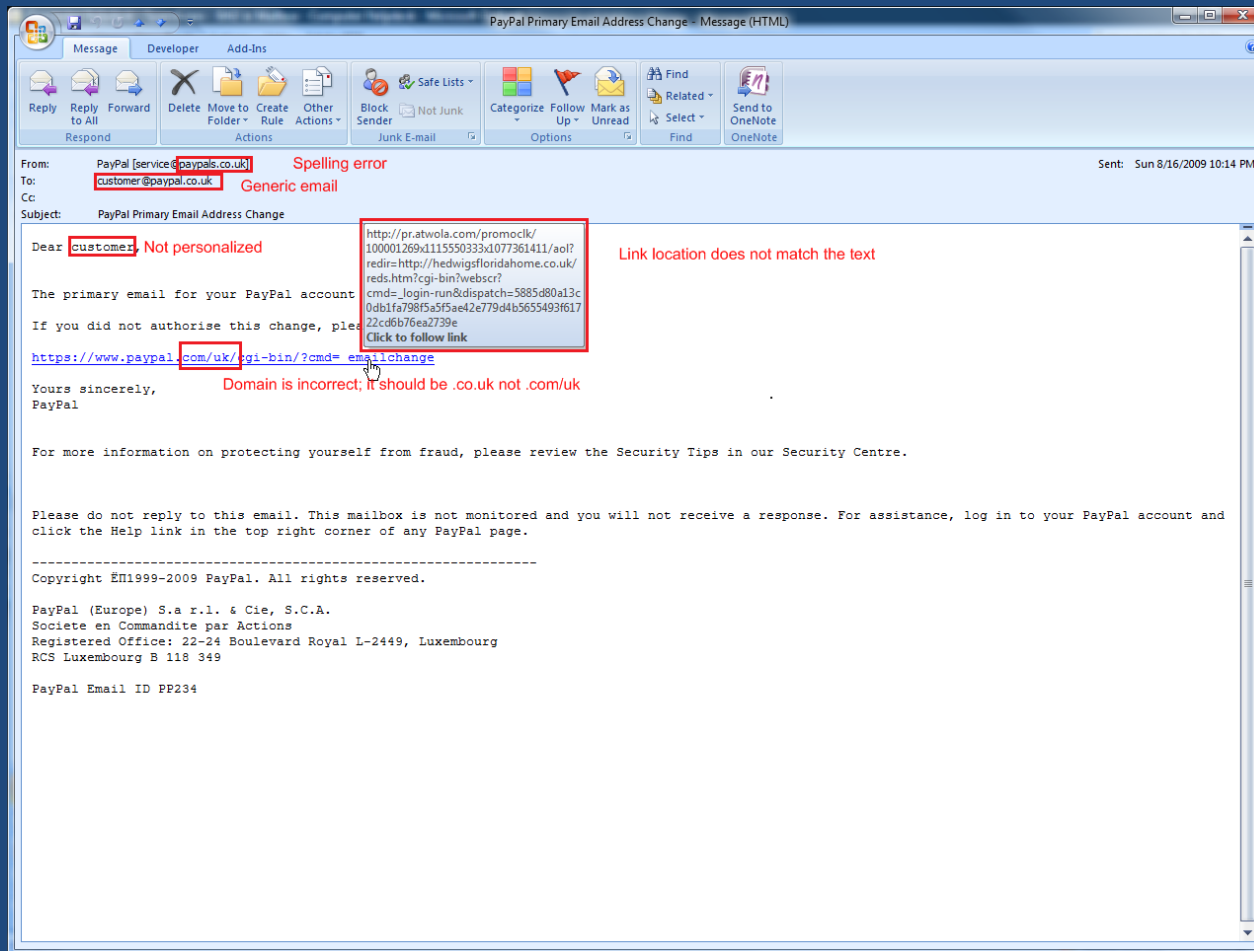
**.29%** Incidence Rate\*

**\$2** Billion Annual Losses\*

**25** Mean Resolution Hours\*

\*Javelin

# Business E-mail Compromise



# Limited Response

- IT staff training
- End-user training
- Encouraging staff to change passwords
- Back-up and offsite storage
- Real-time monitoring
- Increasing use of encryption
- Purchasing cyber security products and services
- Securing vendors
- Outside cyber audits
- Implementing a Cyber Security plan
- Two-factor authentication

# Network Security

- Anti-virus on all clients and servers
- Centralized and automated patch management
- Controlling what can be installed and from what sources.
- Lock down wireless networks
- Content Filtering
- Having an Acceptable Use Policy signed by all staff.

# Quick Wins

- Ensure software is patched and up to date
- Implement modern password policies
- Educate staff about e-mail links and file downloads

# Passwords

## MOST COMMON PASSWORDS IN 2015

- |              |                |              |
|--------------|----------------|--------------|
| 1. 123456    | 12. 1234567890 | 23. solo     |
| 2. password  | 13. abc123     | 24. passw0rd |
| 3. 12345678  | 14. 111111     | 25. starwars |
| 4. qwerty    | 15. 1qaz2wsx   |              |
| 5. 12345     | 16. dragon     |              |
| 6. 123456789 | 17. master     |              |
| 7. football  | 18. monkey     |              |
| 8. 1234      | 19. letmein    |              |
| 9. 1234567   | 20. login      |              |
| 10. baseball | 21. princess   |              |
| 11. welcome  | 22. qwertyuiop |              |





# Internet Crime Complaint Center

[www.IC3.gov](http://www.IC3.gov)



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# InfraGard

- **Partnership between the FBI and the private sector.**
- **Businesses, academia, state and local law enforcement agencies, and other participants**
- **Sharing information and intelligence to protect critical infrastructure.**



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