



ULTIMATE
IT
GUYS

Cyber Security Risks for PHAs



Cleatus Davis

Owner

Ultimate IT Guys

**We Keep You
Safe, Secure,
& Productive!**



Vulnerability Analogy

A **Vulnerability** is like not having a lock on your back door.

What



Exploit Analogy

An **Exploit** is like somebody going down the street checking to see if someone's backdoor is unlocked.

HOW



Attack Analogy

An **Attack** is like somebody actually opening the door and going in.

Action



Data Breaches

Incidents vs Breaches

Incident: A security event that compromises the integrity, confidentiality or availability of an information asset. (Possible Loss)

Breach: An incident that results in the confirmed disclosure—not just potential exposure—of data to an unauthorized party. (Actual Loss)



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Data Breaches

**Breach Victims
can be
Direct or Indirect**



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Data Breaches

Direct Breach Victim

**My systems have been
compromised**



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Data Breaches

**I haven't been
breached.
So, what is the
big deal?**



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Fact

81% of hacking related breaches used stolen or weak passwords.



Data Breaches

The Big Deal

InDirect Breach Victim

Someone else's system
has been compromised
who has my information



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The Big Deal

**Indirect Victims
become a
Direct Target**



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Data Breaches

Why do I care?

I am **Responsible** for the information at my housing authority:

- Applicants
- Tenants
- Employees
- Board Members
- Vendors
- Other Housing Authorities



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Data Breaches

How do Data Breaches Impact Me?

Increased Risk for targeted attacks

- Dark Web
- Phishing
- Email



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Risks

- Data Breaches
- Ransomware
- Crypto-Jacking
- Email
- Phishing
- Dark Web
- Scams



Risks

Risk # 1

Data Breaches



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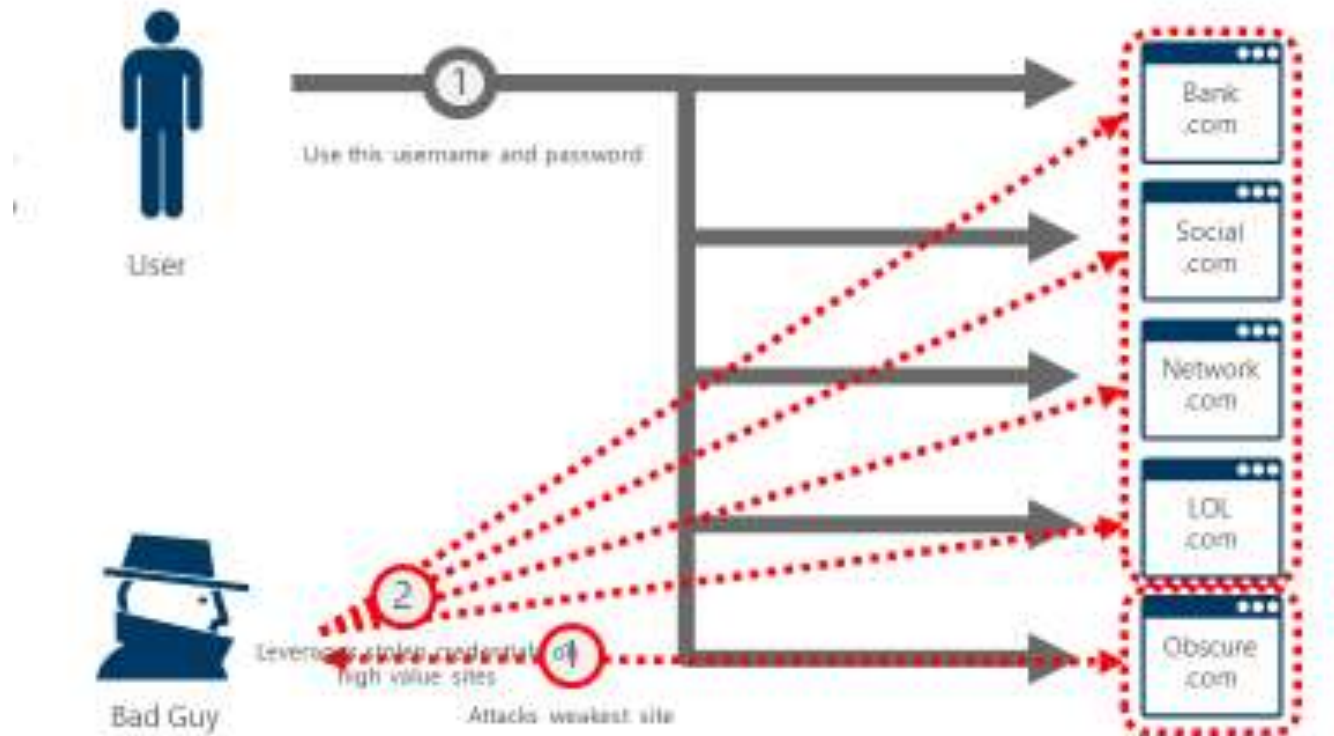
You Have Been a Victim

Over **80%** of Americans have their information for sale by criminals on the DarkWeb.



Ransomware Stats

Don't Reuse Your Password



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Risks

Risk # 2

Ransomware



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Vocabulary

Ransomware

(noun): a type of malicious software designed to block access to a system until a sum of money is paid.



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Ransomware Stats

THE STATE OF RANSOMWARE AMONG SMBs



In the last 12 months

22% of organizations had to cease business operations immediately because of ransomware

81% of businesses have experienced a cyberattack

66% have suffered a data breach

35% were victims of ransomware



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Ransomware

3 Types of Ransomware

- *Scareware*
- *Screen/Browser Locker*
- *Data Encrypter*



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Ransomware

Scareware

Fake Antivirus or PC

Cleanup tools pretending to detect issues on computer and demanding money to clean them up.



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Ransomware

Screen / Browser Locker

Fake messages claiming illegal activity detected for which you need to pay fine.



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Ransomware

Data Encrypter

Messages say your files are encrypted and demand ransom money be paid in order to return them.



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Risks

Risk # 3

Crypto-Jacking



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Risk # 3

**Crypto-Jacking
Is the new
Ransomware**

Risks

**Crypto-Jacking
Is a hidden cost
\$\$\$**



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Risks

Risk # 4

Email



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Risks

Risk # 4

Why is Email a Risk



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Why is Email a Risk?

- Data Breaches
- Phishing
- Data Leakage
- Virus/Malware

Why is Email a Risk?

Data Breaches

Someone else has your info

Leads to most other attacks

Why is Email a Risk?

Phishing

Why is Email a Risk?

Data Leakage

Data Leakage

Accidental or purposeful
release of sensitive information

Data Leakage

(83%) Employees have accidentally exposed sensitive customer or business data at their organization

Data Leakage

5 Causes of accidental breaches by employees:

1. External email services (Gmail, Yahoo!, etc.)
2. Corporate email – not protected
3. File sharing services (FTP sites, etc.)
4. Collaboration Tools (Slack, Dropbox, etc.)
5. SMS / Messaging Apps (G-Chat, WhatsApp, etc.)

Data Leakage

Data Leakage IS a Data Breach

Combating Data Leakage

- Encrypted Email
- Outbound Email Scanning
- Secure Remote Work (no usb)
- Secure file sharing (no usb)

Why is Email a Risk?

Virus/Malware

Email is Dangerous

Email is the preferred way of delivering attacks

- **66%** of breach related malware is delivered by email
- **90%** of complex attacks used email as one of the steps



Risks

Risk # 5

Phishing



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Data Breaches

Phishing – trying to get information from you by tricking or scamming you.



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57% of workers who get phished don't change their password behaviors

Data Breaches

Avoiding Phishing

- Business Email
- Email Filtering
- DNS Filtering
- Employee Training & Testing



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Risks

Risk # 6

The Dark Web



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Dark Web

Dark Web – a subset of the internet where many hacker communities and organized crime groups hang out.



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Dark Web Video

MOST OF US HAVE BEEN VICTIMS



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Dark Web

MOST OF US HAVE BEEN VICTIMS



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You Have Been a Victim

Over 80% of Americans had their information stolen from 3rd party websites.



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You Have Been a Victim

**Over 20% of Americans had
their Social Security
Number stolen from 3rd
party websites.**



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You Have Been a Victim

**Your information is now for
sale on the Dark Web.**



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Risks

Risk # 7

Scams



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Current Threats

What is a Scam?

Trying to trick you into giving up money, information or access.



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Current Threats

Why Scams Work



- Seems Real
- Truth mixed with a lie.
- Prey on Fear
- Don't want to miss out



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Current Threats

Things To Watch For



- Claim to be legitimate
- Pushy
- Threatening
- Too Good To Be True



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Current Threats

A Recent Scam



An email claiming to have your email address & password.

They say if you don't pay them \$5000 they will load pornographic images to your Facebook account.



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Current Threats

A Recent Scam



A new twist on a couple of old scams.

Basically, blackmail or extortion
Mixed with a 3rd party data
breach & online access



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Current Threats

A Recent Scam



A Partial Truth

- They do have your email address & a password.
- They may or may not have access to your Facebook, email or other accounts.



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Current Threats

Hacking

Does this stuff really happen?



Getting Hacked



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Fighting Back

Tip # 1

Find out if your information
Is on the Dark Web



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Fighting Back

Tip # 2

Use Complex, but
memorable passwords



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Tip # 3

Change your passwords often



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Tip # 4

Don't Reuse Passwords



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Tip # 5

Use a Password Manager



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Tip #6

Use Multi-Factor Authentication MFA



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Tip #7

Use Business Class Email

Scanning, Filtering, Archiving,
Outbound Scanning



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Tip #8

Use Email Encryption
For sending sensitive
information



Fighting Back

Tip #9

Use Modern Anti-Virus



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Tip #10

**Always have a good
backup**



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Tip #11

Keep Computer Updated



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Tip #12

Clean Computer



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Tip #13

**Don't store something
unless you really
need it**



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Tip #14

Employee Training

- Security Training
- Phishing Simulation

Fighting Back

Tip #15 Be secure when working remotely

No free wifi, No USB sticks, Use
secure remote software



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Getting Hacked

There was a video here



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You Don't Have To Be a Victim!

Requires Action

You can't continue to ignore the problem
(It isn't going away)

Think you can hide from cyber criminals?
Think again...

Don't bury your head in the sand!
Find out if your credentials
are for sale on the Dark Web.



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Stay Safe

Let us Help You!

Our Base Service Plan

- Preventative Maintenance
- Managed Anti-Virus Service
- Off-Site Backup
- Remote Support
- Business Email Service (w/Phishing, Virus & Spam Protection)



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Stay Safe

Let us Help You!

Other Services

- **Dark Web Monitoring**
- **Advanced Network Protection**
- **Security Assessments**
- **VOIP Phone Service**
- **Managed Copier & Print Service**
- **Managed Toner Service**



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Questions?

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