



TODAY'S PRESENTERS:



Chris Montgomery

Director of Sales



Dustin Leefers

Cyber Security Manager





AGENDA

- How many web's are there?
- How did the Dark Web start?
- Why does the Dark Web exist?
- How you access the Dark Web?
- What can you buy on the Dark Web?
- What Dark Web tools present the most risk to businesses?
- A brief tour of the Dark Web
- What can you do to keep your information secure?
- What can you do if you suspect your information is on the Dark Web?



CYBER SECURITY TRAINING

FREE ON-SITE TRAINING FOR YOUR TEAM

AND LUNCH ON US!



[Training session takes less than an hour.
Minimum 10 participants. Est. \$2000 Value]



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WHAT ARE THE DIFFERENT WEBS?

(there is more than one!)

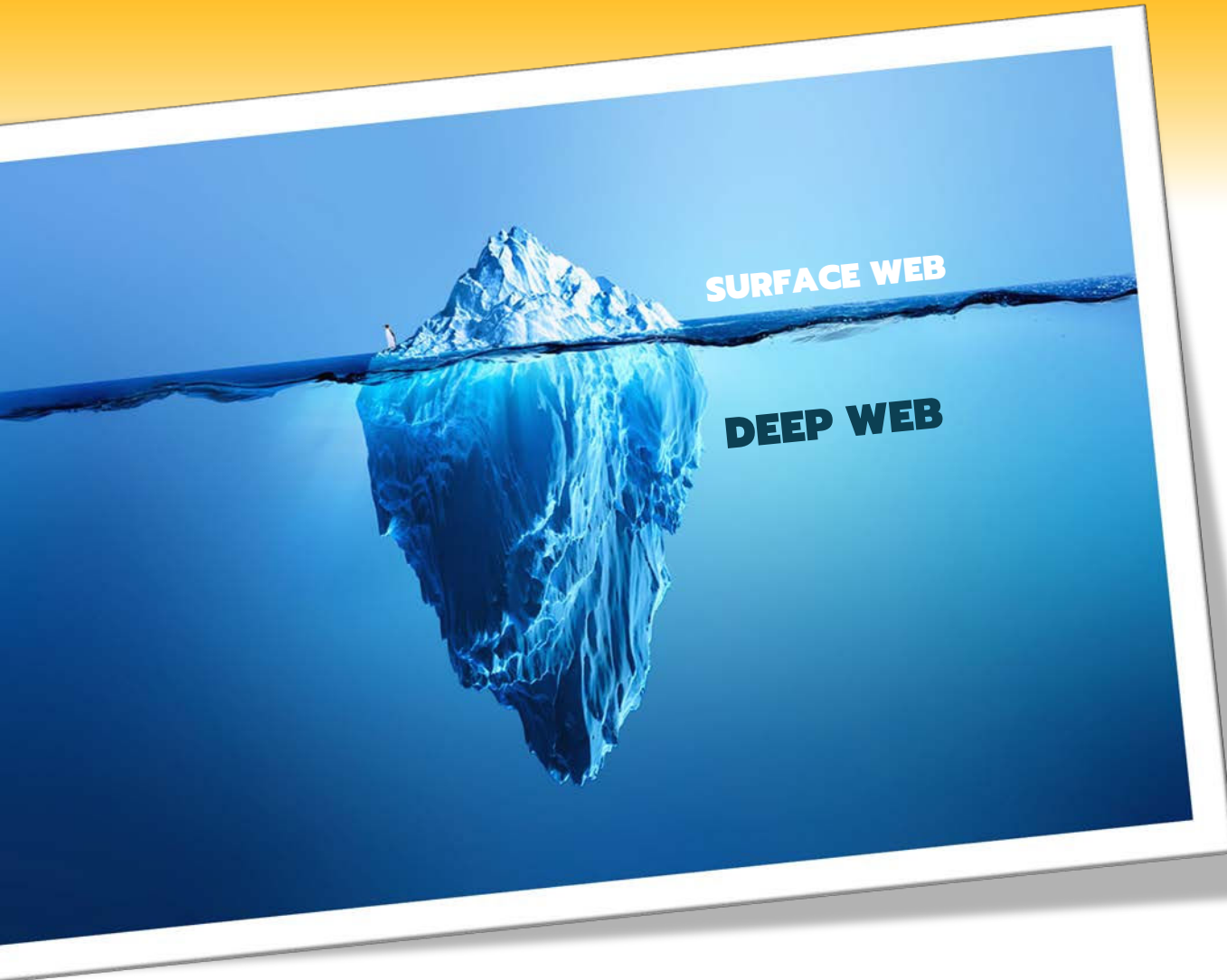


SURFACE WEB

The Surface Web is what most are familiar with since this variation is what search engines such as Chrome, Yahoo and Edge rank their search results around based on criteria such as relevancy, inbound links and keywords.



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DEEP WEB

The Deep Web is comprised of items such as medical records, fee-based content, membership websites and confidential corporate pages. Essentially, the Deep Web includes anything that requires you sign-in or contact behind a paywall (those sites only available to subscribers). Estimates place the Deep Web at between 96% and 99% of the internet



DARK WEB

The Dark Web is part of the internet that is not indexed by search engines and requires a specific type of browser to view.

HOW DID THE DARK WEB START?



In the late 1990s, two research organizations in the US Department of Defense drove efforts to develop an anonymized and encrypted network that would protect the sensitive communications of US spies. This secret network would not be known or accessible to ordinary internet surfers and later became what we now know as the Dark Web.



HOW BIG IS THE DARK WEB?



A review performed by Recorded Future found there are about 55,000 domains with around 8,400 being active (roughly 15%).



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WHY DO THE DEEP & DARK WEB EXIST?



DEEP WEB

The Deep Web helps protect your personal information that you probably want to stay private. But if you access your bank account, it is not entirely private since the bank knows you've accessed your account.

WHY DO THE DEEP & DARK WEB EXIST?



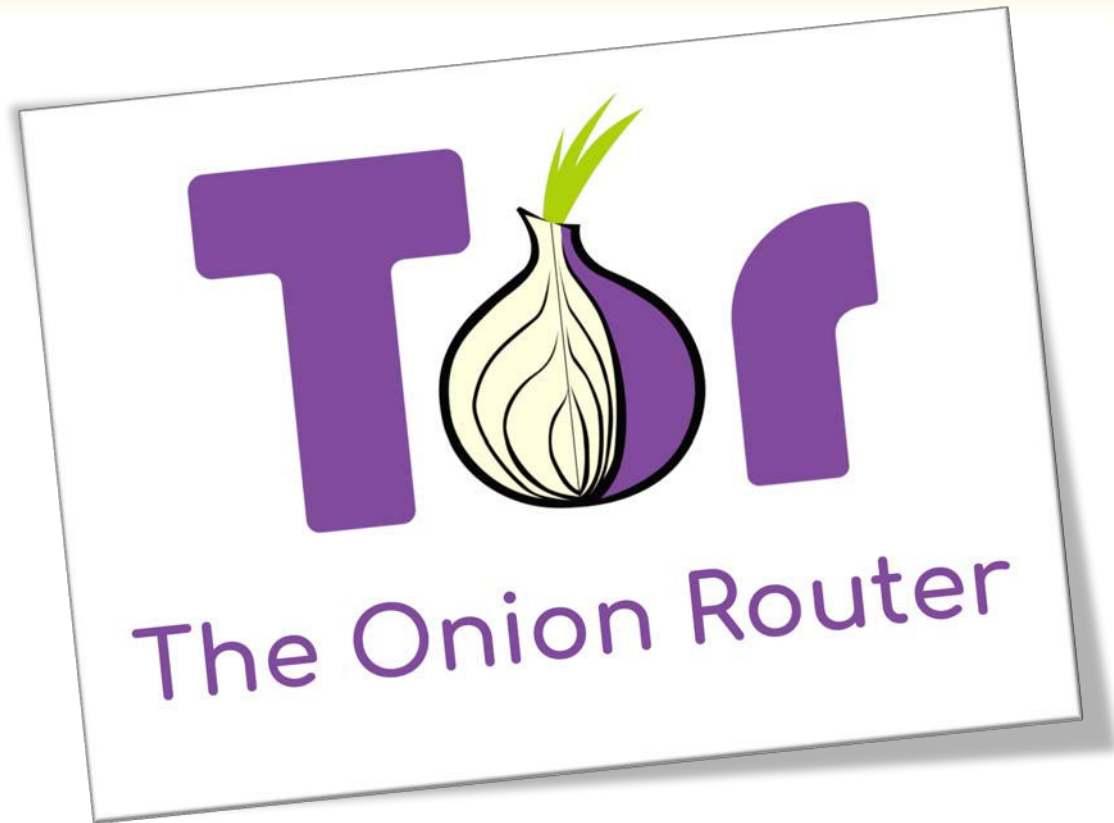
DARK WEB

The Dark Web operates on the principle of total anonymity. What you do there is your business. With certain precautions, what you do there can't be tracked or traced to you.

For some people, privacy is a big concern on the internet. They might want control over the personal information that standard internet service providers and websites collect on them.

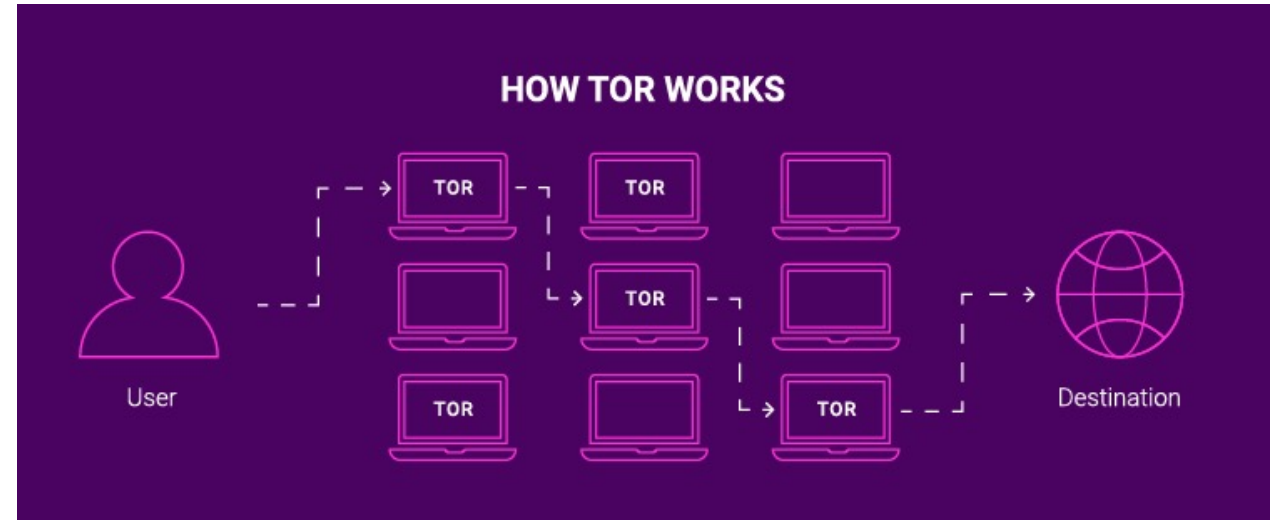
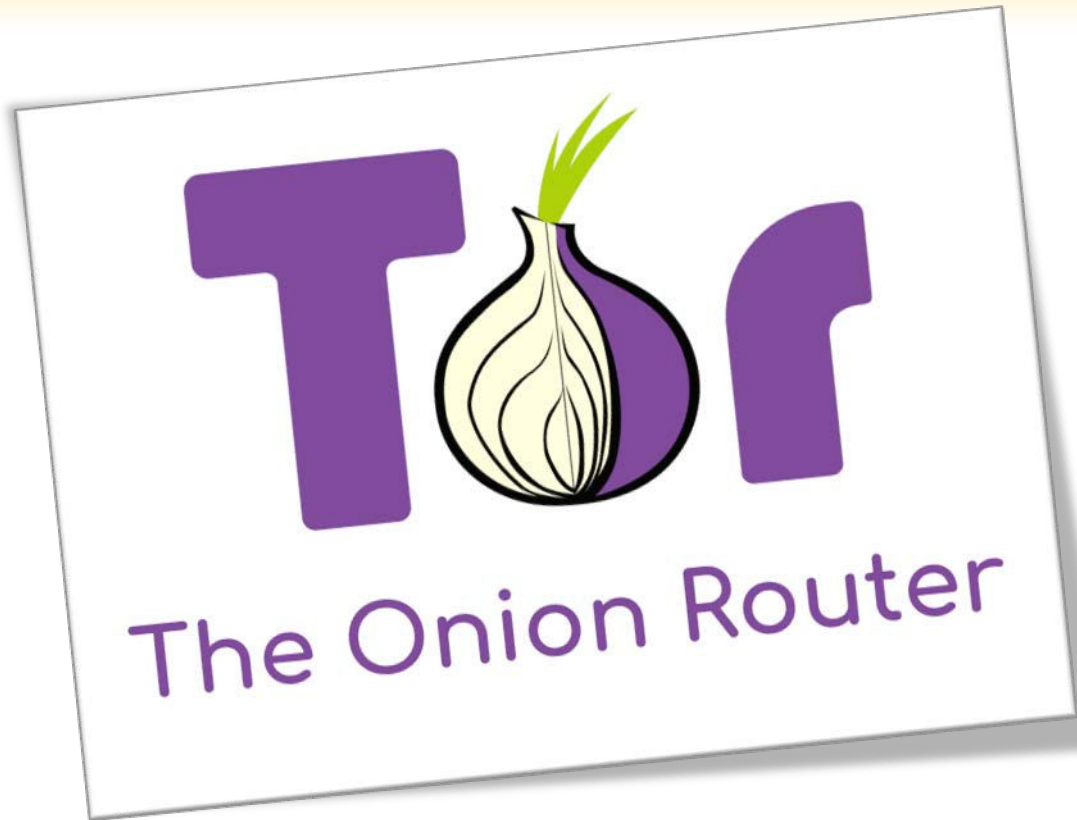
Freedom of speech also is an issue, and some people would make an argument for privacy and anonymity based on the First Amendment. That's one reason why law-abiding citizens might value the privacy of Tor and other dark web browsers.

HOW DO YOU ACCESS THE DARK WEB?

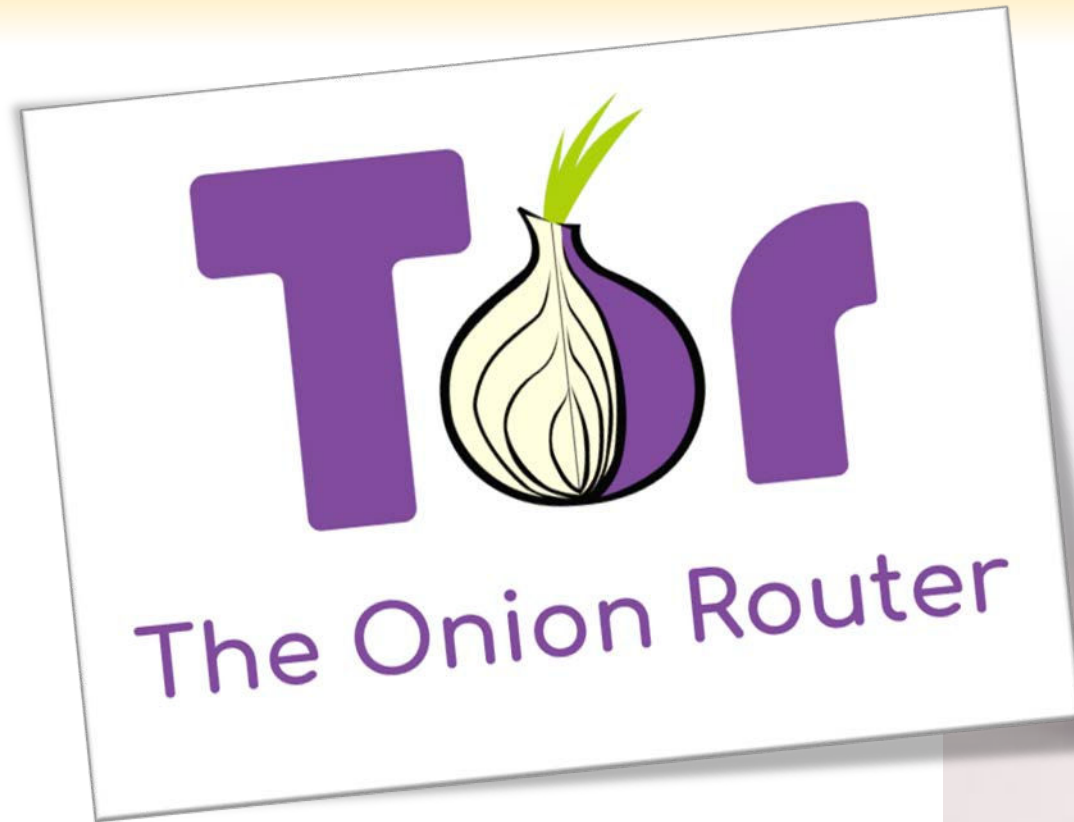


Most believe you must know someone or be a hacker to gain access to the Dark Web. In reality, all you need is a specific type of browser with the most well-known being Tor (The Onion Router)

HOW DOES TOR WORK?

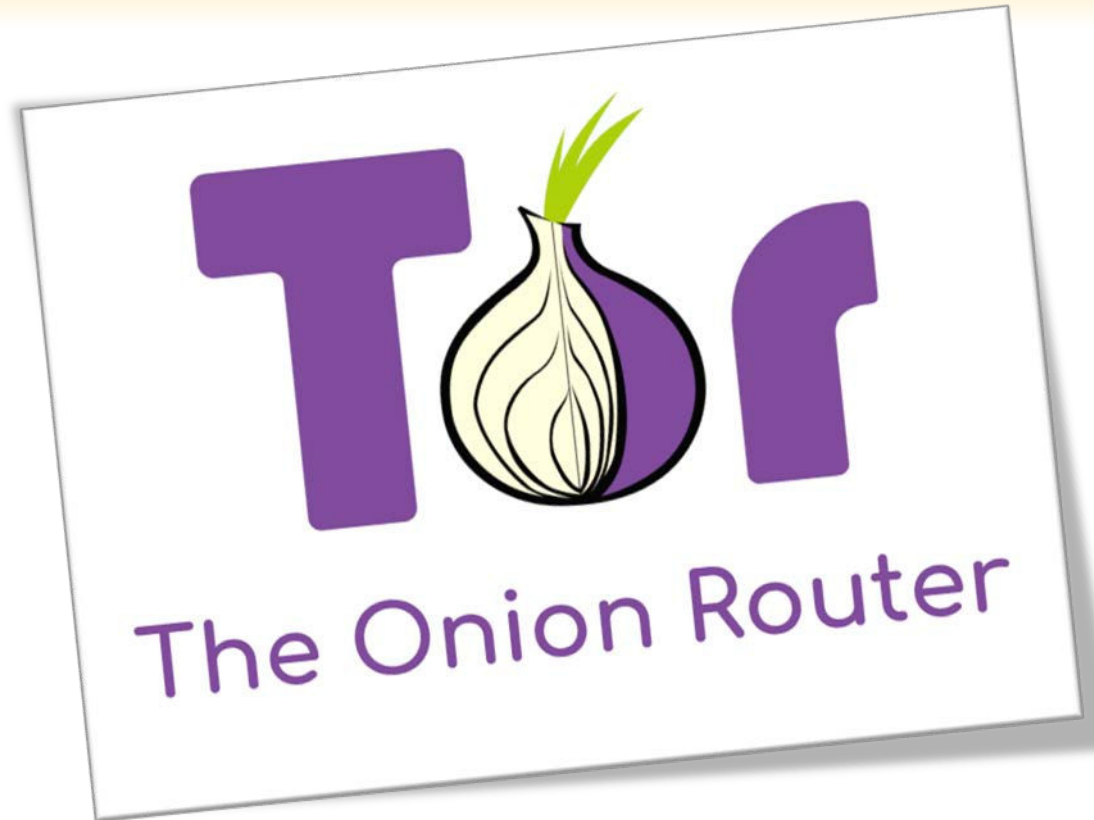


WHAT ARE TOR'S SOURCES OF INCOME?



IS TOR OR THE DARK WEB ILLEGAL?

ILLEGAL



WHAT ARE SITED ON THE DARK WEB CALLED?



These sites are under the domain .onion.

WHAT CAN YOU FIND ON THE DARK WEB?

- Credit card numbers
- All manner of drugs
- Guns
- Counterfeit money
- Stolen subscription credentials
- Hacked Netflix accounts
- Software that helps you break into other people's computers.

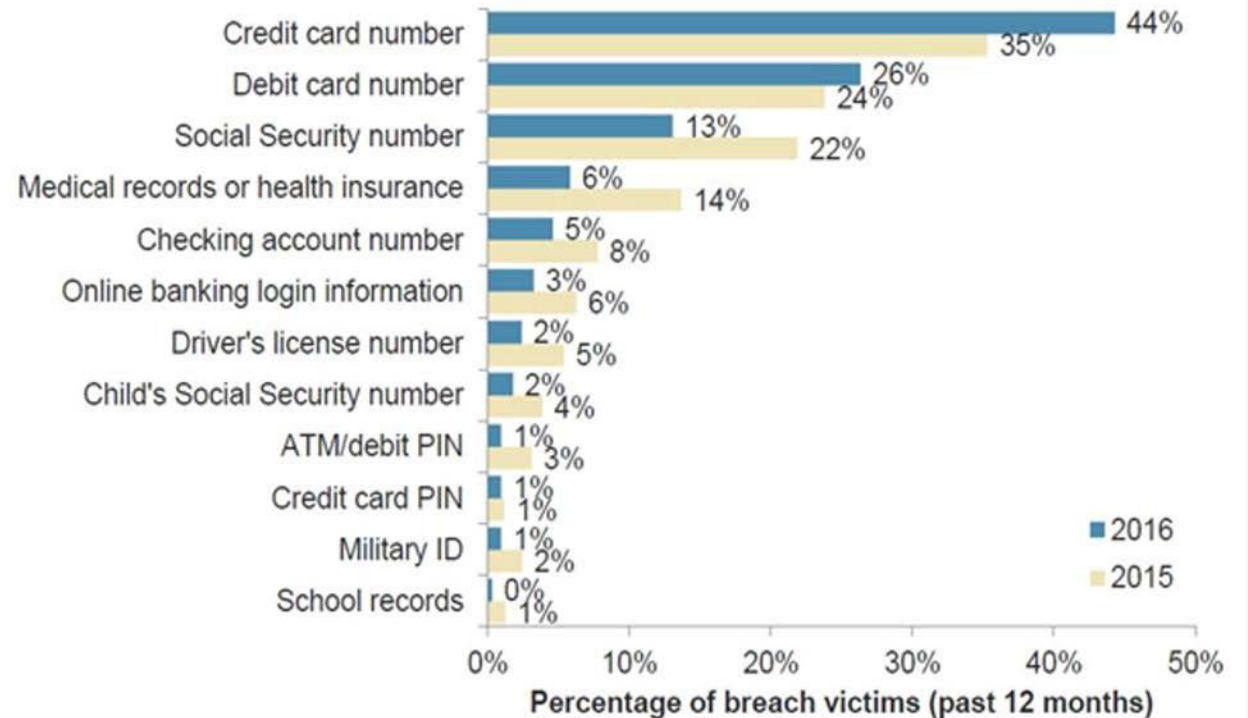


WHAT ARE THE MOST COMMON TYPES OF DATA BOUGHT AND SOLD ON THE DARK WEB?



Types of Data Being Bought and Sold

Type of Data Breached Among Notified Victims, 2015-2016



Source: Javelin Strategy & Research, 2017

WHAT ARE SOME MORE INTERESTING THINGS FOR SALE ON THE DARK WEB?



LOGIN CREDENTIALS TO A \$50,000 BANK OF AMERICA ACCOUNT.

Cost: \$500



\$3000 IN COUNTERFEIT \$20 BILLS

Cost: \$600



SEVEN PREPAID CARDS WITH \$2500 BALANCE ON EACH. \$17,500 TOTAL.

Cost: \$500 WITH EXPRESS SHIPPING



LIFETIME NETFLIX PREMIUM ACCOUNT.

Cost: \$6



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HOW DO YOU PURCHASE OFF THE DARK WEB?



The dark web has flourished thanks to **bitcoin**, the crypto currency that enables two parties to conduct a trusted transaction without knowing each other's identity.

Nearly all dark web commerce sites conduct transactions in **bitcoin** or some variant, but that does not mean it is safe to do business there.



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WHAT DARK WEB TOOLS AND SERVICES PRESENT THE HIGHEST ENTERPRISE RISK?

According to *Into the Web of Profit* report identified 12 categories of tools or services that could present a risk in the form of a network breach or data compromise:

- Infection or attacks, including malware, distributed denial of service (DDoS) and botnets
- Access, including remote access Trojans (RATs), keyloggers and exploits
- Espionage, including services, customization and targeting





**Support services
such as tutorials**



Credentials



Phishing



Refunds



Customer data



Operational data



Financial data



**Intellectual
property
/trade secrets**

WHAT DARK WEB TOOLS AND SERVICES PRESENT THE HIGHEST ENTERPRISE RISK?



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THERE ARE 3 RISK VARIABLES FOR EACH CATEGORY BASED ON THESE MOTIVATING FACTORS



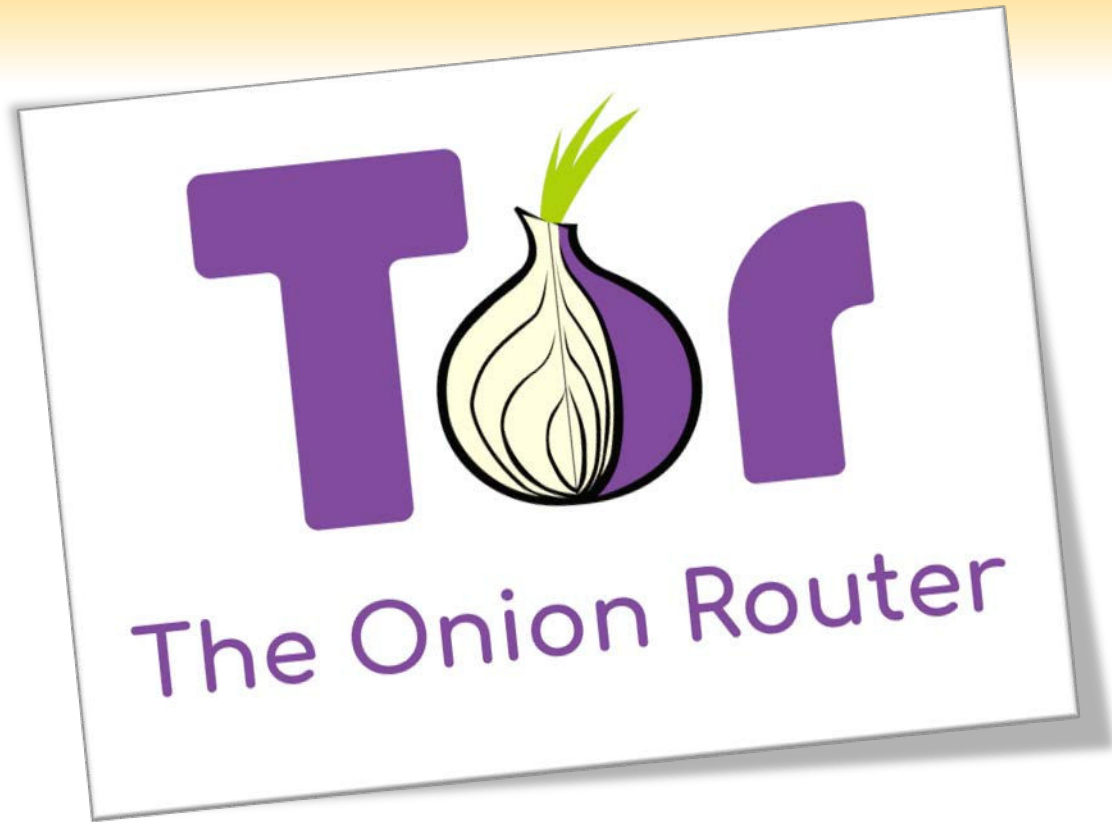
DEVALUING the enterprise, which could include undermining brand trust, reputational damage or losing ground to a competitor.



DISRUPTING the enterprise, which could include DDoS attacks or other malware that affects business operations.



DEFRAUDING the enterprise, which could include IP theft or espionage that impairs a company's ability to compete or causes a direct financial loss.



WHAT DOES THE DARK WEB LOOK LIKE?



FREE Dark Web Compromise Report

Businesses of ten (10) users or more

Specific to the business domains only

Sign up at ThrottleNet.com

DARK WEB COMPROMISE REPORT



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▶ WHY MONITORING FOR EXPOSED CREDENTIALS IS IMPORTANT



HOW ARE CREDENTIALS COMPROMISED?



PHISHING

- Send e-mails disguised as legitimate messages
- Trick users into disclosing credentials
- Deliver malware that captures credentials



WATERING HOLES

- Target a popular site: social media, corporate intranet
- Inject malware into the code of the legitimate website
- Deliver malware to visitors that captures credentials



MALVERTISING

- Inject malware into legitimate online advertising networks
- Deliver malware to visitors that captures credentials



WEB ATTACKS

- Scan Internet-facing company assets for vulnerabilities
- Exploit discovered vulnerabilities to establish a foothold
- Move laterally through the network to discover credentials



Passwords are a twentieth-century solution to a modern-day problem. Unfortunately, user names and passwords are still the most common method for logging onto services including corporate networks, social media sites, e-commerce sites and others.

39%

Percentage of adults in the U.S. using the same or very similar passwords for multiple online services

28,500

Average number of breached data records, including credentials, per U.S.-based company

User names and passwords represent the keys to the kingdom for malicious attackers. Criminals who know how to penetrate a company's defenses can easily steal hundreds or even thousands of credentials at a time.

WHAT CAN AN ATTACKER DO WITH COMPROMISED CREDENTIALS?



- Send Spam from Compromised Email Accounts
- Deface Web Properties and Host Malicious Content
- Install Malware on Compromised Systems
- Compromise Other Accounts Using the Same Credentials
- Exfiltrate Sensitive Data (Data Breach)
- Identity Theft

PROTECTING AGAINST CREDENTIAL COMPROMISE

While there is always a risk that attackers will compromise a company's systems through advanced attacks, most data breaches exploit common vectors such as known vulnerabilities, unpatched systems and unaware employees. Only by implementing a suite of tools including monitoring, data leak prevention, multifactor authentication, employee security awareness training and others - can organizations protect their business from the perils of the dark web.



A criminal dealing in stolen credentials can make tens of thousands of dollars from buyers interested in purchasing credentials. And by selling those credentials to multiple buyers, organizations that experience a breach of credentials can easily be under digital assault from dozens or even hundreds of attackers.

\$1 - \$8

Typical price range for individual compromised credentials



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OF EXPOSED CREDENTIALS
FOR YOUR COMPANY

1,000+



EXTERNAL THREAT INTELLIGENCE

Are you monitoring for compromised data that
can be used to exploit your business?

☐ Yes

☐ No

DATA BREACH & PRIVACY LAW COMPLIANCE

Do you have a compliant data breach
response plan in place?



☐ Yes

☐ No

YOUR INFORMATION IS ALREADY EXPOSED

This information is used to compromise your corporate services such
as: Office 365, payroll services, VPNs, remote desktops, banking,
VOIP, ERP, CRM, social media access, ID Theft.



WE IDENTIFY

COMPROMISES
Throughout your organization.

**EMPLOYEE
CREDENTIALS ARE
A BEST SELLER
ON THE DARK WEB**

WE MONITOR

24/7/365

- Hidden chat rooms
- Private websites
- Peer-to-peer networks
- IRC (Internet relay chat) channels
- Social media platforms
- Black market sites
- 640,000+ botnets

WE REPORT

80,000+

Compromised emails daily.

 **Certified in
Dark Web Monitoring**



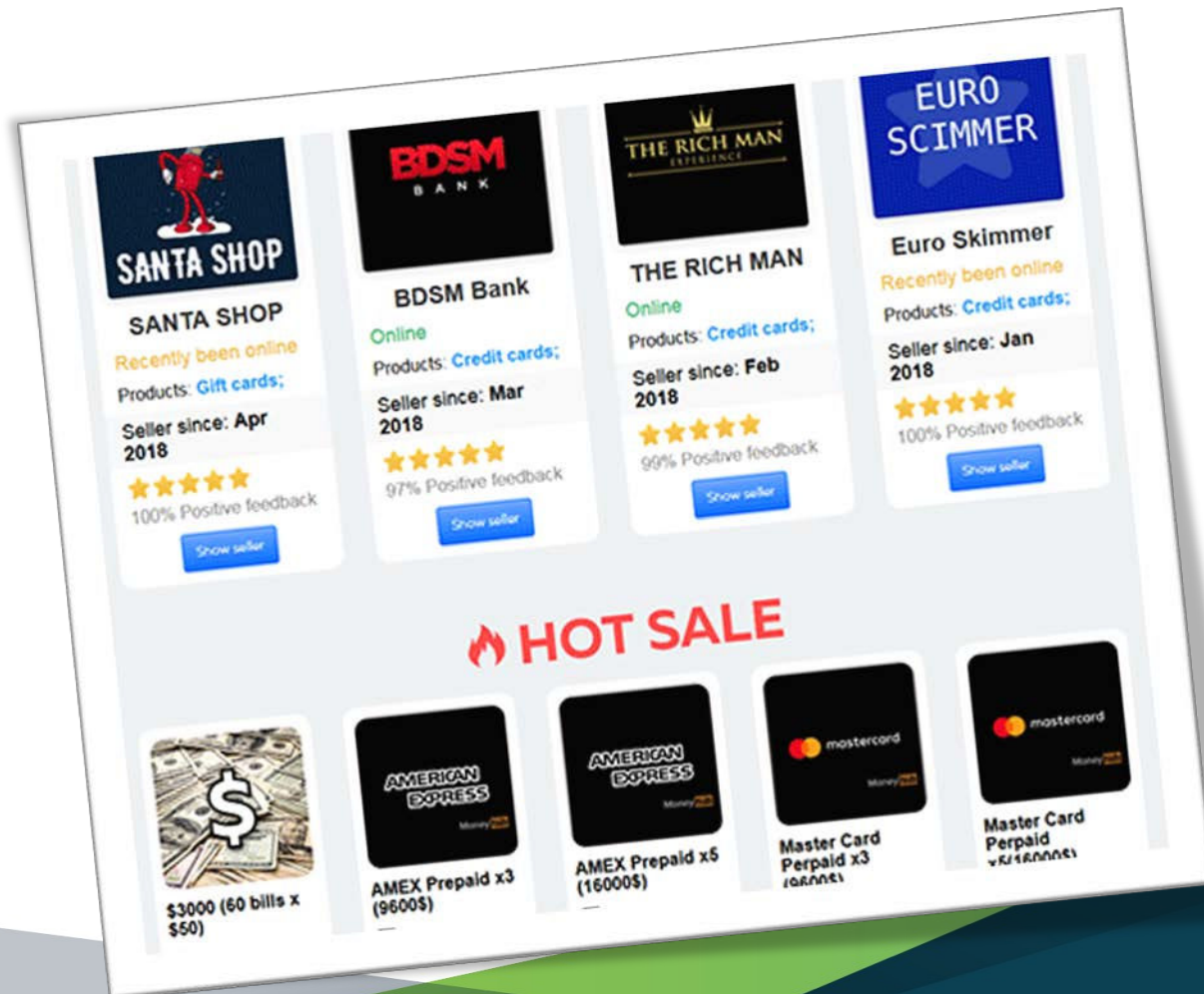
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Most Recent 100 Compromises

What
does the
report
show me?

Date Found	Email	Password Hit	Source	Type	Origin	PII Hit
04/13/21	sample2@sample.com	\$P\$D****	id theft forum	Not Disclosed	Not Disclosed	2
04/13/21	sample4@sample.com	\$P\$D****	id theft forum	Not Disclosed	Not Disclosed	2
04/13/21	sample3@sample.com	\$P\$D****	id theft forum	Not Disclosed	Not Disclosed	2
04/13/21	sample@sample.com	\$P\$D****	id theft forum	Not Disclosed	Not Disclosed	2
04/12/21	1@sample.com	qqqq****	id theft forum	Not Disclosed	Not Disclosed	None
04/12/21	sampl@sample.com	1992****	id theft forum	Not Disclosed	Not Disclosed	None
04/12/21	samp@sample.com	asda****	id theft forum	Not Disclosed	Not Disclosed	None
04/12/21	sample@sample.com	3346****	id theft forum	Not Disclosed	Not Disclosed	None
04/12/21	sample@sample.com	tttt****	id theft forum	Not Disclosed	Not Disclosed	None
04/11/21	sample@sample.com	1234****	id theft forum	Not Disclosed	Not Disclosed	None
04/11/21	sample@sample.com	ba95****	id theft forum	Not Disclosed	Not Disclosed	None
04/11/21	sample@sample.com	5e8f****	id theft forum	Not Disclosed	Not Disclosed	None
04/11/21	sample@sample.com	95e3****	id theft forum	Not Disclosed	Not Disclosed	None
04/07/21	readmetest30@sample.com	\$2a\$****	id theft forum	Not Disclosed	Not Disclosed	None
04/07/21	sampleemail@sample.com	\$2a\$****	id theft forum	Not Disclosed	Not Disclosed	None
04/07/21	readmetest27@sample.com	\$2a\$****	id theft forum	Not Disclosed	Not Disclosed	None
04/07/21	readmetest33@sample.com	\$2a\$****	id theft forum	Not Disclosed	Not Disclosed	None
04/07/21	readmetest4@sample.com	\$2a\$****	id theft forum	Not Disclosed	Not Disclosed	None
04/07/21	readmetest17@sample.com	\$2a\$****	id theft forum	Not Disclosed	Not Disclosed	None
04/07/21	readmetest16@sample.com	\$2a\$****	id theft forum	Not Disclosed	Not Disclosed	None
04/07/21	readmetest34@sample.com	\$2a\$****	id theft forum	Not Disclosed	Not Disclosed	None
04/07/21	readmetxt5@sample.com	\$2a\$****	id theft forum	Not Disclosed	Not Disclosed	None
04/07/21	readmetest29@sample.com	\$2a\$****	id theft forum	Not Disclosed	Not Disclosed	None

THE DARK WEB & HONORING AMONG THIEVES



Not only is the Dark Web going corporate, but they have Yelp style reviews and mechanisms to resolve disputes just like any other online retailer.



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WHAT CAN YOU DO TO PROTECT YOURSELF?



The first step to effective financial data protection is to identify the data that is more important to protect.



What data do I need to secure?



What computers, servers, laptops, networks, or other devices is the information stored on?



What devices can be used to access the data?



What roles/titles will have permission to view the data?

IMPLEMENT EFFECTIVE PASSWORDS

- Make sure passwords are at least 16 characters long and include at least one letter, one number and one symbol.
- Ensure passwords are changed on a regular basis
- Implement multifactor authentication
- Never share credentials and make sure all users have a unique username and password

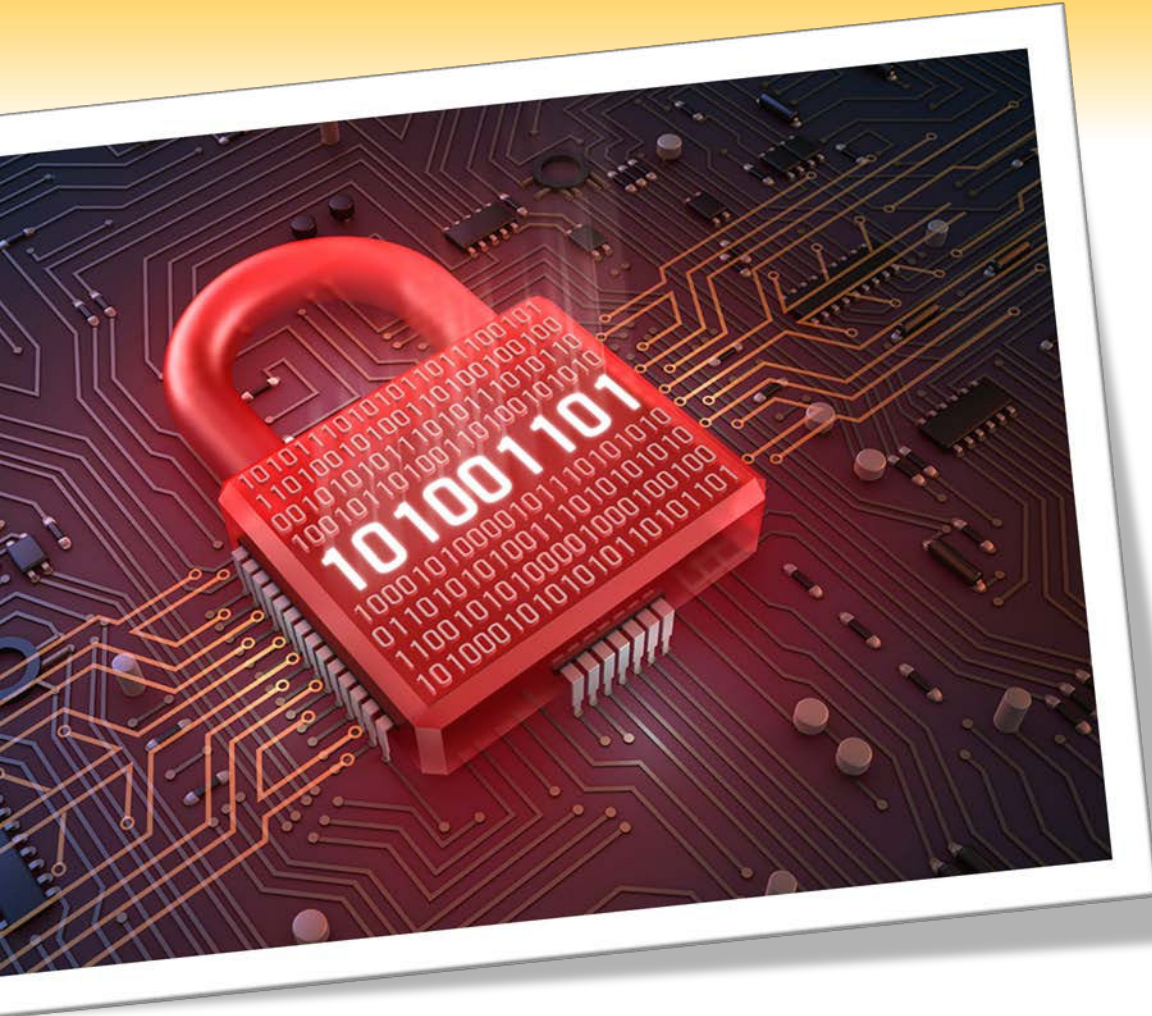
CREATE PASSWORD

CONFIRM PASSWORD

Password Strength: EXCELLENT

ENTER

FIREWALLS



Installation of an enterprise grade firewall is key to protecting your data from unauthorized access as these establish a barrier between your internal network and any unauthorized, external actors trying to access or attack it.

SECURITY AWARENESS TRAINING

KnowBe4 is ThrottleNet's preferred mock phishing and training tool to protect against phishing attacks. The solution sends mock attacks to users and provides training around any areas identified as a user's weakness.



KnowBe4
Human error. Conquered.



"Working with you is a breath of fresh air compared to other vendors who refuse to listen to what I ask and respond in kind."

- J.C. - Vice President, Information Technology



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DATA ENCRYPTION



Encryption is the translation of stored data into a secret code, ensuring that only someone with the encryption key can decrypt the data and use it for its intended purpose. Encrypting stored data acts as an insurance policy in case the data is ever lost or stolen.

You can also use encryption to reduce the vulnerability of network endpoints like computers and mobile phones.

INTRODUCING THE...

"WIN-WIN"

from ThrottleNet



NEVER FEEL LOCKED IN AGAIN!

A TRUE "RISK FREE" APPROACH TO IT SUPPORT...

HOW IT WORKS!

➤ Changing IT support providers can be a cumbersome and risky process so we've **REMOVED ALL OF THE RISK AND STREAMLINED THE PROCESS.**

ThrottleNet WILL..



- OFFER FREE SERVICES for the FIRST 30 DAYS *
- NO ONBOARDING FEES TO GET STARTED
- PAY me \$1,000 if I cancel within the FIRST 30 DAYS.
- NOT REQUIRE A CONTRACT and I can leave at ANYTIME.

WHAT'S THE CATCH?

➤ THERE IS NO CATCH. Our services will be completely FREE FOR THE FIRST 30 DAYS and you're free to CANCEL ANYTIME WITHOUT PENALTY.



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CAN LAW ENFORCEMENT DO ANYTHING?



Law enforcement has had a great deal of success shutting down Dark Web sites; however, the black market for illicit goods and services continue to exist and so will the Dark Web. Dark Web sites continue to leverage anonymous messaging tools such as Telegram and Discord that link back to their sites.



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CAN I SEARCH FOR MY INFO ON THE DARK WEB?



This is difficult since unlike the internet most are used to, the Dark Web is difficult to navigate simply because there is not an index or ranking system as is the case when on the Surface Web using a traditional browser.

CAN YOU MONITOR THE DARK WEB?



You can as there are several solutions that provide this service; however, there is no way for any company to search the entire Dark Web.

These solutions work by scouring collections of stolen personal information and alerting you if anything is found.

Unfortunately, this does not capture everything since your information or that of your business may be on a scanned document is difficult, if possible, to scan.



Once the information is out there, there is little you can do other than using credit monitoring services from large or reputable organizations.

You can also explore the options to “freeze” your credit, so it is harder for others to open accounts without your knowledge.



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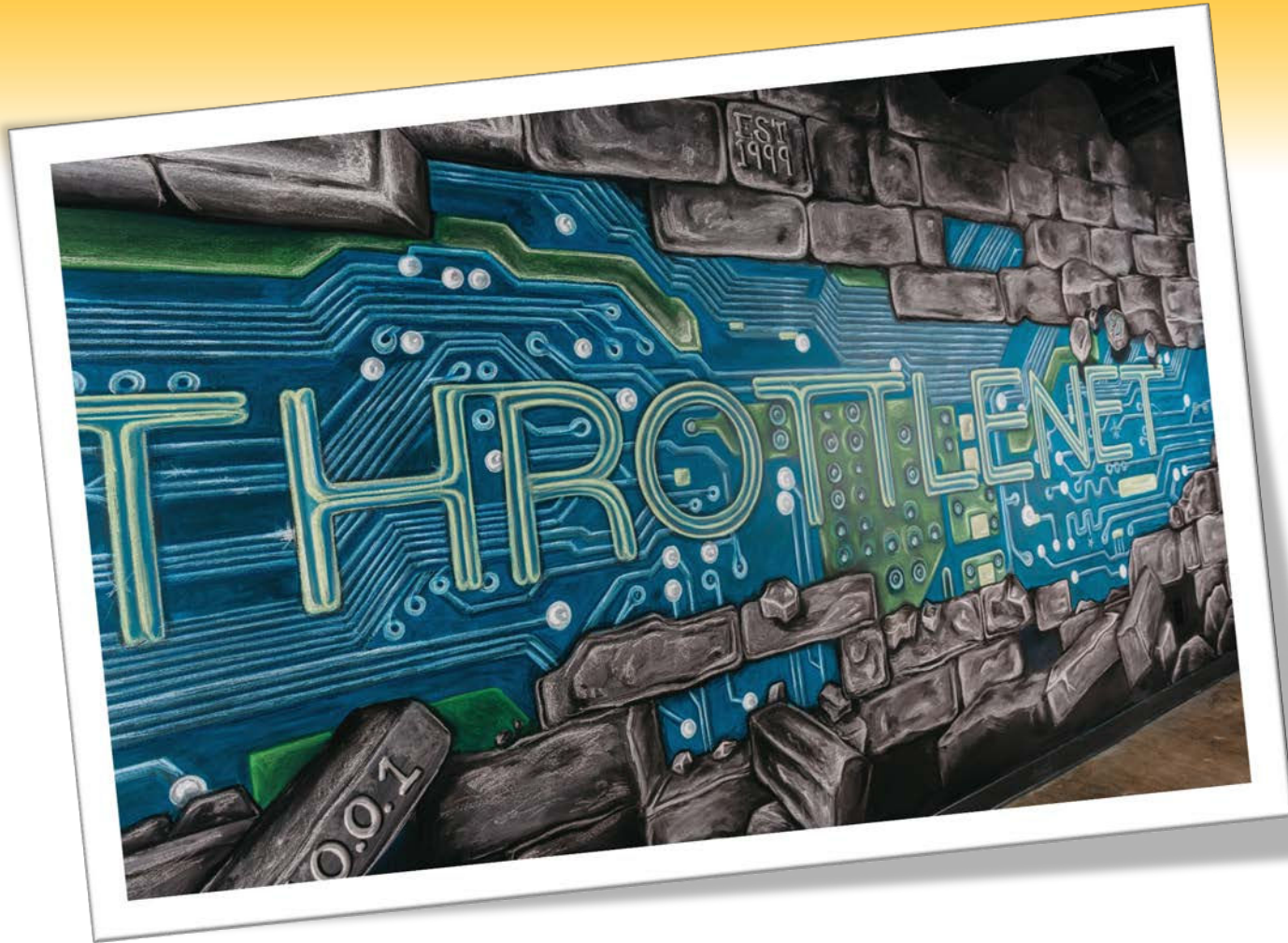
WHAT IS NEXT FOR THE DARK WEB?



Unfortunately, the Dark Web is not going away anytime soon. If anything, it is becoming more like a traditional corporate selling environment – only in this case – for illicit items.

These include:

- Sales of malicious code with instructions on how to execute
- Ransomware as a Service (RaaS)
- Consulting on how to breach an organization or you can subcontract it out



ThrottleNet Loves Referrals

11+ Users/Workstations = \$1000

10 Users/Workstations or less = \$500

<https://www.throttpnet.com/why-throttpnet/referral-program/>



MANAGED SERVICES BCDR SOLUTIONS HOSTING SOLUTIONS CYBER SECURITY SOLUTIONS



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HOW CAN WE HELP?

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