

### Keeping your cloud secure

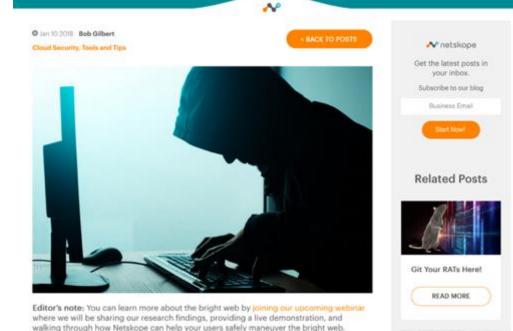
(and a tour of the latest cyber threats)

Ross Asquith – ross@netskope.com

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## There's a place that is scarier than the Dark Web

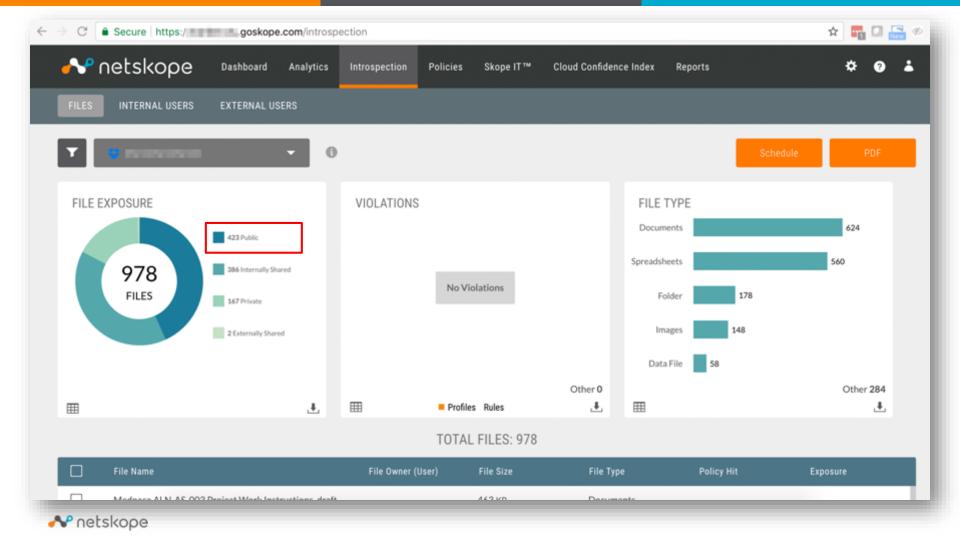
Why worry about data being stolen when your employees are giving it away?!



I originally planned to focus this blog post on the dark web. Many of you reading this blog may know

https://www.netskope.com/blog/theres-





## Cyber Crime is Big Business!

 A flourishing economy generating over \$1.5 trillion in revenues every year.



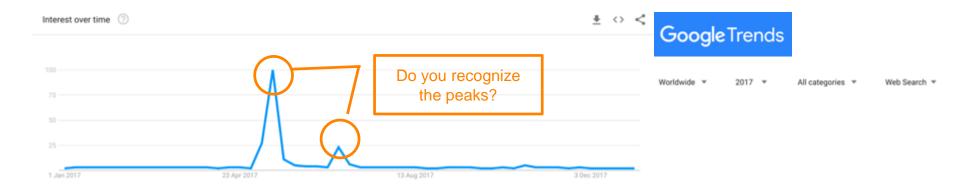
- Increasing commoditization of malware: minimum effort and technical skills required.
  - Growing adoption of cloud services brings new methods of attack

Destruction of your data is a feature of recent attacks

https://venturebeat.com/2018/04/21/the-web-of-profit-a-look-at-the-cybercrime-economy/

## Ransomware: King of 2017

- In 2016 revenues rose to \$1 Billion
- In 2017 ransomware attack volumes grew by 2,500%
- SMB and consumers preferred targets (poorly protected)





### WannaCry - May 2017

📌 netskope

Estimates suggest WannaCry affected around 300,000 organisations worldwide

Encrypted user's files and demanded \$300 worth of Bitcoins

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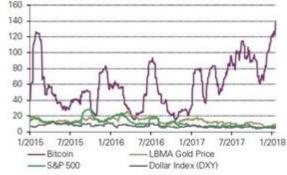
- WannaCry is one of the fasted spreading ransomware strains ever
- Within four days of its discovery, Avast had detected 250,000 instances across 116 countries
  - The malware was still active a year later

### But the ransomware business model is facing some challenges...

- Value of Cryptocurrencies is a rollercoaster
- A problem for a business model that relies on carefully selected price points for ransoms

#### Chart 2: Bitcoin's price volatility is very high

Realised volatility of bitcoin, gold, S&P 500 and US dollar\* 30-day realised volatility



\*As of 19 January 2018 Source: Bloomberg, World Gold Council

New attack vectors were needed that provided a better payout

https://venturebeat.com/2018/04/21/the-web-of-profit-a-look-at-the-cybercrime-economy/

## Move over ransomware... There's a new kid on the block



"Whatever you are... Wherever you are... You can mine..."

Does not require high technical skills

Unlike ransomware, it offers a potential 100% pay-out ratio

Cyber crime has a new business model – a subscription-based revenue...

13,769 views | Aug 3, 2018, 02:00pm

## 200,000 Routers Turned Into Mindless Crypto Coin Mining Zombies



10

Lee Mathews Contributor ① Security Observing, pondering, and writing about tech. Generally in that order.

Somewhere out there a cybercriminal is lining his or her pockets with cryptocurrency. Whoever it is isn't using powerful computers to do the mining. Instead, this individual is using an ever-growing army of enslaved routers to do the dirty work.

> CoinHive is generating **\$250,000** worth of Monero **every month**



#### Security

### Not even ordering pizza is safe from the browser crypto-mining scourge

Coin Hive JavaScript increasingly pops up in top 3 million websites

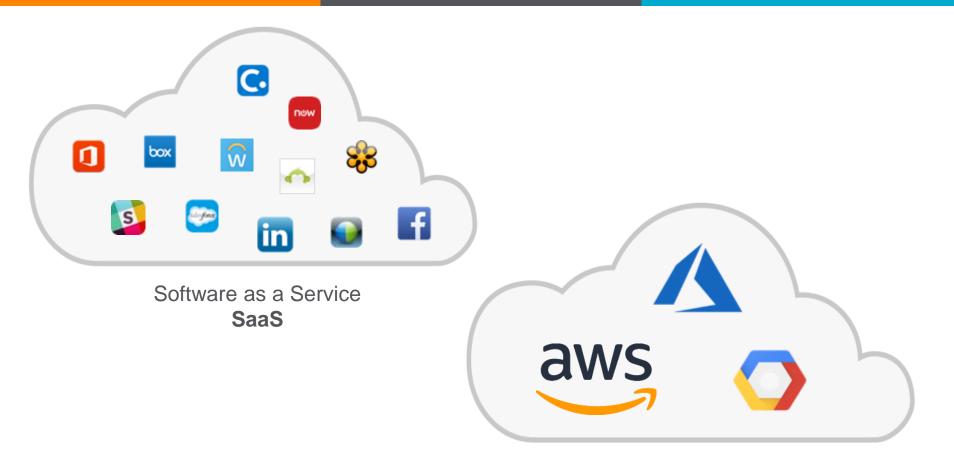
By John Leyden 9 Nov 2017 at 12:33

23 🖵 SHARE 🔻

Elsewhere Netskope discovered a Coin Hive miner installed as a plugin on a tutorial webpage for Microsoft Office 365 OneDrive for Business.

The offending website – https://www.sky-future[.]net – removed the Coin Hive plugin after it was notified about the issue. "The tutorial webpage hosted on the website was saved to the cloud and then shared within an organisation," according to Netskope.





Infrastructure as a Service **laaS** 



🕛 🕛 HREKERROOD

https://hackernoon.com

ME READ-LATEST BLOCKCHAIN DEV AL CRYPTO STARTUP ECONOMICS HACKERJOBS Q

### Ethereum mining on AWS in 5mins



## \$1.70 per hour = \$1,124 per month

aws

.000017 BTC per month

## \$0.10 per month



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回 … 3 ☆

### Ethereum mining on AWS in 5mins

NEWS





CYBERCRIME NETWORK SECURITY PRODUCT REVIEWS IN DEPTH EVENTS

### THE CYBERSECURITY SOURCE

60

February 20, 2018

## Tesla's AWS servers hijacked by cryptominers

The hijacking of Tesla's Amazon Web Server cloud system by rogue cryptominers is proof that no one is immune to a misconfigured AWS server nor cryptomining attacks.





0	misconfigured s3	Q		
	Web Images Videos News			
	Italy * Safe Search: Moderate * Any Time *			

#### AWS Employee Flub Exposes S3 Bucket Containing GoDaddy Server ...

According to one study earlier this year by Digital Shadows, researchers estimated that 1.5 billion sensitive files were visible on the internet from **misconfigured S3** buckets, NAS devices, FTP servers, and other cloud storage systems. Configuration ...

Dark Reading 18 hours ago

GoDaddy data exposed by AWS employee misconfiguring cloud instan... Data exposures caused by misconfigured Amazon Web Services Inc. cloud storage ... first uncovered by security firm UpGuard Inc., involved GoDaddy data found to be residing on an

SiliconANGLE I 6 hours ago

#### Web doc iCliniq plugs leaky S3 bucket stuffed full of medical records However, iClinig stored these private medical documents in a

misconfigured wide-open AWS \$3 bucket that could have been

potentially pored over by anyone. This cloud storage box, according to Gilwke, contained about 20,000 medical documents.

Amazon \$3 bucket open to the public. The data included high-level ...

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A The Register 17 days ago

such as \_\_\_\_

#### Millions of U.S. Voter Records Exposed on Robocall Company RoboCent's Poorly Configured AWS Cloud Storage



IEEE Spectrum | 5 days ago



### **Time Warner Cable**

Kromtech Security Center found two AWS S3 buckets exposed on the Internet [...] included internal development information like SQL database dumps, code with access credentials, and access logs. One text file contained more than four million records with information like user names, Mac accesses, serial numbers, account numbers, and transaction IDs.

#### Accenture

The Cyber Risk Team at UpGuard recently discovered that Accenture left at least four AWS S3 storage buckets unsecured and publicly available for download. Accenture's slip-up exposed authentication credentials, secret API data, digital certificates, decryption keys, customer information, and other data that could be leveraged to target both Accenture and its client accurements.

https://www.darkreading.com/cloud/10-r intel app, data on open public AWS bucket

Failed intelligence system, with data labeled "Top Secret," left open by contractor.

SEAN GALLAGHER - 11/28/2017, 7:02 PM











# Thank you

Ross Asquith – ross@netskope.com