

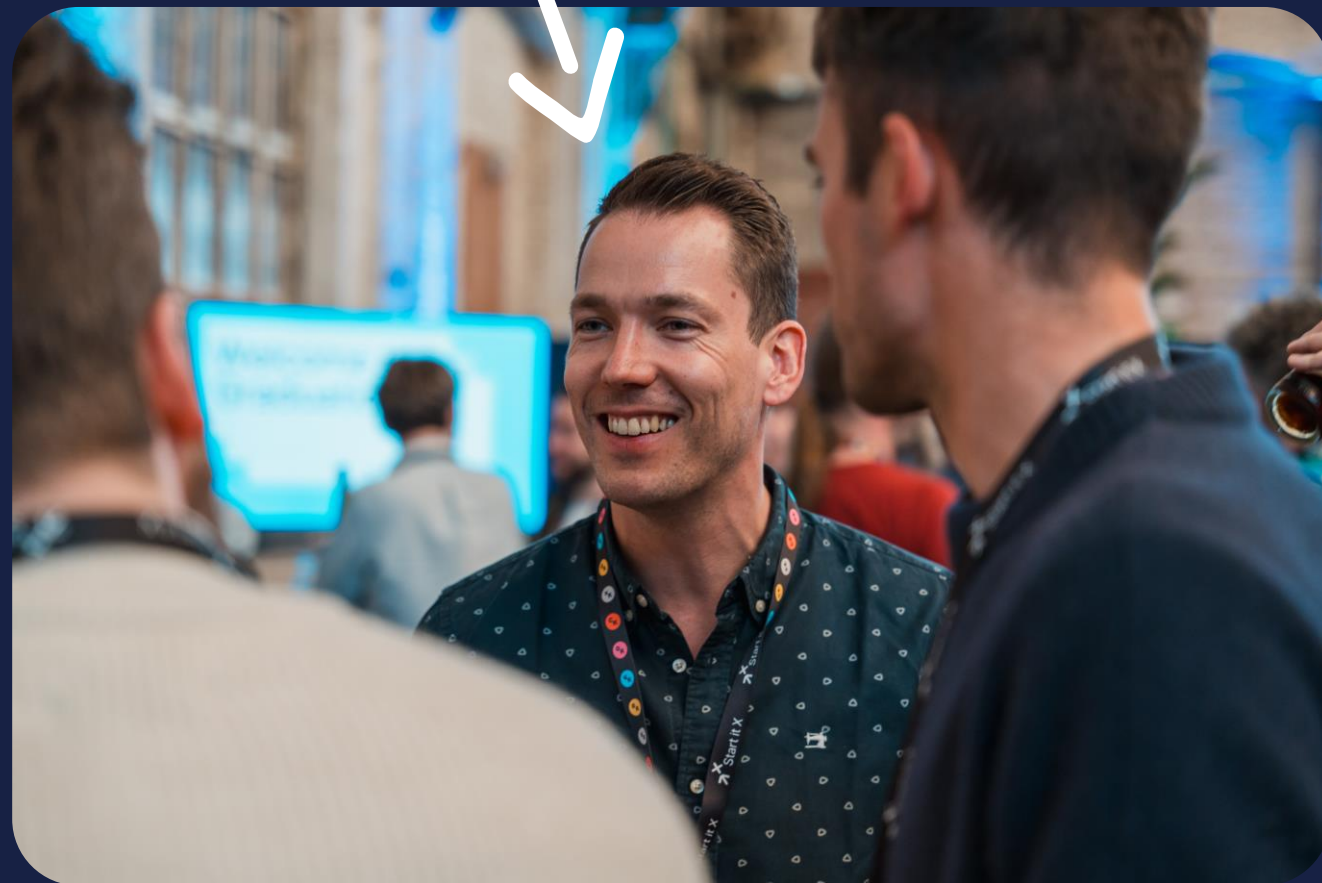


THE BEST OF 2023-2024:

inside the biggest hacks and facts of the past year

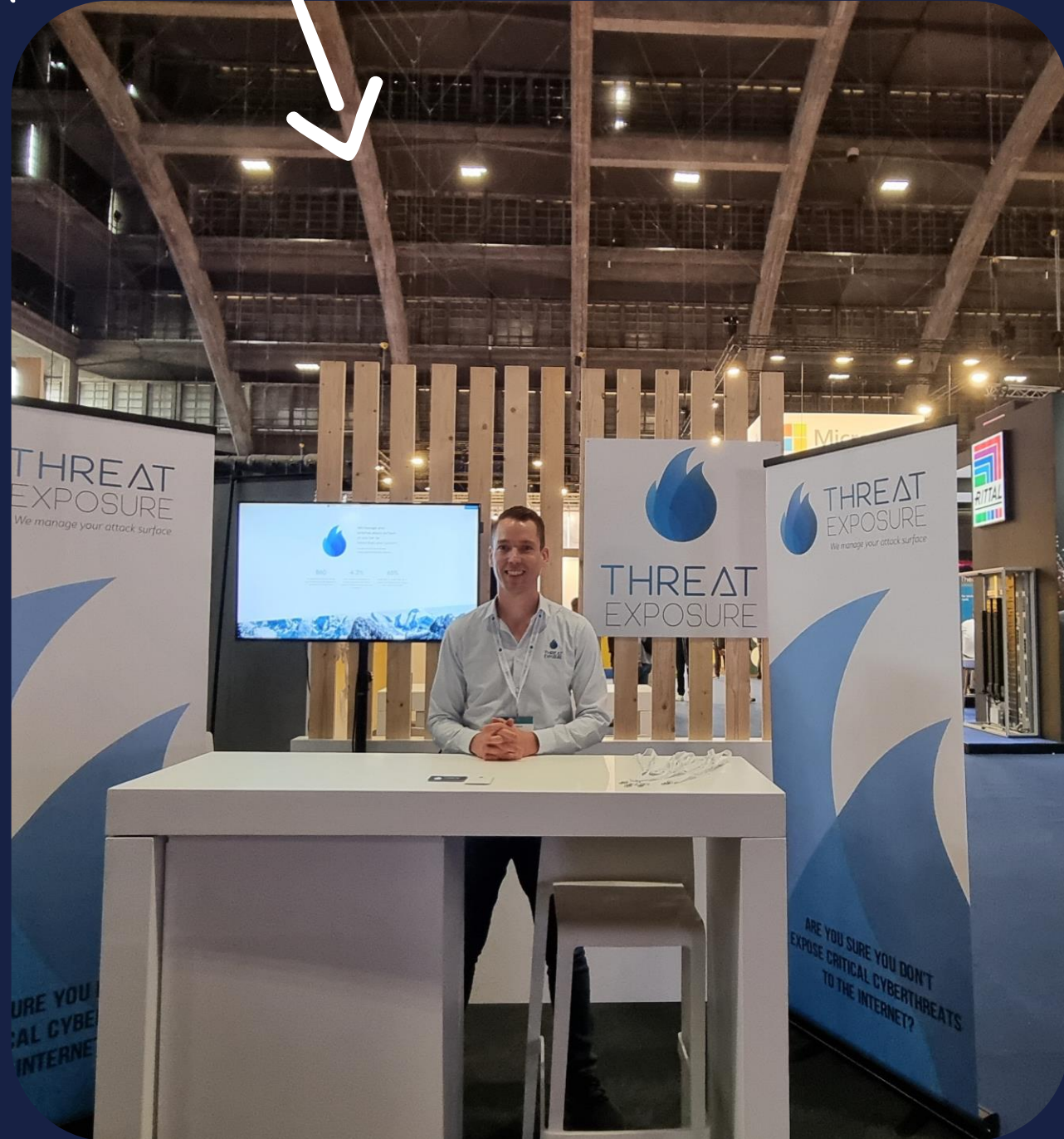


Dieter Van Den Bosch



- Addicted to learning geeky stuff
 - All things technical, Sci-Fi, Science, Astronomy, Birds, Insects, ...
- Since 2009 in security
- Threat Intelligence analyst in group CERT
- International lead Attack Surface Management

Proud Dieter Van Den Bosch



THREAT EXPOSURE

We manage your attack surface



threatexposure.eu



dieter@threatexposure.eu



www.linkedin.com/in/vdbdieter/

BruCON 2023

START

Ransomware MGM

Sep 11: Scattered Spider gets in by calling MGM's helpdesk posing as an employee

Even key cards for rooms not functioning

Jan - June: 3 young adults from US & UK arrested

MGM doesn't pay any ransom
Cyberattack costed \$100 million

OCT
11



Ransomware Caesars

Days before MGM's cyberattack, Caesars paid a \$15 million ransom

SEP
7

Ransomware MGM

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OCT
11



Citrix Bleed

OCT
10

Steal authentication cookies from Citrix NetScaler ADC and Gateway appliances

Mandiant revealed that the flaw was abused months before the patch came out

Victims:

Boeing

Allen & Overy

DP World

Industrial and Commercial Bank of China



OCT
10

HTTP/2 'Rapid Reset' DDoS attack

New DDoS record: 400 million requests per second. Many times bigger than the last record.

A primary design goal of HTTP/2 was efficiency, and unfortunately the features that make HTTP/2 more efficient for legitimate clients can also be used to make DDoS attacks more efficient.

23andMe hack finally clear

23andMe spent months downplaying it
and blaming their customers

DNA related data of 6.9 million, about half of
customers, in the hands of hackers

The names, addresses belonging to 1 million
23andMe customers with Jewish heritage
on BreachForums

Lacking MFA

DEC
5

De Standaard

Nieuws Opinie Inspiratie Podcasts

Meest recent Binnenland Politiek Buitenland Economie Cultuur Wetenschap S

HACKING

Van “niets gelekt” naar “grootste hack ooit”: aanval op Limburg.net neemt steeds grotere proporties aan

DEC
13

Ransomware attack Limburg.net

By Medusa

One server hacked with data of 311.000 families. Also leaked: data of 61 people in debt mediation etc.

RDP server exposed to the internet [lacking MFA](#).
Source: Belang van Limburg

“

Ransom payments to ransomware gangs
are
tax-deductible as
business expenses

”

- Minister of Finances Vincent Van Peteghem -

“

By paying ransom, you are financing
cybercrime. Cybercriminals use their
profit from ransomware attacks to launch
new attacks on other companies.

”

- *Simen Van Der Perre (Orange Cyberdefense), de Tijd* -

“

Ransom payments to ransomware
gangs are tax-deductible as
business expenses

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- Minister of Finances Vincent Van Peteghem -

The toothbrush DDoS attack

Reported by Swiss newspaper after an interview with Fortinet.

The DDoS knocked out a Swiss company for several hours, costing millions of euros

The news quickly went viral around the world.

Except... it wasn't true. Fortinet said it was just a hypothetical story.

Did we all think it was indeed plausible?

FEB
6



i-Soon leak

FEB 18

APT-for-hire for multiple Chinese authorities

It got quickly deleted

80 targets: government of India, Thailand, Vietnam, South Korea, Pakistan, Afghanistan...

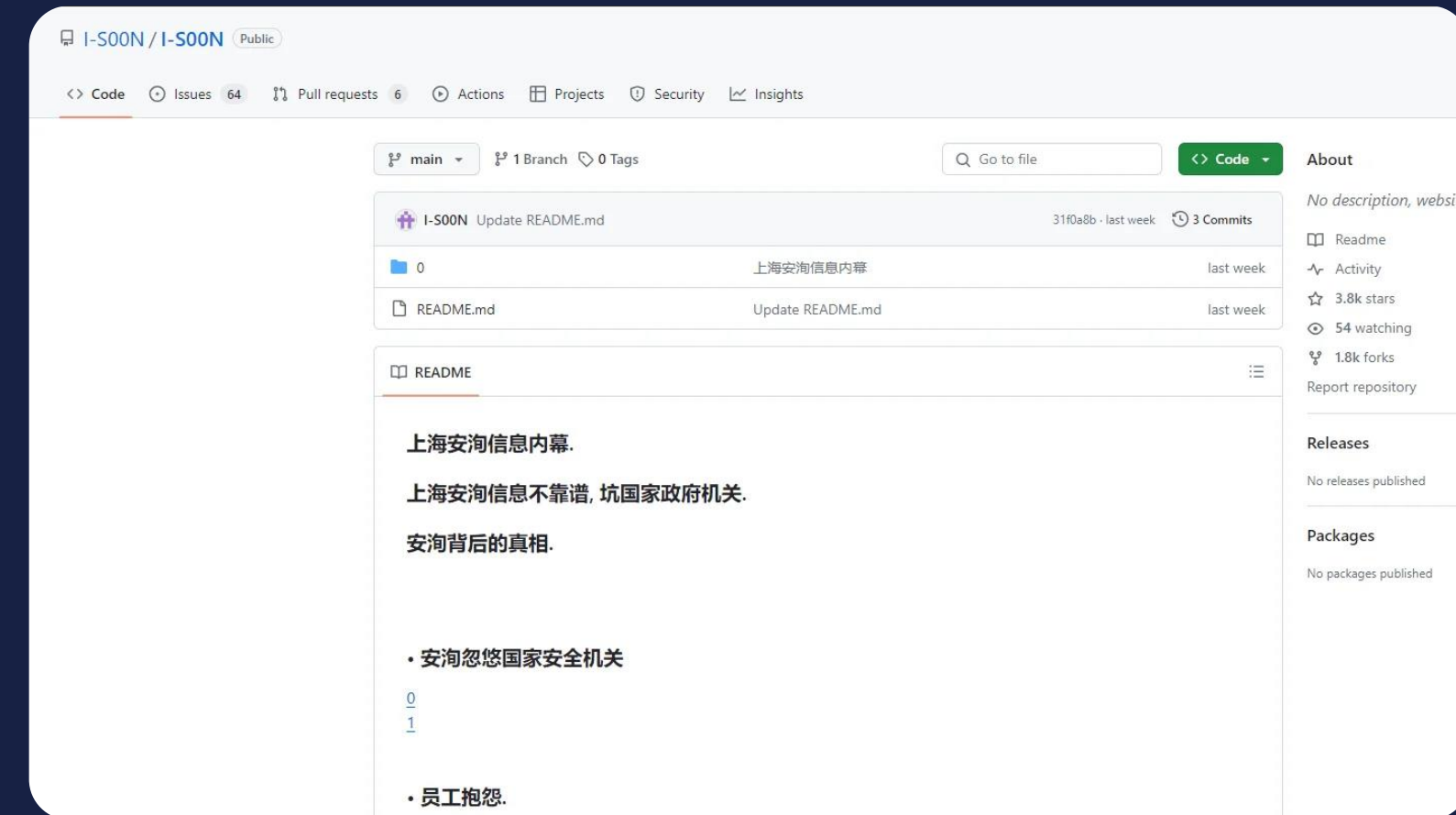
Chat logs reveal:

A: we've got stuff from their chairman Jens Stoltenberg

B: they are not interested

A: what about making it cheaper?

I'm running low on money



1800 forks

2022-05-10 07:07:02	wxid_wh6x59w70y3r22	总秘书处的
2022-05-10 07:07:05	wxid_wh6x59w70y3r22	北约总秘书处
2022-05-10 07:07:12	wxid_5390224027312	现在又晓得了
2022-05-10 07:07:20	wxid_5390224027312	他们看了小样，不感兴趣
2022-05-10 07:07:28	wxid_wh6x59w70y3r22	[撇嘴]
2022-05-10 07:07:47	wxid_wh6x59w70y3r22	有他们主席的东西
2022-05-10 07:07:49	wxid_wh6x59w70y3r22	在里面
2022-05-10 07:08:41	wxid_wh6x59w70y3r22	有北约Jens Stoltenberg秘书长的
2022-05-10 07:08:49	wxid_wh6x59w70y3r22	北约的秘书长是最高行政领导
2022-05-10 07:09:08	wxid_5390224027312	
2022-05-10 07:09:11	wxid_5390224027312	所以说
2022-05-10 07:09:21	wxid_5390224027312	不是你认为有价值别人就会认为有价值
2022-05-10 07:09:22	wxid_wh6x59w70y3r22	便宜点
2022-05-10 07:09:23	wxid_wh6x59w70y3r22	卖
2022-05-10 07:09:28	wxid_wh6x59w70y3r22	行不行

IDENTITY REVEAL

LOCKBIT LockBitSupp is:

Dmitry Yuryevich Khoroshev



FEB
20

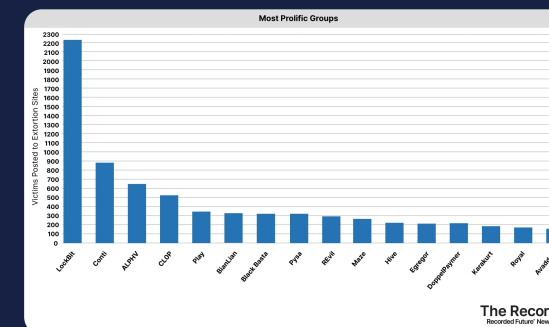
LockBit hackers hacked

Led by British National Crime Agency

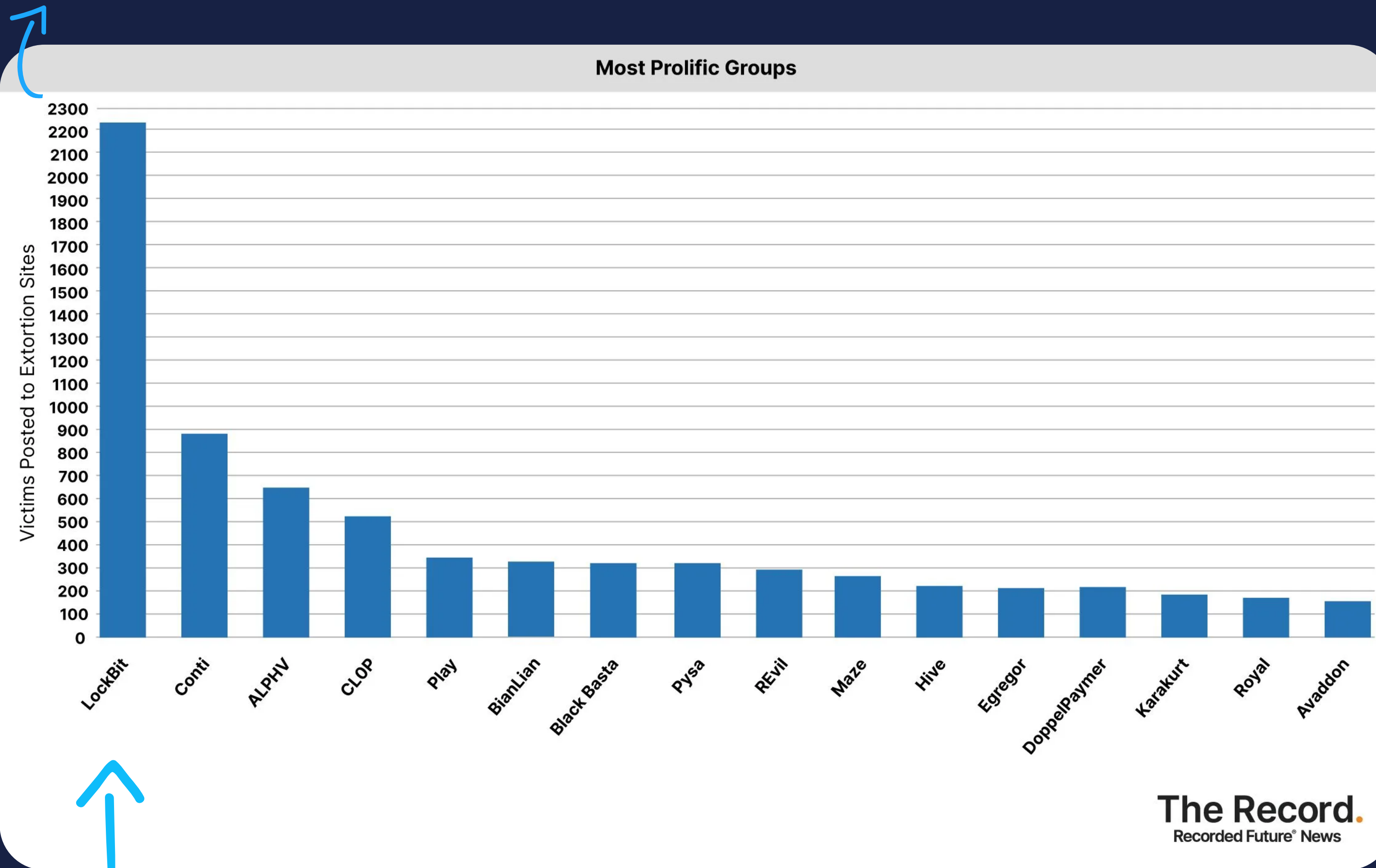
Victims: Accenture, British Royal Mail, City of Geraardsbergen, Maldegem, province Namur, French Ministry of Justice, Canada's largest pediatric hospital, ...

2500 victims. More than \$500 million in ransom

194 affiliates (the ones that do the actual hacking)
80% off ransom goes to affiliate



Number of victims is 50% -60% higher,
because not all victims reach the leak site.
Source: Orange Cyber Defense



FEB
20

LockBit hackers hacked

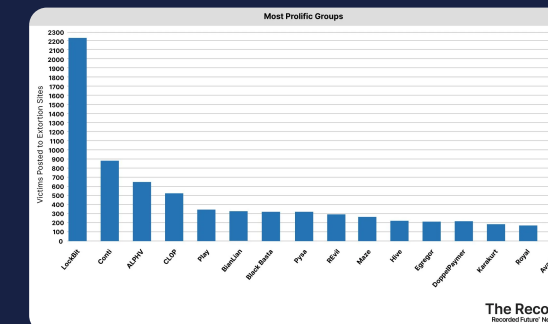
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In 2021 LockBit said jokingly they would give money to anyone who would get a tattoo.

And some were crazy enough to do it!

 **vx-underground** ✓
@vxunderground

Previously, Lockbit ransomware group stated online that they would pay anyone \$1,000 if they tattooed the Lockbit ransomware group logo on themselves.

People (more than 1) have done it.

[Post vertalen](#)



6:23 p.m. · 9 sep. 2022





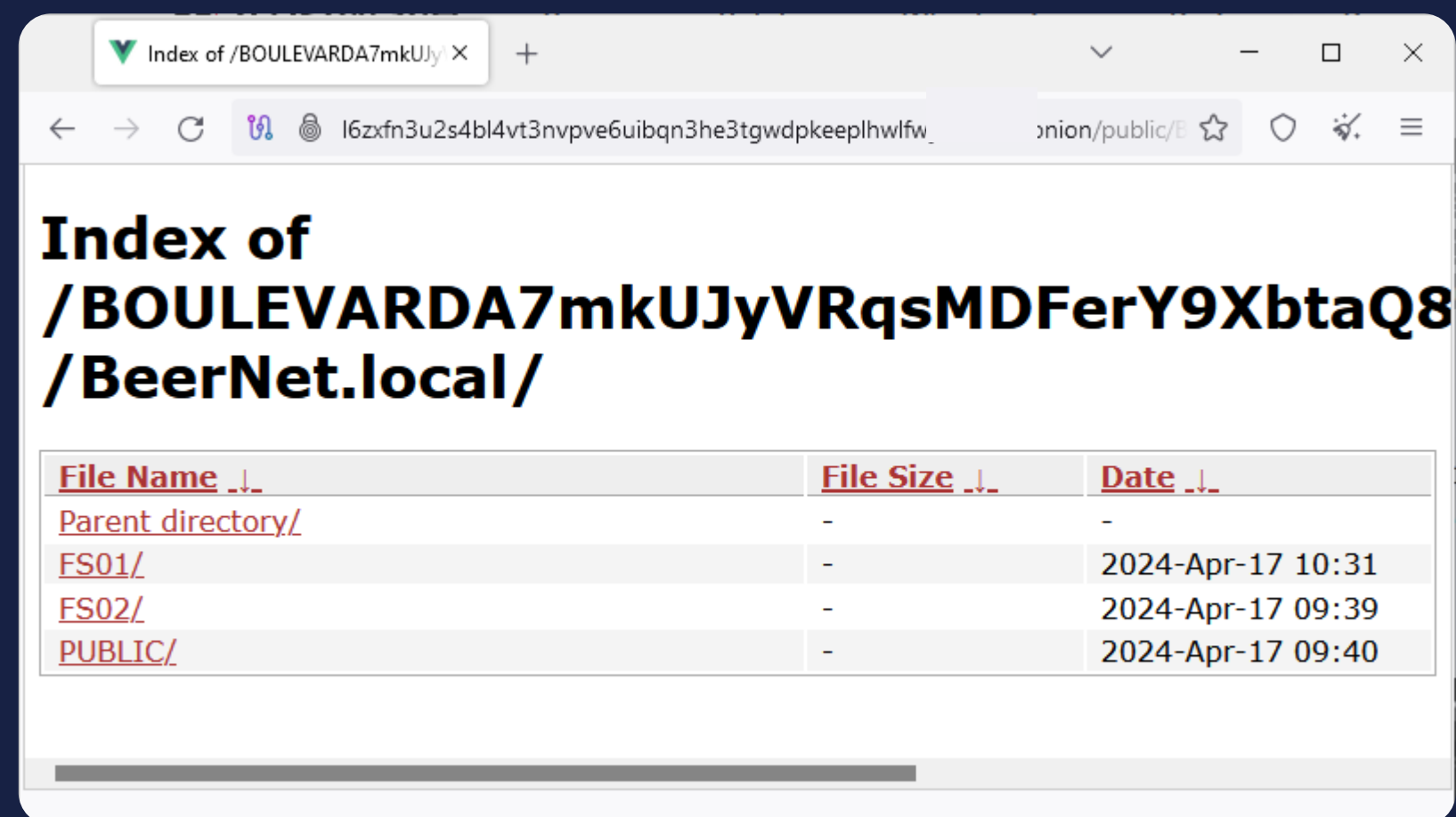
MAR
6

Ransomware attack Duvel Moortgat

Ransomware Gang Stormous...
or Black Basta? Conti?

2 file servers from American daughter

But also access to Belgian DC
e.g. domain admins with passwords
1 day later main brewery of Duvel was back in action



NETWORK INFORMATION

1: DUVEL duvel.intra BELGIUM

-----DOMAIN ADMINS-----

admuser a-anton angela a-aurelien manon

Re: [xz-devel] XZ for Java

Jigar Kumar | Tue, 07 Jun 2022 09:00:18 -0700

Progress will not happen until there is new maintainer. XZ for C has sparse commit log too. Dennis you are better off waiting until new maintainer happens or fork yourself. Submitting patches here has no purpose these days. The current maintainer lost interest or doesn't care to maintain anymore. It is sad to see for a repo like this.

MAR
29

XZ Utils backdoor

XZ = a compression tool e.g. used in sshd

Three years in the making

Found by Andres Freund from Berlin, Postgres developer working at Microsoft, who thought his CPU levels were suspicious



MAR
20

Microsoft hacked

Again.

• May and June, 2023

Chinese cyber-espionage group Storm-0558 compromised the Microsoft Exchange Online mailboxes of 22 organizations around the world.

From 10 State Department e-mail boxes alone, 60 000 emails were stolen.



• “Cascade of security failures at Microsoft” caused hack

- 1) Found a key from 2016. These ‘keys to their kingdom’ were still valid after 7 years.
- 2) In September: the hackers found the key in a crash dump.

In March: we have not found a crash dump containing the impacted key material. It was just a ‘theory’.

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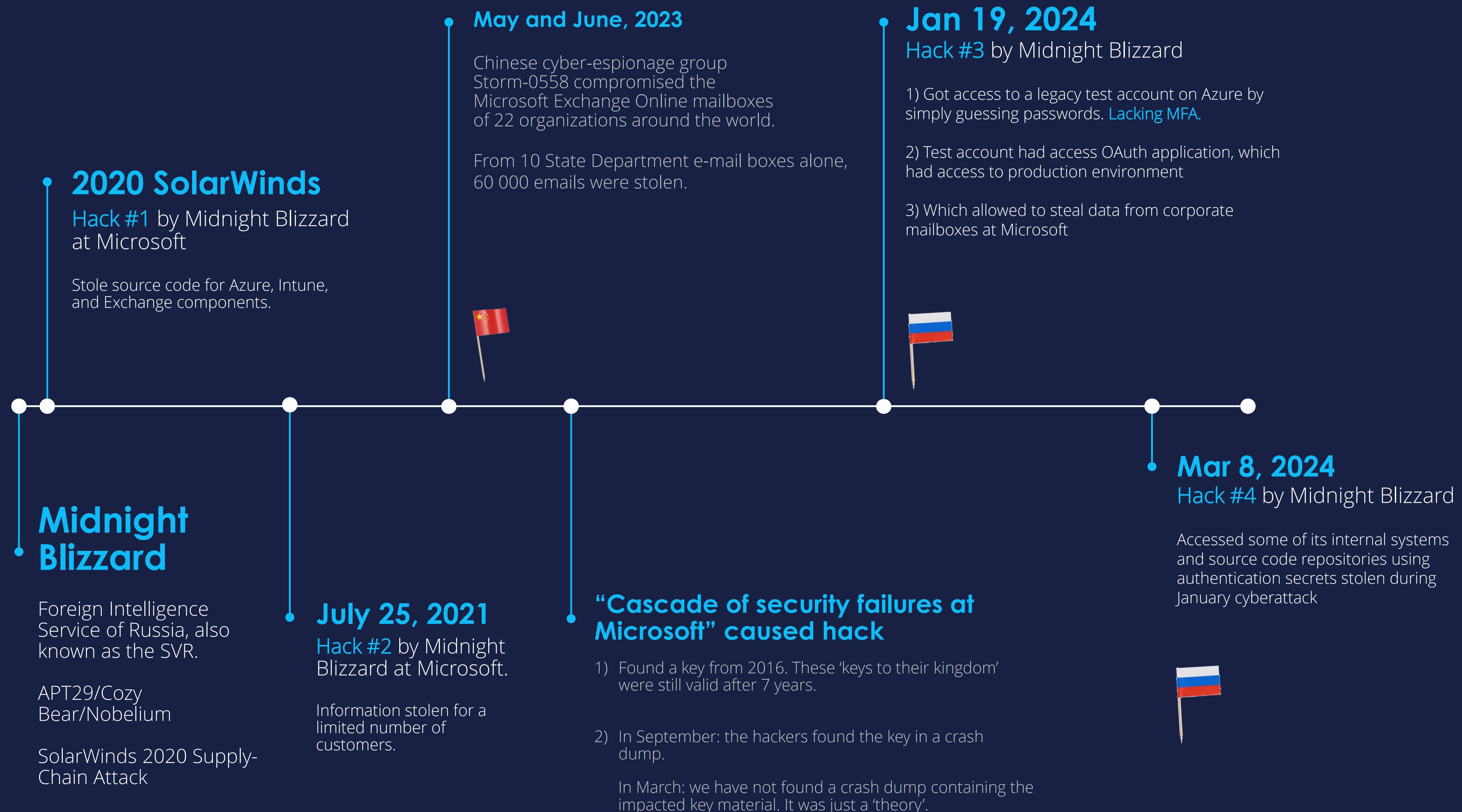
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2020 SolarWinds

Hack #1 by Midnight Blizzard at Microsoft

Stole source code for Azure, Intune, and Exchange components.

May and June, 2023

Chinese cyber-espionage group Storm-0558 compromised the Microsoft Exchange Online mailboxes of 22 organizations around the world.

From 10 State Department e-mail boxes alone, 60 000 emails were stolen.



Jan 19, 2024

Hack #3 by Midnight Blizzard

- 1) Got access to a legacy test account on Azure by simply guessing passwords. [Lacking MFA](#).
- 2) Test account had access OAuth application, which had access to production environment
- 3) Which allowed to steal data from corporate mailboxes at Microsoft



Midnight Blizzard

Foreign Intelligence Service of Russia, also known as the SVR.

APT29/Cozy Bear/Nobelium

SolarWinds 2020 Supply-Chain Attack

July 25, 2021

Hack #2 by Midnight Blizzard at Microsoft.

Information stolen for a limited number of customers.

“Cascade of security failures at Microsoft” caused hack

- 1) Found a key from 2016. These ‘keys to their kingdom’ were still valid after 7 years.
- 2) In September: the hackers found the key in a crash dump.

In March: we have not found a crash dump containing the impacted key material. It was just a ‘theory’.

Mar 8, 2024

Hack #4 by Midnight Blizzard

Accessed some of its internal systems and source code repositories using authentication secrets stolen during January cyberattack



“

We are making security our top
priority at Microsoft, above all else,
above all features

”

- Charlie Bell, Executive Vice President, Microsoft Security -

MAY
20

Microsoft announces Recall

~~Photographic memory of your PC life~~

Built-in information stealer/password grabber

~~Only admins can read the database~~ Nope!

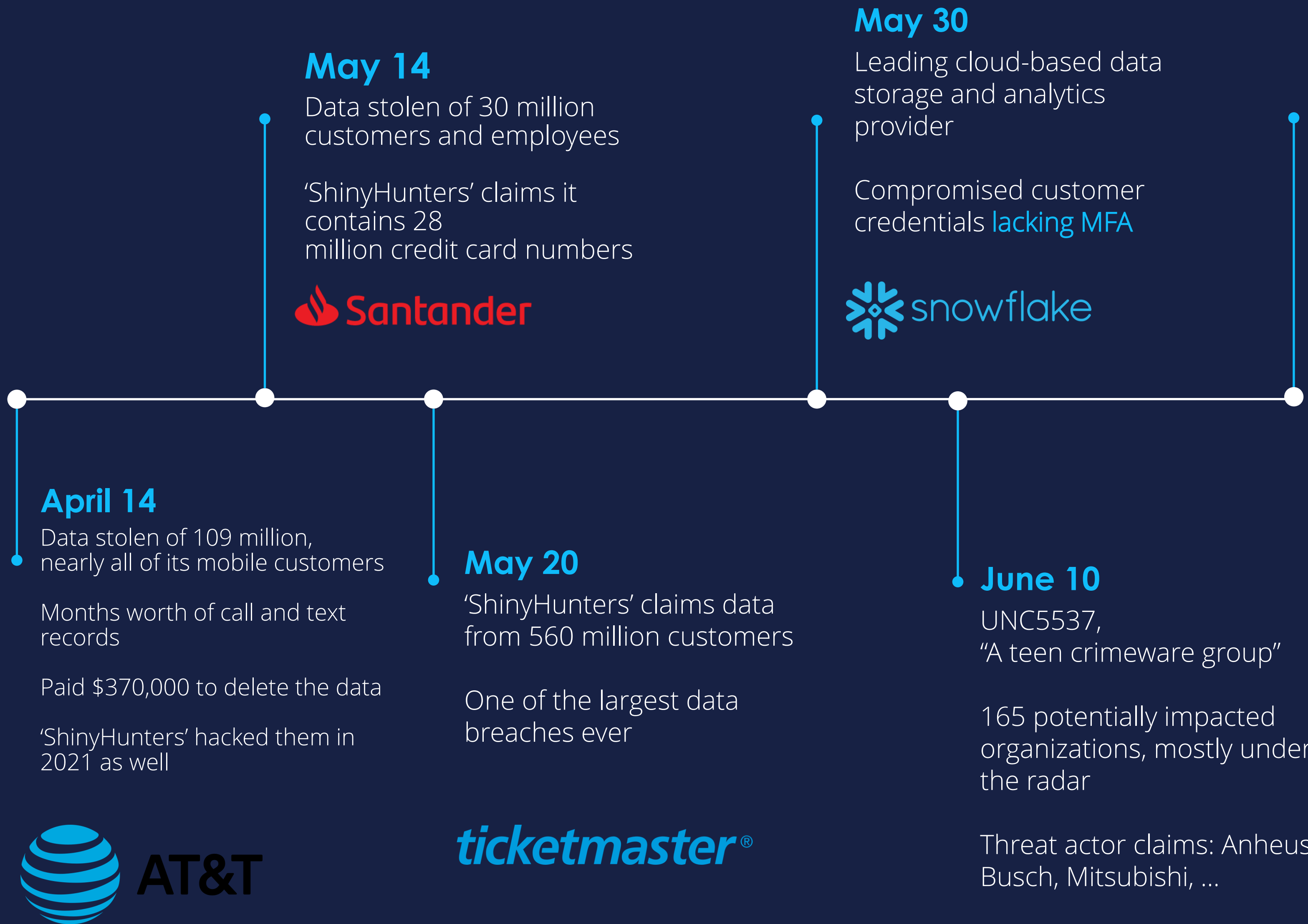
~~Users on the same device can not access the database~~ Nope!

June 14: Recall got... ~~recalled~~ delayed to October!

Windows Insiders with Copilot+ PCs

Snowflake

May
30



Future prediction

This kind of attack will continue, as long as there are sites relying on passwords only

Infostealer malware



July
19

Largest IT outage ever

Caused the exact thing that companies pay them to protect them from

8.5 million systems impacted with this CrowdStrike flu

Every single Windows machine that got the update got a blue screen of death. This means they didn't test it on a single Windows machine

So one lazy bastard??
They did test it on their own systems

To express their gratitude CrowdStrike gave a \$10 Uber Eats voucher. Not kidding.

McAfee also 'pulled a CrowdStrike' in 2010 with svchost.exe
Guess who was the CTO?

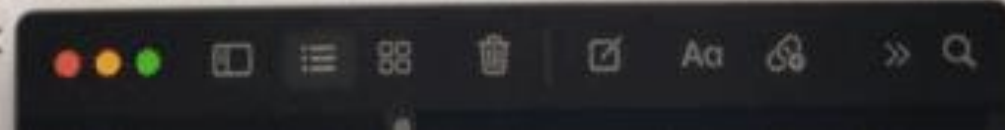
Not customers

CROWDSTRIKE

Dear CrowdStrike Partners,

We recognize the additional work that the July 19 incident has caused. And for that, we send our heartfelt thanks and apologies for the inconvenience.

To express our gratitude, your next cup of coffee or late night snack is on us! Access your UberEats credit by using code:



A large graphic consisting of many concentric, slightly irregular blue lines forming a circular shape, centered on the page. A thin vertical blue line extends from the top edge of the image down to the center of the circular graphic.

BruCON 2024

The End

Conclusion

1

Teenage hackers with new skills will keep popping up

2

Days are over to rely on passwords without MFA

3

This will not stop. Next year will not be boring...



THREAT EXPOSURE

We manage your attack surface

*← Presentation
of today*

 threatexposure.eu/brucon2024.pdf

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