

A person wearing a skull mask and glasses, with a dark background and a glowing blue light source. The person is wearing a black skull mask with white teeth and eye sockets. They are also wearing round glasses with a reflection of a computer screen showing code. The background is dark with a glowing blue light source and some faint, illegible text on the right side.

**Inyett**

**Cybercrime – What's the fuzz?**

Jan Olsson

# The Financial Cost of Fraud

**6.05%**

Global losses of fraud equate to **6.05%** of GDP.



**£3.89 trillion**

This equates to USD 5.127 trillion, or **£3.89 trillion**.



**80%**

Global fraud losses are **80%** larger than the UK's entire **GDP**.

**UK**

For the UK, fraud losses equate to **£130 billion\*** each year.



**-40%**

Reducing such losses by **40%** would free up more than **£76 billion** each year.

**€ 190 Billion  
Pund/Year**

\* Focused, sector by sector research makes this total even larger at nearer £190 billion.



## The Financial Cost of Fraud 2019

The latest data from around the world

Jim Gee and Professor Mark Button

The Swedish losses:

349.989.000.000 Sek !

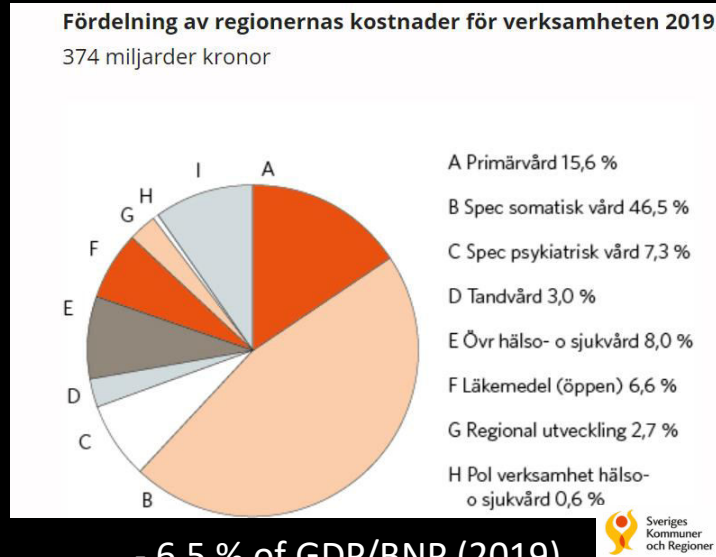
Aprox SEK 350 billion or € 36.31 billion

Norway € 18.66 billion

Denmark € 20.41 billion

Finland € 19.53 billion

# What does the amount represent?



- 6.5 % of GDP/BNP (2019)

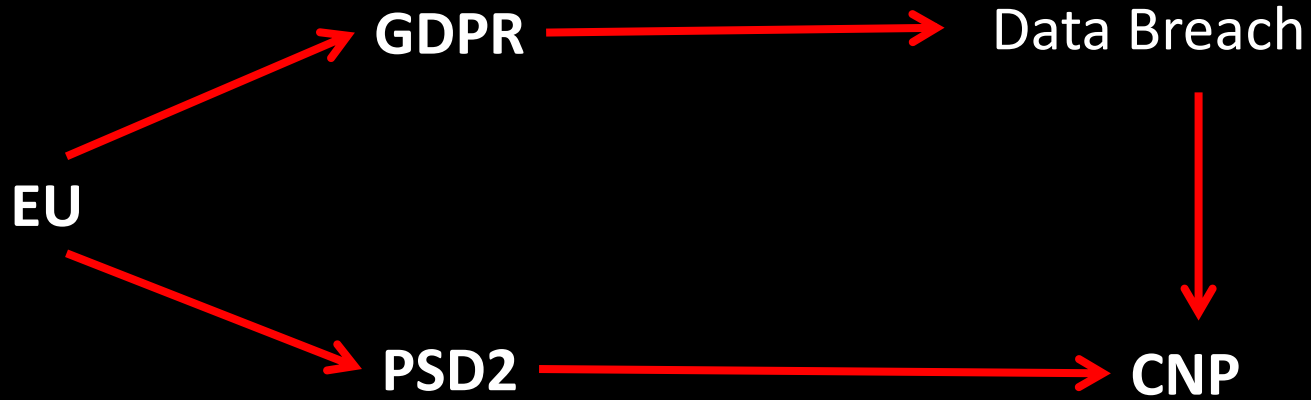
- 11.090 Skr/ sec.

## Global Remarks

**4.700.000.000.000 Euro = The global costs of Fraud (UKFCMC)**

**5.500.000.000.000 Euro = The global costs for companies due to**

# EU Responded



**GDPR** (General Data Protection Regulation)

**PSD2** (Payment Service Directiv 2)

**CNP** (Card-Not-Present )

# Data Breaches



Organized Crime Groups ->> State Attacks - Manipulate Campaigns – Terrorism - \$\$

Ransomware    BEC/CEO-fraud    (r)DDOS    DDOS    BankTrojans    Fraud    RAT

All evil after World War II

**"There are only two types of companies:**  
those that have been hacked,  
and those that will be."

Robert Mueller  
FBI Director, 2012





NEWS

# Phishing Attacks Spiked by 250%

**info** security  
STRATEGY | INSIGHT | TECHNOLOGY

# COMB: largest breach of all time leaked online with 3.2 billion records



contains more than 3.2 billion unique pairs of cleartext emails and passwords

# 2014, the whole of Europe was affected



**POLISEN ENHETEN FÖR DATABROTT**

## OBS!

### Datorn är blockerad!

Din IP-adress: [REDACTED]  
Din värd Namn: [REDACTED]  
Din plats är fast

Detta operativsystem är blockerad på grund av brott mot svensk lag. Fastställt följande brott:

Med denna IP-adress var besökta webbplatser som innehåller pornografi, barnpornografi, tidelag, och våld mot barn. Videofiler som innehåller pornografi, våld inslag av barnpornografi har installerats på dator! Dessutom skickades e-postmeddelanden i form av spam, som innehåller terrorist motiv från din epost adress.

Datorn har blockerats för att stoppa din olaglig verksamhet.

För att låsa upp datorn, du måste betala böter på 100 euro. Du kan betala en straffavgift på två sätt:

- 1) Betalning via ett system Ukash:

För att göra detta måste du ange i betalningsform 19-siffrig kod och trycka OK (Om du har flera koder, bör de införas en efter en, och klicka sedan på OK).

- 2) Betalning via ett system Paysafecard:

För att göra detta måste du ange i betalningsform 16-siffrig kod (Om nödvändigt, skriv in ett lösenord) och tryck OK (Om du har flera koder, bör de införas en efter en, och klicka sedan på OK).

**Ukash Var kan jag köpa Ukash?**  
Du kan få Ukash från hundratentals globala platser, på nätet, från pånböcker, från kiosker och uttagsautomater.

- Pressbyrån - Ukash finns nu från över 300 Pressbyrån kiosker över hela Sverige.
- 7Eleven - Få Ukash från över 200 grenar av 7Eleven finns i Shell bensinstationer.
- Payzone - Ukash tillgängliga Payzone terminaler runt om i Sverige.

**paysafecard Var kan jag köpa Paysafecard?**  
I Sverige kan du köpa dina paysafecard vid 7-Eleven, Shell 7-Eleven, Direkten, Timebutliker, Pressbyrån, bensinstationer och tobaksaffärer.

Pressbyrån   

Ange 100 EURO Paysafecard och Ukash kod:

Ange koden eller Ukash Paysafecard

**SKICKA** 

# To Day

Ransomware is now your biggest online security nightmare. And it's about to get worse

**GARMIN.**

We're sorry.

We are currently experiencing an outage that affects [Garmin.com](https://www.garmin.com) and Garmin Connect. This outage also affects our call centers, and we are currently unable to receive any calls, emails or online chats. We are working to resolve this issue as quickly as possible and apologize for this inconvenience.

Ransom € 10.000.000

**31%** ↑

Average increase  
of ransom amount

**93%** ↑

Highest  
ransom amount

Highest Ransom sum: **35 million USD**

The ransom demands are calculated to be the highest value that is still affordable by the victim and are typically based on the turnover of the victim organization. The highest amount demanded has increased dramatically to over 290 million SEK in some cases, which is up 93% compared to 2019.

An important driver in the increase in the rise of ransom attacks is unregulated cryptocurrencies, like Bitcoin. The lack of regulation of Bitcoin

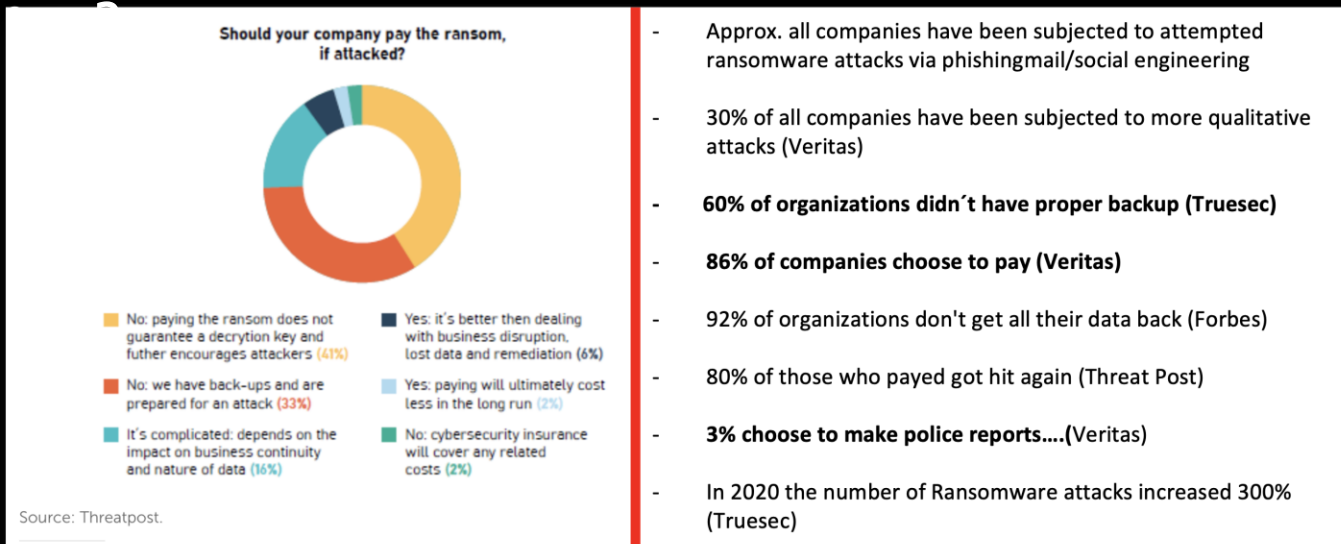
allows cybercriminals to acquire extortion money without trace.

The success of ransomware attacks has also led to an increase in the number of smaller groups involved in various forms of Ransomware-as-a-Service schemes, as well as other ransom attacks. This means that the increase in average ransom demand has not risen much, as the less sophisticated attacks typically involve much lower ransom sums. Together these trends mean that the total number of ransom attacks has skyrocketed and is estimated to have increased in 2020 to around 300%, compared to 2019.

# In what reality do we live in?

74% will definitely not

But reality kicks back...



# Easy peasy - just identify and captivate...or?

- State-prohibited
- State-prohibit-but-inadequate
- State-ignored
- State-encouraged
- State-shaped
- State-coordinated
- State-ordered
- State-rogue-conducted
- State-executed
- State-integrated



# Banktrojan Retefe (Rovnix)

## The Phishingmail

### Siv

---

**Från:** CDON.COM" <order@cdon-faktura.org>  
**Till:** <sivan@cdon.com>  
**Skickat:** den 18.05.2015 18:05  
**Bifoga:** Faktura\_18.05.2015.zip  
**Ämne:** Din order från CDON 149886534

Hej!

Här kommer din beställning.

Orderspec.:  
Betaling: Visa  
Leveranssätt: UPS  
Totalt inklusive moms: 12.441,14 sek

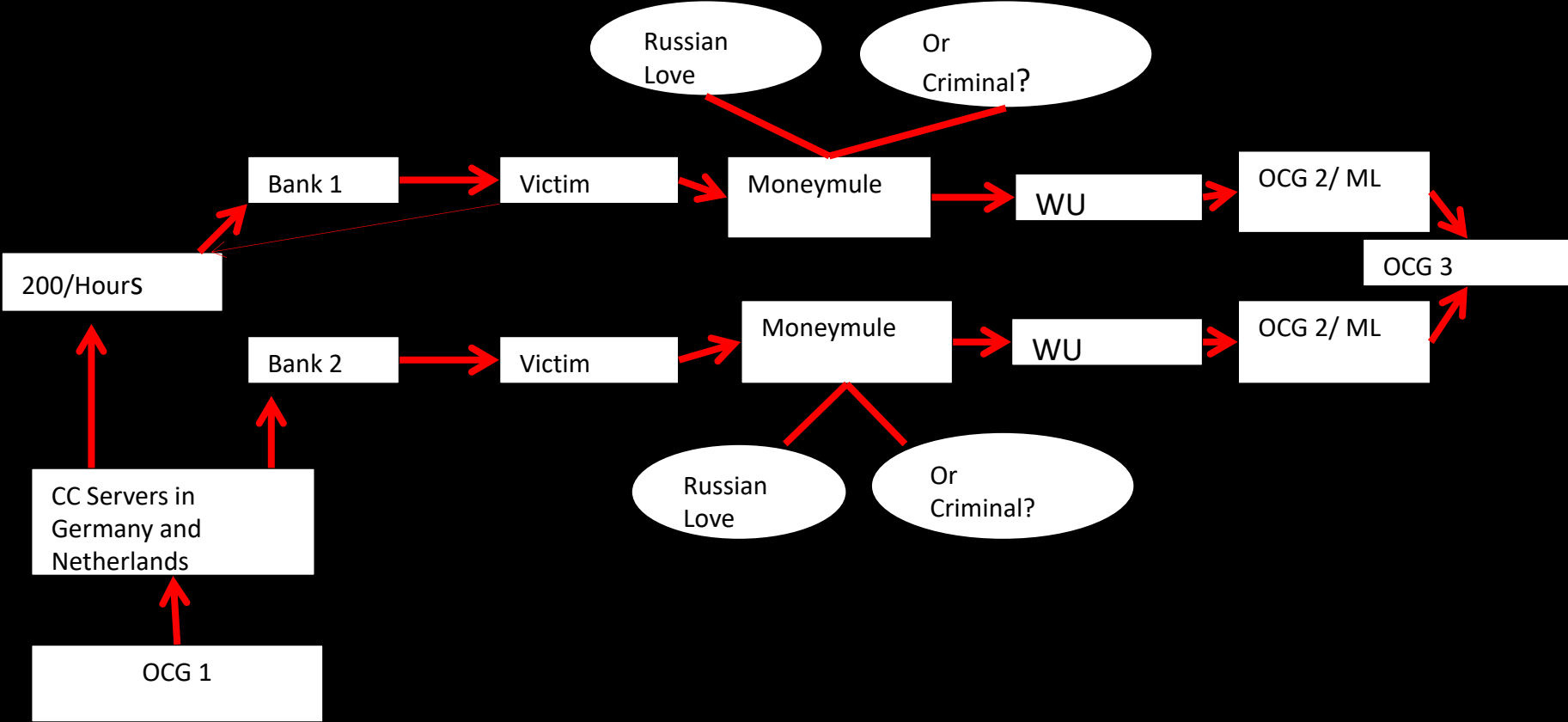
Du får ett e-postmeddelande när ordern skickas från vårt lager. Din beställning kommer at levereras till den adress som du angett/anger till oss.

Vi välkomnar dig som en kund!

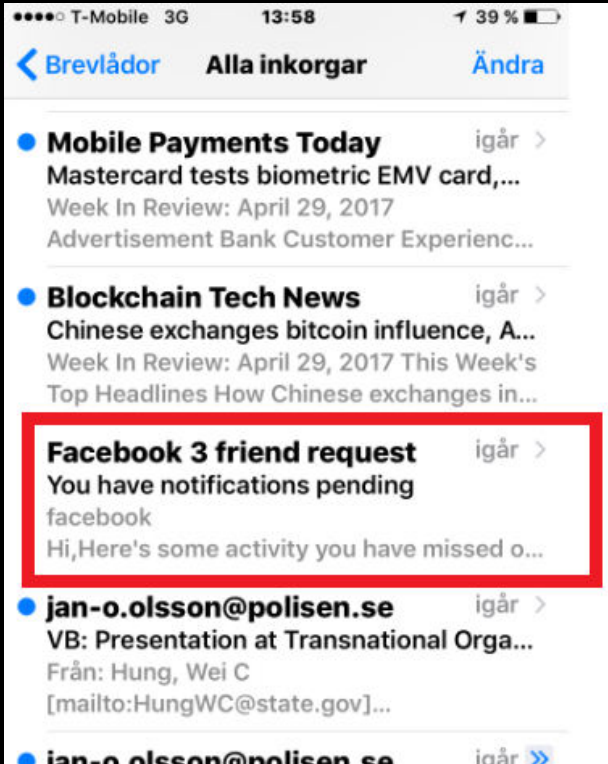
Med vänliga hälsningar,  
CDON.COM.



# Flow chart



Phishing, who is stupid enough....?



# What the .....

The screenshot shows a mobile browser view of the CanadianPharmacy website. The address bar displays 'octanegolf.com.sg'. The page features a navigation bar with 'EN' and 'USD' options, a search bar, and a shopping cart icon. A prominent banner advertises an 'Erection Powerpack' for \$74.95, including 10 pills of Viagra and 10 pills of Cialis. Below this, a 'Special Deals' section offers limited-time discounts on several products:

Product	Original Price	Discount	Current Price
Viagra	\$1.18	25% OFF	\$0.86
Cialis	\$1.99	20% OFF	\$1.59
Viagra Super Active+	\$3.00	15% OFF	\$2.55
Levitra	\$2.24	10% OFF	\$2.02

Further down, a 'Categories' section is visible, followed by a 'Most Popular Products' section. This section lists four products with their respective prices and categories:

Product	Price	Category
Viagra Super Force	\$4.25	Erectile
Pink Female Viagra	\$0.72	Female
Viagra Professional	\$0.72	Erectile
Cialis Super Active+	\$2.99	ED, Erectile

Password, the ultimate protection..



# Do we use strong passwords ?

Industry	Total Exposed Credentials
Technology	5,071,144
Financials	4,915,553
Health Care	1,923,340
Industrials	1,898,434
Energy	1,745,283
Telecommunications	1,329,882
Retail	682,408
Transportation	602,003
Motor Vehicles & Parts	575,046
Aerospace & Defense	549,073

Industry	Top 5 Passwords	Industry	Top 5 Passwords
Technology	password lqaz!w@x career121 abc123 password1	Telecommunications	cheer1 welcome password 66936455 password1
Financials	456a33 student old123ma welcome 123456	Retail	11111 soccer1 123456789 abc123 password
Health Care	Exigent password pass1 00000 123456	Transportation	pass1 123456789 cheezy aaaaa 112233
Industrials	12345678 lqaz!qaz passer comdy password	Motor Vehicles & Parts	password 11111 penispenis 123456 3154061
Energy	password 123456 soccerman old123ma 789_234	Aerospace & Defense	password1 opensesame career password 123456

# So, are we secured ?

Dark web researchers discovered 15 billion passwords and usernames circulating on criminal forums (Getty Images/Stockphoto)

**15 BILLION STOLEN PASSWORDS ON SALE ON THE DARK WEB, RESEARCH REVEALS**

INDEPENDENT

## BREAKDOWN OF FREQUENCY OF DIFFERENT ACCOUNT LISTINGS

### PERCENTAGE OF LISTINGS

- 25% BANK/FINANCIAL
- 13% STREAMING
- 12% PROXY/VPN
- 9% CABLE
- 8% EDUCATION
- 7% ADULT
- 7% MUSIC
- 7% FILE SHARING
- 5% SOCIAL MEDIA
- 5% ANTIVIRUS
- 2% VIDEO GAMES



FIGURE 4

Ok, let's go biotechnical..





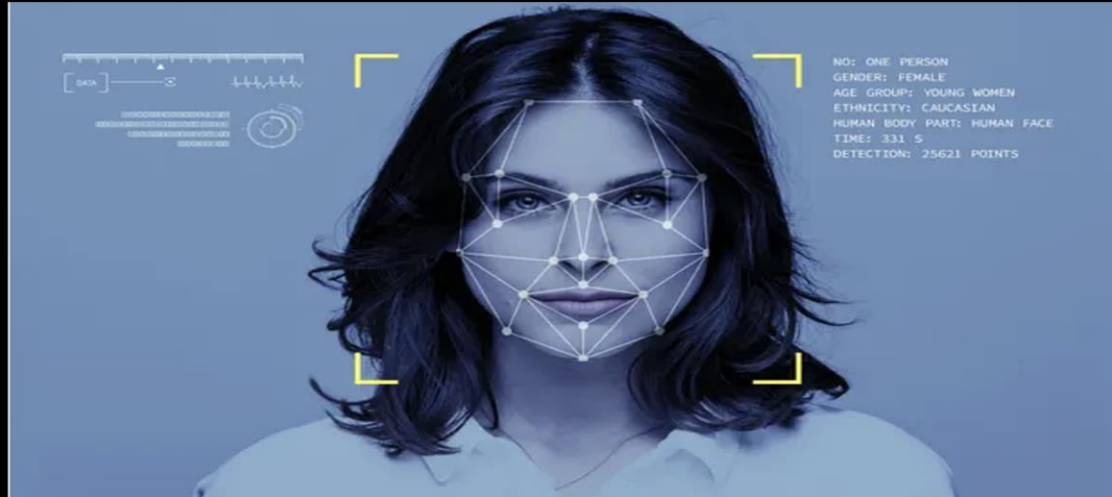


Omfattningen av intrånget hos den amerikanska personalmyndigheten OPM fortsätter att växa. Nu meddelar myndigheten att 5,6 miljoner fingeravtryck stals i hackerattacken i våras, skriver IDG News.



A database containing the fingerprints of 1 million people, along with facial recognition and login data, was publicly available, researchers from the Israeli cybersecurity firm vpnmentor discovered last week

# Major breach found in biometrics system used by banks, UK police and defence firms (28 million records)



**Fingerprints, facial recognition and other personal information from Biostar 2 discovered on publicly accessible database**

# Genesis marketplace

Specialized in selling digital fingerprints (bots)



- Genesis store an online cybercriminal marketplace for **stolen digital fingerprints**
- Bots from 5 to 200 USD searchable via panel

**Bots** 113377

BOT NAME / ID	RESOURCES KNOWN / OTHER	COUNTRY / HOST	PRICE
46D08C2-79849AD-31887684-2A5C7268-61C8E927 2019-07-15 21:48:43 2019-07-15 21:04:15	NO INFO Amazon Ebay Live login.verizonwireless.com login.xfinity.com ...other 10	US 76.117 Windows 10 Enterprise 2016 LT5B	8.00
1A92CD42-E548B574-CSM20516-C232B700-40F4D8E0 2019-07-15 21:48:37 2019-07-15 21:04:15	NO INFO Ebay ticketmaster Tehzra CostcoStore FirefoxAaccounts accounts.firefox.com skuhnasjerky.com.au ...other 32	AU 11.52 Windows 10 Home	10.00
10349728-343A2EC6-66FC7852-5668D28F-C4349C00 2019-07-15 21:46:34 2019-07-15 21:04:15	NO INFO Facebook Wellsfargo Google Live Careerbuilder GoDaddy Chase SonyEntertainm... WordPress Seniorpeoplemeet PayPal Ebay X-koorn Walmart Uber ...other 45	US 76.254 Windows 7 Professional	21.00

# IoT

The first digital murder?

DHS says it remotely hacked a Boeing 757 sitting on a runway



# The future is already here!



## Private Industry Notification

FEDERAL BUREAU OF INVESTIGATION, CYBER DIVISION

9 February 2021

PIN Number  
20210209-001

## Cyber Actors Compromise US Water Treatment Facility



### Confirmed: North Korean malware found on Indian nuclear plant's network

Two days after rumors of a malware infection at the Kudankulam Nuclear Power Plant surfaced on Twitter, the plant's parent company confirms the security breach.

By Catalin Cimpanu for Zero Day | October 30, 2020 | 12:05 GMT-05:00 EDT | Topic: Security

# The way forward - and it has started...

- The most important thing: prevention and then prevention...
- Incident planning

But except from that:

- Report to the Police
- Increase and accelerate national and global cooperations between authorities
- Build Private-Public-Partnership (P3) organisations
  - **Ransomware Task Force (US)**
  - **NoMoreRansom.org**
  - **ECCFI**
  - **NCFTA**
  - **NN-organizations**

# JIT – Joint Investigation Teams

## How did Emotet work?

### Luring the victims



Emotet was delivered to the victims' computers via emails that contained a malicious link or an infected document.

### Installation



If victims opened the attachment or the link, the malware got installed.

### Infection



The computer became vulnerable and was offered for hire to other criminals to install other types of malware.

## Emotet opened doors for:



**Information stealers**



**Trojans**



**Ransomware**

Trickbot, QakBot and Ryuk were among the malware families to use Emotet to enter a machine.





# 422 ARRESTED AND 4 031 MONEY MULES IDENTIFIED IN GLOBAL CRACKDOWN ON MONEY LAUNDERING

## EMMA 6

European Money  
Mule Action 2020

#dontbeaMule



1529  
Investigations



4942  
Fraudulent  
transactions

### Cooperation among



26 countries



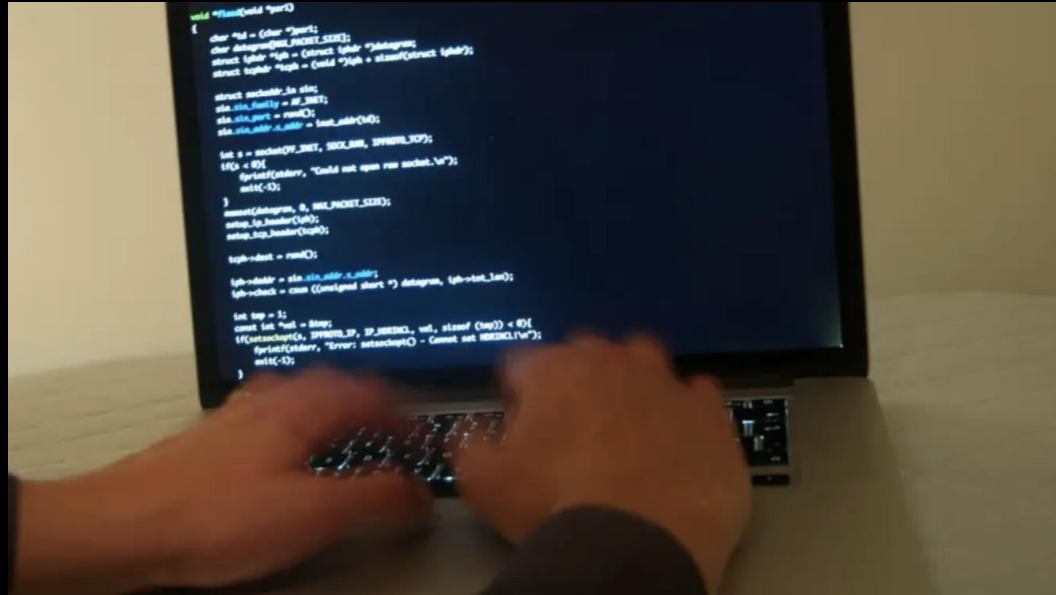
500+ financial entities

# NoMoreRansom.org



- A non profit organization, get help for free !
- 170 partners behind it: Europol, Law Enforcement organizations, IT/Cybersecurity companies
- 151 Ransomware families can be decrypted
- 121 tools, free to use
- Have saved more then € 800.000.000

## NN – When LEA gets the information..



Genrebild. Foto: Gustav Sjöholm/TT

## Omfattande it-attack mot flera svenska storföretag

**More ?**

**Jan Olsson**

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