

PRESENTER DETAILS



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RECENT PASSWORD BREACHES

CYPRUS UNDER THE MICROSCOPE

**BOS**  **CYPRUS**  
**SIDES**

# RECENT PASSWORD BREACHES

## THE TOPICS WE WILL DISCUSS TODAY



WHY YOU SHALL NOT PASS



HOW CAN SOMEONE OBTAIN ACCESS TO THESE LEAKS



SHOULDER SURFING - REENGINEERED



DARK INTERNET JOURNEY



DATA AND PASSWORD LEAKAGES



ANALYSIS OF COLLECTION #1

# WHY... “YOU SHALL NOT PASS”

## SOME OF THE REASONS WHY YOU SHALL NOT PASS

### PASSWORD

“A secret word or phrase that must be used to gain admission to a place.”

Password reuse phenomenon

Shared passwords amongst users

Same password for a long time

Passwords written in sticky notes

Use of too weak passwords.

Stolen passwords via malware

Stolen through social engineering

No proper management of accounts

Password-cracking tools

Many users have default password.

Password leaks

Sent over unsecure networks

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ANALYSIS OF COLLECTION #1



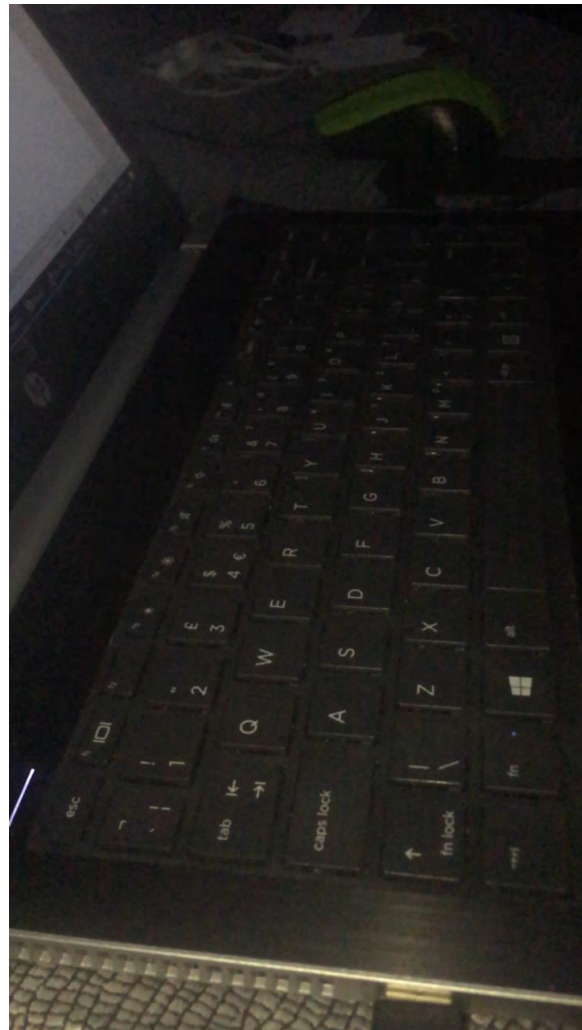
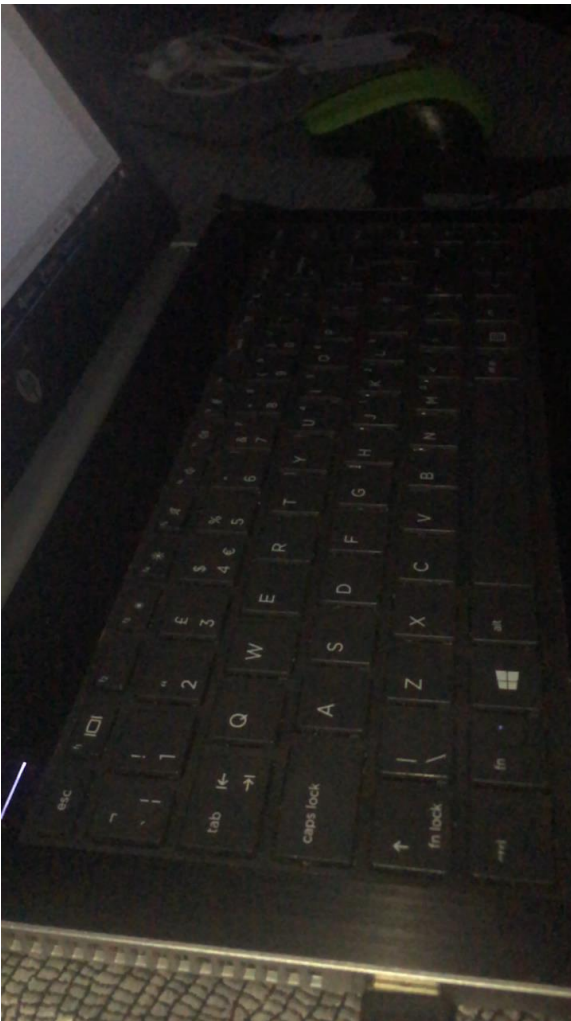
# SHOULDER SNIFFING - REENGINEERED

NOT ONLY HACKING TOOLS ARE EVOLVING



# SHOULDER SNIFFING - REENGINEERED

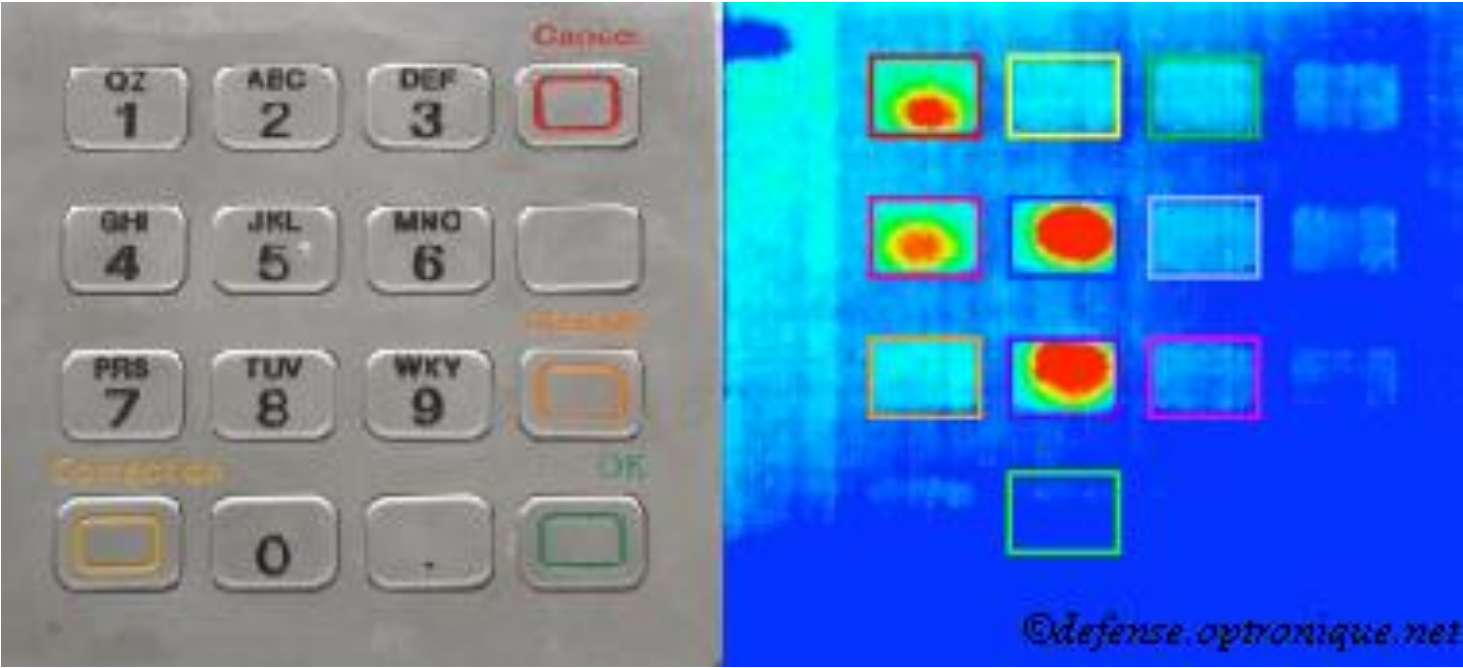
USE OF MOBILE PHONE –SLOW MOTION FEATURE



b s i d e s 2 0 1 9 !

# SHOULDER SNIFFING - REENGINEERED

THERMAL CAMERAS AS A KEY LOGGER



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DARK INTERNET JOURNEY



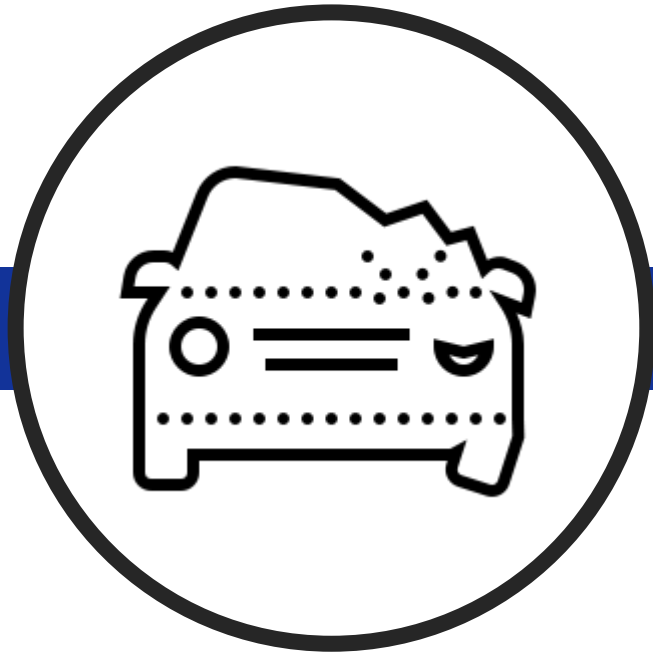
DATA AND PASSWORD LEAKAGES



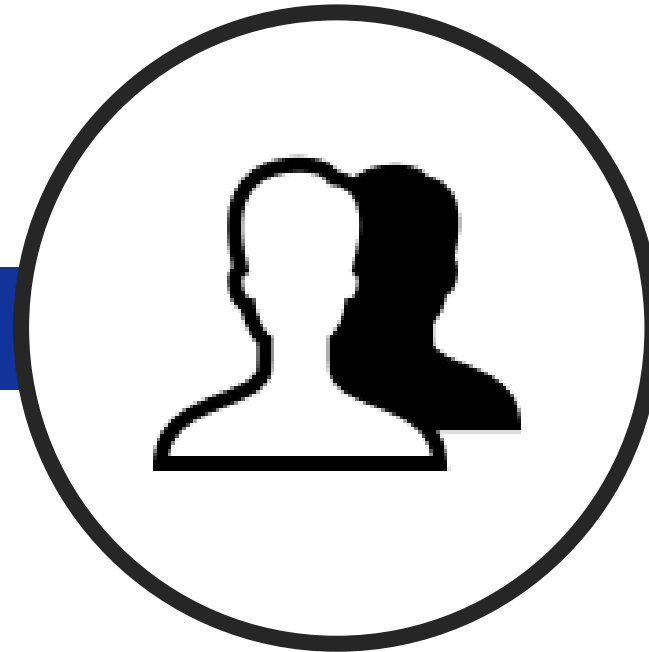
ANALYSIS OF COLLECTION #1

# WHAT IS A DATA LEAKAGE?

## HOW THIS CAN HAPPEN?



**ACCIDENTAL BREACH**



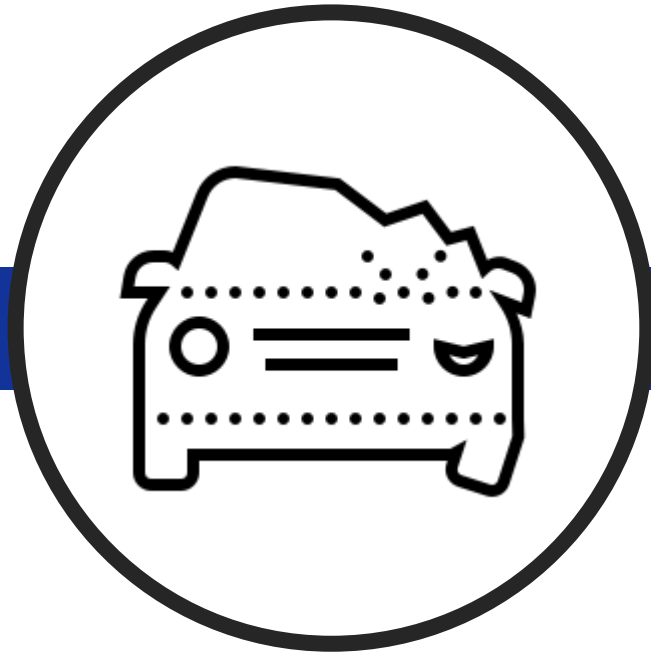
**ILL-INTENTIONED  
EMPLOYEES, PARTNERS**



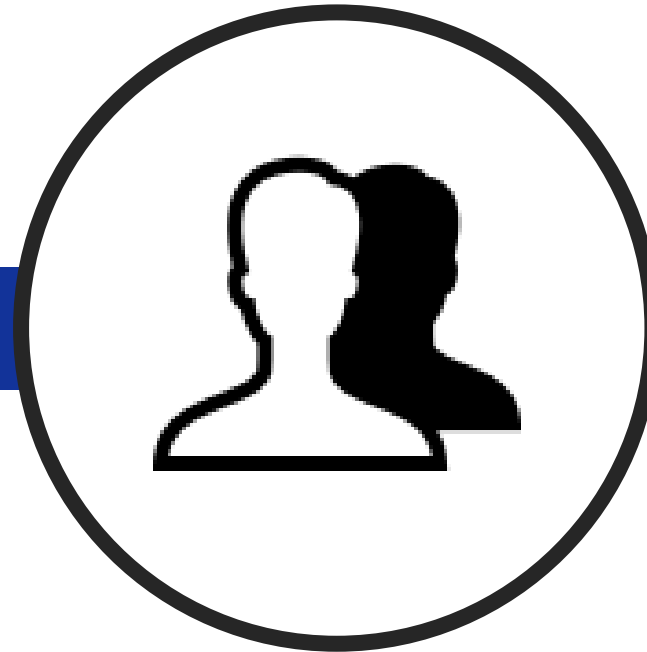
**CYBER ATTACKS**

# WHAT IS A DATA LEAKAGE?

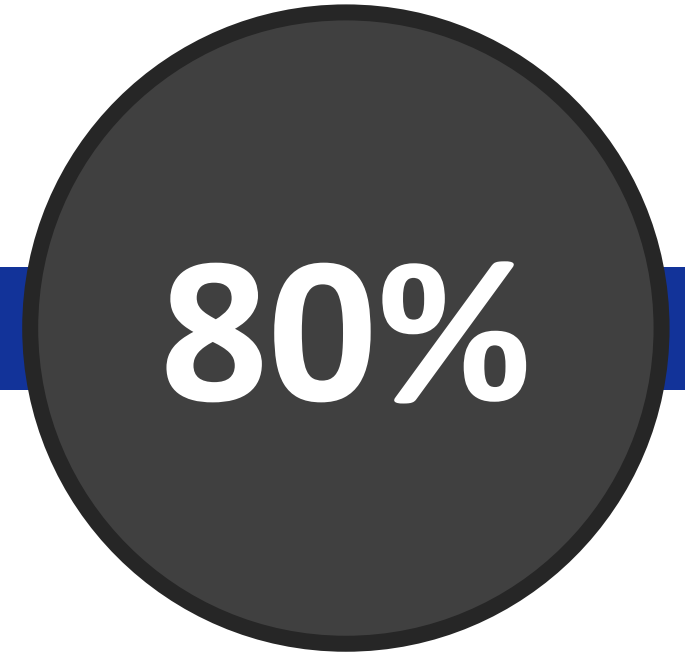
## HOW THIS CAN HAPPEN?



**ACCIDENTAL BREACH**



**ILL-INTENTIONED  
EMPLOYEES, PARTNERS**



**CYBER ATTACKS**

# RECENT PASSWORD BREACHES



The next slides list **some** of the incidents that have been **discovered** and **reported** during **the last month**.

# IS NOT A LIST OF INCIDENTS OF ONE MONTH

ARE SOME OF THE INCIDENTS DISCOVERED LAST MONTH...



SEP 2019

A Dutch hospital has been fined €460,000 after staff used sheets of paper containing medical information as a shopping list – and then left them in a shopping trolley. **The breached information includes patients' names, treating physician, reason for admission, medication was provided, etc.**

Health records are highly valued in the cyber crime industry, because they contain detailed information that can be used for identity theft, fraud, or spear phishing.



SEP 2019

Details of around **30 million passengers** of Malindo Air (a Malaysia airline company) were posted in online forums. The leaked information included passengers' passport details, addresses and phone numbers.

**The files were uploaded and stored in an open Amazon Web Services (AWS) bucket, a public cloud storage resource.**



# IS NOT A LIST OF INCIDENTS OF ONE MONTH

ARE SOME OF THE INCIDENTS DISCOVERED LAST MONTH...

SEP 2019



More than **419 million records** of phone numbers linked to Facebook accounts have been found online. Some of the records also had the user's name, gender and location by country.

**The exposed server wasn't protected with a password, thus anyone could find and access the database.**

SEP 2019



The personal records of most of Ecuador's population, including children, has been left exposed online due to a misconfigured database. The Elasticsearch server contained a total of approximately 20.8 million user records, a number larger than the country's total population count (16.6 million citizens).

The leak was including details such as names, family trees, civil registration data, financial and work information, car ownership.

# IS NOT A LIST OF INCIDENTS OF ONE MONTH

ARE SOME OF THE INCIDENTS DISCOVERED LAST MONTH...

SEP 2019



Tens of millions of images of cars entering or exiting Tesco Car Parks, were freely available to anyone who could correctly deduce the format of the required HTTP POST request.

It was said that during a planned data migration exercise to an AWS data lake, access to the Azure blob was opened to aid with the process.

SEP 2019

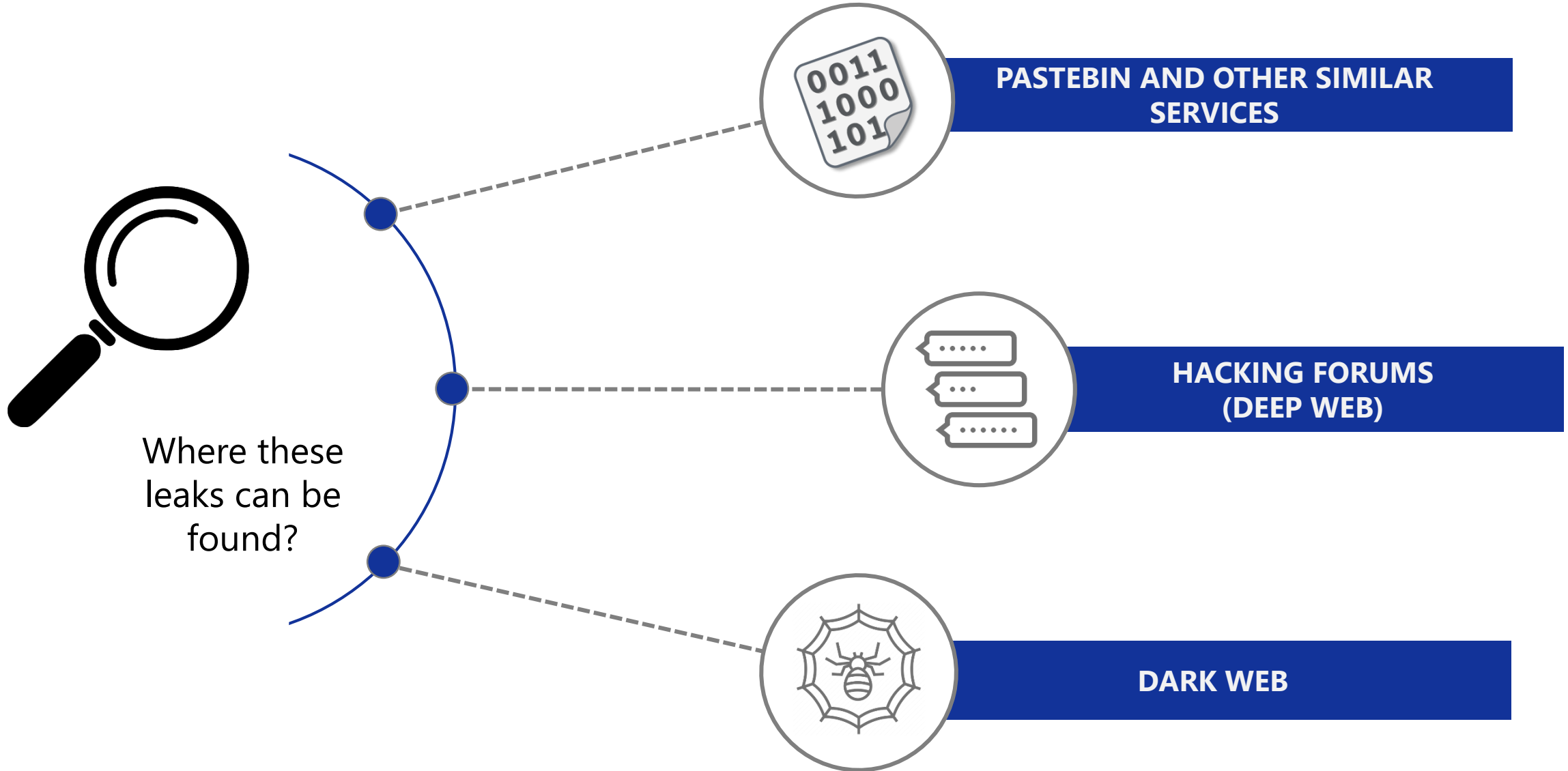


An insecure webserver allowed completely unsecured access to private info of **four million Israelis (Israel population aprox. 9m)**. The list was including personal information, such as phone and ID numbers and the individual's stance vis-à-vis Likud: for, against or undecided...

The instructions included a video explaining how to utilize an online application that Likud developed, through which its representatives could update the details of every voter who arrived to cast a ballot.

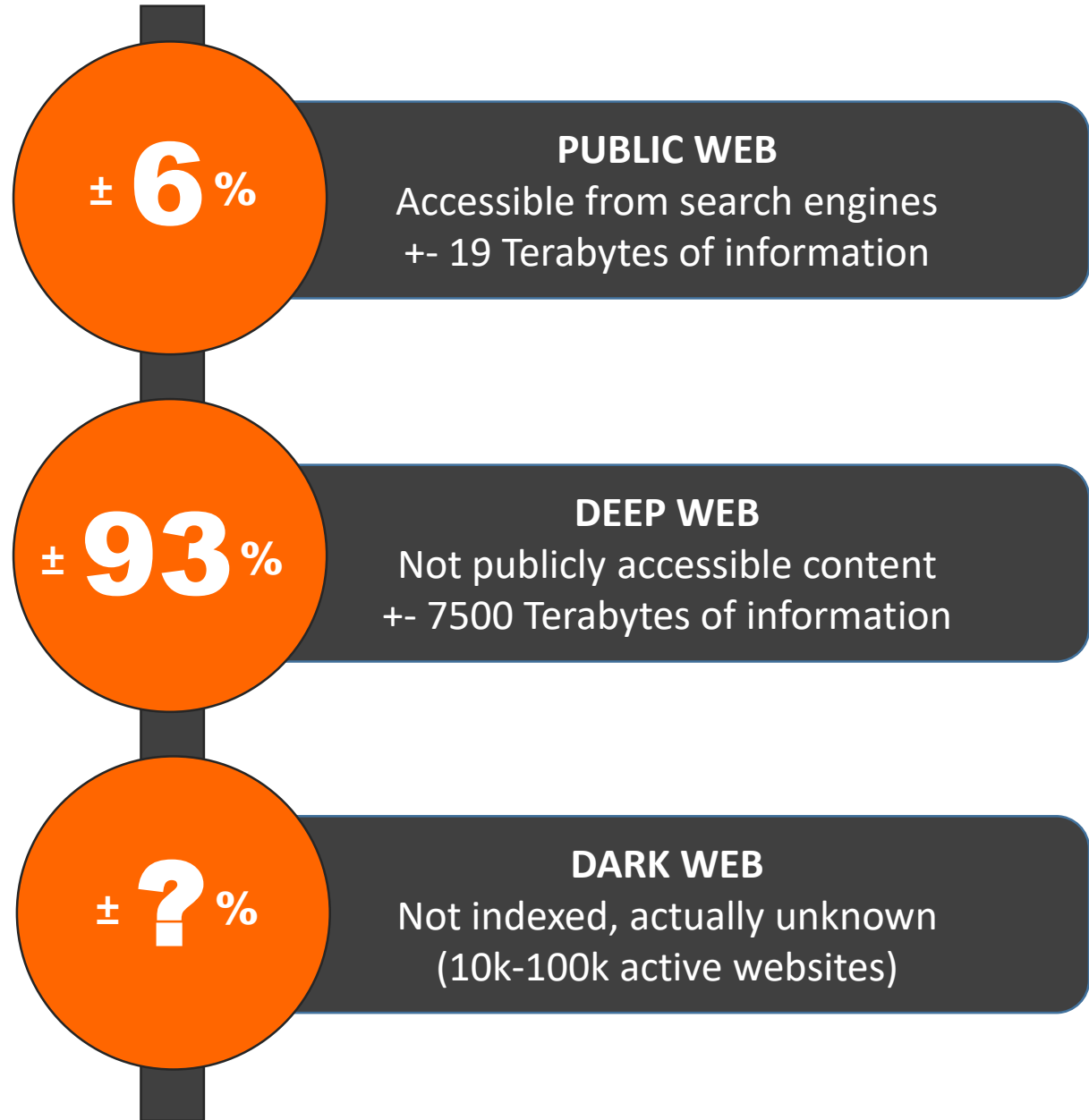
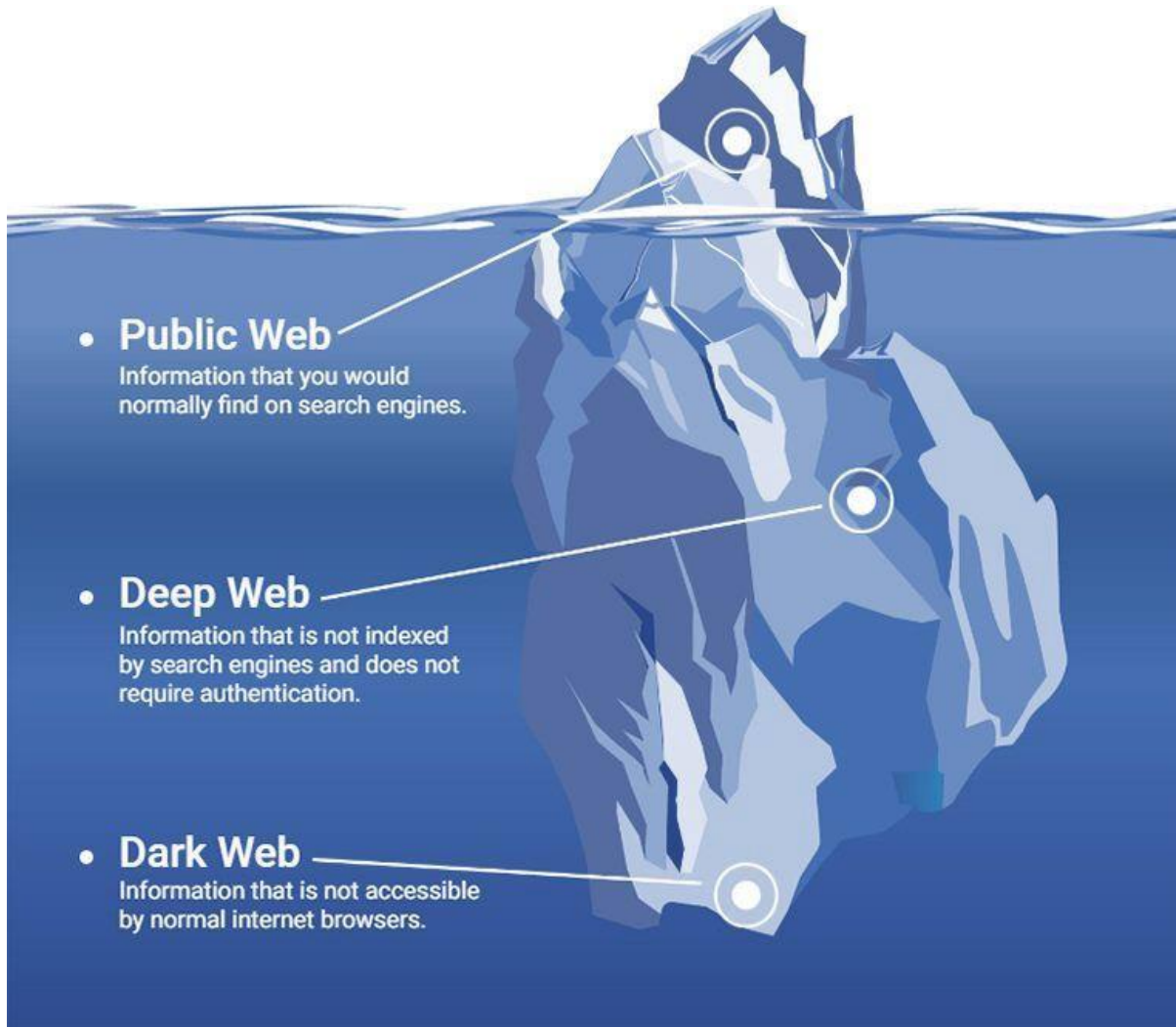
# HOW CAN SOMEONE OBTAIN ACCESS TO THESE LEAKS

## WHERE CAN SOMEONE ACCESS THESE LEAKS?



# HOW CAN SOMEONE OBTAIN ACCESS TO THESE LEAKS

## PUBLIC, DEEP AND DARK? SIZE PLEASE?



# RECENT PASSWORD BREACHES

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WHY YOU SHALL NOT PASS



HOW CAN SOMEONE OBTAIN ACCESS TO THESE LEAKS



SHOULDER SURFING - REENGINEERED



DARK INTERNET JOURNEY



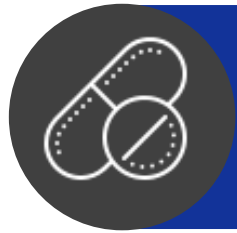
DATA AND PASSWORD LEAKAGES



ANALYSIS OF COLLECTION #1

# DARK INTERNET JOURNEY

## WHAT IS INCLUDED AND WHO IS USING IT?



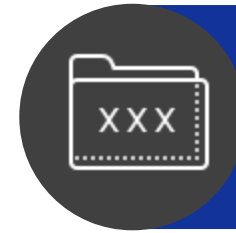
### BLACK MARKETS

Drugs, Weapons, Data Leaks, stolen goods



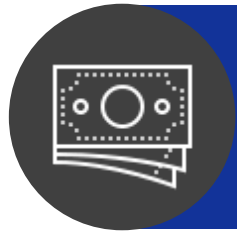
### TERRORISM

Used for organizing terrorism activities



### PORNOGRAPHY

Distribution of illegal pornographic content



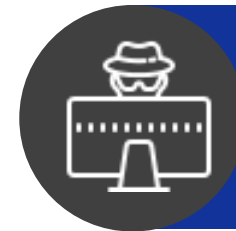
### MONEY & CARDS

Counterfeit, card scamming and laundering services



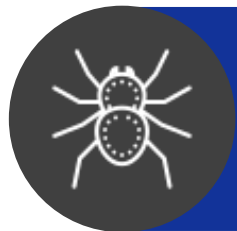
### HOAXERS

Many hoax sites looking for victims



### HACKERS

Hacking Services can be purchased



### BOTNETS

Hiring Bots and DDoS services



### HITMEN

Hitmen for hire, arms dealers, etc



### ACTIVISTS

Journalists, activists, whistle-blowers

# DARK INTERNET JOURNEY

## SCREENSHOT 1/4

Login Register

### Hidden Answers

Welcome to Hidden Answers, also at [hiddenanswers.i2p](#)  
Español - Português - Русский


Questions Unanswered Tags Users Ask a Question Rules Contact

#### How to open up a bank account online with low id check?

soon™  
[Contact us with site questions](#)  
XMPP chat:

0 I would like to have a bank account for illegal business.  
0 What is the best way to get one?


bank account

 asked Jun 1, 2017 in [IDs, passports, & demonopoli](#) **Novice** (1,740 points)

[comment](#)

3 Answers

2  
0

 Best answer

Plenty of experience in Germany. Not a bad place to open a bank account with no trace. I did it many times, (ich bin Deutscher -- oder besser war einmal Deutscher).

Mate, all you need is a faked ID, that you can easily get on

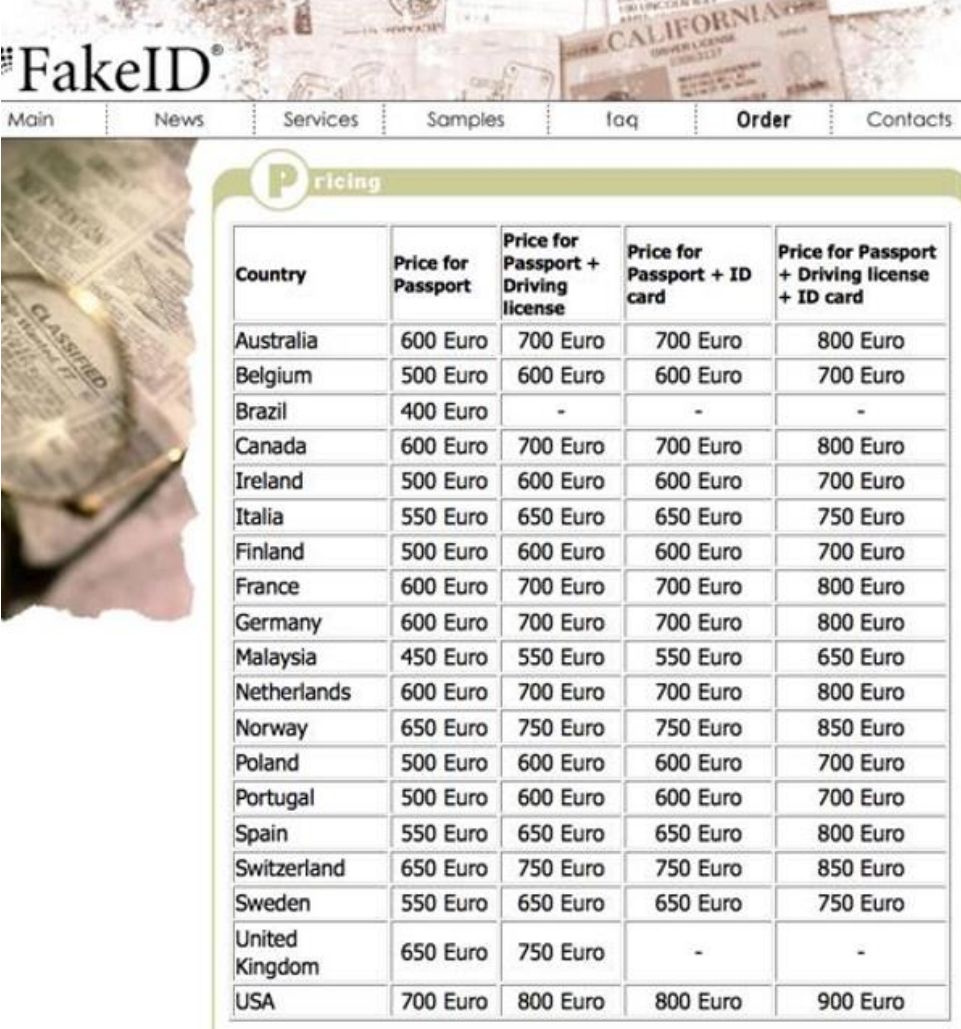
AlphaBay or one  
Personalausweis  
card are doing w  
citizen to open a

0  
0

Probably the same places as where dishonest politicians or companies have their accounts at (Cayman Islands, Cyprus, etc).

# DARK INTERNET JOURNEY

## SCREENSHOT 2/4



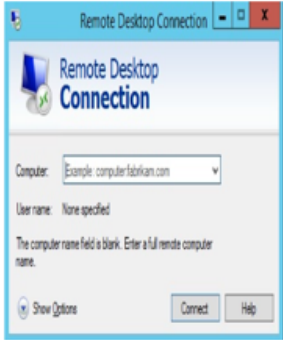











The screenshot shows the FakeID website interface. At the top, there is a navigation menu with links for Main, News, Services, Samples, Iaq, Order, and Contacts. Below the navigation is a 'Pricing' section with a table listing prices for various countries. The table has five columns: Country, Price for Passport, Price for Passport + Driving license, Price for Passport + ID card, and Price for Passport + Driving license + ID card. The prices are listed in Euro. A magnifying glass is visible over the table, highlighting the 'Price for Passport' column.

Country	Price for Passport	Price for Passport + Driving license	Price for Passport + ID card	Price for Passport + Driving license + ID card
Australia	600 Euro	700 Euro	700 Euro	800 Euro
Belgium	500 Euro	600 Euro	600 Euro	700 Euro
Brazil	400 Euro	-	-	-
Canada	600 Euro	700 Euro	700 Euro	800 Euro
Ireland	500 Euro	600 Euro	600 Euro	700 Euro
Italia	550 Euro	650 Euro	650 Euro	750 Euro
Finland	500 Euro	600 Euro	600 Euro	700 Euro
France	600 Euro	700 Euro	700 Euro	800 Euro
Germany	600 Euro	700 Euro	700 Euro	800 Euro
Malaysia	450 Euro	550 Euro	550 Euro	650 Euro
Netherlands	600 Euro	700 Euro	700 Euro	800 Euro
Norway	650 Euro	750 Euro	750 Euro	850 Euro
Poland	500 Euro	600 Euro	600 Euro	700 Euro
Portugal	500 Euro	600 Euro	600 Euro	700 Euro
Spain	550 Euro	650 Euro	650 Euro	800 Euro
Switzerland	650 Euro	750 Euro	750 Euro	850 Euro
Sweden	550 Euro	650 Euro	650 Euro	750 Euro
United Kingdom	650 Euro	750 Euro	-	-
USA	700 Euro	800 Euro	800 Euro	900 Euro



# DARK INTERNET JOURNEY


## SCREENSHOT 3/4

RDP Windows/linux Remote Desktop VPS - Finland	REMOTE DESKTOP (RDP) CONNECT 100% CARDING SUCCESS	HACKED SMTP SERVER FOR SPAMMING	HACKED RDP
			
<b>Escrow</b>	<b>No Escrow</b>	<b>Escrow</b>	<b>Escrow</b>
 <b>Neolytik</b> 27	 <b>picsou</b> 66	 <b>chernobyl</b> 205	 <b>chernobyl</b> 205
4.99 ★	5.00 ★	4.99 ★	4.99 ★
Trust Level 1	Trust Level 1	Trust Level 3	Trust Level 3
USD 35.53 	USD 26 	USD 17.68 	USD 18.72 

# DARK INTERNET JOURNEY

## SCREENSHOT 4/4


**\$7,000 FAST WESTERN UNION AND MONEYGRAM TRANSFER WITH MTCN AND RECEIPT GUARANTEED**




Escrow

**careersclap** 241

5.00 ★ Trust Level 1

USD 728 


**[AD] Updated list of cardable sites + cashout and more**




Escrow

**careersclap** 241

4.98 ★ Trust Level 2

USD 5.2 


**[AD] 0,17 Million United States GEORGIA GMAIL Emails**



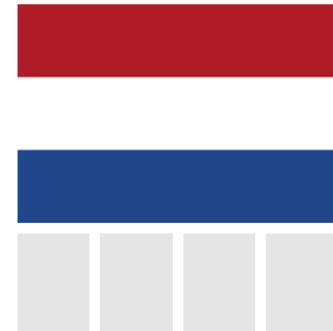
Escrow

**BANK** 79

5.00 ★ Trust Level 1

USD 50.96 

## 50K FRESH NETHERLANDS HIGH QUALITY LEADS [MAIL 100% VALID]



Sold by **drhack3r** 93 5.00 ★

Trust Level 1

### FEATURES

<b>Product class</b>	Digital Product	<b>Quantity left</b>	Unlimited
<b>Views</b>	58	<b>Visibility</b>	Public
<b>Ends In</b>	Never	<b>Payment</b>	Escrow

Total Purchase Price : USD 46.8

Shipping : PM 1 Days - USD +0 / item



# RECENT PASSWORD BREACHES

## WHAT'S NEXT



WHAT IS A DATA LEAKAGE



DARK INTERNET JOURNEY



DATA LEAKAGES OF LAST MONTH



ANALYSIS OF COLLECTION #1



HOW CAN SOMEONE OBTAIN ACCESS TO THESE LEAKS



Q&A



# COLLECTION #1

WE GAINED ACCESS TO IT!



...AND PERFORMED AN ANALYSIS ON HOW CYPRIOTS MAY BE IMPACTED BY THIS BREACH.

IT FOLLOWED ME HOME!  
CAN I KEEP IT?

```

root@Penetrido:/media/root/a30a0a23-4f4c-4b75-85bd-6d4ac004b819/ALL# ls
10-SEMIPRIVATEEU 14-CHINA 18-OLDDUMBSDEHASHED 21-TRADING
11-PRIVATEUPDATE 15-DUMPCLEANED 19-PORN 22-UKCOMBOS
12-NUMBER 16-GAMINGCOMBOS 1-EUCOMBOS 23-USACOMBOS
13-BTC 17-MONETARYCOMBOS 20-SHOPPING 24-RUCOMBOS
21-TRADING 25-SHOPPINGCOMBOSNEW 3-DEHASHED
22-UKCOMBOS 26-USACOMBOSNEW 4-GAMES
23-USACOMBOS 27-USERPASS 5-GAMESINDI
24-RUCOMBOS 2-BTCCOMBOS 6-GAMES_SHARPENING

```

# COLLECTION #1

## THE X-RAY OF ONE OF THE LARGEST PASSWORD DUMPS TO DATE

A circular icon with a dark grey background, containing a white target symbol with a central bullseye and four crosshairs extending to the edges.

### WHAT IS COLLECTION #1

A set of email addresses and passwords totalling **2,692,818,238 rows**.

A circular icon with a dark grey background, containing a white icon of a platform scale with a weighing pan on top and a display on the side.

### THE SIZE OF IT?

The collection totalled **over 12,000 separate files** and more than **87GB of data**.

A circular icon with a dark grey background, containing a white icon of a calendar page with a right-pointing arrow.

### WHEN IT WAS PUBLISHED?

It was published in **January 2019**

A circular icon with a dark grey background, containing a white '@' symbol surrounded by a dotted circle.

### NUMBER OF UNIQUE EMAILS

There are **772,904,991 unique email addresses**.

A circular icon with a dark grey background, containing a white icon of a list with four horizontal lines and a small circle to the right of each line.

### WHAT IS MADE UP?

By many **different individual data breaches** from literally thousands of different sources

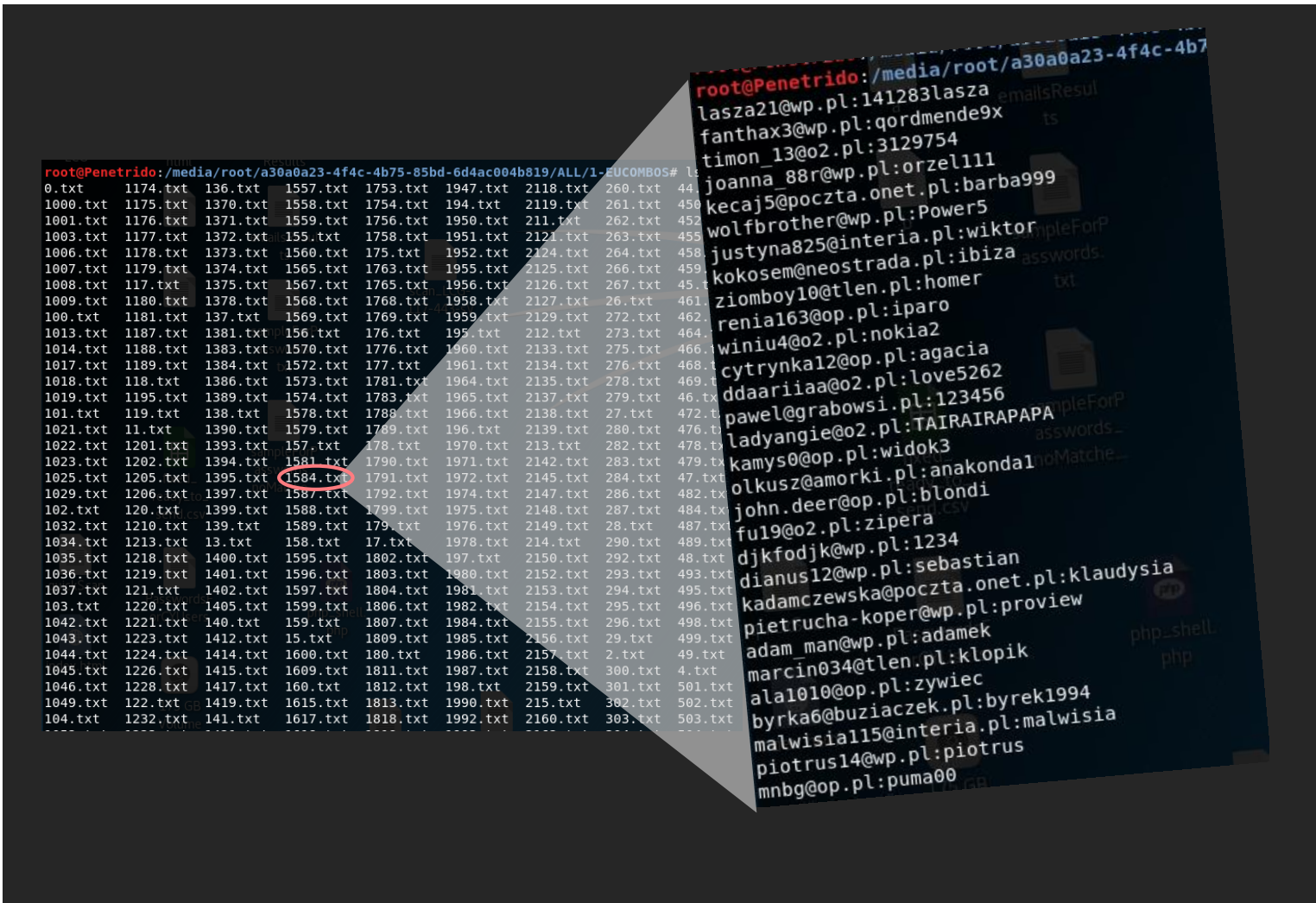
A circular icon with a dark grey background, containing a white icon of a speech bubble with four dots inside and a circular arrow below it.

### NUMBER OF UNIQUE PASSWORDS

There are **21,222,975 unique passwords**.

# COLLECTION #1

## HOW IT LOOKS INSIDE



LEVEL 1

29 ROOT FOLDERS



LEVEL 2

FILES, FILES AND FILES



LEVEL 3

EMAIL : PASSWORD  
EMAIL : HASH  
EMAIL : EMPTY  
SQL QUERIES



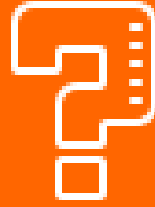
**HOW MANY OF THE RECORDS SEEM  
TO BELONG TO CYPRIOTS?**

# COLLECTION #1

## SAMPLE ANALYSIS AND CONFIDENCE INTERVAL

BY USING A RANDOM SAMPLE OF	IT WAS IDENTIFIED THAT	WHICH RESULTS TO AN ESTIMATE THAT	BY ASSUMING THAT APROX.	IT IS ESTIMATED THAT
<b>18.124</b>	<b>2.940</b>	<b>18%</b>	<b>700.000</b>	<b>115.000</b> - Confidence Level 99% -
EMAIL ADDRESSES THAT BELONG TO CYPRIOTS	EMAILS WERE INCLUDED IN COLLECTION #1	OF CYPRIOTS ARE EXPOSED IN COLLECTION #1	CYPRIOTS HAVE AN EMAIL ACCOUNT	<b>CYPRIOTS CREDENTIALS ARE EXPOSED IN COLLECTION #1</b>





**HOW MANY OF THESE WERE  
IDENTIFIED?**

# COLLECTION #1

## HOW WERE CYPRIOT ACCOUNTS EXTRACTED

### SELECTION CRITERIA

**#CYPRUS\_DISTRICTS**

**#COM.CY**

**#ORG.CY**

**#AC.CY**

**#GOV.CY**

**#.CY**

**#CYPRUS\_TEAM\_NAMES**

**#COMMON\_CYPRIOTS\_NAMES**

**#LISTS**

**#CYPRUS\_BUSSINESSES**

**#CYPRUS\_SERVICE\_PROVIDERS**

**#WORDS\_ENDING\_TO**

# COLLECTION #1

HOW MANY OF THOSE RECORDS WERE IDENTIFIED

**105.000** approx.

## TOTAL NUMBER OF RECORDS

RECORDS THAT PROBABLY BELONG TO CYPRIOTS

**50.000** approx.

## NUMBER OF CYPRIOT EMAILS

UNIQUE EMAIL ADDRESS ARE INCLUDED

**67.000** approx.

## NOT-SO-SAFE PASSWORDS

PASSWORDS THAT WERE FOUND TO BE USED MORE THAN ONCE



**WHAT IS THE MOST COMMON  
PASSWORD FOUND?**



OMONIA



# **WHAT ARE THE OTHER COMMON PASSWORDS**

# COLLECTION #1

## SOME SCARY STATISTICS...

approx. **15.000**

### **FOOTBALL TEAMS**

PASSWORDS THAT CONTAIN A TEAM NAME  
(e.g. APOEL1, OMONOIA1948, etc)

approx.

**15%**

approx. **12.000**

### **AREAS / DISTRICTS**

PASSWORDS THAT INCLUDE AN AREA IN CYPRUS / DISTRICT  
(e.g. cyprus, limassol, larnaca, )

approx.

**11%**

approx. **5.500**

### **USERNAME INCLUDED IN PASSWORD**

PASSWORDS THAT INCLUDE THE USERNAME  
(e.g. username: charis – password: charis!)

approx.

**6%**

approx. **3.200**

### **MOST COMMON PASSWORDS**

PASSWORDS THAT ARE INCLUDED IN COMMON LISTS  
(e.g. password, query, 12345%,)

approx.

**3%**

approx. **2.100**

### **NAMES**

PASSWORDS THAT CONTAIN COMMON CYPRIOTS NAMES  
(e.g. PetrosXX, George!, Costas11)

approx.

**2%**



**HOW MANY ARE REUSING THE SAME  
PASSWORD**



# COLLECTION #1

SOME SCARY STATISTICS...

**25.000**

Out of 28.000

**USED THE SAME  
PASSWORD ON  
DIFFERENT  
WEBSITE**

**85%**



**HOW MANY IN THIS ROOM ARE IN  
COLLECTION #1**

# COLLECTION #1

HOW MANY IN THIS ROOM ARE INCLUDED IN THIS BREACH?

27

OF THE ATTENDEES ARE INCLUDED IN COLLECTION #1

...AND SOME OTHERS IN DIFFERENT PASSWORD BREACHES

52



**HOW MANY IN THIS ROOM USE  
THE SAME PASSWORD FOR  
ACCESSING THEIR EMAIL  
ACCOUNT?**

