



# **DOWN THE RABBIT HOLE**

A Comprehensive Tour of the Dark Web

Zahier Madhar | Security Engineer | Check Point evangelist @ the office of the CTO.

YOU DESERVE THE BEST SECURITY

## DOWN THE RABBIT HOLE

Agenda

## 01.

A deeper look into the dark web architecture

### 02.

What is to be found on this platform

## 03.

Innovative technologies? The Dark Web & Blockchain

## 04.

Syndicates, collaboration and execution



# "LIFE IS LIKE AN ONION ....." RL SAN

A deeper loc

SANDBURG

architecture



## "BEGIN AT THE BEGINNING" LEWIS CARROLL

### The Dark Web Evolution





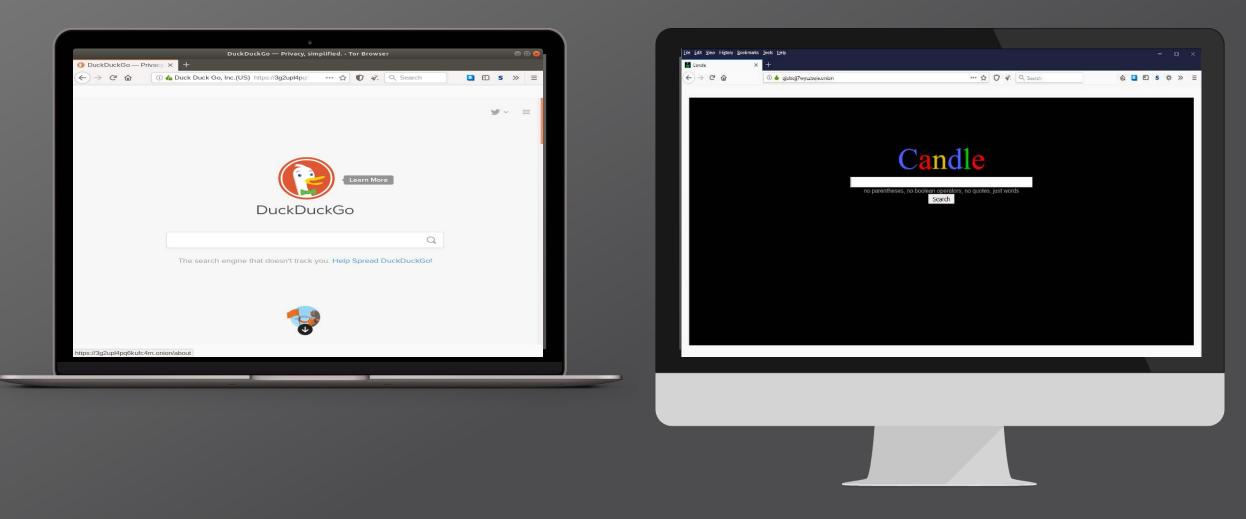


#### A brief capture of the Tor browser history and evolution https://www.torproject.org/about/history/



## "BEGIN AT THE BEGINNING"

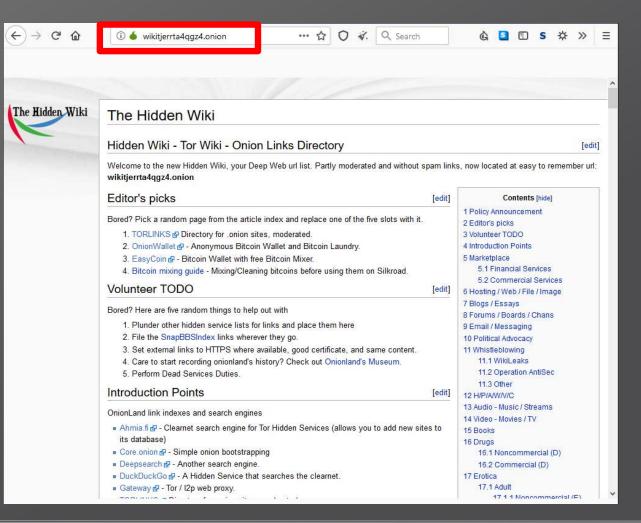
#### What is TOR?





## "BEGIN AT THE BEGINNING"

#### The Dark Web Evolution – Indexed & non Indexed pages





## "IF YOU DON'T KNOW WHERE YOU ARE GOING ANY ROAD CAN TAKE YOU THERE"

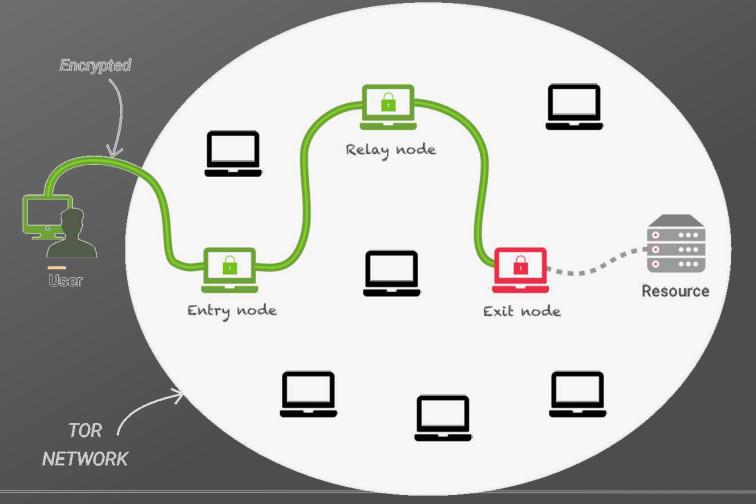
#### Network topology, VPN and encryption process





## "IF YOU DON'T KNOW WHERE YOU ARE GOING ANY ROAD CAN TAKE YOU THERE"

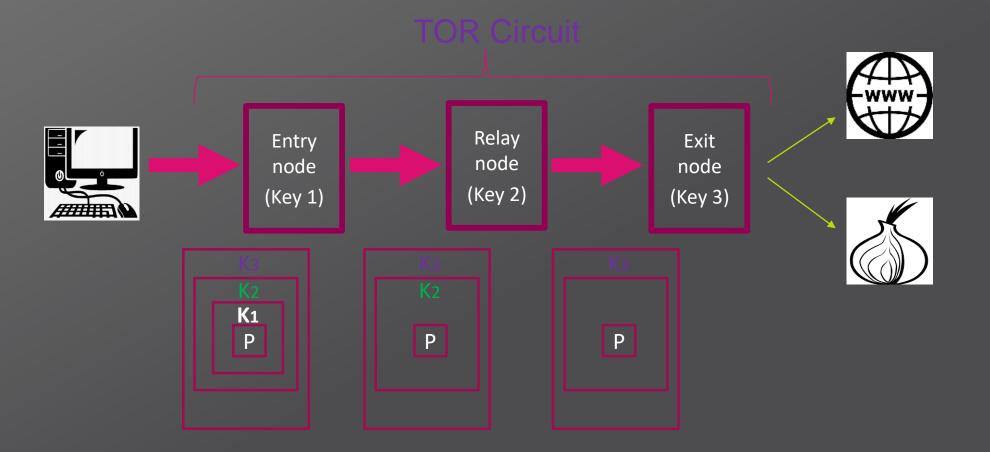
Network topology, VPN and encryption process





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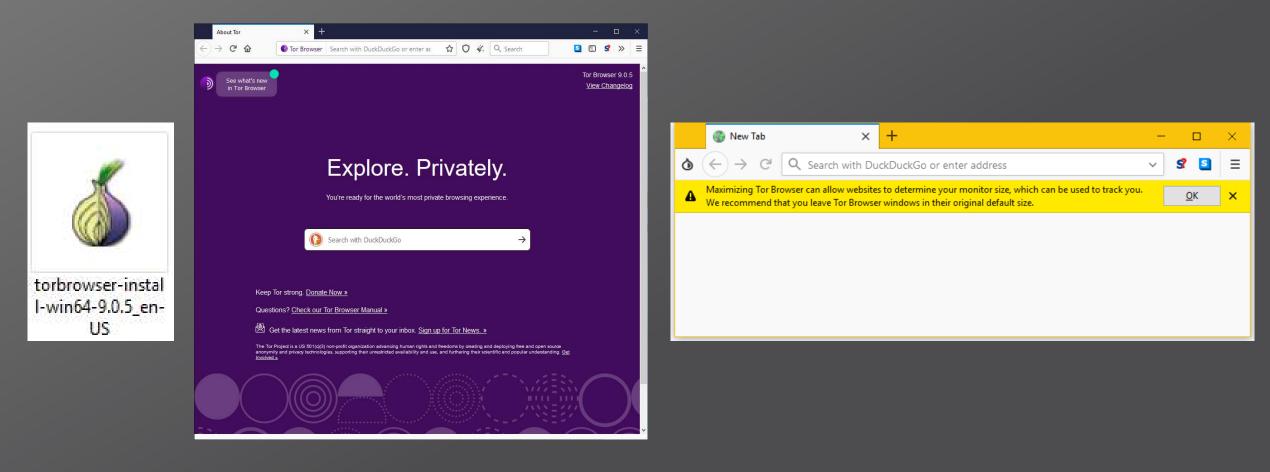
Network topology, VPN and encryption process





## "WHO IN THE WORLD AM I?"

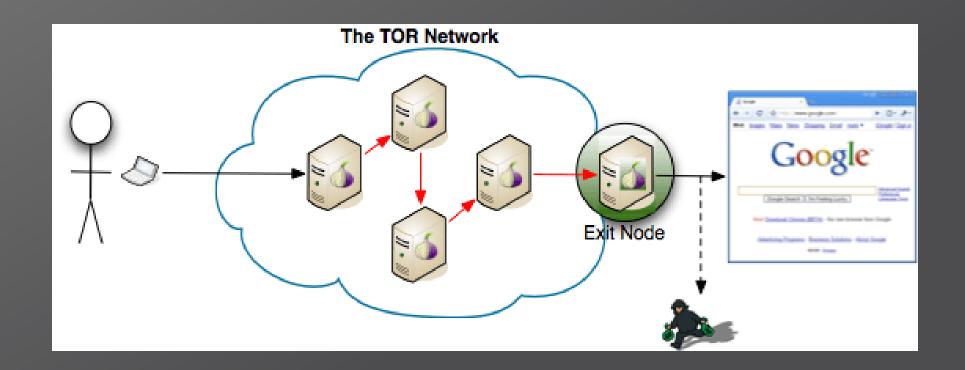
#### How does One keep Anonymous on the Dark Web?





## "WHO IN THE WORLD AM I?"

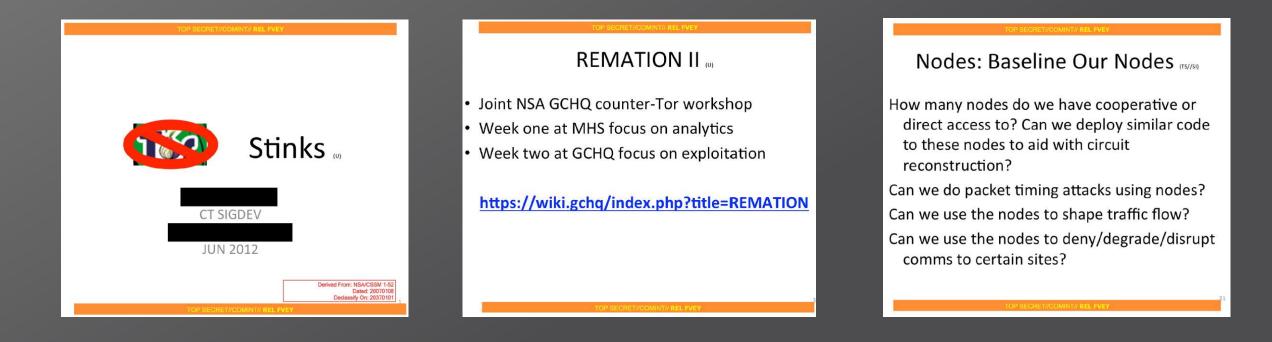
#### Exit Relay – Exposure node





## "THE MORE THERE IS OF MINE, THE LESS THERE IS OF YOURS"

#### Dark Net Nodes Paradigm – Reveal the Man Behind the Keyboard





## "THE MORE THERE IS OF MINE, THE LESS THERE IS OF YOURS"

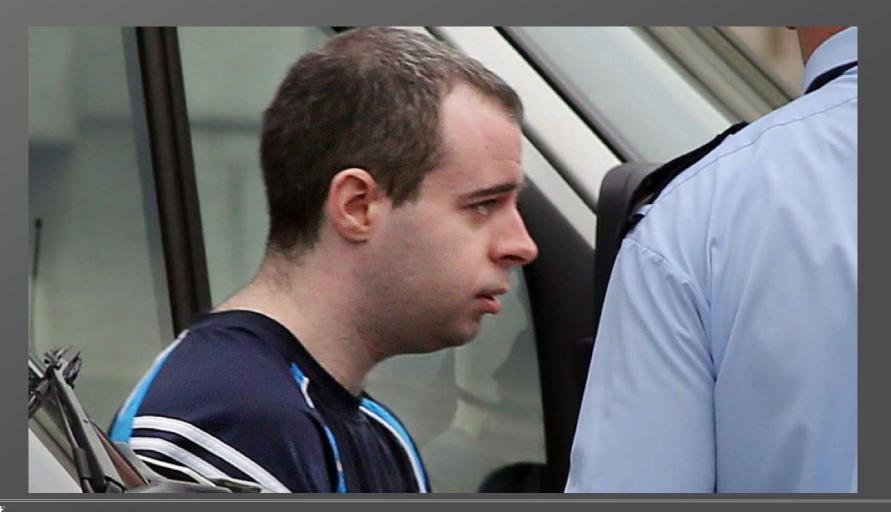
#### Known Exploits, Reveal the Man Behind the Keyboard



"GCHQ has taps on 200 fiber-optic pipes, each transmitting on average **10** gigabits per second.... That works as being **21.6** petabyte per day"



## "THE MORE THERE IS OF MINE, THE LESS THERE IS OF YOURS" Node and TOR Exploits – Real life example



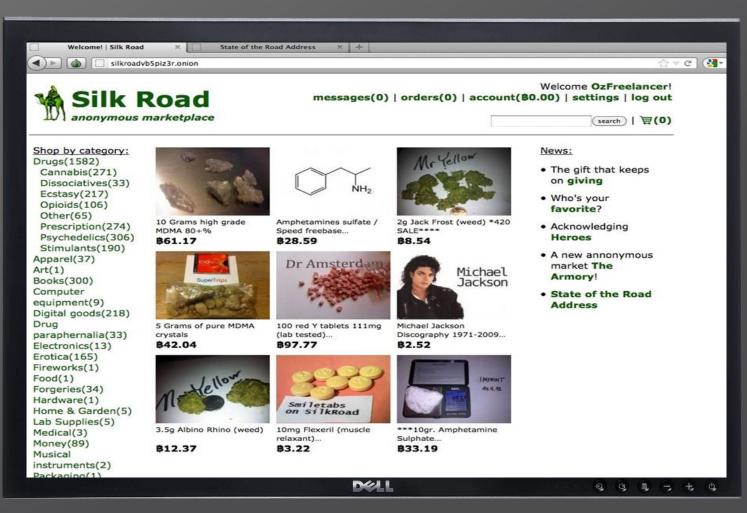


# **REVEALING THE UNSEEN**

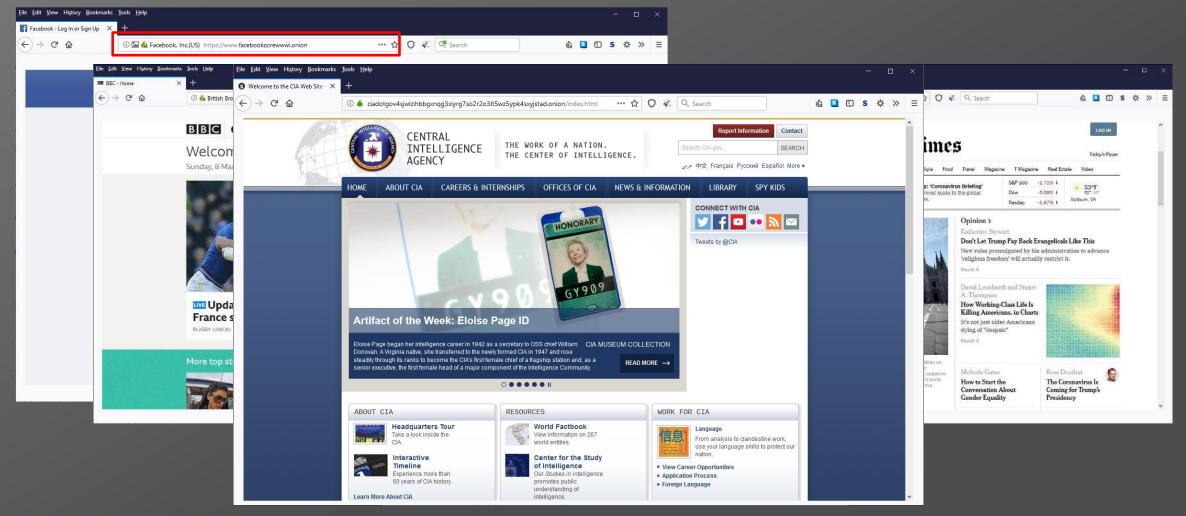
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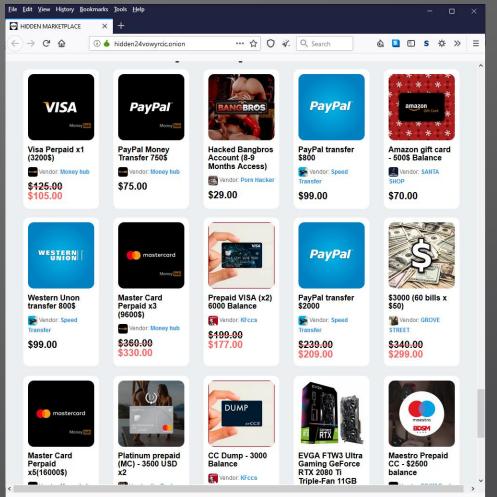








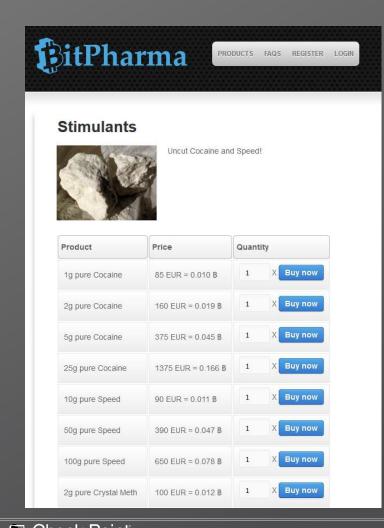




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\$98.00	\$75.00	SHOP \$70.00	\$90.00	SHOP \$45.00	
Amazon.com gift card 700\$	Ebay gift card - 250\$ Balance	Netflix gift card - 150\$ Balance	Google play gift card - 100\$ Balance	Steam gift card - 100\$ Balance	
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#### What is to be found on this platform



ieck Point

#### Purple Kush



Beautiful AAA PK, caked in crystal. Nice colour, distinctly purple. Close trimmed fluffy fat buds. Pungent kush aroma and flavour.

Product	Price	Quantity
20g Purple Kush	160 GBP = 0.022 ₿	1 X Buy now
50g Purple Kush	350 GBP = 0.047 ₿	1 X Buy now
100g Purple Kush	650 GBP = 0.087 B	1 X Buy now



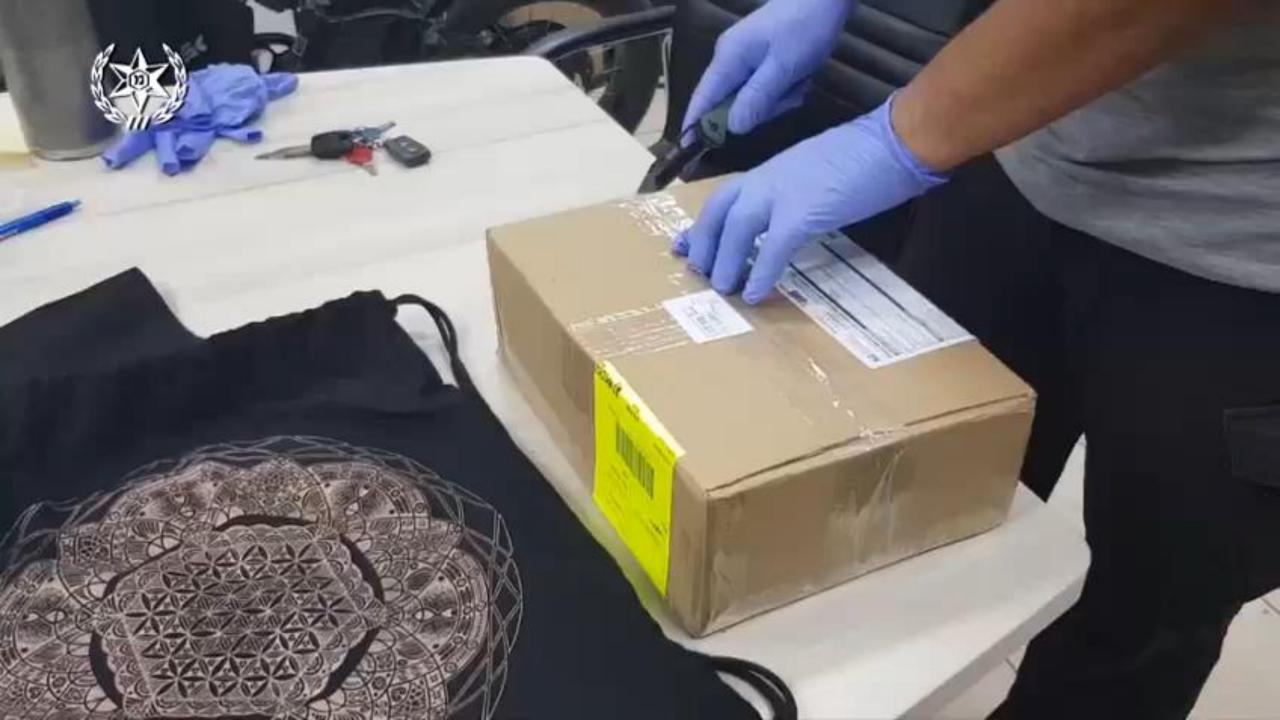
What is to be found on this platform

HOME	DIRECTORY (DARK SITES LINKS LIST)	MUST READ	DARK WEB NEWS	FREE VPN	CONTRIBUTE	DIRECTORY DASHBOARD
DARK V	VEB NEWS					
Mu	nich Gunman A	lleged	lly Bougl	ht Gu	n from	the Dark Web
💽 Ву	admin 🖻 May 19, 2019 🔎 0 🐵 57 Views					

David Ali Sonboly, the Munich killer, reportedly bought the Glock 17 pistol from the dark web.

The German police said that though the serial number of the reactivated gun with which the 18-year-old killed nine people was scratched off, it appeared as though it is of Slovakian origin.





### What is to be found on this platform

will last at least 8 years.

#### **ID Cards**



Product	Price	Quantity		
Czech ID Card	500 EUR = 0.060 B	1 X Buy now		
Netherlands ID Card	550 EUR = 0.066 B	1 X Buy now		
Denmark ID Card	550 EUR = 0.066 B	1 X Buy now		
French ID Card	550 EUR = 0.066 B	1 X Buy now		
Lithuanian ID Card	550 EUR = 0.066 B	1 X Buy now		

#### Products Register FAQS Login Citizenship Become a citizen of the USA, real USA passport We offer bulletproof USA passports + SSN + Drivers License and Birth Certificate and other papers making you an official citizen of the USA! It will even work if you are not in the USA yet How we do it? Trade secret! But we can assure you that you won#t have any problems with our We are shipping documents from the USA, international shipping is no problem. You can use your own name or a new name! Information on how to send us required info (scanned signature, biometric picture etc) will be given after purchase. The total price is 5000 USD, 1000 paid when you order and the other 4000 when we show you photo and video proof of your passport. The first \$1000 are needed upfront to see you are serious about it. Once paid we will discuss details in our shop internal message system. Product Price Quantity 1 X 1000 USD = Your USA citizenship first payment 20% 1000/5000 0.108 B Buy now 1 X US bank account with online banking and card. Great for cashing out bitcoin. Accounts 1000 USD =

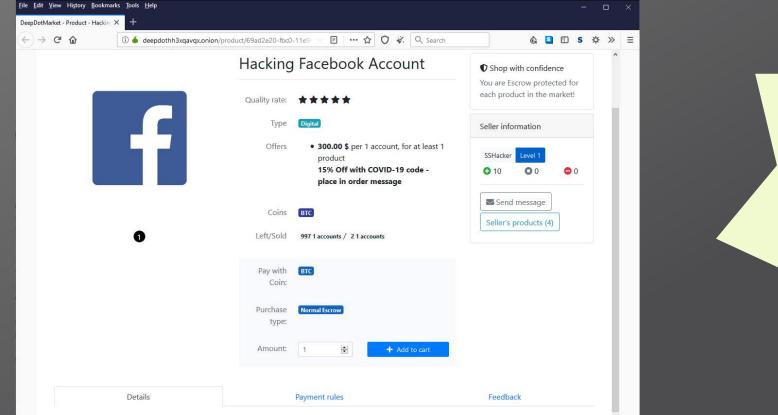
Buy now

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#### What is to be found on this platform

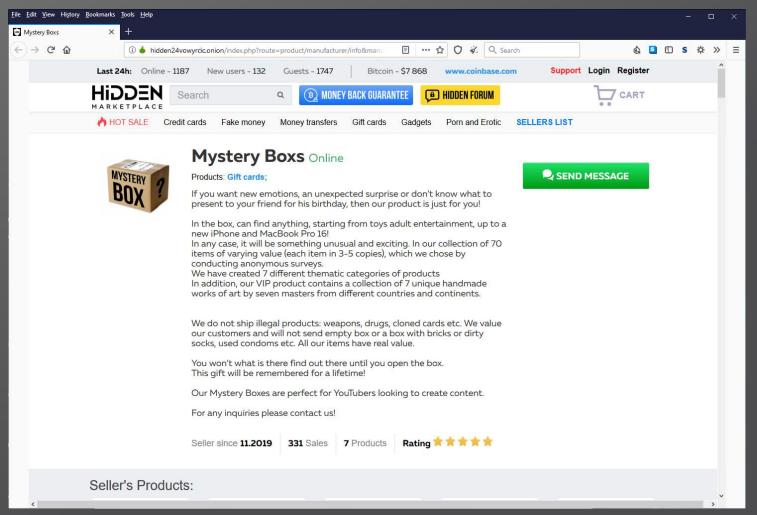


This listing is for hacking into an Facebook account. Hello. Welcome to SSHacker. We are a group of hackers dedicated to provide the best hacking services since 2005. SSHacker was founded in 2005 by Jonathan James when he decided to offer services for email hacking. In that years, internet was dominated by emails, because the social networks didn't exists yet and cell phones technologies were growing. Time has passed and the group increased gradually and we added new services like: Facebook, Twitter or Instagram. Now, our services are even more than then, including PC/Cellphone hacking, deface websites, grades change, custom ransomware, etc. We invite you to explore our Hacking Services and if you're interested in any of them, hire usl SSHacker, the best choice. Why should I hire a hacker? Why a hacker? Because if you really want any hacking service, either get a password, spy or track a





## OPEN THE MYSTERY BOX





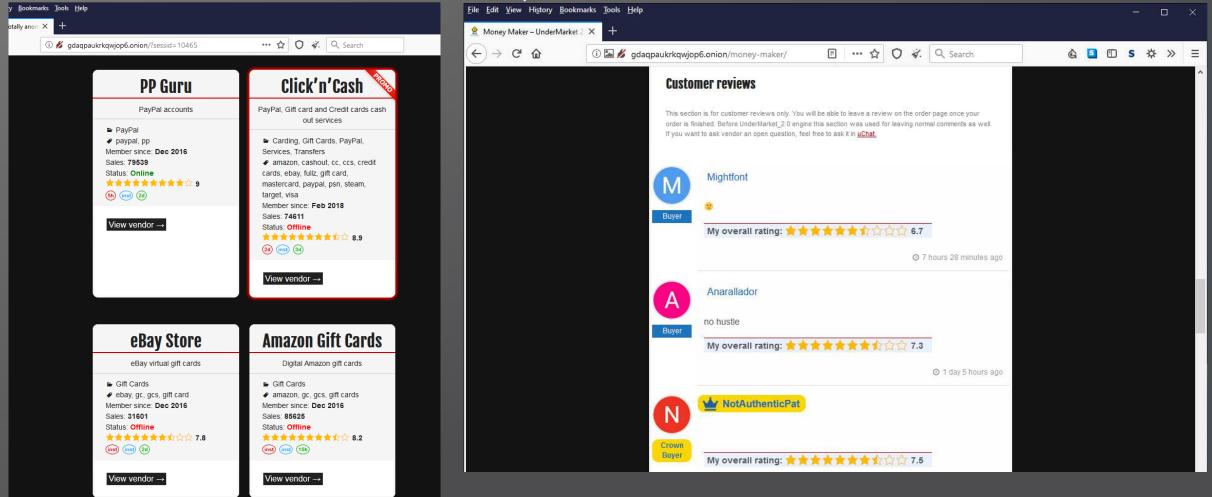
## OPEN THE MYSTERY BOX





## PLAY THE GAME

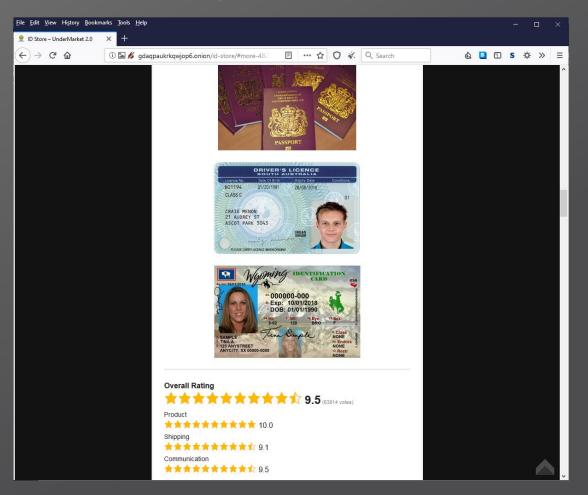
#### Policies and reputation on the Dark Web





## PLAY THE GAME

Policies and reputation on the Dark Web





## THE PEOPLE BEHIND THE KEYBOARDS

### Population on the platform





## THE PEOPLE BEHIND THE KEYBOARDS

### Professions on the platform



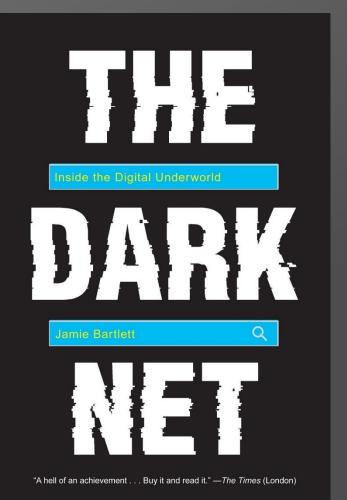






## THE PEOPLE BEHIND THE KEYBOARDS

#### Population on the platform





**Jamie Bartlett** 



# GOODS TRANSFER - THE RISE OF CRYPTO'S

The Dark

chnologies

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## GOODS TRANSFER - THE RISE OF CRYPTO'S

#### What is the payment process





## GOODS TRANSFER - THE RISE OF CRYPTO'S

What is the payment process							
WebMoney 🛞 About	WebMoney - Personal - Busin	ess → Heip →	Find information	Sign Up Log In			
WebMoney Transfer universal payment system							
		Personal	3 <u></u>				
		With draw		Raise funds			
Top-up	Pay	Withdraw	Get a loan	Raise tunds			
		Business	ä <u></u>				
Accept payments	Make payments	Budget management	Work management	Secure transaction			



#### What is the payment process

#### **Invisible Transactions**

De Andrés said the dark web enables criminals to exploit three legitimate features of the modern internet: anonymization, encryption and virtual currencies. The latter has revolutionized money laundering and made cyberenabled financial crime a top enforcement priority for investigators.

Organized crime groups are now using centralized virtual currencies like WebMoney and Perfect Money or decentralized cryptocurrencies like bitcoin to better cover their financial footprints.

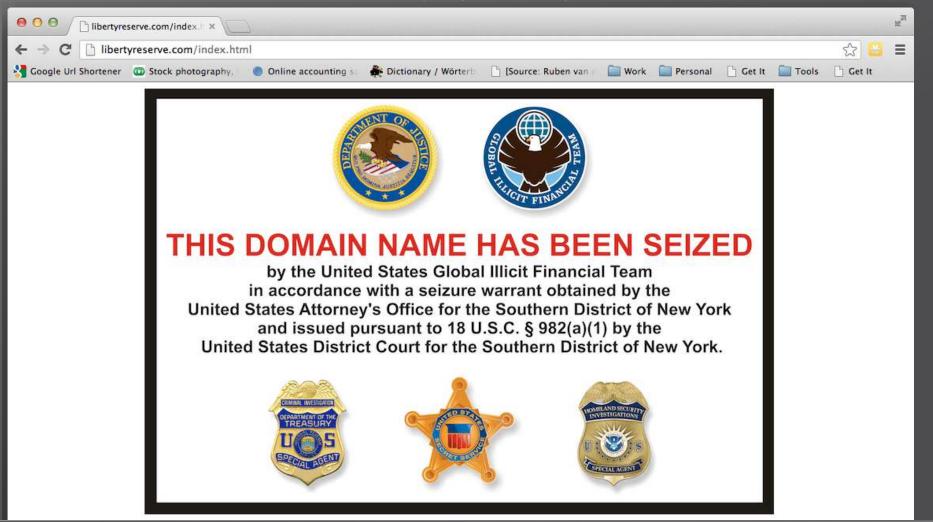
Latin America and the Caribbean was home to the first major international virtual currency laundering scandal: the US government's takedown of underworld cyber banking system Liberty Reserve in 2013. Before its closure, authorities said the service laundered \$6 billion worth of illicit transactions tied to drug trafficking, investment fraud, credit card fraud, data theft and child pornography.

To further confound law enforcement, Latin American criminal organizations are employing "money-mule" networks, which structure virtual and conventional transactions into smaller and more innocuous-looking sums. De Andrés said each mule receives a commission of between 3 and 5 percent per transaction.





#### What is the payment process



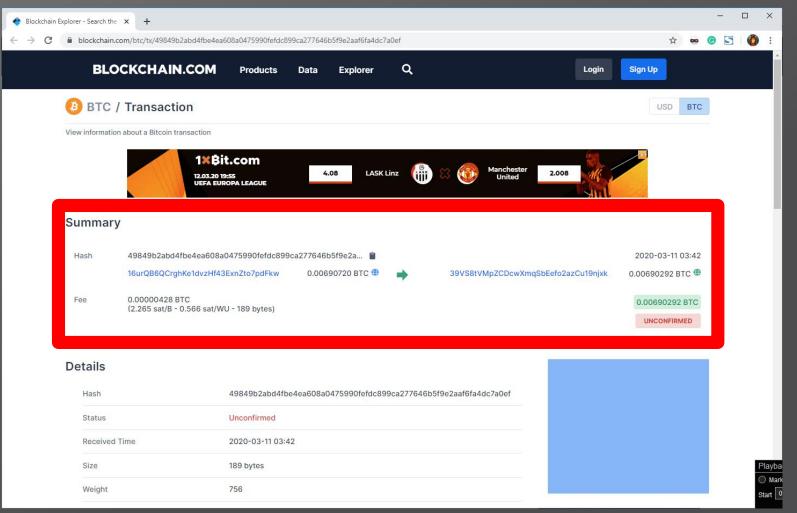


#### The preferred methodology





#### The preferred methodology



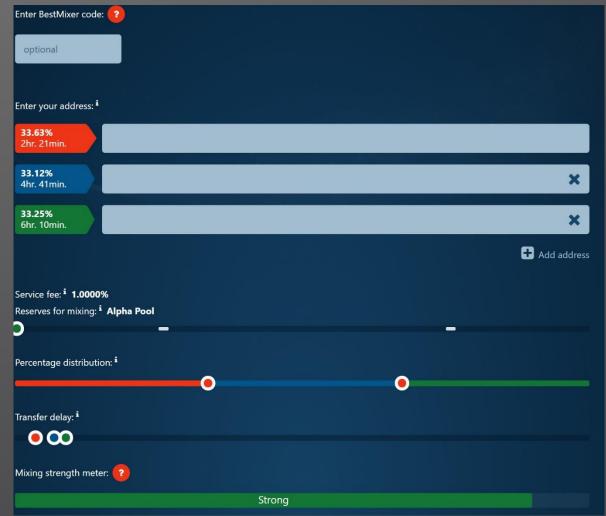


#### The preferred methodology

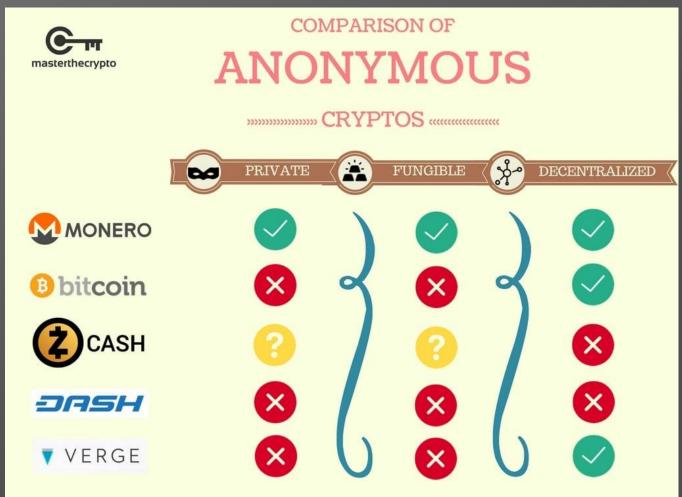
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rthevenard (1000+; 100%) •			National bank transfer:	France		5,683.56 EUR	100 - 1,019 EUR		Buy	/	
Ilansky (3000+; 99%)			SEPA (EU) bank transf	er		5,698.08 EUR	100 - 2,000 EUR		Buy	/	
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ecripto.it (3000+; 100%)			advcash			5,710.88 EUR	60 - 1,000 EUR		Buy	/	
onsaiso (100+; 100%) <sup>©</sup>			SEPA (EU) bank transf	er		5,723.62 EUR	100 - 2,861 EUR		Buy	/	
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fedorintaliev (3000+; 100%)			advcash			5,738.21	10 - 2,695 EUR		Buy		



#### The preferred methodology



#### The preferred methodology – Monero Evolution





# **BAD** ACTORS SPACE

Syndicate

Execution



### THE DARK NET FOOD CHAIN

Syndicates structure & Roles

#### Maze Team official press release. March 18 2020

Due to situation with incoming global economy crisis and virus pandemic, our Team decided to help commercial organizations as much as possible. We are starting exclusive discounts season for everyone who have faced our product. Discounts are offered for both decrypting files and deleting of the leaked data. To get the discounts our partners should contact us using the chat or our news resource.

In case of agreement all the info will be deleted and decryptors will be provided.

The offer applies to both new partners and the «archived» ones. We are always open for cooperation and communication.

We also stop all activity versus all kinds of medical organizations until the stabilization of the situation with virus



### THE DARK NET FOOD CHAIN

#### Life of a hacker





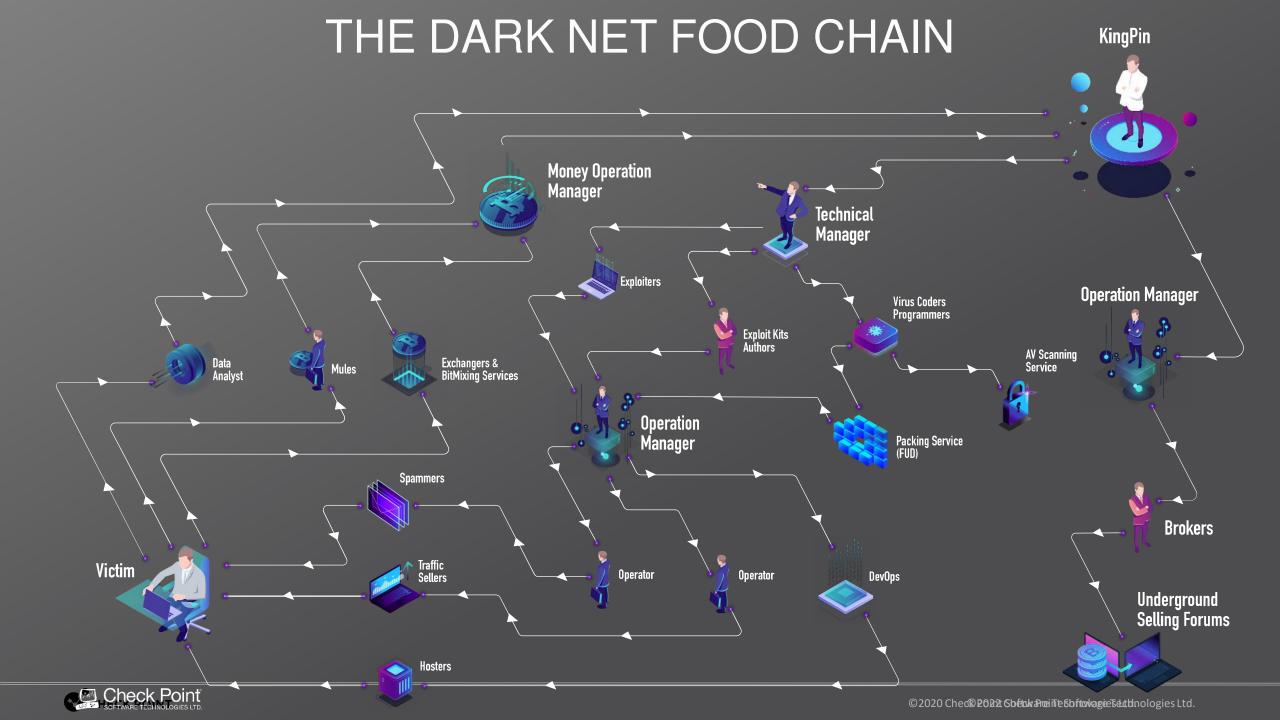
### THE DARK NET FOOD CHAIN

#### Syndicates structure & Roles



Ivan Viktorvich Klepikov Aliases: "petr0vich", "nowhere" Alexey Dmitrievich Bron Alias: "thehead" Vyacheslav Igorevich Penchukov Aliases: "tank", "father"





• The leader!

Powerful criminal

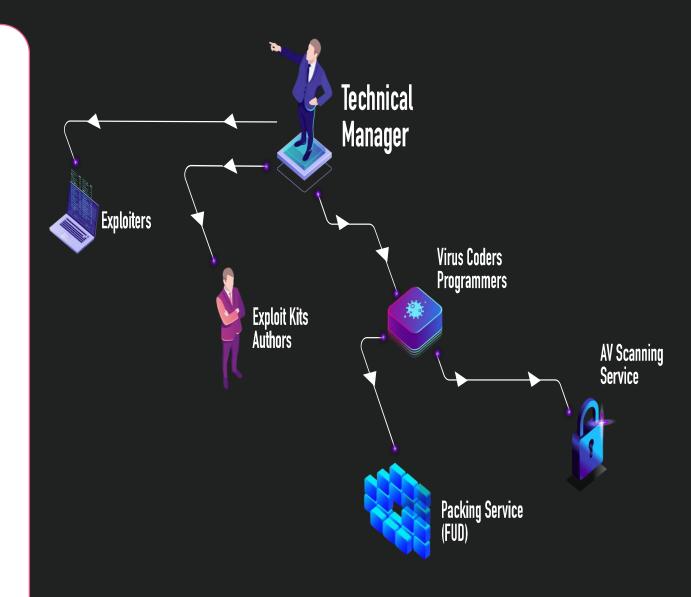
 Well connected upside down in the crime scene

And don't mess with him

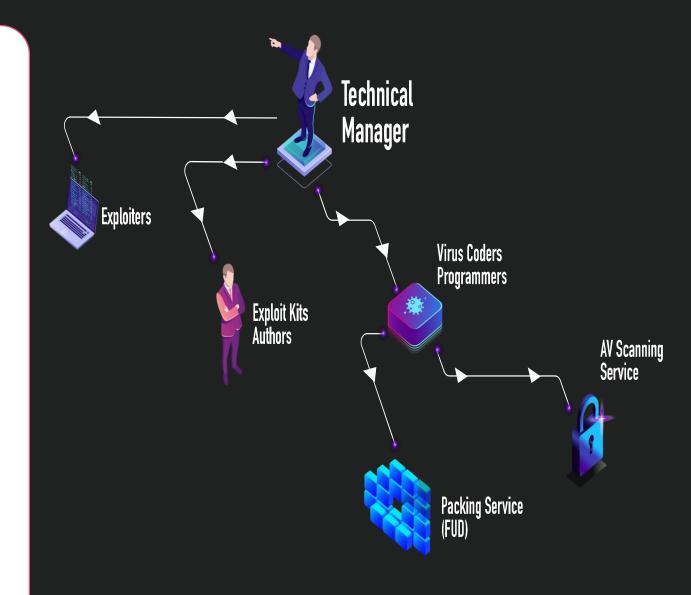


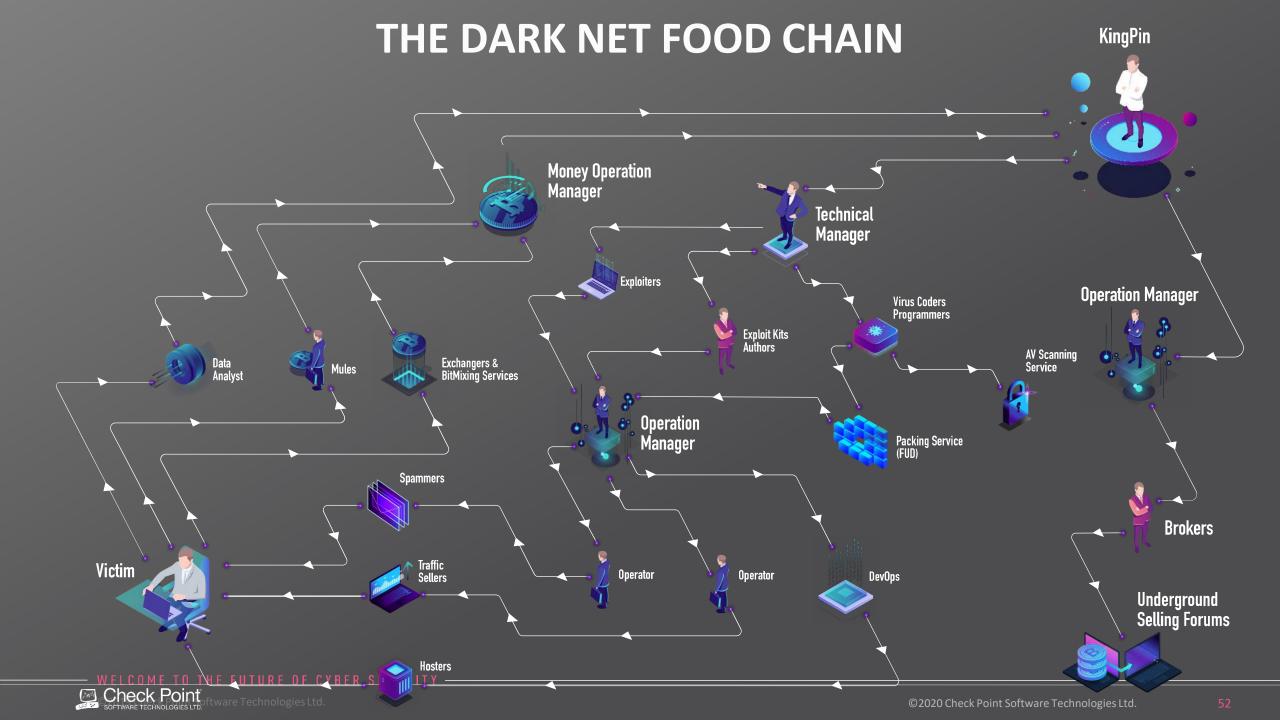
Malware authors

- Exploit kit developers
- Phishing kit developers
- Hacking tools developers



- Developing 0-day exploits
- Weaponizing newly published exploits (1-days)
- Allowing malware authors
  to evade AV signatures
- Selling it as standalone exploit



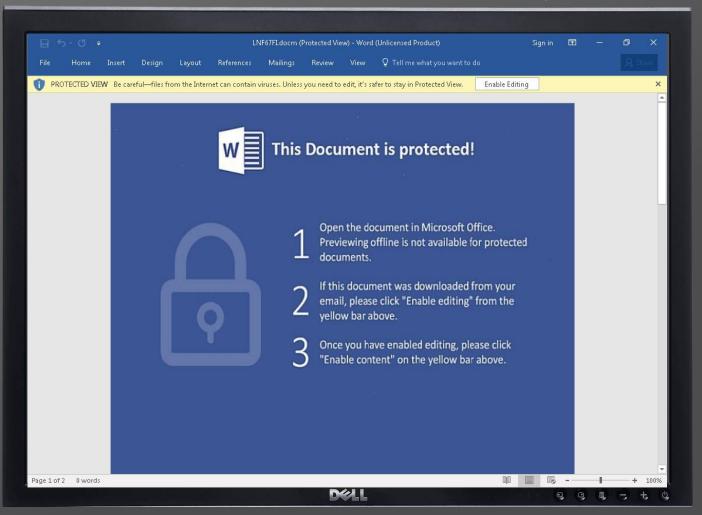


#### Collaboration and Execution – Locky Showcase



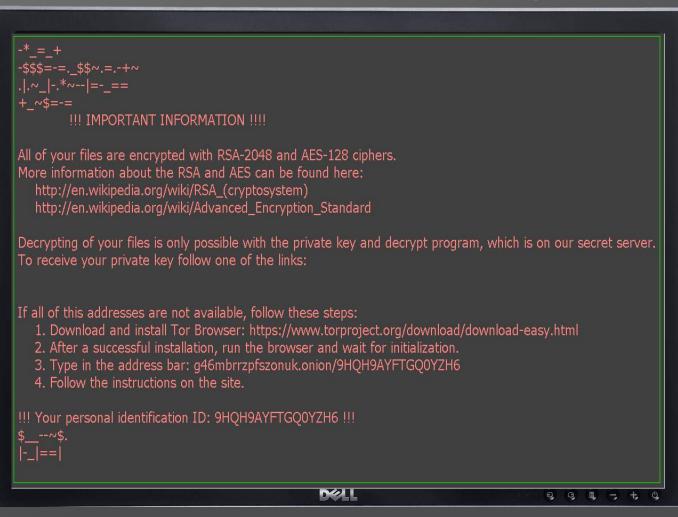
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#### Collaboration and Execution – Locky Showcase





#### Collaboration and Execution – Locky Showcase



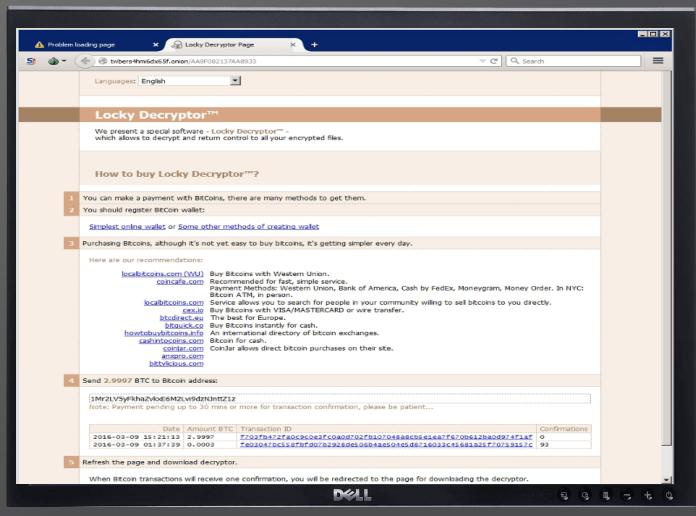


#### Collaboration and Execution





#### Collaboration and Execution





"It's a wonder you made your way out"

### HOW TO STAY SAFE?

Tip for a secured journey on the Dark Net







# **THANK YOU**

