



General overview on ransomware attacks, their impact on societies worldwide and critical infrastructure

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Threat Assessment

How ransomware affects society and critical infrastructure?

Threat Assessment Ransomware

Supply Chain
Vulnerabilities

New Extortion
Techniques

Motivational
Shift

Initial Access
Brokers

Ransomware
as a Service

Shift in targeted systems

Critical Infrastructure

“Critical infrastructure is an asset or system which is essential for the maintenance of vital societal functions. The damage to a critical infrastructure, its destruction or disruption by natural disasters, terrorism, criminal activity or malicious behaviour, may have a significant negative impact for the security of the EU and the well-being of its citizens.”

DG Home, https://home-affairs.ec.europa.eu/pages/page/critical-infrastructure_en, 14/10/2022

What is happening in the world?

'Jugular' of the U.S. fuel pipeline system shuts down after cyberattack

The infiltration of a major fuel pipeline is "the most significant, successful attack on energy infrastructure we know of."



Dutch supermarkets run out of cheese after ransomware attack

News ♦ Technology

Ransomware hackers target supply chain companies

by Madd0x | September 19, 2022 | 0 comment

Computer giant Acer hit by \$50 million ransomware attack

**Tomorrow's headline:
An even bigger ransomware attack**



Recent Operations

Operation 5th Element



Operation investigating ransomware attacks against critical infrastructure

Cyber attackers illicit activities have affected victims in 71 countries

More than 50 foreign investigators including 6 from Europol were deployed

12 high-profile suspects linked to ransomware attacks worldwide targeted

Over USD 52 000 in cash was seized, alongside with 5 luxury vehicles

Operation GoldDust

RO authorities arrested two individuals on Nov.2021 suspected of cyber-attacks deploying the Sodinokibi/REvil ransomware. 5 other suspects have been arrested in PL (1), KW (1), and KR (3)

The suspects are allegedly responsible for 7.000+ infections, which in total pocketed millions euros in ransom payments.

Operation GoldDust involved 17 countries, Europol, Eurojust and INTERPOL.

The arrests follow the joint international law enforcement efforts of identification, wiretapping and seizure of some of the infrastructure used by Sodinokibi/REvil ransomware family, which is seen as the successor of GandCrab.

VPNLab.net Takedown

Action part of EMPACT security framework
objective *Cybercrime - Attacks Against
Information Systems*



All 15 servers
disrupted and
seized



100+

businesses identified as at risk of cyberattacks.
Law enforcement worked with the potential
victims to mitigate their exposure.



The information exchange
was facilitated in the
framework of the J-CAT

VPNLab.net



The VPN offered shielded communications and internet access. Law enforcement took interest in it after multiple investigations uncovered criminals using this service to facilitate illicit activities such as malware distribution and ransomware attacks.



POLIZEIDIREKTION
HANNOVER



Staatsanwaltschaft
Verden

POLITIE

THIS DOMAIN HAS BEEN SEIZED

Since 17 January, 2022

International law enforcement, under the leadership of the Police Headquarters Hannover and the Verden Public Prosecutor's Office (Germany), has seized the domain vpnlab.net.

This service provided a platform for the anonymous commission of high value cybercrime cases, and was involved in several major international cyberattacks. This seizure follows a long-running international investigation by authorities in Germany, The Netherlands, Canada, the Czech Republic, France, Hungary, Latvia, Ukraine, the United Kingdom and the United States.

Law enforcement has now gained access to the vpnlab.net servers and seized the customer data stored within. The investigation regarding customer data of this network will continue.



NCA
National Cyber Agency



POLICIJA



EUROPOL

EUROJUST

A photograph of the Europol building, featuring the word 'EUROPOL' in large, illuminated letters on the facade. The image is overlaid with a dark blue diagonal shape on the left side.

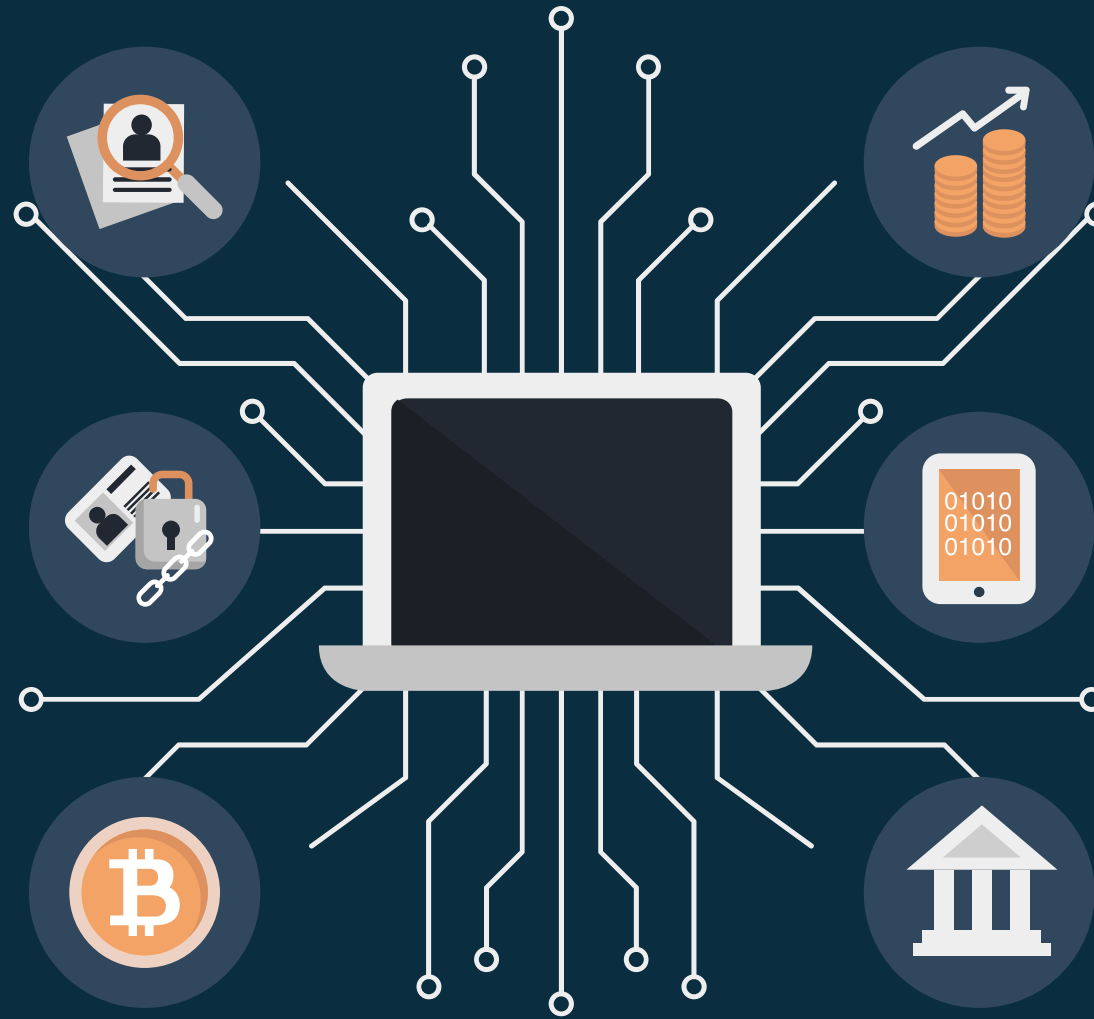
International Ransomware Response Model (IRRM)

J-CAT – EC3 International Ransomware Response Model (IRRM)

Experiential learning from hundreds of high-profile ransomware and facilitators investigations supported by EC3 since 2013 and J-CAT since 2014

Continuous proliferation & sophistication of ransomware threats since the 1980s

Mapping of existing cross-border ransomware initiatives (operational, tactical, strategic, prevention, PPPs)



20 Sept 2021 Brainstorming Workshop EC3-J-CAT

New international LE model based on the anatomy of a ransomware attack, different investigative avenues and the necessary response measure to thwart ransomware from a LEA standpoint

The new multi-faceted model aligned with and mainstreamed within EMPACT, US-EU Ransomware Taskforce, G7, US Counter Ransomware Initiative, etc.

Thank you for your
attention

Any
questions?

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