

# Inside the HIVE - LAC

(Latin America & Caribbean)

Jesper Jurcenoks & Svetlana Ostrovskaya, FIRST May 4, 2022



**GROUP-IB**

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**Group-IB: 19 years of DFIR**



Ransomware in LAC Grew 127% 2020-2021

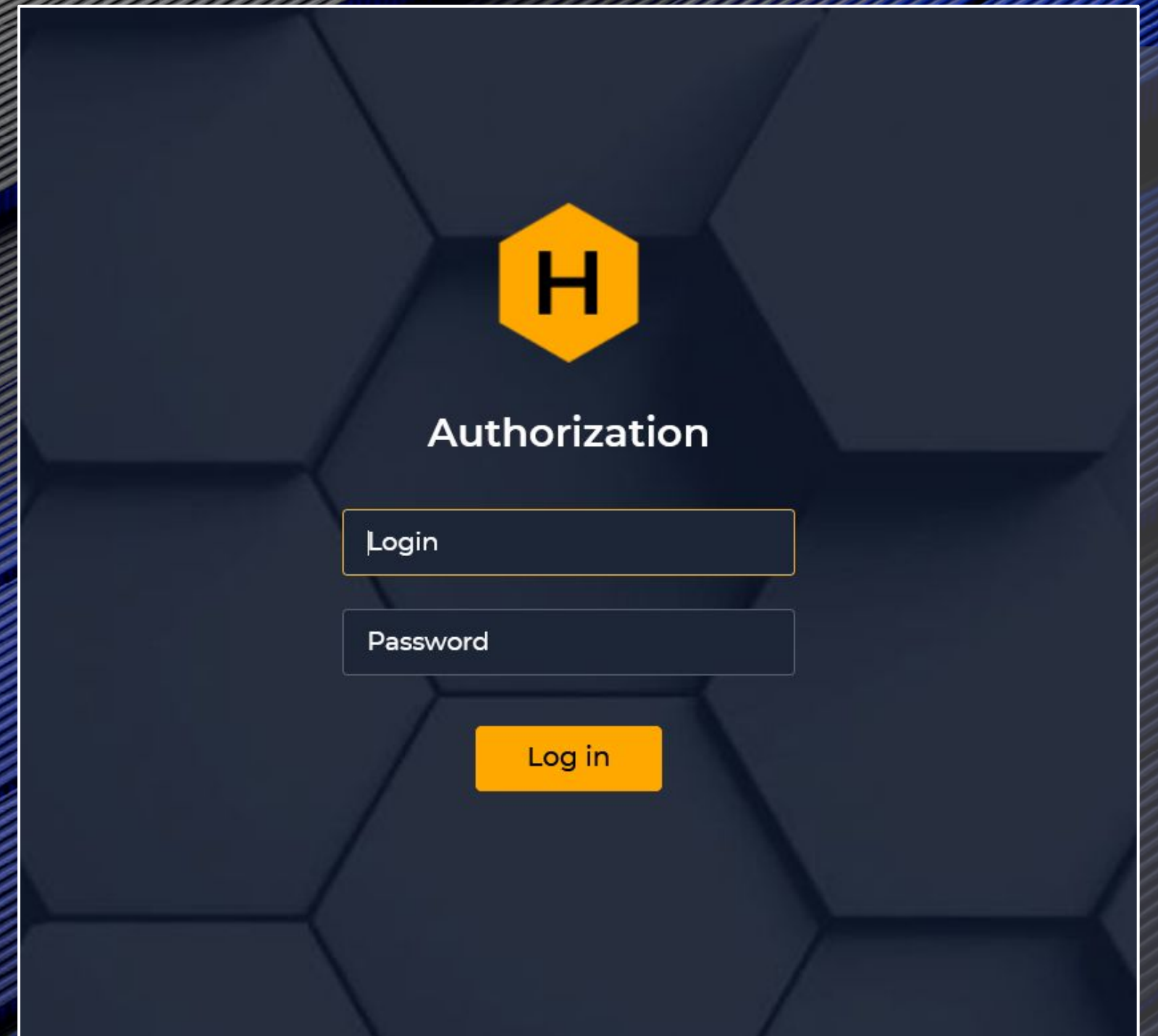
Focus on HIVE

Finance **Transport** InfoTech  
**Brazil**

**26.APR.2022**

How do we know this?

How to we fight this?

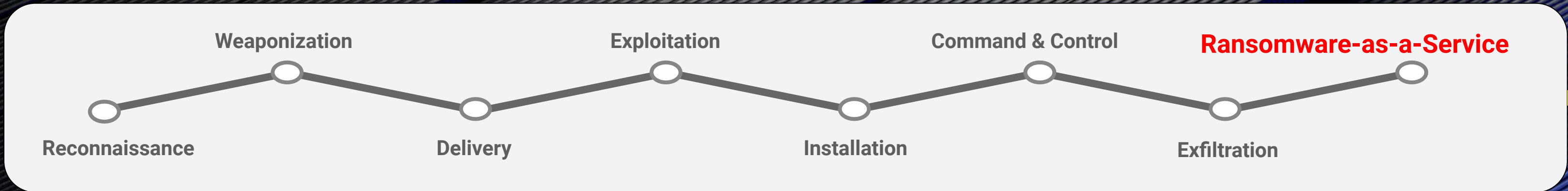




# Ransomware Kill-Chain - RaaS Extortion Chain



## Cyber Kill-Chain - By Affiliate



Stage 1 - Outside network

Stage 2 - Inside network

Stage 3

## Extortion Chain - By RaaS



Negotiation

Payment

Decryption

Loot Split 80/20

24% of HIVE Victims Pay



# HIVE's Sales Pitch



1. Strong Encryption
2. Small encryptor file size
3. Low AV Detection Rate
4. Fast Encryption speed
5. Admin Panel
6. API
7. Live Chat support
8. Hive for VMWare ESXi
9. Double Extorsion with support for Data Leak Sites

OnLine  
Market → Soft  
[RaaS] Affiliate program  
kkk User  
Published 09/07/2021 at 19:32  
2 115

*Note 3rFNnyte* Note deleted, be sure to copy the data before closing the page

- Passes files by regular expression
- Each file is encrypted with a separate unique key involving chunks of 4096 bytes each, beginning with the file name
- Quick and multi-threaded
- Not dependent on the system's disk space
- It is launched in a separate process within it (Windows)
- Clears all disk space

Compressed file size: ~786Kb for Linux

The admin panel is in Tor with a chat, there is a blog. The API backend is not afraid of XSS, SQLi

Speed 4.5 gigs per minute. Before that the speed was 0.9 gb per minute. Code generation for every build

Speed 4.5 gigs per minute. Before

Code generation for every build

Copy data



## Tracking HIVE activity



1) Most times the hacker downloads compromising information before encrypting, for later Blackmail in case on non-payment (Double Extorsion)

13.5% of customers are exposed on HIVE Data Leak Site (DLS)

2) We fund a vulnerability in the Admin Panel, which allows us to enumerate all the victims worldwide 😏



# The Demographics of the Hackers using HIVE RaaS



Unlike BlackCat RaaS which also does Attacks, HIVE is solely focused on RaaS.

Attack distribution and toolset (Estimate):

5%	State Actors	Own Distinct Tools
20%	Large Criminal Groups	
75%	Small Independent Hackers/Groups	Off-the-shelf tools: Cobalt Strike MetaSploit

**HIVE Affiliates**



# Real-life DFIR on HIVE

by Svetlana Ostrovskaya



# THE STORY BEGINS



- Windows infrastructure and VMWare ESXi nodes are encrypted
- The majority of servers and hosts are down
- Everyone is in a panic



# HIGHLIGHTS



## RDP session

Non-privileged user, no source IP

## SystemBC

Collection of system info, execution of scripts, commands, executable files

## PowerShell

PowerShell scripts to download some malicious payloads

## Shellcode

Shellcode to download Cobalt Strike

## RDP

To move laterally

## PC Hunter

To avoid detection

## SSH

ESXI shell was enabled to access ESXI nodes

## SCP

To move ransomware to ESXI nodes



# MYSTERY - How did they get in?



Vulnerable RDP

Phishing

VPN



# SOLVED - RDP Credentials for Sale beforehand



**TLP** ● ● ●

Admiralty code **A2**

Severity **High**

Reliability **100%**

---

Credibility **80%**

**Source details**

First seen	22 Mar 2022 04:00
Source URL	<a href="https://russianmarket.to/">https://russianmarket.to/</a>
Domain	russianmarket.to
IP	172.67.168.114
Provider	CLOUDFLARENET
Country	United States
Malware	Vidar
Seller	be####st

**Victim details**

Raw log record 📄

```
{
  "browser": "Mozilla Firefox",
  "login": "+",
  "password": "+",
  "cookie": "+",
  "source_link": "██████████"
}
```

```
<script type="text/javascript">
var dirList3305091 = [
  {name: "archive.zip", iconSkin: "pIcon01", children: [ {name: "Autofill", children: [ {name: "Google Chrome_Default.txt"}, {name: "Microsoft Edge_Default.txt"}, {name: "Mozilla Firefox_jiq0v5vj.default-release.txt"} ]}],
  {name: "CC", children: [ {name: "Google Chrome_Default.txt"}, {name: "Microsoft Edge_Default.txt"} ]}],
  {name: "Cookies", children: [ {name: "Edge_Cookies.txt"}, {name: "Google Chrome_Default.txt"}, {name: "Google Chrome_Network.txt"}, {name: "IE_Cookies.txt"}, {name: "Microsoft Edge_Default.txt"}, {name: "Mozilla Firefox_jiq0v5vj.default-release.txt"} ]}],
  {name: "Downloads", children: [ {name: "Google Chrome_Default.txt"}, {name: "Microsoft Edge_Default.txt"} ]}],
  {name: "Files", children: [ {name: "DESKTOP.zip"} ]}],
  {name: "History", children: [ {name: "Google Chrome_Default.txt"}, {name: "Microsoft Edge_Default.txt"}, {name: "Mozilla Firefox_jiq0v5vj.default-release.txt"} ]}],
  {name: "information.txt"}, {name: "outlook.txt"}, {name: "passwords.txt"}, {name: "screenshot.jpg"} ]
];

$(document).ready(function () {
$.fn.zTree.init($("#treeLog3305091"), false, dirList3305091);
});
</script>
```

Type	Logs
OS	Windows 7 Ultimate [x64]
Price	10 USD



# What about decryption?



The screenshot shows the Hive website interface. On the left is a dark sidebar with the Hive logo and navigation links for Website, Revenue, and Employees. Below these is an 'Uploaded Files' section with a file named 'listing.txt' (272.2 Kb) and an 'Upload' button. The main content area is split into two columns. The left column is a 'Live Chat' window for the 'Sales dept.' dated '23 November'. It contains three messages: a welcome message, a demand for \$600,000 in Bitcoin, and a claim of having exfiltrated files. The right column is a yellow advertisement for 'Decryption Software', featuring a folder icon with a key, a 'Download' button, and text instructing users to contact sales via live chat.

**Hive**

**Live Chat**  
Sales dept.

23 November

Hello and welcome to Hive.  
How may I help you?

05:25

To decrypt your files you have  
to pay \$600,000 in Bitcoin.

06:11

I have uploaded a list of  
exfiltrated files we have from  
your network

06:22

Type your message

Send  
Ctrl+Enter

**Decryption Software**

Contact our sales department first via  
Live chat to get an offer please.

Download



# Some IOCs



Files
sk.zip
sk.exe
xxx.exe
PCHunter64.exe
a2122.exe
a42_34.exe.sa

C2
93[.]115.29.50:443
192[.]53.123.202:443
http://46[.]166.169.34:80/asdfg
http://185[.]8.105.112:80/asdfg



# What to do if hit by Ransomware



1. Create memory dump if encryption is in progress
2. Isolate network
3. Call for help (to have proper incident response)
4. Start remediation activities
5. Improve your security



# Expert Level info



SHA 256 hashes for all known versions of HIVE Encryptor

Version 1.0 - 5.2

OS: Windows, Linux, ESXi

Samples include: Encryptor, Dropper, Decryptor

[https://github.com/rivitna/Malware/blob/main/Hive/Hive\\_samples.txt](https://github.com/rivitna/Malware/blob/main/Hive/Hive_samples.txt)

HIVE 5.2	f5d1acc98d62b3a3bfc640bfafd3144fa66112470512e26197cc9b643e438a0e
----------	--

Use the hashes to download binaries from malware repositories like Virustotal for your own research and hidden nuggets

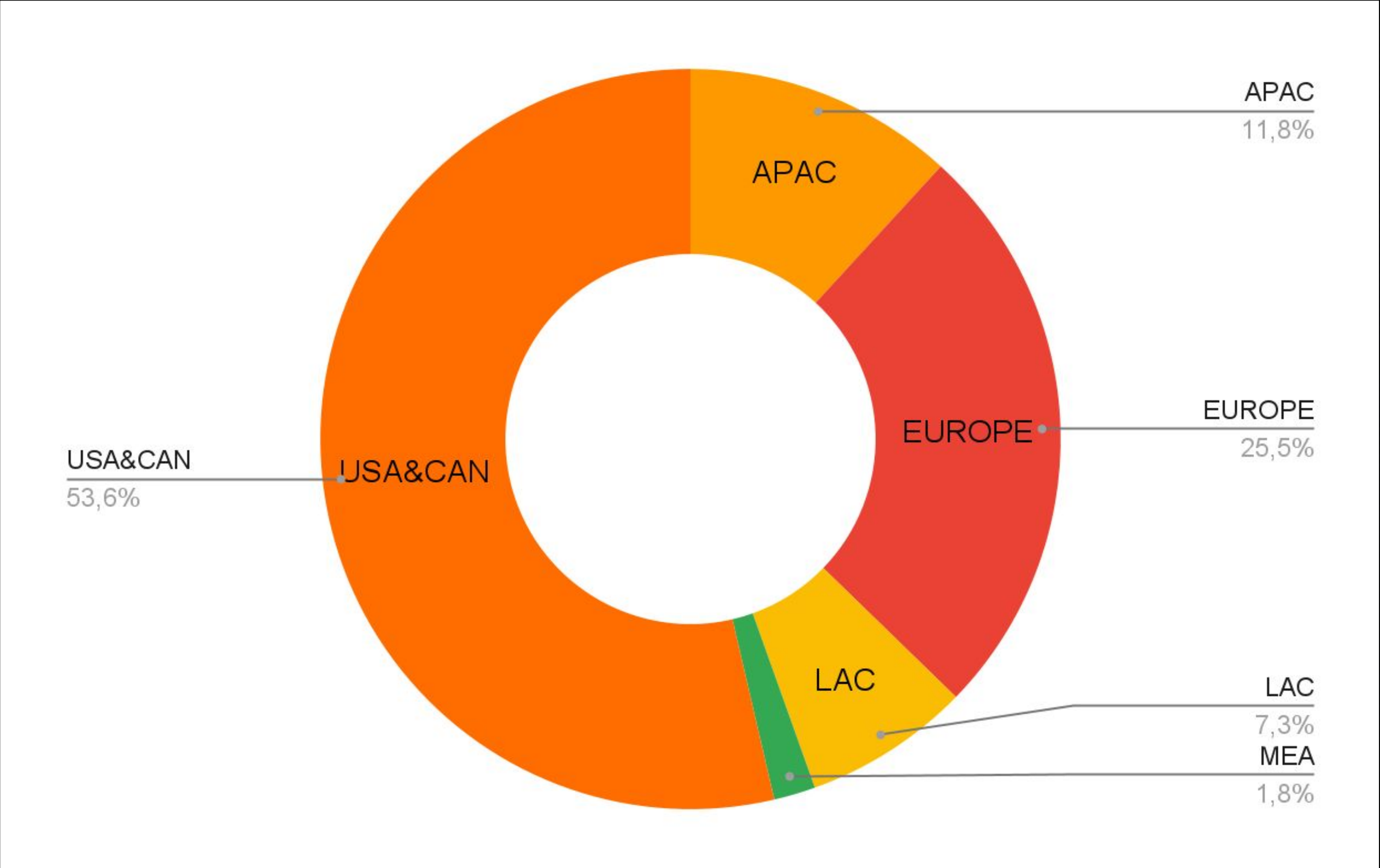




# HIVE activity in LAC

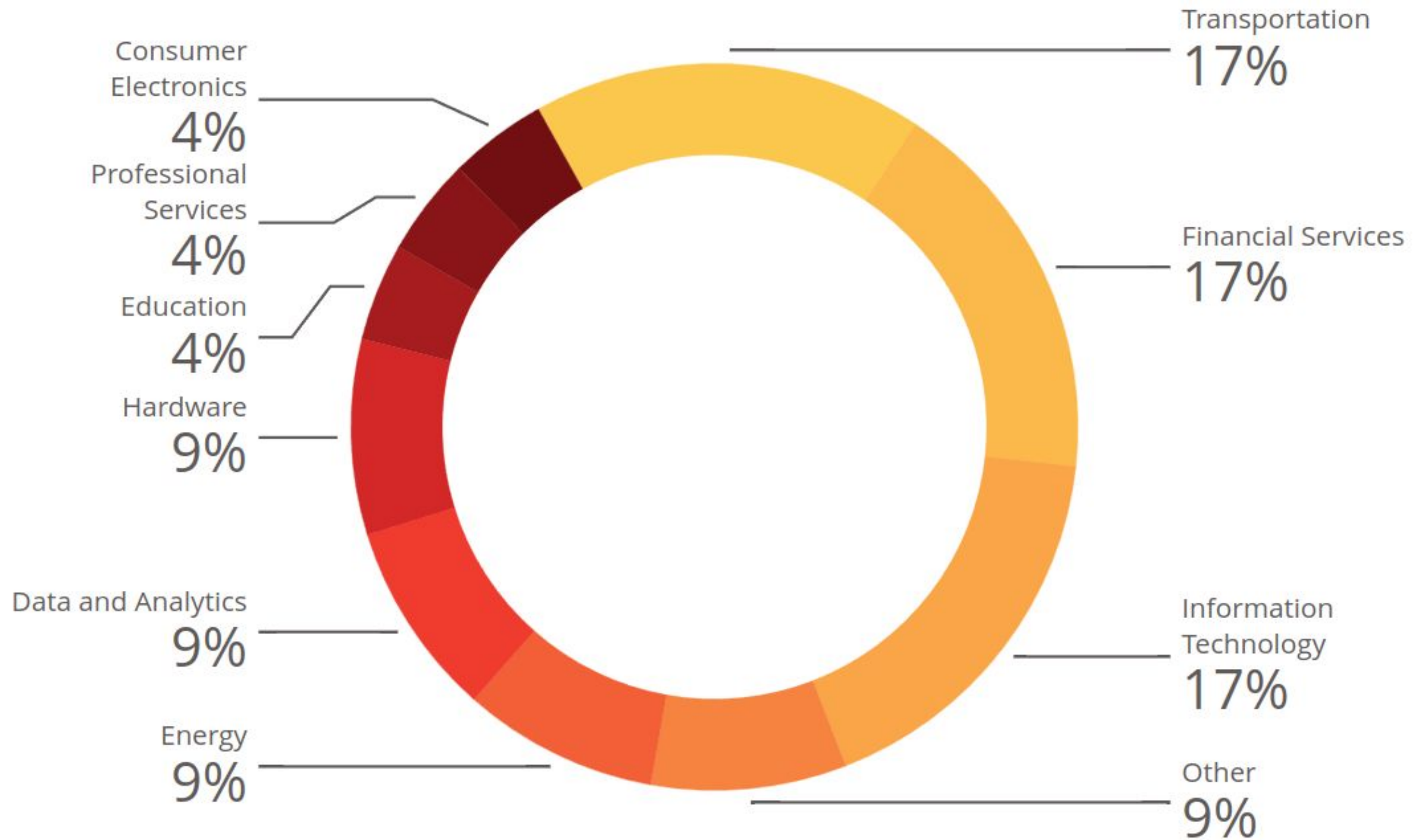


# LAC represents 7.3% (Data Leak Sites)



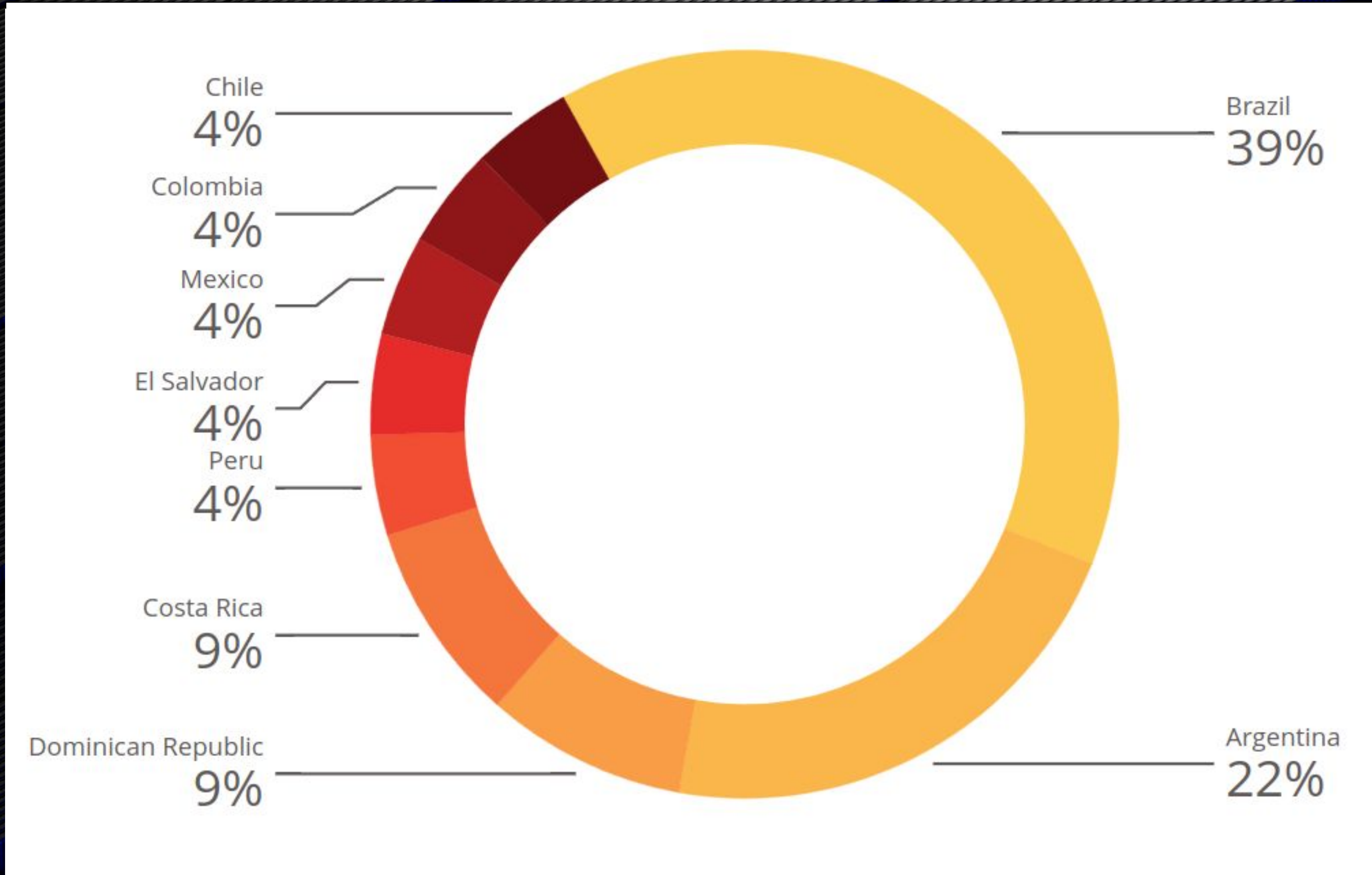


# LAC Industry Break down (All sources)



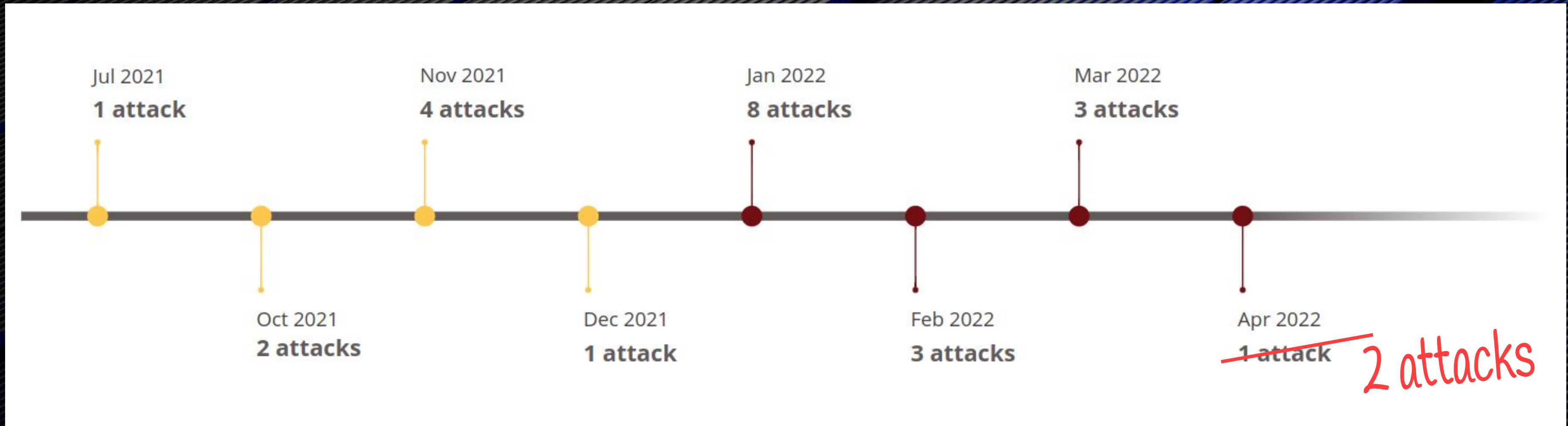


# LAC Countries (All sources)



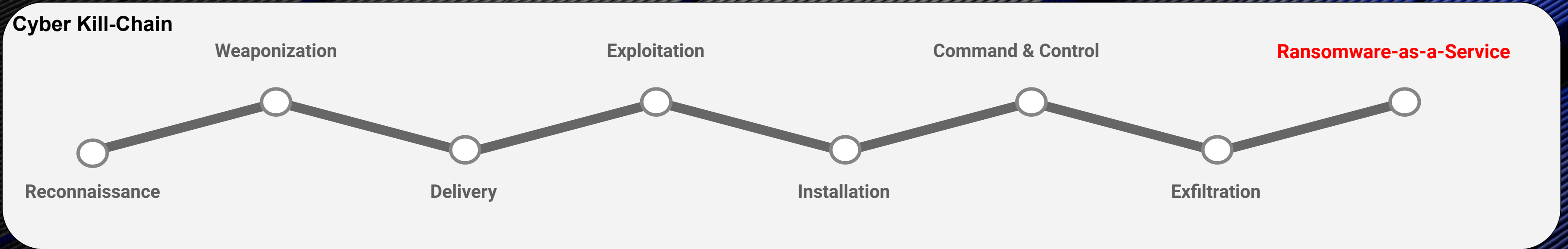


# LAC HIVE Timeline





# Ransomware Kill-chain



**Stage 1**

**Stage 2**

**Stage 3**

Average time in Stage 2 inside the network of before Encryption: **13 Days**

Time for Group-IB to detect 50% of Compromises:

**<24 Hours**

Time for Group-IB to detect 99.9% of Compromises:

**5 days**



# Response to Ransomware for the individual org.



## Stage 1

## Stage 2

## Stage 3

- Threat Intel on Targeted Recon,
  - Ransomware groups favorite Vulns
  - Detections of Major Raas service pre-encryption
- Track Exposed Assets - Both Direct and in the supply chain (47% of attacks)
- Business Email Protection, Malware Detonation
- NTA Detect "Soft" (of attacks) and (

- EDR
  - Persistence
  - Windows Scripting
  - Application shimming
  - Powershell
  - Processes started from Office Programs
  - Procdump of lsass (31%)
- NTA
  - East-west spreading, ADFind (51%)
  - C&C traffic over covert channels

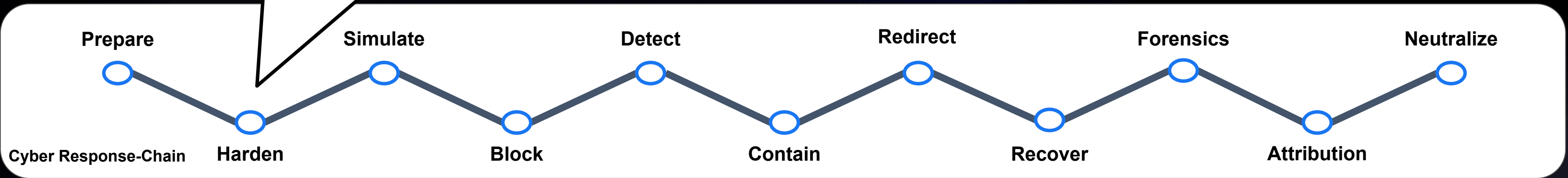
- EDR:
  - Detect and Block HIVE executable
  - Data Leak Prevention
  - End-point isolation
- DFIR
  - Attribution
  - Deanonimize
  - Report to InterPol, Europol

**Off-line (and off-site) Backups**

## Pre-compromise

## Intra-compromise Response

## Post-compromise Response





# Response to Ransomware for the individual org.



## Stage 1

- NTA On ISP Backbone
  - Detect “SoftPerfect Network Scanner” (71% of attacks) and Cobalt Strike (57%)
- Threat Intel:
  - Our Global sensors detect scanning activity targeting LACNIC Ranges
- BEC:
  - ISP Level Email url and attachment malware detection (Cobalt Beacon)

## Stage 2

- EDR
  - Multi-customer ISP Level managed deployment
- NTA in SD-Wan/SASE
  - East-west spreading, ADFind (51%)
  - C&C traffic over covert channels
  - DNS resolution of suspicious domains

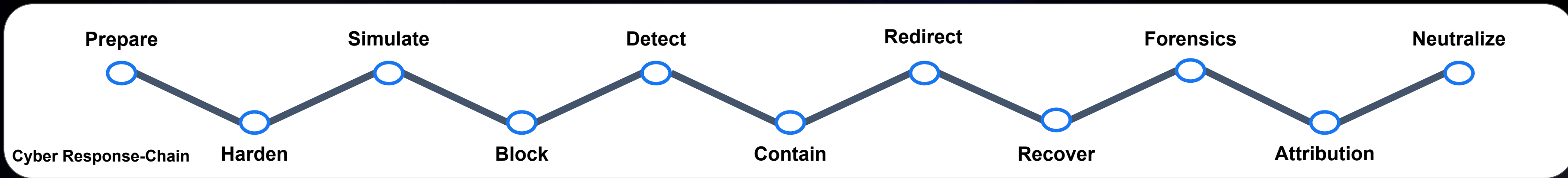
## Stage 3

- DFIR
  - ISP provided DFIR, Forensics, Attribution and Neutralization backed by World Class Provider.

## Pre-compromise Response

## Intra-compromise Response

## Post-compromise Response





# Group-IB Tracks 51 “Ransomware as a Service” groups



Good News: Many groups have ceased operations and after the leaders behind REvil got arrested in January 2022, several smaller independent hackers who had used REvil’s RaaS also exited the Ransomware business.

Bad News: The number of Ransomware victims is unchanged so the remaining threat actors have grown to fill the vacuum.

As of May 2, we know 23 active RansomWare as a Service groups which hit victims in the previous 30-day period

More in [HI-TECH CRIME TRENDS 2021/2022 PART II “Corporansom”](#)



## In Conclusion



We hope this has been an informative insight into:

- Ransomware-as-a-service in general
- HIVE Ransomware in particular
- Tools for fighting Ransomware
- How to respond to Ransomware



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**Svetlana Ostrovskaya**  
Principal DFIR Analyst

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**Happy Hunting**





For Help on Ransomware attacks including:

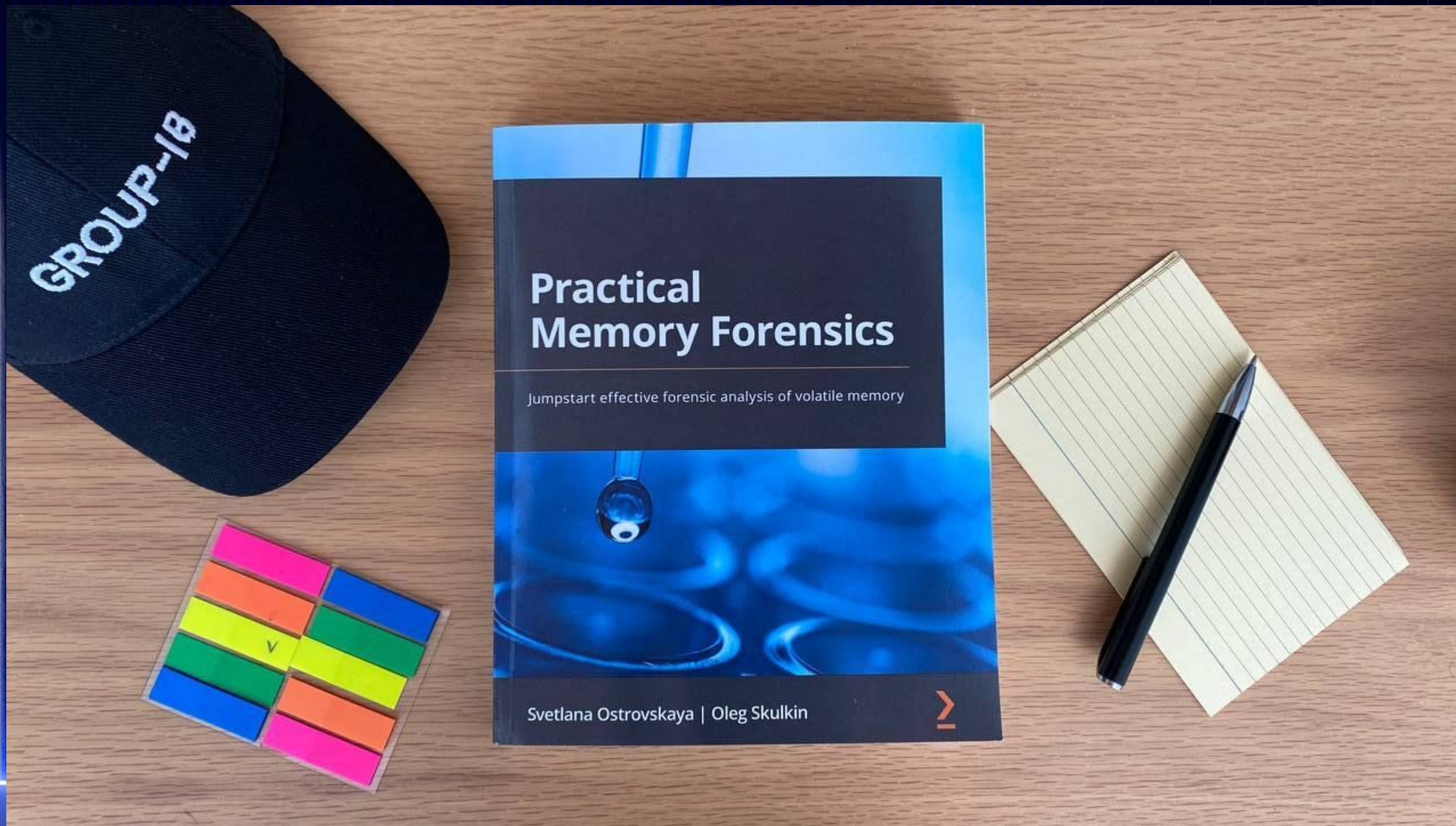
- Training for Digital Forensics Incident Responders, Threat Hunters
- ISP Level Malware traffic pattern detection
- Multi-region centralized ISP Level Malware detonation
- Latin America Country and Industry specific Threat Intel

Please contact Jesper Jurcenoks on

[jurcenoks@group-ib.com](mailto:jurcenoks@group-ib.com)



GROUP-IB



<https://www.amazon.com/gp/product/B09RMYSGTZ/>

Svetlana's recent book





# Extra Slides





# THREAT INTELLIGENCE & ATTRIBUTION

System for analyzing and attributing cyberattacks, threat hunting, and protecting network infrastructure

Adversary-centric threat detection and proactive threat hunting

Advanced fraud detection and user authentication

Next-gen intellectual property protection

## THREAT HUNTING FRAMEWORK

- Huntbox
- Sensor
- Sensor Industrial
- Polygon
- Huntpoint
- Decryptor

## FRAUD HUNTING PLATFORM

- Processing Hub
- Preventive Proxy
- Web Snippet
- Mobile SDK

## DIGITAL RISK PROTECTION

- Anti-Scam
- Anti-Counterfeiting
- Anti-Piracy
- Leak Detection
- VIP Protection

## SERVICES THAT GIVE AN ACCESS TO “BATTLE FIELDS”

- Security & Risk Assessment
- Red Teaming Testing
- 24/7 CERT-GIB
- Internal & External Threat Hunting
- Incident Response
- Digital Forensics & Malware Analysis
- Hi-tech Crime Investigations
- Cyber Education



# GROUP-IB OVERVIEW



## OUR COMPANY IN NUMBERS:

**1,300+**

investigations  
of high-tech  
cybercrime cases

**600+**

employees

**450+**

enterprise  
customers from

**60**

countries  
worldwide

**11**

key services

**6**

products

**120+**

patents and  
applications

**4**

regions with  
research centers  
Singapore,  
UAE, Russia,  
Netherlands

## GROUP-IB GLOBAL PARTNERSHIPS:

INTERPOL

EUROPOL

## GROUP-IB: RECOGNIZED BY TOP INDUSTRY EXPERTS

FORRESTER® IDC Gartner.

kuppingercoie ANALYSTS

FROST & SULLIVAN



# GROUP-IB TECHNOLOGIES



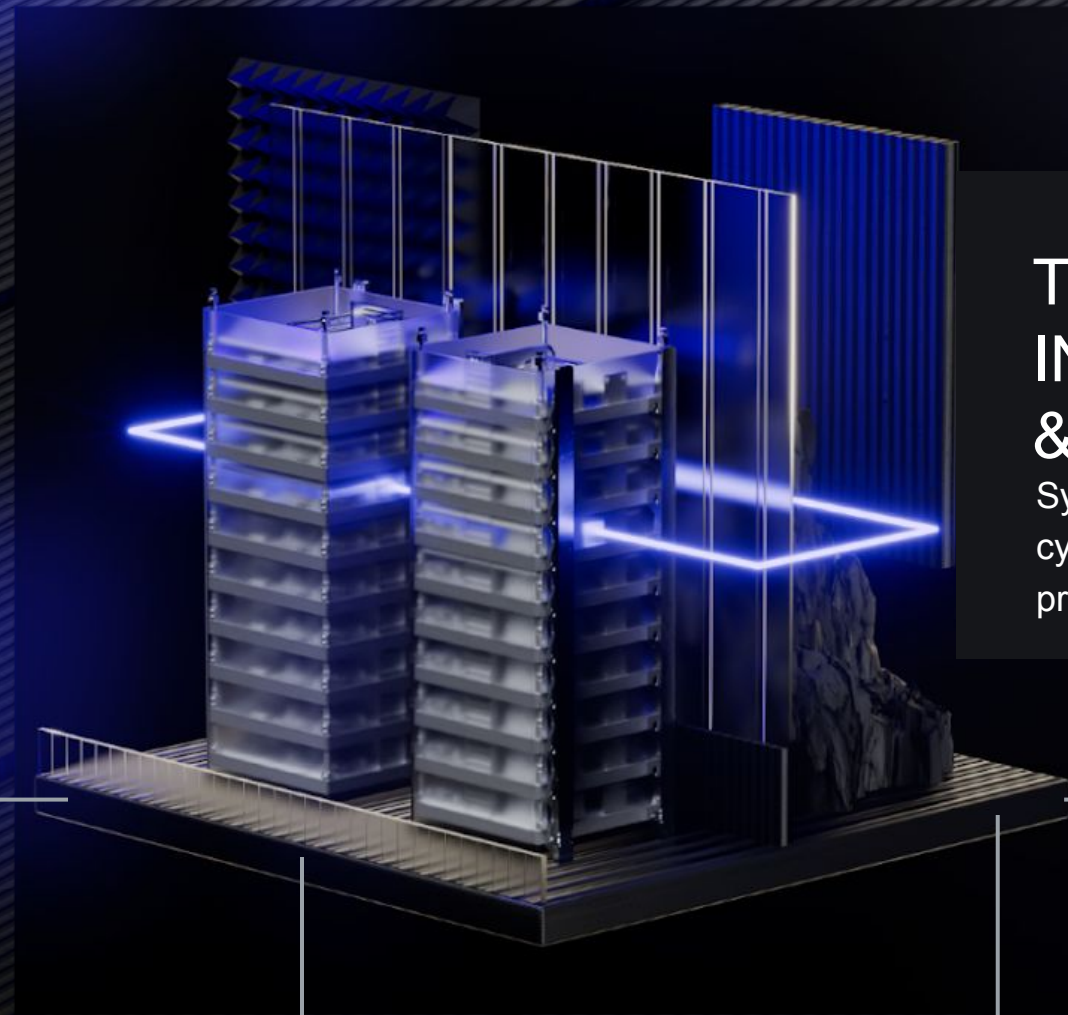
Unified Risk Platform:





# TECHNOLOGIES WITH DETECTIVE DNA

State-of-the-art innovations and extensive service portfolio powered by the best-in-class Threat Intelligence solution



## THREAT INTELLIGENCE & ATTRIBUTION

System for analyzing and attributing cyberattacks, threat hunting, and protecting network infrastructure



### THREAT HUNTING FRAMEWORK

Adversary-centric detection threats within the infrastructure and beyond

### FRAUD HUNTING PLATFORM

Real-time client-side digital identity protection and fraud prevention

### DIGITAL RISK PROTECTION

AI-driven platform for digital risk identification and mitigation

### ASSETZERO

Intelligence-driven attack surface management that continuously discovers all external-facing IT assets  
  
Discover your external attack surface, manage risk and prevent breaches.

### INTELLIGENCE-DRIVEN SERVICES

- Managed Detection & Response
- Digital Forensics and Incident Response
- Managed Threat Hunting
- Managed Anti Fraud
- Managed Takedown
- Red Teaming
- Security, Compromise and Pre-IR assessments

### ATMOSPHERE

Patented email security technology that blocks, detonates and hunts for the most advanced email threats

### CLOUD ANTIBOT

Bot preventive proxy for SME market

SOON



# GROUP-IB SERVICES PORTFOLIO



## PREVENTION

### Red Teaming

Real-life simulation of targeted attacks using the technologies from hackers' arsenals

### Compliance Audit

Unbiased evaluation of your company's security posture against industry's best practices and standards

### Cyber Education

Training courses relevant for all organizations, conducted by certified specialists

### Security Assessment

Assessments performed with advanced technologies and conducted by our team of experts

### Compromise Assessment

Proactive detection of attack intention, compromise or attacked and damaged assets

### Pre-IR Assessment

Evaluation of your incident response capabilities and your team's readiness

## RESPONSE

### Incident Response

Network traffic analysis, forensic analysis, malware analysis conducted by incident experienced response team

### Managed Threat Hunting

Threat Hunting service powered by Group-IB technology

### Managed Detection & Response

Detection & Response service powered by Group-IB technology

## INVESTIGATION

### Investigations

World-class investigations bringing criminals to justice

### Digital Forensics

Top experts with 18+ years of experience dissecting cyber incidents

## THE GROUP-IB SERVICES PORTFOLIO COVERING ALL STAGES OF CYBER RESPONSE CHAIN:

### BEFORE

PREPARE

HARDEN

SIMULATE

PREVENT

### DURING

DETECT

CONTAIN

REDIRECT

RECOVER

### AFTER

INVESTIGATE

ATTRIBUTE

NEUTRALIZE

audits,  
assessment  
assetzero

consulting  
incident  
readines

red-team  
pen-testing  
trebuchet

atmosphere  
malware  
detonation

HUNTbox  
MDR

CERT  
HUNTBox  
EDR

HUNTBox  
malware  
detonation

CERT

DFIR

de  
anonymize

report  
to interpol



# ABOUT CERT-GIB



## CERT-GIB IS:

Round-the-clock computer security incident response team  
First private CERT in Russia founded in 2011  
70 000+ hours of incident response  
60+ certified experts and analysts  
The biggest laboratory in Eastern Europe  
Information exchange among teams in 78 countries

## CERT-GIB COMPRISES:

24/7 incident response  
Rapid takedown of dangerous websites in 2500+ domain zones  
Close cooperation with CERT teams, domain registrars and hosting providers from 150+ countries globally  
Collection, analysis and preservation of digital evidence  
Full support on every stage of incident response and investigation  
Preparation of required documentation for court

## INTERNATIONAL COOPERATION AND RECOGNITION



### ACCREDITED MEMBER OF FIRST

The largest global network of IR teams, encouraging cooperation in incident prevention and reaction, information sharing among teams in 78 countries.



### MEMBER OF APWG

Anti-phishing working group, an international coalition unifying the global response to cybercrime



### PARTNER OF THE IMPACT

IMPACT serves as a politically neutral global platform that brings together governments of the world, industry and academia to deal with cyber threats



### ACCREDITED MEMBER OF TRUSTED INTRODUCER

The Trusted Introducer Service - was established by the European CERT community in 2000 providing vital support for all security and IR teams.



### MEMBER OF OIC-CERT

OIC-CERT is the Computer Emergency Response Team for Organisation of Islamic Cooperation (OIC) member countries



# GROUP-IB AS A RECOGNIZED LEADER



Gartner Market Guide	Gartner Competitive Landscape	IDC Russia	Forrester Vendor Landscape	Forrester New Wave	Gartner Market Guide	Forrester Now Tech Gartner Market Guide	Forrester Total Economic Impact Forrester Wave Frost & Sullivan Frost Radar
2014	2015	2016	2017	2018	2019	2020	2021

**ABOUT GROUP-IB**

**BUSINESS INSIDER**

The firm's Threat Prevention & Investigation Department has been a prominent factor leading Group-IB toward becoming the go-to expert on Russian cybercrime.

Defenders of the web: The people behind 7 influential security companies (2015)

**THREAT INTELLIGENCE & ATTRIBUTION**

**FROST & SULLIVAN**

Group-IB is one of the few vendors in the market that conducts intelligence collection in line with customers' requirements.

Group-IB is one of the most innovative vendors in the market and a leader on the Frost Radar leading CTI vendors.

Frost Radar™: Global Cyber Threat Intelligence Market, 2021

**THREAT HUNTING PLATFORM**

**KUPPINGERCOLE ANALYSTS**

Group-IB's TDS is one of the most feature-rich NDR solutions in the market. It exceeds expectations for NDR functionality. Organizations that need a full range of NDR capabilities, especially for industrial applications, should consider Group-IB TDS.

Kuppingercole: Leadership Compass Report - NDR, 2020

**THREAT INTELLIGENCE & ATTRIBUTION**

**FORRESTER**

With Group-IB TI&A, fraud prevention on payment cards became available instantly, and that resulted in large savings. Before, it would not have been possible for us to replicate that effort.

Forrester: Total Economic Impact report, 2021

**FRAUD HUNTING PLATFORM**

**KUPPINGERCOLE ANALYSTS**

Exhaustive device intel capabilities, advanced bot management available, sophisticated array of ML detection models and excellent fraud analyst interface"

Kuppingercole: Leadership Compass Report - FRIP, 2021

**DIGITAL RISK PROTECTION**

**FROST & SULLIVAN**

Group-IB keeps a close watch on customers' needs. For instance, the company has included brand protection and digital footprint monitoring in MSSP and MDR Partner's Program in response to partner's end-clients demand."

Frost Radar™: Digital Risk Protection Innovation Excellence, 2020



# MEET GROUP-IB GLOBAL TEAM OF EXPERTS



The Group-IB team comprises cybersecurity professionals in different areas:



**We created a distributed and repeatable team structure across the world to provide our clients with a tailored and robust protection and continuous service.**

- Threat hunting
- Digital forensics and incident response
- Malware reverse engineering
- Penetration testing
- Security assessment
- Investigations

**60**

countries of presence

**600+**

experts internationally

**135**

Cyber security certifications

**1 300**

investigations worldwide

**18+**

languages spoken by analysts

**70K**

hours of incident response

**GLOBAL PRESENCE**



# OUR PRINCIPLES



## PROUDLY PRESENTING GROUP-IB'S FIVE PRINCIPLES, THE CORE VALUES OUR TEAM STANDS FOR

### Zero tolerance to cybercrime

Fighting against all cybercrime: no matter geography, origin or victim choice

### Doing things right and doing the right things

Acting the right way, standing for good, supporting our customers, partners, friends and mutually help each other.

### Researching and investigating

Being vigilant, ready to combat cyber criminals and bring them to justice no matter what is your role in a team at Group-IB.

### Inventing and innovating

Continuously innovating and improving our technologies, products and services in order to make a difference and proactively fight against cyber criminals.

### Earning honestly and investing in cyber safe culture

We reinvest our gains to build research centers in regions of presence, hire new talents to study local threat landscape. Supporting us, our clients also contribute to cybersafety of their regions.

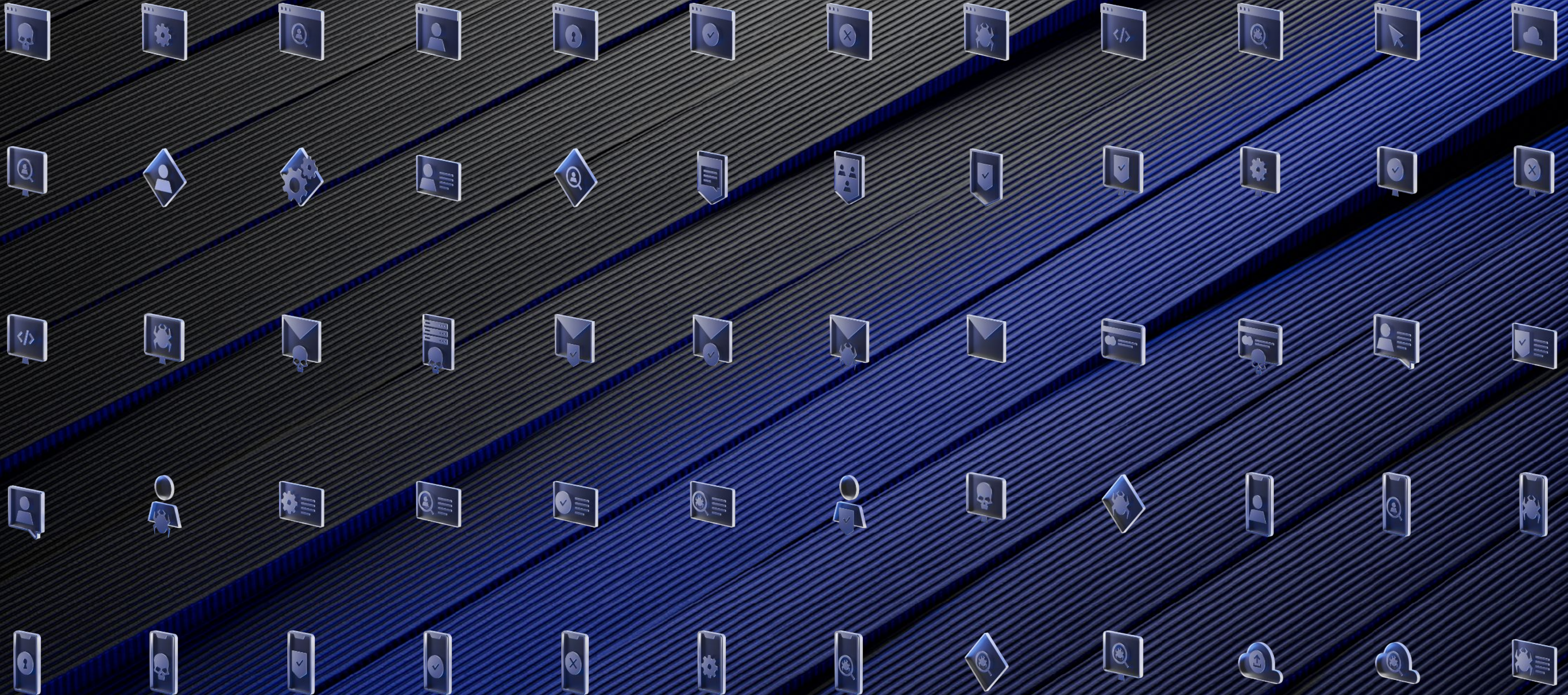


# ICONS 01





# ICONS 02





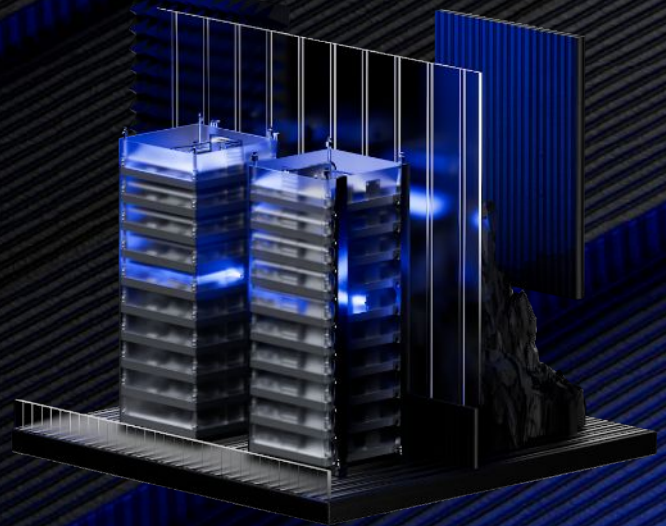
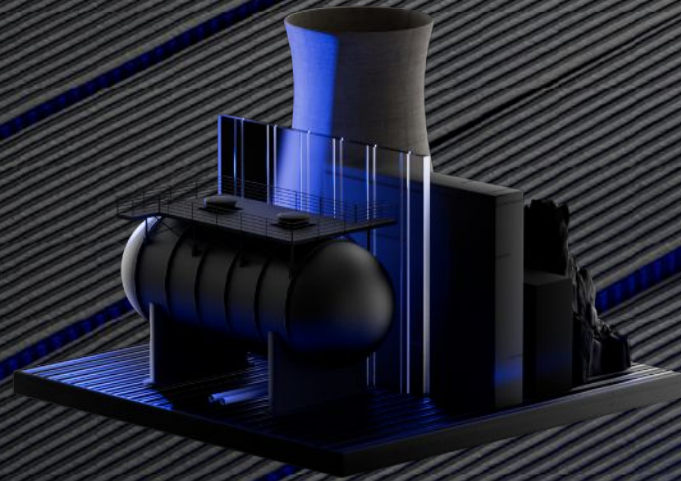
# ICONS 03



\* The main glass icons are blue icons, red ones are recommended to be used only in case of acute necessity.

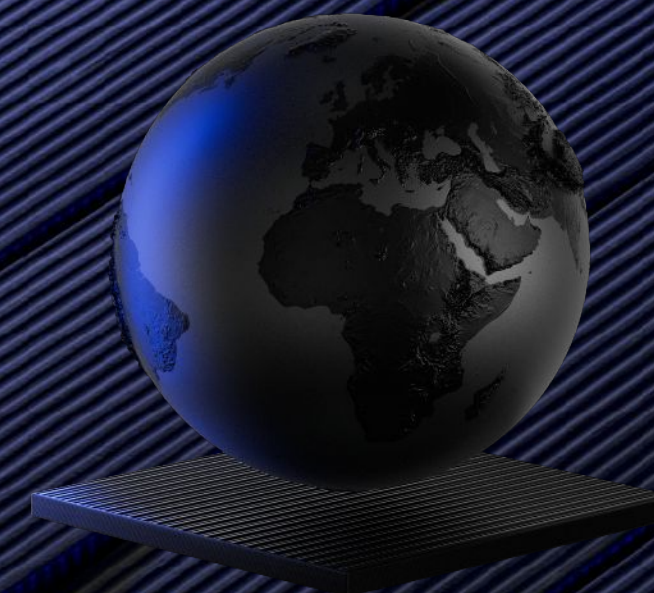
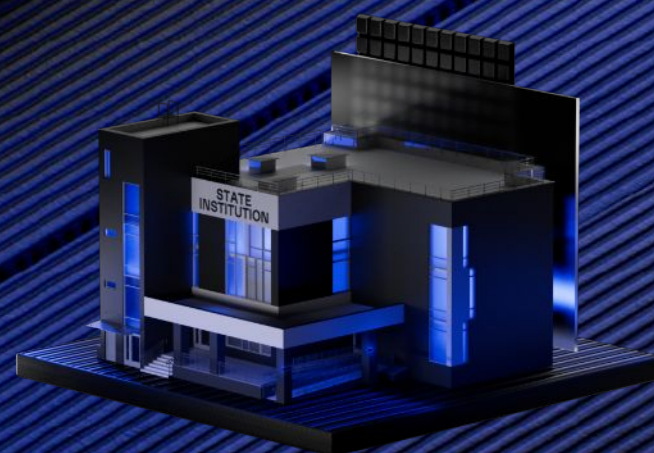
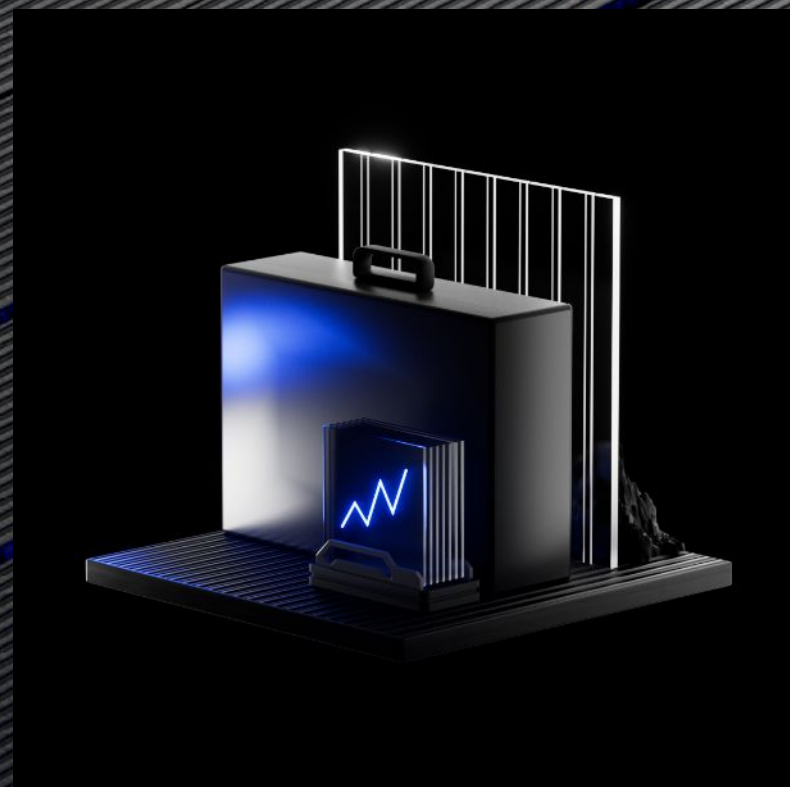


# FACTOIDS 01



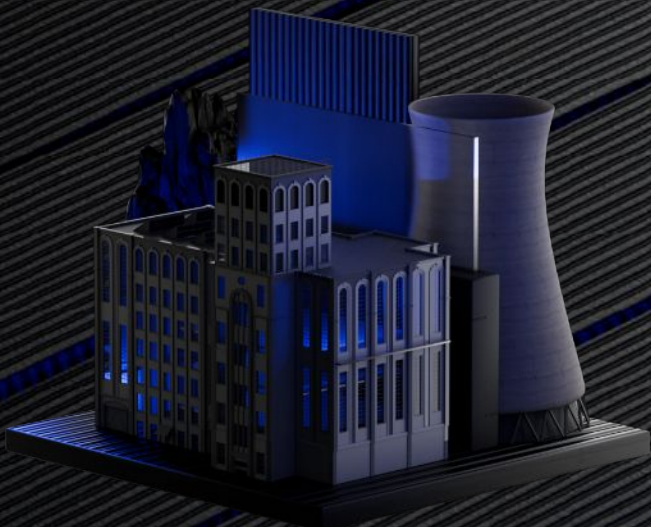


# FACTOIDS 02





# FACTOIDS 03





# OTHER ELEMENTS 01



□ 01 ————— □ 02 ————— □ 03

□ 01 ————— □ 02



**18 yr**

spent building the industry's best threat database

**11 mln**

threat actors are mapped and tracked

## Small tags



## Medium tags







## Fraud Hunting Platform

BY GROUP-IB

Compromised credentials

Compromised devices

Compromised websites

Fraudster IP addresses

Fraudster devices

Fraudster profile

Compromised credit Cards

## Group-IB Investigation team BY GROUP-IB

01 Deep knowledge of criminal schemes Enables us to immobilize the attackers before businesses suffer major damage

02 Individual approach by special project team Project team consists of eDiscovery and Forensic analysts, economic security, financial audit, corporate law specialists, financial crime experts.

03 Proprietary technologies for criminal's detection We accelerate investigations using in-house tools for pattern analysis, network analysis, tactical profiling.

04 Collaboration with law enforcement agencies Work with international police in combating various types of crimes from computer-based crimes to murders and missing people

450+

enterprise customers around the world

550+

employees worldwide

1,300+

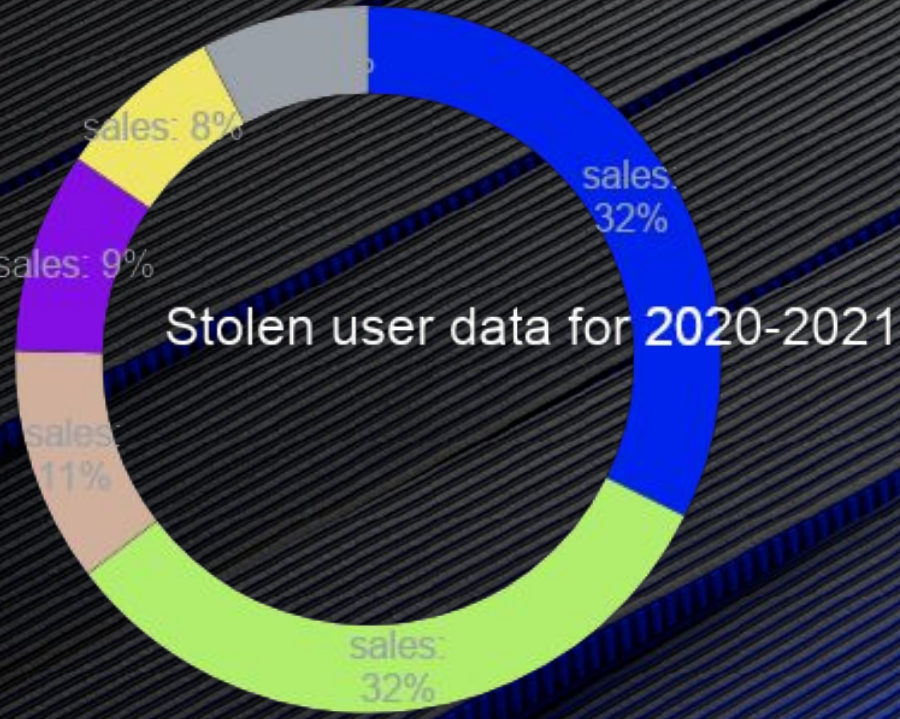
successful investigations of hi-tech cybercrime cases

70,000+

hours of hands-on Incident Response



# DIAGRAMS 01



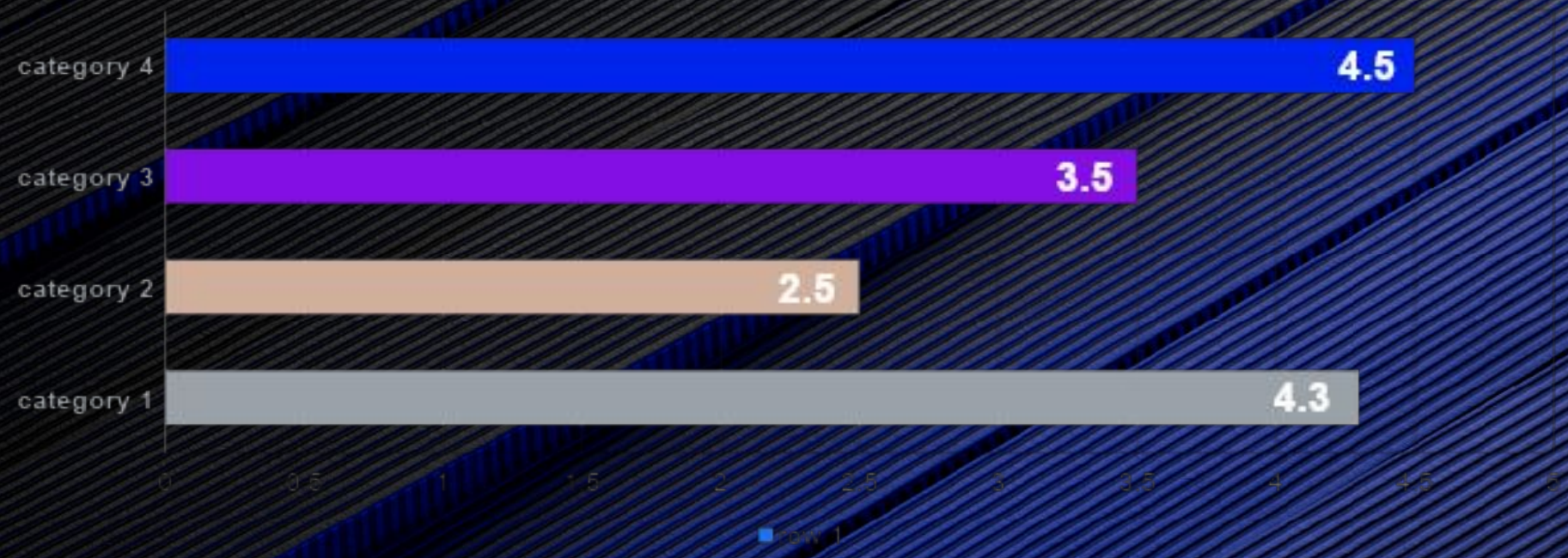
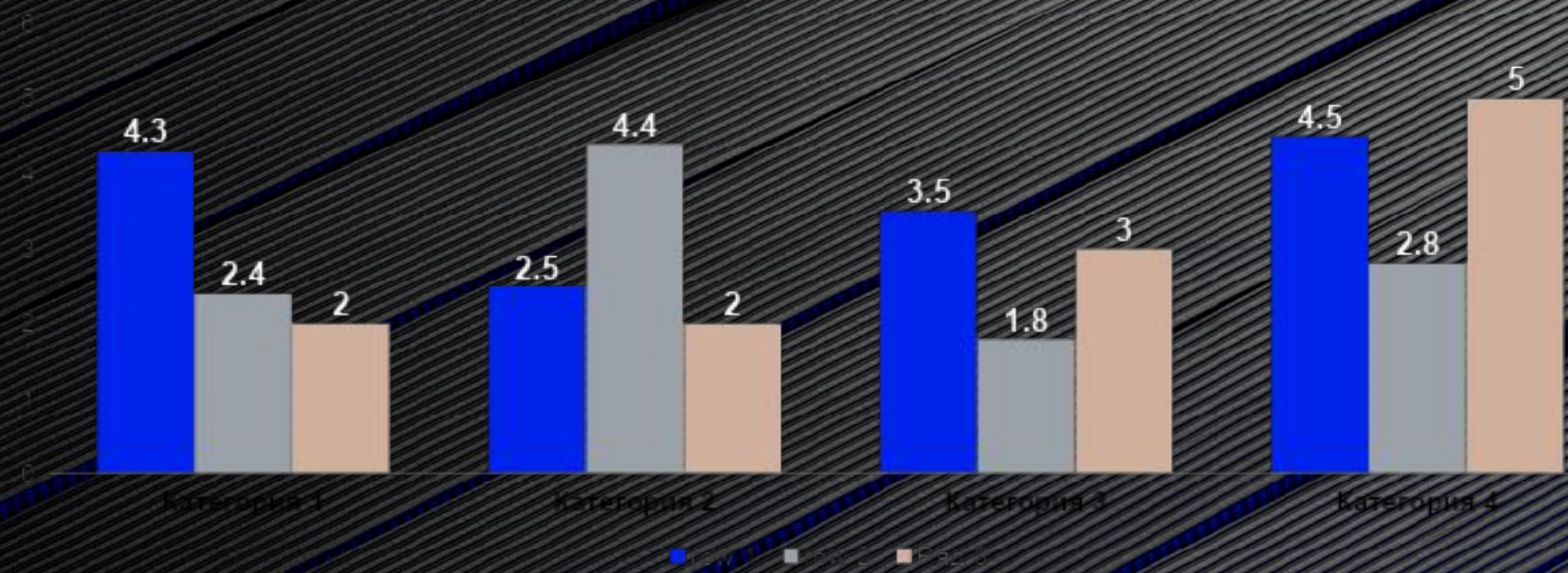
■ quarter. 1 ■ quarter. 2 ■ quarter. 3 ■ quarter. 4 ■ quarter. 5 ■ quarter. 6



■ quarter. 1 ■ quarter. 2 ■ quarter. 3 ■ quarter. 4 ■ quarter. 5 ■ quarter. 6

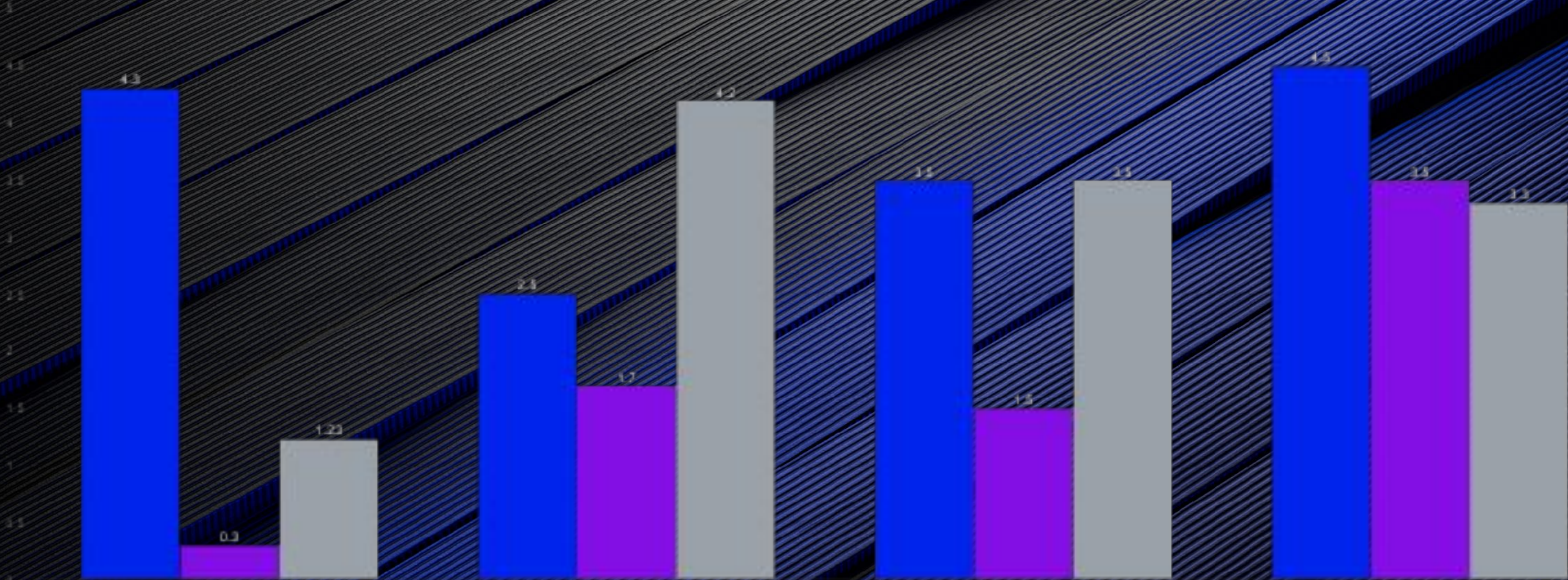


# DIAGRAMS 02





# DIAGRAMS 03





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TEMPLATES



# USEFUL LINKS TO SLIDES



In other words, fast navigation

The standard icons are on [this slide](#)



The factoids are on [this](#) and the following slides after that



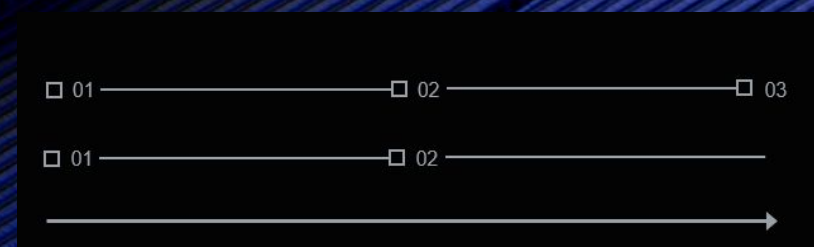
The glass icons are on [this](#) and the slides following it.



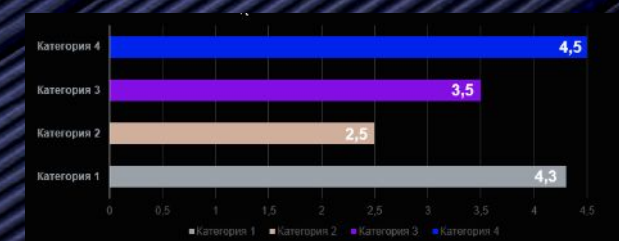
The tables on [this](#) and the following slides

Условия	Пакет «Лайт»
Длительность	1 год
Краткое описание	100% предоплата

The elements that can be quickly copied are [here](#)



Diagrams can be found on [this slide](#) and the following slides after that





# EXAMPLE OF A COMPLETED TEMPLATE

**01** This is how the lead text is filled in, this is the text to fill in, you can change it

## JUST AN EXAMPLE OF A FILLED HEADER

this is just an example of filling in the text, in order to show how an already filled slide looks, you can change the text, but please do not repaint it

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# EXAMPLE OF A COMPLETED TEMPLATE

**02** This is how the lead text is filled in, this is the text to fill in, you can change it

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## JUST AN EXAMPLE OF A FILLED HEADER

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# EXAMPLE OF A COMPLETED TEMPLATE 03



## JUST AN EXAMPLE OF A FILLED HEADER

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# EXAMPLE OF A COMPLETED TEMPLATE 04



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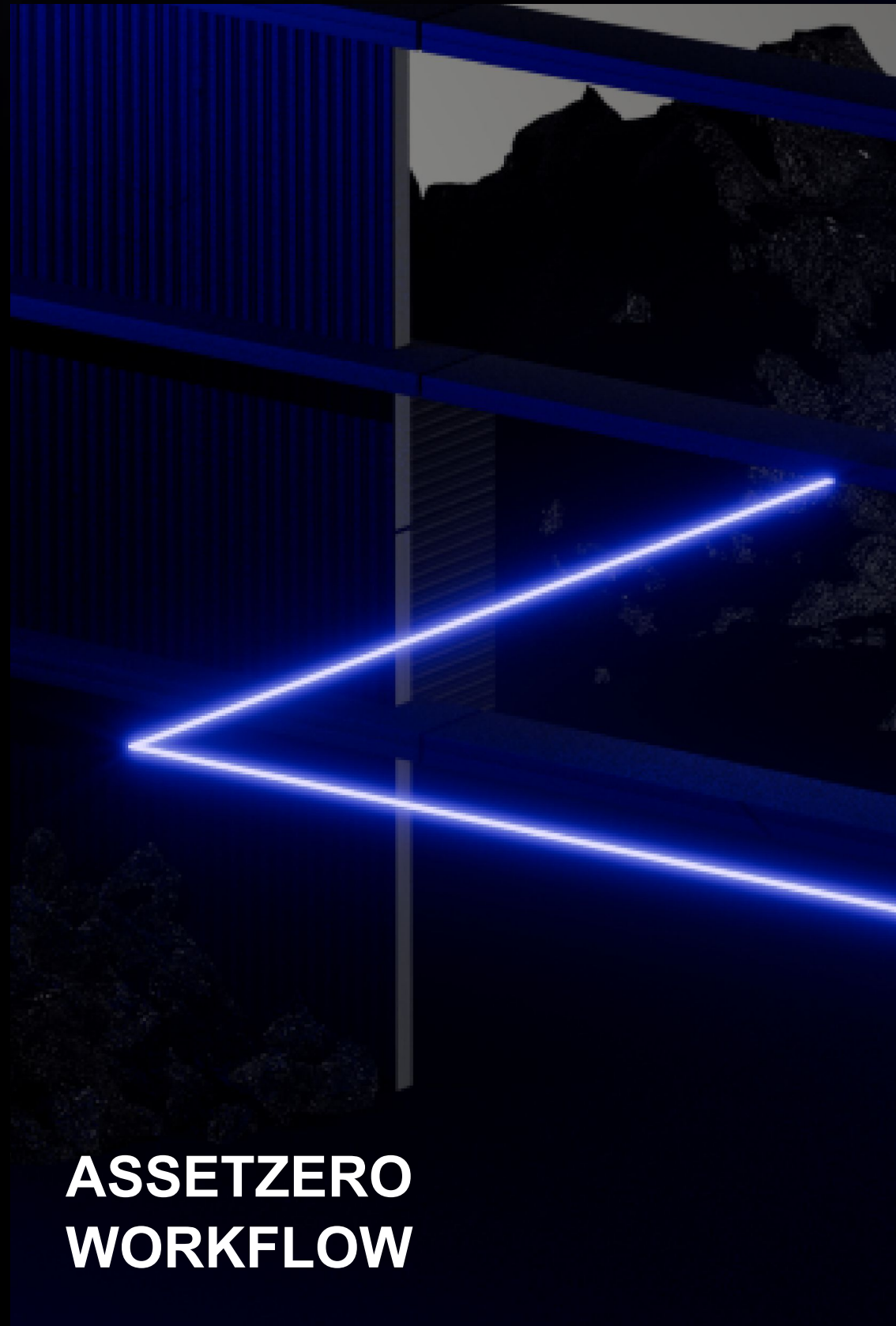
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# EXAMPLE OF A COMPLETED TEMPLATE 05



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# EXAMPLE OF A COMPLETED TEMPLATE 06



this is how the lead text is filled in, this is the text to fill in, you can change it

## JUST AN EXAMPLE OF A FILLED HEADER

- Growth requires creation of safe digital platforms and ecosystems to scale and extend the digital reach
- Cross-channel complex digital footprint  
Wider digital attack surface
- Digital assets are increasingly exposed and harder to control

## JUST AN EXAMPLE OF A FILLED HEADER

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# EXAMPLE OF A COMPLETED TEMPLATE 06

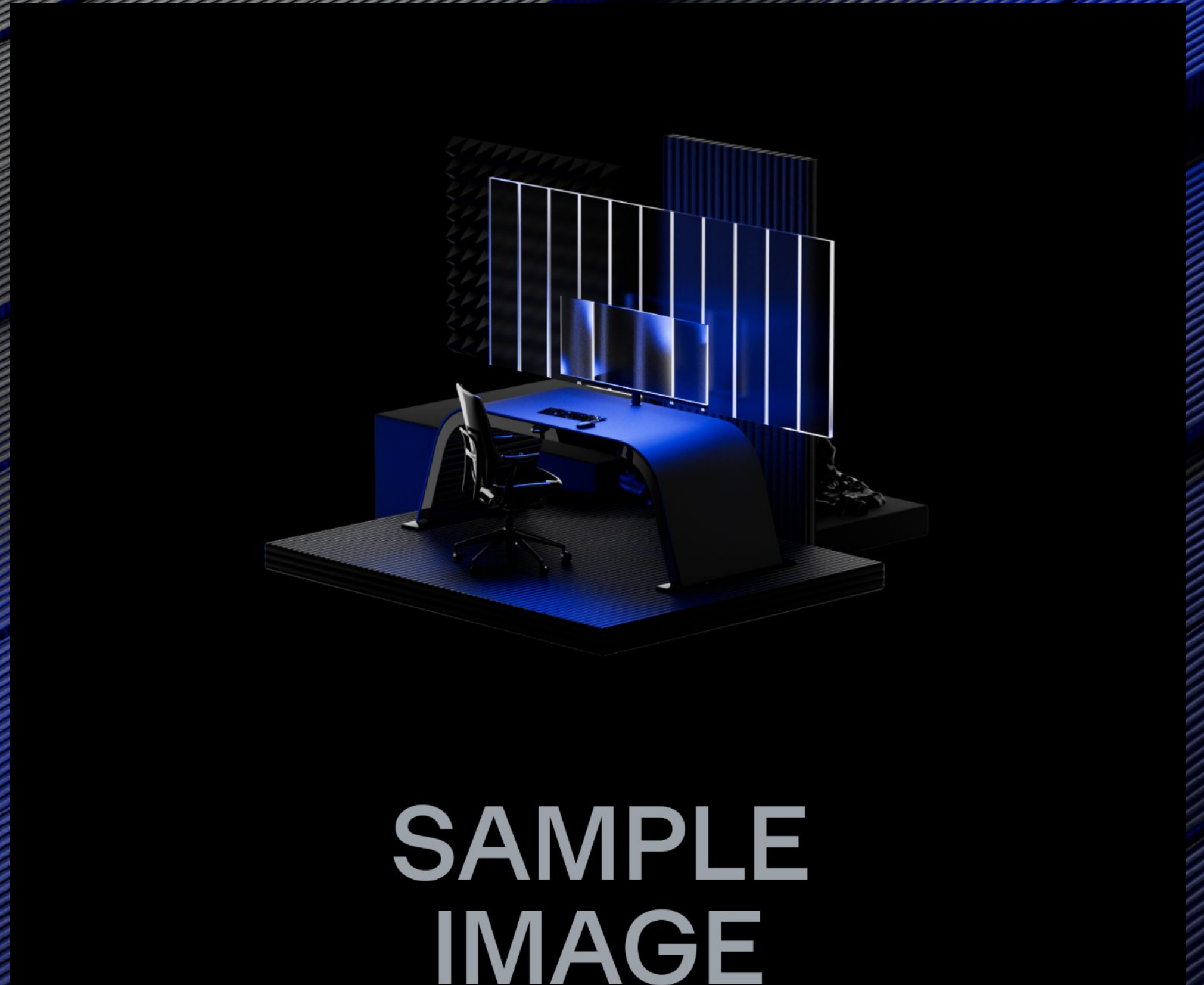


this is how the lead text is filled in, this is the text to fill

in, you can change it  
**JUST AN EXAMPLE  
OF A FILLED HEADER**

- Growth requires creation of safe digital platforms and ecosystems to scale and extend the digital reach
- Growth requires creation of safe digital platforms and ecosystems to scale and extend the digital reach
- Growth requires creation of safe digital platforms and ecosystems to scale and extend the digital reach

JUST AN EXAMPLE  
OF A FILLED HEADER





# WHERE THE OTHER SLIDES?

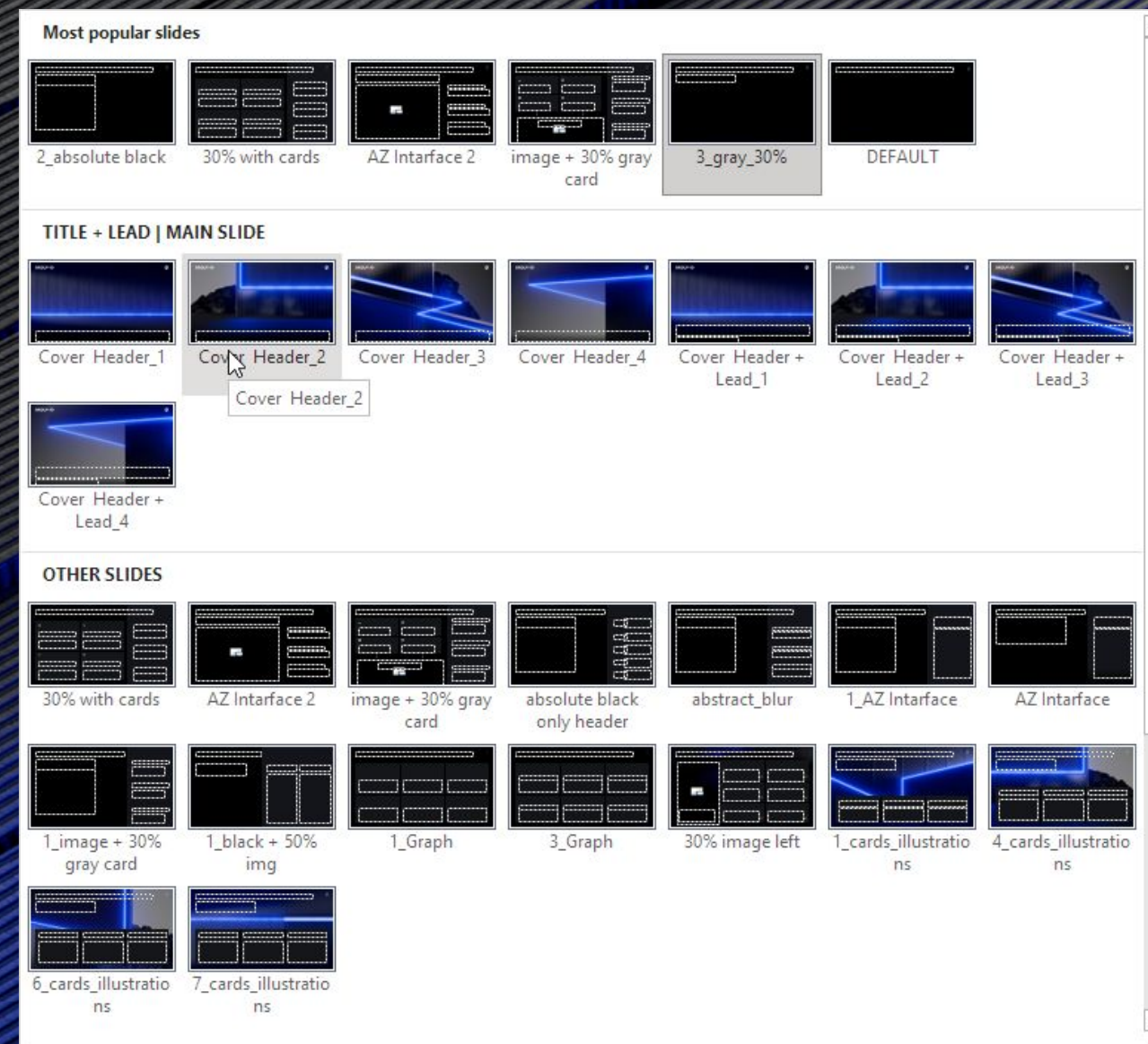
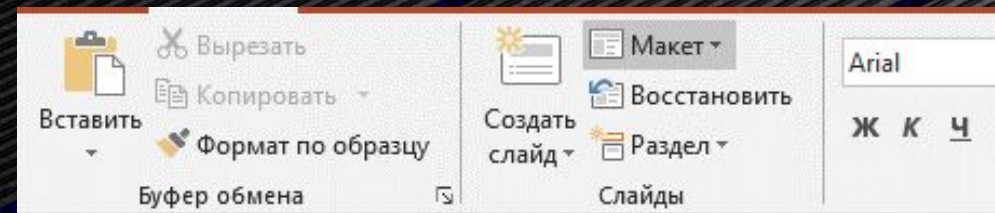


All other templates you can find here (look at the steps below)

□ 01

□ 02

□ 03



**CHOOSE  
THE ONE  
YOU NEED!**



GROUP-IB



# TEMPLATES USAGE



# HOW TO USE ICONS?



There are two basic rules

Firstly, we use standard icons on black cards and do not repaint them



## STANDARD ICONS

An example of using icons

The standard icons are on [this slide](#)

The second rule is that we use glass icons for schemes

The glass icons are on [this](#) and the slides following it





# EXAMPLE OF USING A TEMPLATE 01



## NO CLARITY ABOUT AT-RISK ASSETS

Alerts without context do not facilitate adequate prioritization of mitigation activity. Our industry and attackers have moved beyond CVSS.



## ONLY PERIODIC EXTERNAL DISCOVERY

Intermittent vulnerability assessments provide outdated and incomplete assessments of the attack surface.



## SCATTERED DIGITAL FOOTPRINT

Keeping up-to-date data on all external assets and services is near impossible. Manual inventory struggles to map resources for automated validation & management.



## LIMITED VIEW OF THE ATTACK SURFACE

Security scanners only scan known resources & active scanning is often not used across all resources because it can disrupt business processes.

# 55%+

of all Group-IB IR cases are due to perimeter-based vulnerabilities and insecure infrastructure

# 173%

growth in the number of RDP access sales to large corporate networks (Group-IB Intelligence)

# 1.5 bln+

files were available online on Amazon S3, rsync, SMB, and FTP servers from periodic reviews



# EXAMPLE OF USING A TEMPLATE 02



Lead example

52%

of global GDP will come from digitally transformed business by 2023

50-100X

quicker will be developing of new products

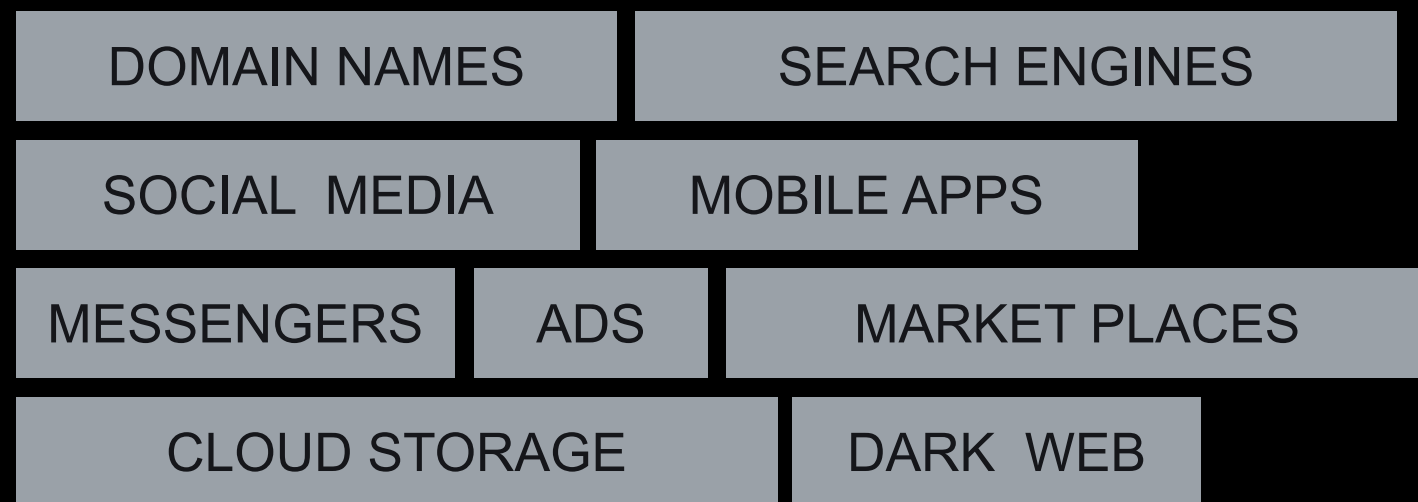
520K

new apps and services will be developed by 2024



# EXAMPLE OF USING A TEMPLATE 03

Identify in what ways you are exposed and understand the threats to critical assets across all your platforms.



## ATTACK SURFACE

- Discovers and classifies your assets  
Identifies Shadow IT  
24/7 Monitoring  
Catches external threats like leaks, dark web & malware connections  
Issues alerts regarding infrastructure risk  
Maps to remediation & workflows  
Tracks and baselines security posture over time

## ATTACK SURFACE

- Discovers and classifies your assets  
Identifies Shadow IT  
24/7 Monitoring  
Catches external threats like leaks, dark web & malware connections  
Issues alerts regarding infrastructure risk  
Maps to remediation & workflows  
Tracks and baselines security posture over time



# EXAMPLE OF USING A TEMPLATE 04



## Example of lead

AssetZero is Group-IB's intelligence-driven External Attack Surface Management solution. This is a fully cloud, software-as-a-service solution with no agents required for use. It discovers and inventories all known and unknown Internet-facing assets related to your organization. Group-IB AssetZero provides full visibility of your External Attack Surface, thoroughly evaluates its risk & vulnerability, allowing prioritised remediation.

## HOW DOES ASSETZERO MAP YOUR ATTACK SURFACE?

- Discovers and classifies your assets
- Identifies Shadow IT
- 24/7 Monitoring
- Catches external threats like leaks, dark web & malware connections
- Issues alerts regarding infrastructure risk
- Maps to remediation & workflows
- Tracks and baselines security posture over time





# EXAMPLE OF USING A TEMPLATE 05



Many companies are becoming increasingly digital and expanding the online side of their business

- Growth requires creation of safe digital platforms and ecosystems to scale and extend the digital reach
- Cross-channel complex digital footprint
- Wider digital attack surface
- Digital assets are increasingly exposed and harder to control



Digital Risk Protection identifies where and how your assets are exposed and protects your brand from digital threats

2X

growth number of online offers

40

percent of sales via social media channel

4,6

billion internet users

4,3

billion mobile internet users

4,2

billion social media users



# ACT NOW WITH ASSETZERO



Take control of your external attack surface



Baseline and track external security posture



Build new services & deliver value



Protect your organization from avoidable risks



**YOU CAN CHANGE  
TEXT HERE PLEASE USE IT**



## IMMEDIATE VISIBILITY & FAST RESULTS

AssetZero requires no installation of software and is 100% agentless. Our process is fully automated, and alerts flow to your clients, either directly or through your team as a managed service.

## PREVENT AVOIDABLE INCIDENTS

AssetZero identifies, tracks and alerts you on the risks and vulnerable infrastructure of your organisation. Take back control and get ahead of attackers.

## FRICTIONLESS SERVICES

The easy-to-use portal and dashboards help quickly manage issues and prioritize critical risks for proper remediation.



# PREVENTING AND RESEARCHING CYBERCRIME SINCE 2003



GROUP-IB



# PREVENTING AND RESEARCHING CYBERCRIME SINCE 2003

Contributor name



PLACE  
QR-CODE