



HiveForce Labs
MONTHLY
THREAT DIGEST

Vulnerabilities, Actors, and Attacks

NOVEMBER 2023

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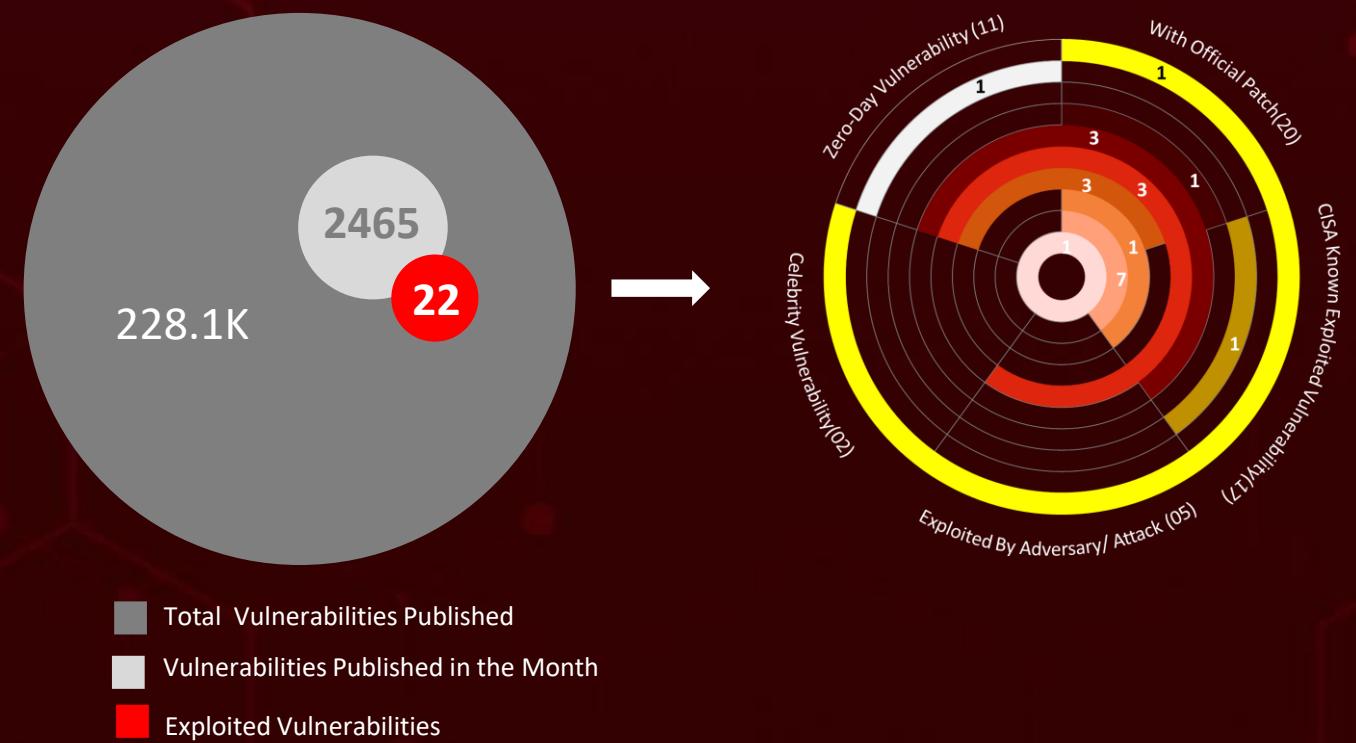
Summary

In November, the discovery of **eleven zero-day** vulnerabilities drew significant attention from the cybersecurity community. One of these vulnerabilities was exploited by the **Lace Tempest group**, leading to a sense of urgency among security teams to patch their systems.

November saw a rise in ransomware attacks, with various strains such as **LockBit ransomware**, **HelloKitty ransomware**, **TellYouThePass ransomware**, **Clop ransomware** and **NoEscape Ransomware** actively targeting victims. As ransomware continues to evolve and grow in sophistication, organizations must take steps to protect themselves by implementing comprehensive backup and disaster recovery strategies and training employees on how to recognize and avoid phishing attacks.

Furthermore, nineteen adversaries were active and involved in various campaigns. **SideCopy** exploited a vulnerability (**CVE-2023-38831**) in WinRAR, targeting Indian government agencies.

Lastly, the **CVE-2023-4966**, a critical zero-day vulnerability was exploited since August potentially to allowing attackers to steal authentication sessions and hijack accounts.



Insights

farnetwork

The Russian Speaking actor behind five Ransomware strains

Ransom of \$980

Demanded by DJVU ransomware for decryption

Citrix Bleed

Flaw has been targeted since August to steal authentication sessions and hijack

NoEscape Ransomware

Operating as Ransomware-as-a-Service, it encrypts files, changes wallpapers, and demands ransom

Government, Education, Technology Financial Services were the most targeted sectors

CVE-2023-38831

SideCopy is capitalizing on WinRAR's flaw to target Indian government agencies

63

vulnerabilities were patched during November Microsoft Patch Tuesday, out of which 5 were Zero-Day

Mustang Panda

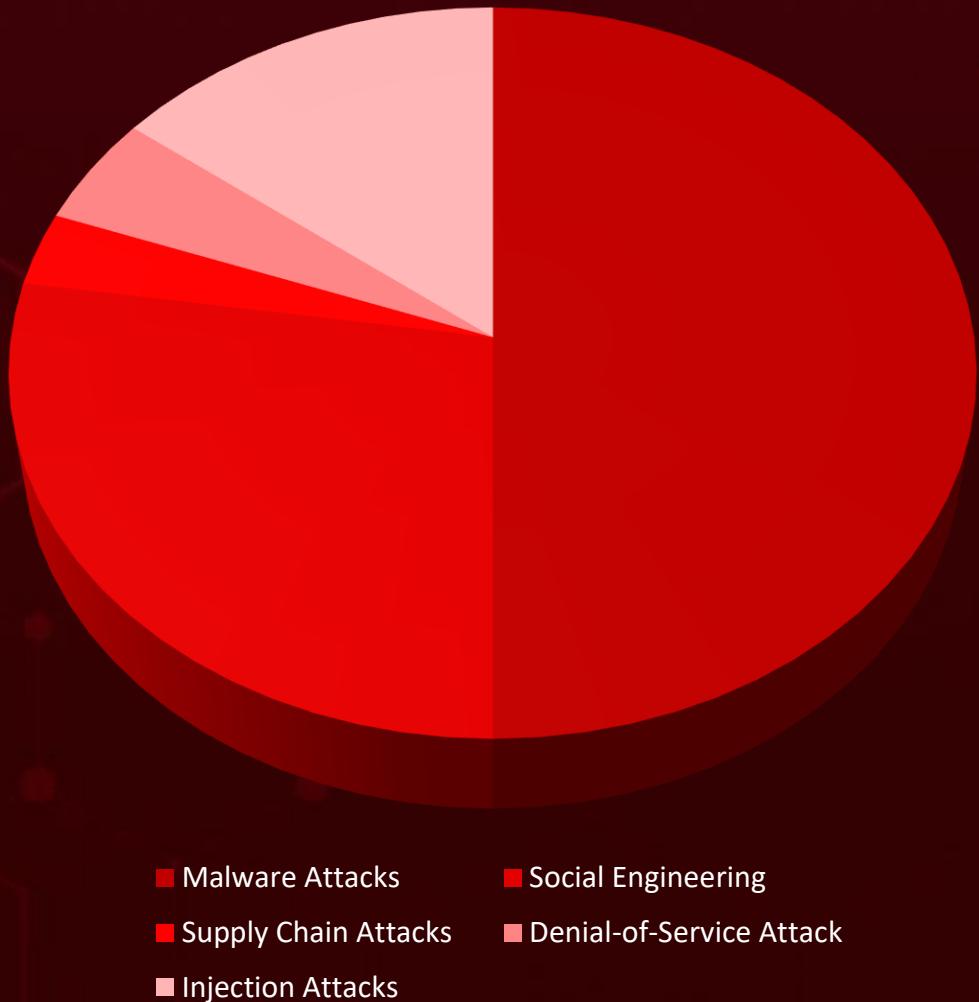
Targets Philippines Government Using Legitimate Software

United States, Israel, United Arab Emirates and **Iraq** were the most targeted countries

BlazeStealer

PyPI repository infiltrated with malicious packages masquerading as Obfuscation utility targeting developer community

Threat Landscape



Celebrity Vulnerabilities

CVE ID	CISA KEV	AFFECTED PRODUCTS	ASSOCIATED ACTOR	
CVE-2023-4966		NetScaler ADC and NetScaler Gateway 14.1 before 14.1-8.50, 13.1 before 13.1-49.15 & 13.0 before 13.0-92.19, NetScaler ADC 13.1-FIPS before 13.1-37.164 & 12.1-FIPS before 12.1-55.300, NetScaler ADC 12.1-NDcPP before 12.1-55.300	-	
		AFFECTED CPE	ASSOCIATED ATTACKS/RANSOMWARE	
NAME	ZERO-DAY	cpe:2.3:a:citrix:netscaler_application_delivery_controller:*:*:*:-*:*:*	LockBit ransomware	
	cpe:2.3:a:citrix:netscaler_gateway .*.**.*.**.*. cpe:2.3:a:citrix:netscaler_application_delivery_controller:*:*:*:fips .*:*:*			
Citrix Bleed (Citrix NetScaler ADC and NetScaler Gateway Buffer Overflow Vulnerability)		cpe:2.3:a:citrix:netscaler_application_delivery_controller:*:*:*:ndcpp:*:*:*	https://support.citrix.com/article/CTX579459/netscaler-adc-and-netscaler-gateway-security	
		CWE ID	ASSOCIATED TTPs	PATCH LINK
	CWE-119	T1574: Hijack Execution Flow; T1499.004: Application or System Exploitation; T1563: Remote Service Session Hijacking; T1548.002: Bypass User Account Control; T1210: Exploitation of Remote Services		

CVE ID	CISA KEV	AFFECTED PRODUCTS	ASSOCIATED ACTOR
CVE-2023-4911		All systems running glibc 2.34 to 2.37	Kinsing
	ZERO-DAY		
		AFFECTED CPE	ASSOCIATED ATTACKS/RANSOMWARE
NAME		cpe:2.3:a:gnu:c_library:.*:.*:.*:.*:.*:.*	-
Looney Tunables (Glibc Buffer Overflow Vulnerability)	CWE ID	ASSOCIATED TTPs	PATCH LINK
	CWE-120	T1574: Hijack Execution Flow	Upgrade glibc to 2.38 or later versions

Vulnerabilities Summary

CVE	Name	Affected Product	Zero-Day	KEV	Patch
CVE-2023-4966	Citrix NetScaler ADC and NetScaler Gateway Buffer Overflow Vulnerability (Citrix Bleed)	Citrix NetScaler ADC and NetScaler Gateway	✓	✓	✓
CVE-2023-4967	Citrix NetScaler ADC and NetScaler Gateway Denial of Service Vulnerability	Citrix NetScaler ADC and NetScaler Gateway	✗	✗	✓
CVE-2023-22518	Atlassian Confluence Improper Authorization Vulnerability	Confluence Data Center, Confluence Server	✗	✓	✓
CVE-2023-46604	Apache ActiveMQ Deserialization of Untrusted Data Vulnerability	Apache ActiveMQ	✗	✓	✓
CVE-2023-4911	Glibc Buffer Overflow Vulnerability	GNU C Library (glibc)	✗	✓	✓
CVE-2017-9841	PHPUnit Command Injection Vulnerability	Oracle Communications Diameter Signaling Router	✗	✓	✓
CVE-2023-38831	RARLAB WinRAR Code Execution Vulnerability	WinRAR	✓	✓	✓
CVE-2023-47246	SysAid path traversal vulnerability	SysAid	✓	✗	✓
CVE-2023-36844	Juniper Junos OS EX Series PHP External Variable Modification Vulnerability	Juniper Junos OS	✗	✓	✓

CVE	NAME	AFFECTED PRODUCT	ZERO-DAY	KEV	PATCH
CVE-2023-36845	Juniper Junos OS EX Series and SRX Series PHP External Variable Modification Vulnerability	Juniper Junos OS	✖️	✅	✅
CVE-2023-36846	Juniper Junos OS SRX Series Missing Authentication for Critical Function Vulnerability	Juniper Junos OS	✖️	✅	✅
CVE-2023-36847	Juniper Junos OS EX Series Missing Authentication for Critical Function Vulnerability	Juniper Junos OS	✖️	✅	✅
CVE-2023-36851	Juniper Junos OS SRX Series Missing Authentication for Critical Function Vulnerability	Juniper Junos OS	✖️	✅	✖️
CVE-2023-36033	Microsoft Windows Desktop Window Manager (DWM) Core Library Privilege Escalation Vulnerability	Microsoft Windows	✅	✅	✅
CVE-2023-36025	Microsoft Windows SmartScreen Security Feature Bypass Vulnerability	Microsoft Windows	✅	✅	✅
CVE-2023-36036	Microsoft Windows Cloud Files Mini Filter Driver Privilege Escalation Vulnerability	Microsoft Windows	✅	✅	✅
CVE-2023-36038	ASP.NET Core Denial of Service Vulnerability	Microsoft ASP.NET	✅	✖️	✅

CVE	NAME	AFFECTED PRODUCT	ZERO -DAY	KEV	PATCH
CVE-2023-36413	Microsoft Office Security Feature Bypass Vulnerability	Microsoft Office	✓	✗	✓
CVE-2023-34060	VMware Cloud Director Authentication Bypass Vulnerability	VMware Cloud Director Appliance (VCD Appliance)	✓	✗	✗
CVE-2023-37580	Zimbra Collaboration (ZCS) Cross-Site Scripting (XSS) Vulnerability	Zimbra Collaboration (ZCS)	✓	✓	✓
CVE-2023-6345	Google Chrome Skia Integer Overflow Vulnerability	Google Chrome	✓	✓	✓
CVE-2023-49103	ownCloud graphapi app Information Disclosure Vulnerability	ownCloud	✗	✓	✓

⚔️ Attacks Summary

ATTACK NAME	TYPE	CVEs	IMPACTED PRODUCT	PATCH	DELIVERY METHOD
LockBit ransomware	Ransomware	CVE-2023-4966, CVE-2023-4967	Citrix NetScaler ADC and NetScaler Gateway	✓	Exploiting vulnerabilities
LIONTAIL	Passive loader	-	-	-	Phishing
HelloKitty ransomware	Ransomware	CVE-2023-46604	Apache ActiveMQ	✓	Exploiting vulnerabilities
TellYouThePass ransomware	Ransomware	CVE-2023-46604	Apache ActiveMQ	✓	Exploiting vulnerabilities
SparkRAT	RAT	CVE-2023-46604	Apache ActiveMQ	✓	Exploiting vulnerabilities
Socks5Systemz	Proxy botnet	-	-	-	Phishing, exploit kits, malvertising, trojanized executables
PrivateLoader	Loader	-	-	-	Phishing, exploit kits, malvertising, trojanized executables
Amadey	Loader	-	-	-	Phishing, exploit kits, malvertising, trojanized executables
Jupyter Infostealer	Infostealer	-	-	-	Phishing
MultiLayer	Wiper	-	-	-	Exploiting vulnerable internet facing web servers

ATTACK NAME	TYPE	CVEs	IMPACTED PRODUCT	PATCH	DELIVERY METHOD
PartialWasher	Wiper	-	-	-	-
BFG Agonizer	Wiper	-	-	-	Exploiting vulnerable internet facing web servers
sqlextractor	Infostealer	-	-	-	Exploiting vulnerable internet facing web servers
ObjCShellz	Backdoor	-	-	-	-
RustBucket	Backdoor	-	-	-	-
AllaKore RAT	RAT	CVE-2023-38831	WinRAR	✓	Exploiting Vulnerability
Ares RAT	RAT	CVE-2023-38831	WinRAR	✓	Phishing
DRat	RAT	CVE-2023-38831	WinRAR	✓	Exploiting Vulnerability
Key RAT	RAT	CVE-2023-38831	WinRAR	✓	Exploiting Vulnerability
Millenium RAT	RAT	-	-	-	-
BlazeStealer	Stealer	-	-	-	-
Nokoyawa	Ransomware	-	-	-	-
JSWORM	Ransomware	-	-	-	-
Nefilim	Ransomware	-	-	-	-
Karma	Ransomware	-	-	-	-
Nemty	Ransomware	-	-	-	-
FakeBat	Loader	-	-	-	Google Ads
Redline stealer	Infostealer	-	-	-	-

Attack Name	Type	CVEs	Impacted Product	Patch	Delivery Method
Clop ransomware	Ransomware	CVE-2023-47246	SysAid	✓	-
Gracewire	RAT	CVE-2023-47246	SysAid	✓	-
Ducktail	Infostealer	-	-	-	Spear-phishing emails
IronWind	Downloader	-	-	-	Social Engineering
SharpSploit	Toolkit	-	-	-	Spear phishing and IronWind
NoEscape Ransomware	Ransomware	-	Windows, Linux, and ESXi	-	Phishing
GhostLocker	Modular	-	-	-	Phishing, Affiliate Programs, Darkweb Marketplace
BlackCat/ALPHV Ransomware	Ransomware	-	-	-	Social engineering, phishing, and SIM swap attacks
AveMaria	RAT	-	-	-	Social engineering, phishing, and SIM swap attacks
Raccoon Stealer	Infostealer	-	-	-	Social engineering, phishing, and SIM swap attacks
VIDAR Stealer	Infostealer	-	-	-	Social engineering, phishing, and SIM swap attacks
LitterDrifter	Worm	-	-	-	USB drives

Attack Name	Type	CVEs	Impacted Product	Patch	Delivery Method
Kinsing	Cryptocurrency miner	CVE-2023-46604	ActiveMQ	✓	Exploiting vulnerability
NetSupport RAT	RAT	-	-	-	Phishing
Nim backdoor	Backdoor	-	-	-	Phishing
DarkGate	Loader	-	-	-	Phishing
Atomic Stealer	Infostealer	-	Mac OS	-	Legitimate AnyDesk remote desktop software
LambLoad	Downloader	-	-	-	Supply chain attacks, Phishing
InfectedSlurs	Botnet	-	-	-	Exploiting vulnerabilities
SwiftLoader	Loader	-	Mac OS	-	-
KandyKorn	RAT	-	Mac OS	-	-
ParaSiteSnatcher	Malicious Extension	-	-	-	Through a VBScript downloader
Djvu	Ransomware	-	-	-	Disguise of cracked software
Cerber ransomware	RaaS	CVE-2023-22518	Confluence Data Center, Confluence Server	✓	Exploiting vulnerabilities



Adversaries Summary

Actor Name	Motive	Origin	CVEs	Attack	Product
Scarred Manticore	Information theft and espionage	Iran	-	LIONTAIL	Windows
MuddyWater (aka Seedworm, TEMP.Zagros, Static Kitten, Mercury, TA450, Cobalt Ulster, ATK 51, T-APT-14, ITG17, Mango Sandstorm)	Information theft and espionage	Iran	-	-	-
Kinsing (aka Money Libra)	Information Theft	-	CVE-2023-4911, CVE-2017-9841	-	GNU C Library (glibc), Oracle Communications Diameter Signaling Router
Agrius (aka Agonizing Serpens, DEV-0227, BlackShadow, SharpBoys, AMERICIUM, Pink Sandstorm)	Information theft and espionage, Sabotage and destruction	Iran	-	MultiLayer, PartialWasher, BFG Agonizer, sqlextractor	-
BlueNorOff (APT 38, Stardust Chollima, CTG-6459, Nickel Gladstone, TEMP.Hermit, T-APT-15, ATK 117, Black Alicanto, Copernicium, TA444, Sapphire Sleet, TAG-71)	Financial crime	North Korea	-	ObjCShellz, RustBucket	-

Actor Name	Motive	Origin	CVEs	Attack	Product
SideCopy	Information theft and espionage	Pakistan	CVE-2023-38831	AllaKore RAT, Ares RAT, DRat, Key RAT	WinRAR
farnetwork (aka farnetworkl, jingo, jsworm, razvrat, piparkuka, and farnetworkit)	Develop ransomware	-	-	Nokoyawa, JSWORM, Nefilim, Karma, and Nemty	-
Lace Tempest (aka DEV-0950, FIN11)	Financial crime, Financial gain	-	CVE-2023-47246	Clop ransomwar, Gracewire (FlawedGrace)	SysAid servers
TA402 (aka Extreme Jackal, Molerats, Gaza Cybergang, Gaza Hackers Team, Aluminum Saratoga, ATK 89, TAG-CT5)	Information theft and espionage	Palestine	-	IronWind, SharpSploit	-
Winter Vivern	Information theft and espionage	-	CVE-2023-37580	-	Zimbra Collaboration (ZCS)
GhostSec (aka Ghost Security)	Information theft, espionage and Financial crime	-	-	GhostLocker	-

ACTOR NAME	MOTIVE	ORIGIN	CVEs	ATTACK	PRODUCT
Scattered Spider (Starfraud, UNC3944, Oktapus, Storm- 0875, LUCR-3, Scatter Swine, and Muddled Libra)	Financial gain	-	-	BlackCat/ALPH V Ransomware, AveMaria, Raccoon Stealer, and VIDAR Stealer	-
Gamaredon (aka Primitive Bear, Winterflounder, BlueAlpha, Blue Otso, Iron Tilden, Armageddon, SectorC08, Callisto, Shuckworm, Actinium, Trident Ursa, DEV- 0157, UAC-0010, Aqua Blizzard)	Information theft and espionage	Russia	-	LitterDrifter	-
TA569	Information theft and espionage	-	-	NetSupport RAT	-
SideWinder (aka Razor Tiger, Rattlesnake, T- APT-04, APT-C- 17, Hardcore Nationalist, HN2, APT-Q-39, BabyElephant, GroupA21)	Information theft and espionage	India	-	Nim backdoor	-
Mustang Panda (aka Bronze President, TEMP.Hex, HoneyMyte, Red Lich, Earth Preta, Camaro Dragon, Stately Taurus)	Information theft and espionage	China	-	-	-
RastaFarEye	Information theft and espionage	-	-	DarkGate	-

ACTOR NAME	MOTIVE	ORIGIN	CVEs	ATTACK	PRODUCT
Lazarus Group	Information theft and espionage, Sabotage and destruction, Financial crime	North Korea	-	LambLoad	-
Andariel	Information theft and espionage, Sabotage and destruction, Financial crime	North Korea	-	LambLoad	-
DarkCasino	Economic motivations	-	CVE-2023-38831	-	RARLAB WinRAR



Targeted Products

VENDOR	PRODUCT TYPE	PRODUCT WITH VERSION
	Applications	NetScaler ADC and NetScaler Gateway 14.1 before 14.1- 8.50, 13.1 before 13.1- 49.15 & 13.0 before 13.0-92.19, NetScaler ADC 13.1-FIPS before 13.1-37.164 & 12.1- FIPS before 12.1-55.300, NetScaler ADC 12.1-NDcPP before 12.1- 55.300
	Data Center and Server	Confluence Data Center and Server 6.0.1 - 8.6.0
	Application	Apache ActiveMQ 5.18.0 before 5.18.3, Apache ActiveMQ 5.17.0 before 5.17.6, Apache ActiveMQ 5.16.0 before 5.16.7, Apache ActiveMQ before 5.15.16, Apache ActiveMQ Legacy OpenWire Module 5.18.0 before 5.18.3, Apache ActiveMQ Legacy OpenWire Module 5.17.0 before 5.17.6, Apache ActiveMQ Legacy OpenWire Module 5.16.0 before 5.16.7, Apache ActiveMQ Legacy OpenWire Module 5.8.0 before 5.15.16
	Library	All systems running glibc 2.34 to 2.37
	Router	Oracle Communications Diameter Signaling Router
	Application	WinRAR version 6.22 and older versions

VENDOR	PRODUCT TYPE	PRODUCT WITH VERSION
	Server	SysAid: 21.4.45 - 23.3.35
	Operating System	All versions prior to 20.4R3-S9; 21.1 version 21.1R1 and later versions; 21.2 versions prior to 21.2R3-S7; 21.3 versions prior to 21.3R3-S5; 21.4 versions prior to 21.4R3-S5; 22.1 versions prior to 22.1R3-S4; 22.2 versions prior to 22.2R3-S2; 22.3 versions prior to 22.3R2-S2, 22.3R3-S1; 22.4 versions prior to 22.4R2-S1, 22.4R3; 23.2 versions prior to 23.2R1- S1, 23.2R2 15.0.4
	Operating System	Windows: 10 - 11 23H2 Windows Server: 2019 - 2022 23H2
	Application	Visual Studio: 2022 version 17.2 – 2022 version 17.7 ASP.NET Core: 8.0 .NET: 8.0.0
	Application	Microsoft Office: 2016 -2019 Microsoft Office LTSC 2021: 32 bit editions - 64 bit editions Microsoft 365 Apps for Enterprise: 32-bit Systems - 64-bit Systems
	Server	Microsoft Exchange Server: 2016 CU22 Nov22SU 15.01.2375.037 - 2019 RTM Mar21SU 15.02.0221.018
	Cloud Platform	az webapp configappsettings set & delete: All versions; az staticwebappappsettings set & delete: All versions; az logicapp configappsettings set & delete: All versions; az functionapp configappsettings set & delete:All versions

VENDOR	PRODUCT TYPE	PRODUCT WITH VERSION
 VMware	Cloud Service Platform	VMware Cloud Director: 10.5.0
 zimbra® A SYNACOR PRODUCT	Software	Zimbra Collaboration: 8.8.15 - 8.8.15 Patch 40
 Google	Browser	Google Chrome 100.0.4896.60 – 119.0.6045.160
 ownCloud	Software	ownCloud graphapi 0.2.0 – 0.3.0



Targeted Countries

Most



Least



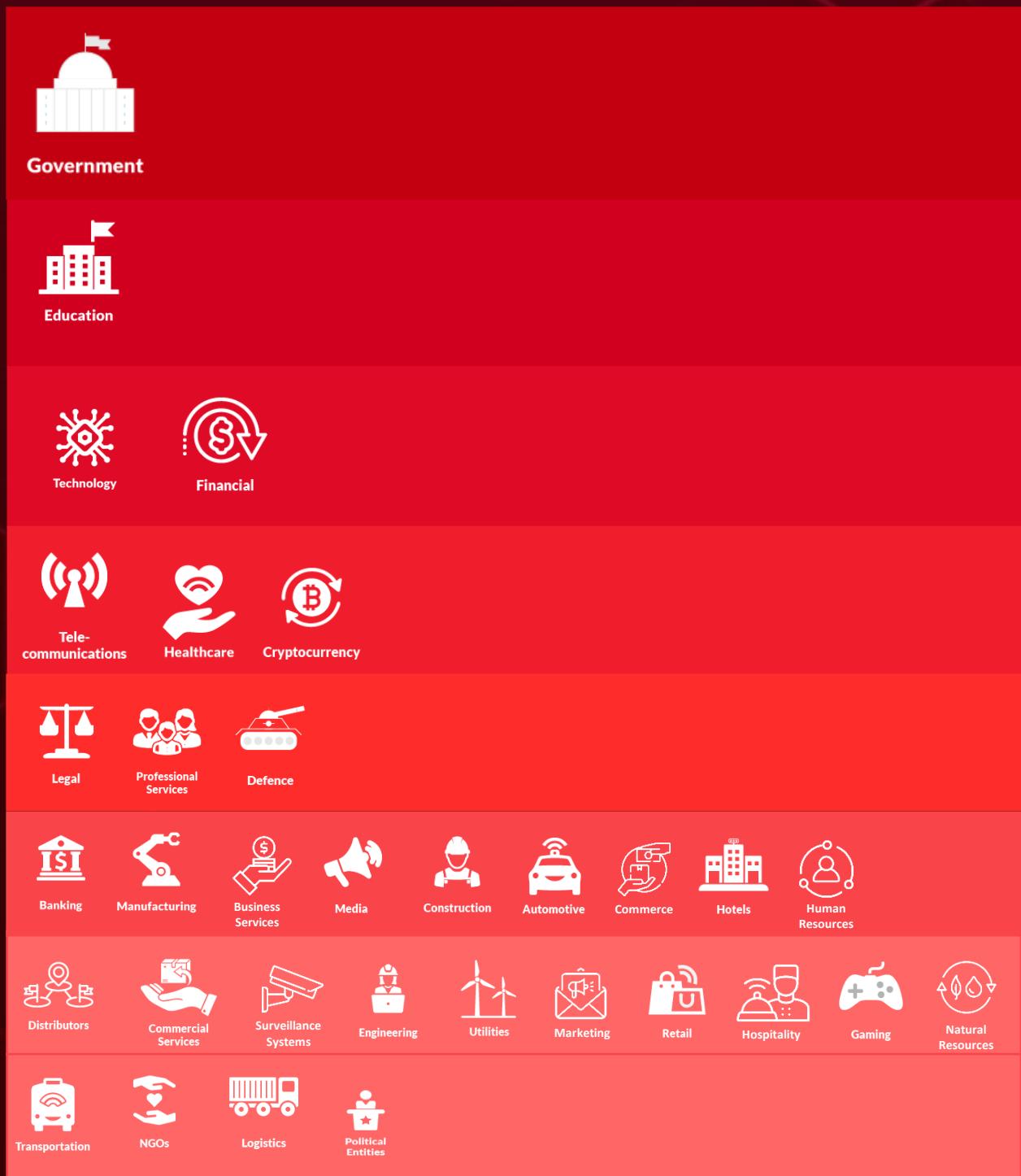
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Color	Countries	Color	Countries	Color	Countries	Color	Countries	Color	Countries
Dark Red	United States	Medium Red	Russia	Light Red	South Korea	Very Light Red	Guinea	Dark Red	Malawi
Dark Red	Israel	Medium Red	Germany	Light Red	Malaysia	Very Light Red	Botswana	Dark Red	Benin
Dark Red	United Arab Emirates	Medium Red	South Africa	Light Red	Sudan	Very Light Red	Thailand	Dark Red	Ethiopia
Dark Red	Iraq	Medium Red	Yemen	Light Red	Mauritius	Very Light Red	Laos	Dark Red	Bangladesh
Dark Red	Canada	Medium Red	Turkey	Light Red	Sweden	Very Light Red	Equatorial Guinea	Dark Red	Mali
Dark Red	Brazil	Medium Red	Myanmar	Light Red	United Kingdom	Very Light Red	Algeria	Dark Red	Paraguay
Dark Red	Lebanon	Medium Red	Colombia	Light Red	Tunisia	Very Light Red	Peru	Dark Red	Malta
Dark Red	France	Medium Red	Nigeria	Light Red	Croatia	Very Light Red	Venezuela	Dark Red	Ghana
Dark Red	Iran	Medium Red	Vietnam	Light Red	Ukraine	Very Light Red	Andorra	Dark Red	Mauritania
Dark Red	India	Medium Red	Pakistan	Light Red	Australia	Very Light Red	Brunei	Dark Red	Portugal
Dark Red	Jordan	Medium Red	Switzerland	Light Red	Moldova	Very Light Red	San Marino	Dark Red	Fiji
Dark Red	Saudi Arabia	Medium Red	Angola	Light Red	Iceland	Very Light Red	Zimbabwe	Dark Red	Romania
Dark Red	Philippines	Medium Red	Austria	Light Red	Central African Republic	Very Light Red	Serbia	Dark Red	Mexico
Dark Red	China	Medium Red	Morocco	Light Red	Papua New Guinea	Very Light Red	Liechtenstein	Dark Red	Rwanda
Dark Red	Cyprus	Medium Red	Greece	Light Red	Bhutan	Very Light Red	Somalia	Dark Red	Finland
Dark Red	Qatar	Medium Red	Chile	Light Red	Slovakia	Very Light Red	Estonia	Dark Red	Sao Tome & Principe
Dark Red	Egypt	Medium Red	Hungary	Light Red	Eritrea	Very Light Red	Guyana	Dark Red	Albania
Dark Red	Spain	Medium Red	Suriname	Light Red	Denmark	Very Light Red	Luxembourg	Dark Red	Senegal
Dark Red	Japan	Medium Red	Belgium	Light Red	Bolivia	Very Light Red	Syria	Dark Red	Gabon
Dark Red	Oman	Medium Red	Argentina	Light Red	Cameroon	Very Light Red	Madagascar	Dark Red	Singapore
Dark Red	Bahrain	Medium Red	Ireland	Light Red	Bosnia and Herzegovina	Very Light Red	Togo	Dark Red	Gambia
Dark Red	Poland	Medium Red	Netherlands	Light Red	Chad	Very Light Red	Djibouti	Dark Red	Slovenia
Dark Red	Kuwait	Medium Red	Italy	Light Red	Kenya	Very Light Red		Dark Red	Mozambique
		Medium Red	Cambodia						
		Medium Red	Lithuania						

Targeted Industries

Most



Least

TOP 25 MITRE ATT&CK TTPS

T1059

Command
and Scripting
Interpreter

T1204

User
Execution

T1588

Obtain
Capabilities

T1105

Ingress Tool
Transfer

T1027

Obfuscated
Files or
Information

T1588.00

6

Vulnerabilitie
s

T1204.00

2

Malicious File

T1566

Phishing

T1041

Exfiltration
Over C2
Channel

T1083

File and
Directory
Discovery

T1036

Masqueradin
g

T1059.00

1

PowerShell

T1543

Create or
Modify
System
Process

T1190

Exploit Public-
Facing
Application

T1574

Hijack
Execution Flow

T1082

System
Information
Discovery

T1140

Deobfuscate/
Decode Files
or
Information

T1071

Application
Layer
Protocol

T1071.00

1
Web
Protocols

T1055

Process
Injection

T1005

Data from
Local System

T1547

Boot or Logon
Autostart
Execution

T1203

Exploitation
for Client
Execution

T1588.00

5
Exploits

T1057

Process
Discovery



Top Indicators of Compromise (IOCs)

Attack Name	Type	Value
<u>LockBit Ransomware</u>	SHA256	27389c160ceee51ca1f2b111ca8b221dc75b71cc699789da65802dc e082dfbb4, a5e6df754a4d3bb72f4d5c91d6b582e7e2c2f87ca838f5d976bc823 84a5ad2d1, 67b05e96f47db0447da53bedbf9aff265cd02562c12428d787fdab 0278ded2e, a2db758f099d8a6dec5fd500d033ce2fcdb89b58b53d938fdb9d9cba 2d91dba01, 2daa5fa152b627f5ae23d2e8fa4e3e399d4899729ad32f184e32d59 fd4dd20ef
<u>HelloKitty</u>	SHA256	c3c0cf25d682e981c7ce1cc0a00fa2b8b46cce2fa49abe38bb412da2 1da99cb7, 8c226e1f640b570a4a542078a7db59bb1f1a55cf143782d93514e3b d86dc07a, 8177455ab89cc96f0c26bc42907da1a4f0b21fdc96a0cc96650843fd 616551f4
	Email	service@hellokittycat[.]online
	IPv4	172.245.16[.]125
	URL	hxxp://172.245.16[.]125/m4.png, hxxp://172.245.16[.]125/m2.png
<u>BlazeStealer</u>	SHA256	77e183e63c70a44e87277be35b63817e185efcf1b8ab469376 26904923251bbe, fb58f3f04e149b97a01c16a3bfedcb0ff33dc476dbab469fe011 e3a379f2b00a, 87fda7a9d8156a9b3ca3ea92173c9c5c5abbd4a7e9f17c1b81e 8921914cd5306, ccec28cfab447c153bc82993857b2ae865eab73c996d4db705 ab1df6f1f29c40, b6c51f8700c067604354dc3f41caf76ac7e3235fa7983c7407e 18729dd94187, 9c3637d925b3bb46ad68e7667e5958cc6e0926d9b12f022c6e 0e990d63f45a9d, a0422225d67779574006c04bd95bb19c02c5dd94f0af009606 d58cf0b3854d6d, 14288b82c089fd1edd66feef6b0ff656d723f2e893b8c2574495 b64c48b762a5, 51d5f41603a4a311c63e3db5d1cf8d5ddba28aa5cdabff62cad 9f646fce8b5da, 716df8c14081570de5489c54a6e1d87d28f5d9d6848ab2b116 54a5a3fbb29880

Attack Name	Type	Value
<u>NoEscape</u>	SHA256	0073414c5a03b20f6f255f400291de67f2a7268c461f90ea6ff0355ca31af07a, 2020cae5115b6980d6423d59492b99e6aaa945a2230b7379c2f8ae3f54e1efd5, 4175dae9b268fe5b4f96055ea0376417b5ddc2518d3bd11e20f0f8255bb4621e, 4d7da1654f9047b6c6a9d32564a66684407ed587cbaffa54ec1185fd73293d3e, 5300d7456183c470a40267da9cd1771d6147445b203d8eb02437348bf3169e0d, 53f5c2f70374696ff12adcaaf1bbbe0e5dd1b1995d98f2e876b0671888b43128, 62205bf0a23e56524f2f1c44897f809457ad26bc70810008ec5486e17c7e64e2, 68bce3a400721d758560273ae024f61603b8a4986440a8ec9e28305d7e6d02b0, 68ff9855262b7a9c27e349c5e3bf68b2fc9f9ca32a9d2b844f2265dccd2bc0d8, 73c19eab8d2ae58db3968dd7de0e745db2d7709859305b113b748bb02494465e, 831a2409d45d0c7f15b7f31eddbbdfe7d58414499e81b3da7d9fdee28fafe646, 8dd64ea7f226d3eb1e857b0086c0668542652cb37f8142dc00272dbd9569e31, 91c515d55fae6d21b106c8c55067ce53d42bef256bd5a385ca dd104cf68f64ff,
<u>Clop ransomware</u>	MD5	31e0439e6ef1dd29c0db6d96bac59446, 4431b6302b7d5b1098a61469bdfca982, 5e52f75d17c80dd104ce0da05fdfc362, 8bd774fb6f846992abda69ddabc3fb7, afe7f87478ba6dfca15839f958e9b2ef, dd5cee48cdd586045c5fb059a1120e15, f59d2a3c925f331aae7437dd7ac1a7c8
	SHA1	40b7b386c2c6944a6571c6dcfb23aaaae026e8e82, 46b02cc186b85e11c3d59790c3a0bfd2ae1f82a5, 4fa2b95b7cde72ff81554cfbddc31bbf77530d4d, 77ea0fd635a37194efc1f3e0f5012a4704992b0e, a1a628cca993f9455d22ca2c248ddca7e743683e, a6e940b1bd92864b742fbd5ed9b2ef763d788ea7, ac71b646b0237b487c08478736b58f208a98eebf, ba5c5b5cbd6abdf64131722240703fb585ee8b56

Attack Name	Type	Value
<u>Gracewire</u>	MD5	88695dbddd4fc57025b523f4fca268d7, 80a20106ced1a5d9f350b1401dbe7d14
	SHA1	57ab5d9b5302644e91e3953062b40c5346b236e3, 753561bf6da3ccb75711d109ed0e38b7abb28db8
	SHA256	f92dbf7943590c2c4011f911ba9ba445010c9d5895b5c8b57a5 da9c8708c221d, 6d15a0807858dce0be652e480fa7f298482c7bbf2c1e116e6cf 0a3d3df95180f
<u>NoEscape</u>	SHA256	0073414c5a03b20f6f255f400291de67f2a7268c461f90ea6ff0 355ca31af07a, 2020cae5115b6980d6423d59492b99e6aaa945a2230b7379c 2f8ae3f54e1efd5, 4175dae9b268fe5b4f96055ea0376417b5ddc2518d3bd11e20 f0f8255bb4621e, 4d7da1654f9047b6c6a9d32564a66684407ed587cbaffa54ec1 185fd73293d3e, 5300d7456183c470a40267da9cd1771d6147445b203d8eb02 437348bf3169e0d, 53f5c2f70374696ff12adcaaf1bbbe0e5dd1b1995d98f2e876b0 671888b43128, 62205bf0a23e56524f2f1c44897f809457ad26bc70810008ec5 486e17c7e64e2, 68bce3a400721d758560273ae024f61603b8a4986440a8ec9e 28305d7e6d02b0, 68ff9855262b7a9c27e349c5e3bf68b2fc9f9ca32a9d2b844f22 65dccd2bc0d8, 73c19eab8d2ae58db3968dd7de0e745db2d7709859305b113 b748bb02494465e, 831a2409d45d0c7f15b7f31eddbbdfe7d58414499e81b3da7d 9fdee28faf646, 8dd64ea7f226d3eb1e857b0086c0668542652cb37f8142dc00 0272dbd9569e31, 91c515d55fae6d21b106c8c55067ce53d42bef256bd5a385ca dd104cf68f64ff, 9d346518330eeefbf288aec7b2b6243bc158415c7fee3f2c19 694f0e5f7d51c, 10d2b5f7d8966d5baeb06971dd154dc378496f4e5faf6d33e48 61cd7a26c91d7, 21162bbd796ad2bf9954265276bfebea8741596e8fe9d86070 245d9b5f9db6da, 46f1a4c77896f38a387f785b2af535f8c29d40a105b63a259d2 95cb14d36a561, c34c5dd4a58048d7fd164e500c014d16befa956c0bce7cae559 081d57f63a243

Attack Name	Type	Value
NoEscape	SHA1	ea1f7940271fc80d06b2f222506020b650ad41bc, 30f71a24c15dd81965b12996a79d914acf4f169e, 12dc0a2de3ad30201107bfcb679de5acacf31e5c, 30c60f18279ed5fd36e3ac2d3ba5ddbdc5d1f624, 9cbc7417fa5ce2f6d87026337fc7892e4f485819, d38c613020cb4616783c8535380e28404f7eaebf, b17403e7dcb992ba8d2b56dd843406264d3910e5, 317f296131b37a73c9a5d253015821dfdc8b1190
	MD5	204f028c983f654be32b97e849edeaab, 47ae17d89c2d9b6acdc7458f5df1c6f7, 5779cec690b5bbc61687381ae8a8d518, 58b4a4eed74fbfbf104d0ffd92207018, a106c1236357c315722ddbd985c5613c, c850f6816459e3364b2a54239642101b



Vulnerabilities Exploited

CVE ID	CELEBRITY VULNERABILITY	AFFECTED PRODUCTS	ASSOCIATED ACTOR
CVE-2023-4966	✓ ZERO-DAY ✓	NetScaler ADC and NetScaler Gateway 14.1 before 14.1-8.50, 13.1 before 13.1-49.15 & 13.0 before 13.0-92.19, NetScaler ADC 13.1-FIPS before 13.1-37.164 & 12.1-FIPS before 12.1-55.300, NetScaler ADC 12.1-NDcPP before 12.1-55.300	-
NAME	CISA KEV	ASSOCIATED ATTACKS/RANSOMWARE	
Citrix NetScaler ADC and NetScaler Gateway Buffer Overflow Vulnerability	✓	cpe:2.3:a:citrix:netscaler_application_delivery_controller:*.*.*:-*:*.*: cpe:2.3:a:citrix:netscaler_gateway:*.*.*.*.*.*: cpe:2.3:a:citrix:netscaler_application_delivery_controller:*.*.*:fips:*.*: cpe:2.3:a:citrix:netscaler_application_delivery_controller:*.*.*:ndcpp:*.*:	LockBit ransomware
	CWE ID	ASSOCIATED TTPs	PATCH LINK
	CWE-119	T1574: Hijack Execution Flow; T1499.004: Application or System Exploitation; T1563: Remote Service Session Hijacking; T1548.002: Bypass User Account Control; T1210: Exploitation of Remote Services	https://support.citrix.com/article/CTX579459/

CVE ID	CELEBRITY VULNERABILITY	AFFECTED PRODUCTS	ASSOCIATED ACTOR
<u>CVE-2023-22518</u>		Confluence Data Center and Server 6.0.1 - 8.6.0	-
	ZERO-DAY		
		AFFECTED CPE	ASSOCIATED ATTACKS/RANSOMWARE
Atlassian Confluence Improper Authorization Vulnerability		cpe:2.3:a:atlassian:confluence_server_and_data_center:8.6.0: *;*.*;*;*;*.*	Cerber ransomware
	CWE ID	ASSOCIATED TTPs	PATCH LINK
	CWE-285	T1588.006: Vulnerabilities	https://www.atlassian.com/software/confluence/download-archives

CVE ID	CELEBRITY VULNERABILITY	AFFECTED PRODUCTS	ASSOCIATED ACTOR
<u>CVE-2023-46604</u>		Apache ActiveMQ 5.18.0 before 5.18.3, Apache ActiveMQ 5.17.0 before 5.17.6, Apache ActiveMQ 5.16.0 before 5.16.7, Apache ActiveMQ before 5.15.16, Apache ActiveMQ Legacy OpenWire Module 5.18.0 before 5.18.3, Apache ActiveMQ Legacy OpenWire Module 5.17.0 before 5.17.6, Apache ActiveMQ Legacy OpenWire Module 5.16.0 before 5.16.7, Apache ActiveMQ Legacy OpenWire Module 5.15.16	-
	ZERO-DAY	Apache ActiveMQ Legacy OpenWire Module 5.8.0 before 5.15.16	
		AFFECTED CPE	ASSOCIATED ATTACKS/RANSOMWARE
NAME	CISA KEV	cpe:2.3:a:apache:activemq:.*:.*:.*:.*: cpe:2.3:a:apache:activemq_legacy_openwire_module:.*:.*:.*:.*:.*	
Apache ActiveMQ Deserialization of Untrusted Data Vulnerability			HelloKitty ransomware
	CWE ID	ASSOCIATED TTPs	PATCH LINK
	CWE-502	T1059: Command and Scripting Interpreter	https://activemq.apache.org/security-advisories.data/CVE-2023-46604

CVE ID	CELEBRITY VULNERABILITY	AFFECTED PRODUCTS	ASSOCIATED ACTOR
<u>CVE-2017-9841</u>		Oracle Communications Diameter Signaling Router	Kinsing
	ZERO-DAY		
		AFFECTED CPE	ASSOCIATED ATTACKS/RANSOMWARE
NAME	CISA KEV	cpe:2.3:a:phpunit_project:phpunit:**:**:**:**:*	-
			-
PHPUnit Command Injection Vulnerability	CWE ID	ASSOCIATED TTPs	PATCH LINK
	CWE-94	T1055: Process Injection	https://www.oracle.com/security-alerts/cpuoct2021.html

CVE ID	CELEBRITY VULNERABILITY	AFFECTED PRODUCTS	ASSOCIATED ACTOR
CVE-2023-38831		WinRAR version 6.22 and older versions	SideCopy
	ZERO-DAY		
		AFFECTED CPE	ASSOCIATED ATTACKS/RANSOMWARE
RARLAB WinRAR Code Execution Vulnerability	CISA KEV	cpe:2.3:a:rarlab:winrar:6.23:beta 1:*.*.*.*.*.*	AllaKore RAT, Ares RAT, DRat, Key RAT
	CWE ID	ASSOCIATED TTPs	PATCH LINK
	CWE-20	T1059: Command and Scripting Interpreter	Update WinRAR version to 6.23 or later versions

CVE ID	CELEBRITY VULNERABILITY	AFFECTED PRODUCTS	ASSOCIATED ACTOR
CVE-2023-47246		SysAid: 21.4.45 - 23.3.35	Lace Tempest
	ZERO-DAY		
		AFFECTED CPE	ASSOCIATED ATTACKS/RANSOMWARE
SysAid path traversal vulnerability	CISA KEV	cpe:2.3:a:sysaid:sysaid:-*:*:*:*:*:*	Clop ransomware, Gracewire
	CWE ID	ASSOCIATED TTPs	PATCH LINK
	CWE-22	T1588.006: Vulnerabilities	https://documentation.sysaid.com/docs/latest-version-installation-files

CVE ID	CELEBRITY VULNERABILITY	AFFECTED PRODUCTS	ASSOCIATED ACTOR
CVE-2023-36845	✗	Juniper Junos OS: 20.4 - 22.4R2	-
	ZERO-DAY		-
	✗	AFFECTED CPE	ASSOCIATED ATTACKS/RANSOMWARE
NAME	CISA KEV	cpe:2.3:o:juniper:junos:*\n*:*\n*:*\n*:*	-
Juniper Junos OS EX Series and SRX Series PHP External Variable Modification Vulnerability	✓	CWE ID	ASSOCIATED TTPs
	CWE-473	T1005: Data from Local System, T1499.004: Application or System Exploitation, T1211: Exploitation for Defense Evasion	https://supportportal.juniper.net/s/article/2023-08-Out-of-Cycle-Security-Bulletin-Junos-OS-SRX-Series-and-EX-Series-Multiple-vulnerabilities-in-J-Web-can-be-combined-to-allow-a-preAuth-Remote-Code-Execution?language=en_US

CVE ID	CELEBRITY VULNERABILITY	AFFECTED PRODUCTS	ASSOCIATED ACTOR
CVE-2023-36846	✗	Juniper Junos OS: 20.4 - 22.4R2	-
	ZERO-DAY		
NAME	CISA KEV	cpe:2.3:o:juniper:junos:**:**:**:**:**	-
	CWE ID		ASSOCIATED TTPs
Juniper Junos OS SRX Series Missing Authentication for Critical Function Vulnerability	CWE-306	T1190: Exploit Public-Facing Application, T1040: Network Sniffing	https://supportportal.juniper.net/article/2023-08-Out-of-Cycle-Security-Bulletin-Junos-OS-SRX-Series-and-EX-Series-Multiple-vulnerabilities-in-J-Web-can-be-combined-to-allow-a-preAuth-Remote-Code-Execution?language=en_US

CVE ID	CELEBRITY VULNERABILITY	AFFECTED PRODUCTS	ASSOCIATED ACTOR
CVE-2023-36847	✗	Juniper Junos OS: 20.4 - 22.4R2	-
	ZERO-DAY		
	✗	AFFECTED CPE	ASSOCIATED ATTACKS/RANSOMWARE
NAME	CISA KEV	cpe:2.3:o:juniper:junos:.*:.*:.*:.*:.*:*	-
Juniper Junos OS EX Series Missing Authentication for Critical Function Vulnerability	✓		
	CWE ID		ASSOCIATED TTPs
	CWE-306	T1190: Exploit Public-Facing Application, T1040: Network Sniffing	https://supportortal.juniper.net/s/article/2023-08-Out-of-Cycle-Security-Bulletin-Junos-OS-SRX-Series-and-EX-Series-Multiple-vulnerabilities-in-J-Web-can-be-combined-to-allow-a-preAuth-Remote-Code-Execution?language=en_US

CVE ID	CELEBRITY VULNERABILITY	AFFECTED PRODUCTS	ASSOCIATED ACTOR
CVE-2023-36851	✖	Juniper Junos OS: 20.4 - 22.4R2	-
	ZERO-DAY		
NAME Juniper Junos OS SRX Series Missing Authentication for Critical Function Vulnerability	✖	AFFECTED CPE	ASSOCIATED ATTACKS/RANSOMWARE
	✓	cpe:2.3:o:juniper:junos:***.*;*;*;*	-
	CWE ID CWE-306	ASSOCIATED TTPs T1190: Exploit Public-Facing Application, T1040: Network Sniffing	WORKAROUND https://supportportal.juniper.net/s/article/2023-08-Out-of-Cycle-Security-Bulletin-Junos-OS-SRX-Series-and-EX-Series-Multiple-vulnerabilities-in-J-Web-can-be-combined-to-allow-a-preAuth-Remote-Code-Execution?language=en_US

CVE ID	CELEBRITY VULNERABILITY	AFFECTED PRODUCTS	ASSOCIATED ACTOR
CVE-2023-36033		Windows: 10 - 11 23H2, Windows Server: 2019 - 2022 23H2	-
	ZERO-DAY		
		AFFECTED CPE	ASSOCIATED ATTACKS/RANSOMWARE
NAME	CISA KEV	cpe:2.3:o:microsoft:windows:10:1809 :*:*:*.**:*	-
Microsoft Windows Desktop Window Manager (DWM) Core Library Privilege Escalation Vulnerability		CWE ID	ASSOCIATED TTPs
	CWE-119		
		T1068: Exploitation for Privilege Escalation, T1204.001: Malicious Link	https://msrc.microsoft.com/update-guide/en-US/advisory/CVE-2023-36033

CVE ID	CELEBRITY VULNERABILITY	AFFECTED PRODUCTS	ASSOCIATED ACTOR
CVE-2023-36025		Windows: 10 - 11 23H2, Windows Server: 2008 - 2022 23H2	-
	ZERO-DAY		
		AFFECTED CPE	ASSOCIATED ATTACKS/RANSOMWARE
NAME	CISA KEV	cpe:2.3:o:microsoft:windows:10:1809 :*:*:*.**:*	-
Microsoft Windows SmartScreen Security Feature Bypass Vulnerability		CWE ID	ASSOCIATED TTPs
	CWE-254		
		T1190: Exploit Public-Facing Application, T1040: Network Sniffing	https://msrc.microsoft.com/update-guide/en-US/advisory/CVE-2023-36025

CVE ID	CELEBRITY VULNERABILITY	AFFECTED PRODUCTS	ASSOCIATED ACTOR
CVE-2023-36036		Windows: 10 - 11 23H2, Windows Server: 2008 - 2022 23H2	-
	ZERO-DAY		
		AFFECTED CPE	ASSOCIATED ATTACKS/RANSOMWARE
NAME	CISA KEV	cpe:2.3:o:microsoft:windows:10:1809 :*:*:.*:*	-
Microsoft Windows Cloud Files Mini Filter Driver Privilege Escalation Vulnerability		CWE ID	ASSOCIATED TTPs
	CWE-119	T1190: Exploit Public-Facing Application, T1040: Network Sniffing	PATCH LINK
			https://msrc.microsoft.com/update-guide/en-US/advisory/CVE-2023-36036

CVE ID	CELEBRITY VULNERABILITY	AFFECTED PRODUCTS	ASSOCIATED ACTOR
CVE-2023-36038		Visual Studio: 2022 version 17.2 – 2022, version 17.7, ASP.NET Core: 8.0 .NET: 8.0.0	-
	ZERO-DAY		
		AFFECTED CPE	ASSOCIATED ATTACKS/RANSOMWARE
NAME	CISA KEV	cpe:2.3:a:microsoft:visual_studio:2022:version17.7:*.*:.*:*	-
ASP.NET Core Denial of Service Vulnerability		CWE ID	ASSOCIATED TTPs
	CWE-20	T1499: Endpoint Denial of Service, T1499.004: Application or System Exploitation, T1574: Hijack Execution Flow	PATCH LINK
			https://msrc.microsoft.com/update-guide/en-US/advisory/CVE-2023-36038

CVE ID	CELEBRITY VULNERABILITY	AFFECTED PRODUCTS	ASSOCIATED ACTOR
<u>CVE-2023-36413</u>		Microsoft Office: 2016 – 2019, Microsoft Office LTSC 2021: 32 bit editions - 64 bit editions, Microsoft 365 Apps for Enterprise: 32-bit Systems - 64-bit Systems	-
	ZERO-DAY		
		AFFECTED CPE	ASSOCIATED ATTACKS/RANSOMWARE
NAME	CISA KEV		
Microsoft Office Security Feature Bypass Vulnerability		cpe:2.3:a:microsoft:microsoft_office:2019:***:***:***:*	-
	CWE ID	ASSOCIATED TTPs	PATCH LINK
	CWE-254	T1190: Exploit Public-Facing Application, T1040: Network Sniffing	https://msrc.microsoft.com/update-guide/en-US/advisory/CVE-2023-36413

CVE ID	CELEBRITY VULNERABILITY	AFFECTED PRODUCTS	ASSOCIATED ACTOR
<u>CVE-2023-34060</u>		VMware Cloud Director: 10.5.0	-
	ZERO-DAY		
		AFFECTED CPE	ASSOCIATED ATTACKS/RANSOMWARE
NAME	CISA KEV		
VMware Cloud Director Authentication Bypass Vulnerability		cpe:2.3:a:vmware:vCloud_Director:10.5.0:***:***:***:*	-
	CWE ID	ASSOCIATED TTPs	WORKAROUND
	CWE-287	T1190: Exploit Public-Facing Application, T1040: Network Sniffing	https://kb.vmware.com/s/article/95534

CVE ID	CELEBRITY VULNERABILITY	AFFECTED PRODUCTS	ASSOCIATED ACTOR
CVE-2023-37580		Zimbra Collaboration (ZCS): 8.8.15 - 8.8.15	Winter Vivern
	ZERO-DAY		
		AFFECTED CPE	ASSOCIATED ATTACKS/RANSOMWARE
NAME	CISA KEV	cpe:2.3:a:zimbra:zimbra:.*:.*:.*:.*:.*:.*	-
Zimbra Collaboration (ZCS) Cross-Site Scripting (XSS) Vulnerability		ASSOCIATED TTPs	PATCH LINK
	CWE ID		
	CWE-79	T1189: Drive-by Compromise, T1204: User Execution, T1059.007: JavaScript	https://wiki.zimbra.com/wiki/Zimbra_Releases/8.8.15/P41 https://wiki.zimbra.com/wiki/Security_Center

CVE ID	CELEBRITY VULNERABILITY	AFFECTED PRODUCTS	ASSOCIATED ACTOR
CVE-2023-6345		Google Chrome 100.0.4896.60 – 119.0.6045.160	-
	ZERO-DAY		
		AFFECTED CPE	ASSOCIATED ATTACKS/RANSOMWARE
NAME	CISA KEV	cpe:2.3:a:google:chrome:.*:.*:.*:.*:.*:.*	-
Google Chrome Skia Integer Overflow Vulnerability		ASSOCIATED TTPs	PATCH LINK
	CWE ID		
	CWE-190	T1059: Command and Scripting Interpreter	https://www.google.com/intl/en/chrome/?standalone=1

CVE ID	CELEBRITY VULNERABILITY	AFFECTED PRODUCTS	ASSOCIATED ACTOR
CVE-2023-49103	✗	ownCloud graphapi 0.2.0 – 0.3.0	-
	ZERO-DAY		
	✗	AFFECTED CPE	ASSOCIATED ATTACKS/RANSOMWARE
NAME	CISA KEV	cpe:2.3:a:owncloud:graphapi:**:**:**:**:*	-
ownCloud graphapi app Information Disclosure Vulnerability	✓	ASSOCIATED TTPs	PATCH LINK
	CWE ID	T1598: Phishing for Information	https://marketplace.owncloud.com/apps/graphapi , https://marketplace.owncloud.com/apps/oauth2 , https://owncloud.com/download-server
	CWE-200		

⚔️ Attacks Executed

Name	Overview	Delivery Method	Targeted CVEs
<u>LockBit ransomware</u>	LockBit ransomware is malicious software designed to block user access to computer systems in exchange for a ransom payment. LockBit will automatically vet for valuable targets, spread the infection, and encrypt all accessible computer systems on a network. This ransomware is used for highly targeted attacks against enterprises and other organizations.	Exploiting Vulnerability	CVE-2023-4966 CVE-2023-4967
Type		Impact	Affected Products
Ransomware-as-a-Service		Block User Access, Encrypt data	Citrix NetScaler ADC and NetScaler Gateway
Associated Actor			Patch Link
-			https://support.citrix.com/article/CTX579459/netscaler-adc-and-netscaler-gateway-security-bulletin-for-cve20234966-and-cve20234967

Name	Overview	Delivery Method	Targeted CVEs
<u>LIONTAIL</u>	LIONTAIL is a passive loader that uses undocumented functionalities of the HTTP.sys driver to load incoming payloads. It is highly customizable and allows attackers to evade detection.	Phishing	-
Type		Impact	Affected Products
Passive loader		Data theft and Financial Losses	Windows
Associated Actor			Patch Link
Scarred Manticore			-

The IOCs (Indicators of Compromise) for the attacks executed are listed in the appendix section at the end of the report.

Name	Overview	Delivery Method	Targeted CVEs
Associated Actor	HelloKitty emerged as a ransomware variant in late 2020, focusing mainly on Windows systems and gaining a reputation for its agility in adopting new Tactics, Techniques, and Procedures (TTPs). It utilized a Golang-based packer to enhance its ability to evade detection. By early 2021, a Linux version of HelloKitty had been spotted operating in the wild.	-	CVE-2023-46604
Type		Impact	Affected Products
Ransomware		Data theft and Financial Losses	Apache ActiveMQ
Associated Actor			Patch Link https://activemq.apache.org/security/advisories.data/CVE-2023-46604
-			

Name	Overview	Delivery Method	Targeted CVEs
Associated Actor	TellYouThePass ransomware is one of many ransomware-type programs used to block access to files by encryption and keep them in this state unless a ransom is paid. The program renames all encrypted files by adding the ".locked" extension and creates a ransom message in a text file called "README.html".	Exploiting Vulnerability	CVE-2023-46604
Type		Impact	Affected Products
Ransomware		Encrypt data	Apache ActiveMQ
Associated Actor			Patch Link https://activemq.apache.org/security/advisories.data/CVE-2023-46604
-			

The IOCs (Indicators of Compromise) for the attacks executed are listed in the appendix section at the end of the report.

Name	Overview	Delivery Method	Targeted CVEs
Type	SparkRAT is an open-source RAT malware that is publicly available on GitHub. Notable for being developed with GoLang, SparkRAT provides basic features commonly found in RAT malware, such as executing commands, stealing information, and controlling processes and files.	Impact	Affected Products
RAT		Execute commands, steal data	Apache ActiveMQ
Associated Actor			Patch Link
-			https://activemq.apache.org/security-advisories.data/CVE-E-2023-46604

Name	Overview	Delivery Method	Targeted CVEs
Type	It is written in C++ and primarily sets up SOCKS5 proxies on victim computers that can then be used by threat actors to tunnel/hide the malicious traffic associated with other malware.	Impact	Affected Products
Proxy botnet		Retrieve data from the C2 servers	-
Associated Actor			Patch Link
-			-

The IOCs (Indicators of Compromise) for the attacks executed are listed in the appendix section at the end of the report.

NAME	OVERVIEW	DELIVERY METHOD	TARGETED CVEs
<u>PrivateLoader</u>	PrivateLoader is a modular malware whose main capability is to download and execute one or several payloads. The loader implements anti-analysis techniques, fingerprints the compromised host and reports statistics to its C2 server.	Phishing, exploit kits, malvertising, trojanized executables	-
TYPE	Loader	IMPACT	AFFECTED PRODUCTS
		Download and execute payloads	-
ASSOCIATED ACTOR			PATCH LINK
-			-

NAME	OVERVIEW	DELIVERY METHOD	TARGETED CVEs
<u>Amadey</u>	Amadey is being sold for about \$500 on Russian-speaking hacking forums. It periodically sends information about the system and installed AV software to its C2 server and polls to receive orders from it. Its main functionality is that it can load other payloads for targeted computers compromised by the malware.	Phishing, exploit kits, malvertising, trojanized executables	-
TYPE	Loader	IMPACT	AFFECTED PRODUCTS
		Deliver multiple malwares, update copies of itself	-
ASSOCIATED ACTOR			PATCH LINK
-			-

The IOCs (Indicators of Compromise) for the attacks executed are listed in the appendix section at the end of the report.

Name	Overview	Delivery Method	Targeted CVEs
Type	Jupyter Infostealer is a malware variant that changes its delivery method to evade detection, use SEO poisoning to encourage malicious file downloads. The malware has demonstrated credential harvesting and encrypted C2 communication capabilities used to exfiltrate sensitive data.	Phishing	-
Associated Actor	Impact	Affected Products	
-	Data Theft	Patch Link	
-		-	
-		-	

Name	Overview	Delivery Method	Targeted CVEs
Type	MultiLayer is .NET based wiper, it can destroy local as well as network files; utilizes timestamping technique and delete system logs to cover its track.	Exploiting vulnerable internet facing web servers	-
Associated Actor	Impact	Affected Products	
Wiper		-	
Agrius	Wipes system data	Patch Link	
-		-	

The IOCs (Indicators of Compromise) for the attacks executed are listed in the appendix section at the end of the report.

Name	Overview	Delivery Method	Targeted CVEs
Type	PartialWasher is a data-wiping tool which is coded in C++. It supports command-line arguments	-	-
Associated Actor		Impact	Affected Products
Actor		Wipes data	Patch Link
Actor		Wipes data	-
Actor		Wipes data	-

Name	Overview	Delivery Method	Targeted CVEs
Type	BFG Agonizer is a wiper. It has code similarities with CRYLINE-v5.0. It circumvents security measures by employing anti-hooking techniques.	Exploiting vulnerable internet facing web servers	-
Associated Actor		Impact	Affected Products
Actor		Destroys system	Patch Link
Actor		Destroys system	-
Actor		Destroys system	-

The IOCs (Indicators of Compromise) for the attacks executed are listed in the appendix section at the end of the report.

Name	Overview	Delivery Method	Targeted CVEs
Sqlextractor	It is a custom tool to extract information from database servers. Its purpose is to query SQL databases and extract sensitive PII data, such as ID numbers, Passport scans, Emails, Full addresses.	Exploiting vulnerable internet facing web servers	-
Type		Impact	Affected Products
Infostealer		Obtains sensitive data	-
Associated Actor			Patch Link
Agrius			-

Name	Overview	Delivery Method	Targeted CVEs
ObjCShellz	The malware, written in Objective-C, operates as a remote shell, enabling attackers to execute commands on compromised systems. It communicates with its C2 server using a POST request, providing information about the victim's macOS version.	-	-
Type		Impact	Affected Products
Backdoor		Executes custom commands	-
Associated Actor			Patch Link
BlueNorOff			-

The IOCs (Indicators of Compromise) for the attacks executed are listed in the appendix section at the end of the report.

Name	Overview	Delivery Method	Targeted CVEs
RustBucket	RustBucket is a new malware family that targets macOS systems. RustBucket is a multi-stage malware that uses a variety of techniques to infect its victims, including phishing emails, malicious websites, and drive-by downloads.	-	-
Type		Impact	Affected Products
Backdoor		Steal sensitive information and install other malware	Patch Link
Associated Actor			-
BlueNorOff			

Name	Overview	Delivery Method	Targeted CVEs
AllaKore RAT	AllaKore RAT is an open-source remote access tool which has been modified for the purposes of SideCopy operations and is commonly observed in their intrusions.	Exploiting Vulnerability	CVE-2023-38831
Type		Impact	Affected Products
RAT			WinRAR
Associated Actor		Keylogging, screenshotting, and gain remote access	Patch Link
SideCopy			Update WinRAR to latest version 6.23 and later.

The IOCs (Indicators of Compromise) for the attacks executed are listed in the appendix section at the end of the report.

NAME	OVERVIEW	DELIVERY METHOD	TARGETED CVEs
<u>Ares RAT</u>	It is type of malicious software that allows an attacker to remotely control and monitor a victim's computer.	Phishing	CVE-2023-38831
		IMPACT	AFFECTED PRODUCTS
		Steal data	WinRAR
TYPE	RAT		PATCH LINK
ASSOCIATED ACTOR			Update WinRAR to latest version 6.23 and later.
SideCopy			

NAME	OVERVIEW	DELIVERY METHOD	TARGETED CVEs
<u>DRat</u>	DRat is capable of parsing as many as 13 commands from the C2 server to gather system data, download and execute additional payloads, and perform other file operations.	Exploiting Vulnerability	CVE-2023-38831
		IMPACT	AFFECTED PRODUCTS
		Download and execute payload	WinRAR
TYPE	RAT		PATCH LINK
ASSOCIATED ACTOR			Update WinRAR to latest version 6.23 and later.
SideCopy			

The IOCs (Indicators of Compromise) for the attacks executed are listed in the appendix section at the end of the report.

Name	Overview	Delivery Method	Targeted CVEs
Key RAT	<p>Key RAT is a Windows based Remote Access Trojan, used by Threat Actor SideCopy in a campaign along side Ares RAT.</p>	Exploiting Vulnerability	CVE-2023-38831
		Impact	Affected Products
Type		Steal data	WinRAR
RAT			Patch Link
Associated Actor		Collect user data	Update WinRAR to latest version 6.23 and later.
SideCopy			-

Name	Overview	Delivery Method	Targeted CVEs
Millenium RAT	<p>The Millenium RAT, a Win32 executable built on .NET, specifically version 2.4, can be found on GitHub and is available for purchase for \$30, granting lifetime access.</p>	-	-
		Impact	Affected Products
Type		Collect user data	-
RAT			Patch Link
Associated Actor		-	-
-			-

Name	Overview	Delivery Method	Targeted CVEs
BlazeStealer	<p>The BlazeStealer payload can extract a malicious script from an external source, giving attackers complete control over the victim's computer. BlazeStealer runs a bot carried via the Discord messaging service using a unique identifier.</p>	-	-
		Impact	Affected Products
Type		Download files, deactivate Windows Defender and Task Manager, and lock a computer by overloading the CPU	-
Stealer			Patch Link
Associated Actor		-	-
-			-

The IOCs (Indicators of Compromise) for the attacks executed are listed in the appendix section at the end of the report.

Name	Overview	Delivery Method	Targeted CVEs
Type	Nokoyawa Ransomware, first discovered in February 2022, is written in Rust making it cross-platform and found to be sharing code with Karma ransomware family. It employs double-extortion technique.	-	-
Associated Actor		Impact	Affected Products
farnetwork		Encrypts data	Patch Link
			-

Name	Overview	Delivery Method	Targeted CVEs
Type	JSWORM is a malicious program classified as ransomware: a program designed to encrypt data and deliver a ransom-demand message. When a computer is infected with a virus of this type, the victim loses access to stored data.	-	-
Associated Actor		Impact	Affected Products
farnetwork		Encrypts data	Patch Link
			-

The IOCs (Indicators of Compromise) for the attacks executed are listed in the appendix section at the end of the report.

Name	Overview	Delivery Method	Targeted CVEs
Type	Nefilim is a Ransomware as a Service(RaaS) operation first discovered in March 2020. Nefilim ransomware replaces the original files with encrypted versions.	Impact	Affected Products
Associated Actor		Encrypt Data	Patch Link
			-
			-

Name	Overview	Delivery Method	Targeted CVEs
Type	Karma is a type of malware that encrypts your files and demands a ransom payment to decrypt them. This ransomware is particularly dangerous because it uses strong encryption algorithms that make it very difficult to recover your files without paying the ransom.	Impact	Affected Products
Associated Actor		Encrypt Data	Patch Link
			-
			-

The IOCs (Indicators of Compromise) for the attacks executed are listed in the appendix section at the end of the report.

Name	Overview	Delivery Method	Targeted CVEs
Type	Nemty is ransomware with an unusually complex encryption algorithm. This malware encrypts user files and demands money so that they can be unlocked again.	Impact	Affected Products
Associated Actor		Encrypt data	Patch Link
farnetwork			-
-			-

Name	Overview	Delivery Method	Targeted CVEs
Type	FakeBat is a malicious software loader and dropper that associated with malvertising campaigns.	Google Ads	-
Associated Actor		Impact	Affected Products
-		Distribute info stealers	-
-			Patch Link
-			-

The IOCs (Indicators of Compromise) for the attacks executed are listed in the appendix section at the end of the report.

Name	Overview	Delivery Method	Targeted CVEs
<u>Redline stealer</u>	Redline is a potent information-stealing malware designed to harvest sensitive data, including passwords, cookies, and cryptocurrency-related information.	IMPACT	- Affected Products
Type			
Infostealer			-
Associated Actor			Patch Link
-			-

Name	Overview	Delivery Method	Targeted CVEs
<u>Clop ransomware</u>	Clop Ransomware is a dangerous file encrypting virus which actively avoids the security unprotected system and encrypts the saved files by planting the .Clop extension. It exploits AES cipher to encrypt pictures, videos, music, databases papers.	IMPACT	CVE-2023-47246 Affected Products
Type			
Ransomware			SysAid
Associated Actor			Patch Link
Lace Tempest			https://documentation.sysaid.com/docs/latest-version-installation-files

The IOCs (Indicators of Compromise) for the attacks executed are listed in the appendix section at the end of the report.

NAME	OVERVIEW	DELIVERY METHOD	TARGETED CVEs
Gracewire (aka FlawedGrace)	It is written in C++. It seems to have been developed in the second half of 2017. GraceWire infections can result in financial loss, serious privacy issues and identity theft.	-	CVE-2023-47246
		IMPACT	AFFECTED PRODUCTS
TYPE		Data theft	SysAid
			PATCH LINK
ASSOCIATED ACTOR			https://documentation.sysaid.com/docs/latest-version-installation-files
Lace Tempest			

NAME	OVERVIEW	DELIVERY METHOD	TARGETED CVEs
Ducktail	Ducktail info stealer propagated by masquerading as documents related to projects and products of well-known companies and brands. A distinctive feature of this campaign was the use of Delphi as the programming language, deviating from the previous approach that relied on .NET applications.	Spear-phishing emails	-
		IMPACT	AFFECTED PRODUCTS
TYPE		Extortion of data	-
			PATCH LINK
ASSOCIATED ACTOR			-
-			

The IOCs (Indicators of Compromise) for the attacks executed are listed in the appendix section at the end of the report.

NAME	OVERVIEW	DELIVERY METHOD	TARGETED CVEs
<u>IronWind</u>	TA402 orchestrated a phishing campaign, deploying a file named PPAM. Within this file were three distinct components, facilitating the deployment of a novel initial access downloader known as IronWind. The infiltration of IronWind occurred through the use of timeout.exe. Subsequently, IronWind initiated communication with a C2 domain via an HTTP GET request.	Social Engineering	-
TYPE	IMPACT	AFFECTED PRODUCTS	
Downloader		-	
ASSOCIATED ACTOR		PATCH LINK	
TA402	Denial of Service, Data Theft, and compromised systems	-	

NAME	OVERVIEW	DELIVERY METHOD	TARGETED CVEs
<u>SharpSploit</u>	The IronWind downloader is designed to establish a connection with a server controlled by the attacker for the retrieval of additional payloads. Among these payloads is a post-exploitation toolkit called SharpSploit, a .NET post-exploitation library written in C#. This process unfolds in a multi-stage sequence	Spear phishing and IronWind	-
TYPE	IMPACT	AFFECTED PRODUCTS	
Toolkit		-	
ASSOCIATED ACTOR		PATCH LINKS	
TA402	Denial of Service, Data Theft, and compromised systems	-	

The IOCs (Indicators of Compromise) for the attacks executed are listed in the appendix section at the end of the report.

Name	Overview	Delivery Method	Targeted CVEs
NoEscape	The NoEscape ransomware, suspected to be a rebrand of Avaddon, targets enterprises globally through multi-extortion attacks. Operating as Ransomware-as-a-Service, it encrypts files, changes wallpapers, and demands ransom, emphasizing financial motives via a TOR negotiation site.	Phishing	-
Type		Impact	Affected Products
Ransomware			Windows, Linux, and ESXi
Associated Actor		Data Theft and Espionage	Patch Links
-			-

Name	Overview	Delivery Method	Targeted CVEs
GhostLocker	GhostSec, a hacktivist group, has introduced GhostLocker, an advanced Ransomware-as-a-Service (RaaS) framework. GhostSec used Python to develop their encryptor, utilizing PyInstaller to package Python code into standalone executable applications compatible with various operating systems. Recent versions of GhostLocker are compiled using Nuitka, a tool that translates Python programs into C binaries.	Phishing, Affiliate Programs, Darkweb Marketplace	-
Type		Impact	Affected Products
Modular			-
Associated Actor			Patch Links
GhostSec		Data Theft and Espionage	-

The IOCs (Indicators of Compromise) for the attacks executed are listed in the appendix section at the end of the report.

Name	Overview	Delivery Method	Targeted CVEs
<u>BlackCat (aka AlphaV, AlphaVM, ALPHV-ng, Noberus)</u>	<p>The BlackCat ransomware gained attention for its utilization of the Rust programming language and its adoption of a Ransomware-as-a-Service (RaaS) business model.</p> <p>BlackCat is highly customizable, allowing it to be tailored for the creation of targeted executables.</p>	Social engineering expertise, phishing, and SIM swap attacks,	-
Type			Affected Products
Ransomware			-
Associated Actor		Data Theft, compromised systems and Espionage	Patch Link
Scattered Spider		-	

Name	Overview	Delivery Method	Targeted CVEs
<u>AveMaria (aka AVE_MARIA, AveMariaRAT, Warzone RAT, WarzoneRAT)</u>	<p>The AveMaria RAT is a remote access trojan written in C++, offered as malware-as-a-service. It possesses a diverse set of capabilities, ranging from stealing victims' files and passwords to capturing desktop activities.</p> <p>The RAT receives regular updates from its command and control (C2) server.</p>	Social engineering expertise, phishing, and SIM swap attacks,	-
Type			Affected Products
RAT			-
Associated Actor		Data Theft, compromised systems and Espionage	Patch Link
Scattered Spider		-	

The IOCs (Indicators of Compromise) for the attacks executed are listed in the appendix section at the end of the report.

Name	Overview	Delivery Method	Targeted CVEs
<u>Raccoon (aka Mohazo, Racealer)</u>	Raccoon is an information-stealing malware available as a Malware-as-a-Service (MaaS). It can be acquired through a subscription, costing \$200 per month. The Raccoon malware has already infected over 100,000 devices, making it one of the most discussed viruses on underground forums in 2019.	Social engineering expertise, phishing, and SIM swap attacks,	-
Type	Impact		Affected Products
Infostealer			-
Associated Actor	Data Theft, compromised systems and Espionage		Patch Link
Scattered Spider			-

Name	Overview	Delivery Method	Targeted CVEs
<u>VIDAR</u>	Vidar is a dangerous malware that steals information and cryptocurrency from infected users. It derives its name from the ancient Scandinavian god of Vengeance. This stealer has been terrorizing the internet since 2018	Social engineering expertise, phishing, and SIM swap attacks,	-
Type	Impact		Affected Products
Infostealer			-
Associated Actor	Data Theft, compromised systems and Espionage		Patch Link
Scattered Spider			-

Name	Overview	Delivery Method	Targeted CVEs
<u>LitterDrifter</u>	LitterDrifter is a self-propagating worm written in VBScript that spreads through removable USB drives. It is believed to be developed by the Gamaredon APT group, which is linked to the Russian government.	USB drives	-
Type	Impact		Affected Products
Worm			-
Associated Actor	Steal data, Disrupt operations		Patch Link
Gamaredon			-

The IOCs (Indicators of Compromise) for the attacks executed are listed in the appendix section at the end of the report.

NAME	OVERVIEW	DELIVERY METHOD	TARGETED CVEs
<u>Kinsing (aka h2miner)</u>	Kinsing malware is a type of Linux malware that has been around for several years. It is known for targeting containerized environments, such as Docker and Kubernetes, and for its ability to spread to other hosts. Kinsing is typically used to mine cryptocurrency, but it can also be used to steal data or launch other attacks.	Exploiting vulnerability	CVE-2023-46604
		IMPACT	AFFECTED PRODUCTS
TYPE			ActiveMQ
Cryptocurrency miner			
ASSOCIATED ACTOR		Performance degradation, Data breach, Denial-of-service attacks	PATCH LINK
-			https://activemq.apache.org/security/advisories.data/CVE-E-2023-46604

NAME	OVERVIEW	DELIVERY METHOD	TARGETED CVEs
<u>NetSupport</u>	NetSupport RAT is a that is based on a legitimate remote administration tool called NetSupport Manager. NetSupport Manager is a legitimate tool that is used by IT professionals to remotely control and manage computers. However, cybercriminals have been known to use modified versions of NetSupport Manager as RATs to gain unauthorized access to computers and steal data.	Phishing	-
		IMPACT	AFFECTED PRODUCTS
TYPE			-
RAT			
ASSOCIATED ACTOR		Data theft, Installing malware	PATCH LINK
TA569			-

The IOCs (Indicators of Compromise) for the attacks executed are listed in the appendix section at the end of the report.

Name	Overview	Delivery Method	Targeted CVEs
Nim backdoor	Nim backdoor is actually a variant of the C++ backdoor and is written in the Nim programming language. A backdoor is a hidden way to access a system or application that is not intended for public use.	Phishing	-
Type		Impact	Affected Products
Backdoor	Data theft, Spying on victims	-	-
Associated Actor			Patch Link
SideWinder			-

Name	Overview	Delivery Method	Targeted CVEs
DarkGate	DarkGate is a commodity malware that is used in a variety of cyber attacks, including targeted attacks and mass attacks. DarkGate is a versatile malware that can be used to steal data, install additional malware, launch denial-of-service attacks, and take control of infected systems.	Phishing	-
Type		Impact	Affected Products
Loader	Launch DDoS attacks And Data Theft	-	-
Associated Actor			Patch Link
RastaFarEye			-

The IOCs (Indicators of Compromise) for the attacks executed are listed in the appendix section at the end of the report.

Name	Overview	Delivery Method	Targeted CVEs
Type	<p>Atomic Stealer</p> <p>Atomic, or AMOS, macOS information-stealing malware. It is currently being delivered to targets through a deceptive web browser update chain known as ClearFake. ClearFake is a recent malware campaign that exploits compromised websites to distribute fake browser updates.</p>	Legitimate AnyDesk remote desktop software	-
Associated Actor		IMPACT	Affected Products
		Data theft	Mac OS
Patch Link			
			-

Name	Overview	Delivery Method	Targeted CVEs
Type	<p>LambLoad</p> <p>LambLoad is a malware family that has been active since at least 2017. It is a downloader that is used in supply chain attacks. Supply chain attacks are attacks that target third-party suppliers to gain access to their customers' systems.</p>	Supply chain attacks, Phishing	-
Associated Actor		IMPACT	Affected Products
			-
Patch Link			
			-

The IOCs (Indicators of Compromise) for the attacks executed are listed in the appendix section at the end of the report.

Name	Overview	Delivery Method	Targeted CVEs
<u>InfectedSlurs</u>	InfectedSlurs is a new Mirai-based malware botnet, and is actively conducting a sophisticated campaign by exploiting two zero-day remote code execution (RCE) vulnerabilities in routers and video recorder (NVR) devices. These vulnerabilities, currently being exploited in the wild, facilitate the creation of a distributed denial-of-service (DDoS) botnet.	Exploiting vulnerabilities	-
		Impact	Affected Products
		Launch DDoS attacks And Data Theft	-
			Patch Link
			-

Name	Overview	Delivery Method	Targeted CVEs
<u>SwiftLoader</u>	SwiftLoader is a backdoored PDF reader app, it secretly retrieves and executes secondary malware.	-	-
		Impact	Affected Products
			macOS
		steal cryptocurrency	Patch Link
			-

Name	Overview	Delivery Method	Targeted CVEs
<u>KandyKorn</u>	KandyKorn primarily targets macOS and is an Remote Access Trojan written in C++.	-	-
		Impact	Affected Products
			macOS
		steal cryptocurrency	Patch Link
			-

The IOCs (Indicators of Compromise) for the attacks executed are listed in the appendix section at the end of the report.

Name	Overview	Delivery Method	Targeted CVEs
<u>ParaSiteSnatcher</u>	ParaSiteSnatcher is a malicious browser extension with ability to intercept HTTP requests enabling Threat Actors to manipulate and exfiltrate HTTP data.	Through a VBScript downloader	-
Type		Impact	Affected Products
Malicious Extension		Extract highly sensitive information	-
Associated Actor			Patch Link
-			-

Name	Overview	Delivery Method	Targeted CVEs
<u>Djvu</u>	Djvu is a ransomware family initially identified in 2018 and linked to the STOP ransomware, utilizes various file extensions for naming encrypted files.	Disguise of cracked software	-
Type		Impact	Affected Products
Ransomware		Data exfiltration and information theft	-
Associated Actor			Patch Link
-			-

Name	Overview	Delivery Method	Targeted CVEs
<u>Cerber ransomware</u>	Cerber Ransomware employs a ransomware-as-a-service model, enabling affiliates to purchase and operate. The latest variant encrypts data with the .LOCK3D extension.	Exploiting Vulnerability	CVE-2023-22518
Type		Impact	Affected Products
Ransomware-as-a-service		Encrypt data	Confluence Data Center, Confluence Server
Associated Actor			Patch Link
-			-

The IOCs (Indicators of Compromise) for the attacks executed are listed in the appendix section at the end of the report.



Adversaries in Action

Name	Origin	Targeted Industries	Targeted Countries
Scarred Manticore	Iran	Information theft and espionage	Middle East
	Motive		
	Information theft and espionage		
	Targeted CVEs	Associated Attacks/Ransomware	Affected Products
	-	LIONTAIL	Windows
TTPs			
TA0001: Initial Access, TA0002: Execution, TA0003: Persistence, TA0004: Privilege Escalation, TA0005: Defense Evasion, TA0006: Credential Access, TA0007: Discovery, TA0009: Collection, TA0011: Command and Control, TA0010: Exfiltration, TA0040: Impact, T1059: Command and Scripting Interpreter, T1190: Exploit Public-Facing Application, T1574: Hijack Execution Flow, T1078: Valid Accounts, T1543: Create or Modify System Process, T1003: OS Credential Dumping, T1082: System Information Discovery, T1005: Data from Local System, T1041: Exfiltration Over C2 Channel, T1490: Inhibit System Recovery, T1036: Masquerading, T1083: File and Directory Discovery, T1105: Ingress Tool Transfer			

NAME	ORIGIN	TARGETED INDUSTRIES	TARGETED COUNTRIES	
 <u>MuddyWater (aka Seedworm, TEMP.Zagros, Static Kitten, Mercury, TA450, Cobalt Ulster, ATK 51, T-APT-14, ITG17, Mango Sandstorm)</u>	Iran	Defense, Education, Energy, Financial, Food and Agriculture, Gaming, Government, Healthcare, High-Tech, IT, Media, NGOs, Oil and gas, Telecommunications, Transportation, Aerospace	Middle East, Asia, Africa, Europe, and North America	
	MOTIVE			
	Information theft and espionage			
	TARGETED CVEs	ASSOCIATED ATTACKS/RANSOM WARE	AFFECTED PRODUCTS	
	-	-	-	
TTPs				
TA0043: Reconnaissance, TA0001: Initial Access, TA0002: Execution, TA0003: Persistence, TA0010: Exfiltration, TA0011: Command and Control, T1566: Phishing, T1566.002: Spearphishing Link, T1547: Boot or Logon Autostart: Execution, T1059: Command and Scripting Interpreter, T1059.001: PowerShell, T1105: Ingress Tool Transfer, T1204: User Execution, T1204.002: Malicious File				

NAME	ORIGIN	TARGETED INDUSTRIES	TARGETED COUNTRIES
 <u>Kinsing (aka Money Libra)</u>	-	Cryptocurrency	Worldwide
	MOTIVE		
	Information Theft		
	TARGETED CVEs	ASSOCIATED ATTACKS/RA NSOMWARE	AFFECTED PRODUCTS
	CVE-2023-4911 CVE-2017-9841	-	GNU C Library (glibc), Oracle Communications Diameter Signaling Router
TTPs			
TA0042: Resource Development; TA0001: Initial Access; TA0002: Execution; TA0003: Persistence; TA0004: Privilege Escalation; TA0005: Defense Evasion; TA0006: Credential Access; TA0007: Discovery; TA0040: Impact; T1059: Command and Scripting Interpreter; T1059.006: Python; T1059.007: JavaScript; T1505: Server Software Component; T1068: Exploitation for Privilege Escalation; T1190: Exploit Public-Facing Application; T1588: Obtain Capabilities; T1588.006: Vulnerabilities; T1027: Obfuscated Files or Information; T1003: OS Credential Dumping; T1082: System Information; Discovery; T1083: File and Directory Discovery; T1140: Deobfuscate/Decode Files or Information; T1496: Resource Hijacking			

Name	Origin	Targeted Industries	Targeted Countries
Agrius (aka Agonizing Serpens, DEV-0227, BlackShadow, SharpBoys, AMERICIUM, Pink Sandstorm)	Iran	Education, Technology	Hong Kong, Israel, South Africa
	Motive		
	Information theft and espionage, Sabotage and destruction		
	Targeted CVEs	Associated Attacks/Ransomware	Affected Products
	-	MultiLayer, PartialWasher, BFG Agonizer, sqlextractor	-
TTPs			
TA0043: Reconnaissance; TA0001: Initial Access; TA0002: Execution; TA0003: Persistence; TA0004: Privilege Escalation; TA0005: Defense Evasion; TA0006: Credential Access; TA0007: Discovery; TA0008: Lateral Movement; TA0009: Collection; TA0010: Exfiltration; TA0040: Impact; T1595: Active Scanning; T1190: Exploit Public-Facing Application; T1003: OS Credential Dumping; T1560: Archive CollectedData; T1490: Inhibit System Recovery; T1574: Hijack Execution Flow; T1059: Command and Scripting Interpreter; T1110: Brute Force; T1005: Data from Local System; T1041: Exfiltration Over C2 Channel; T1485: Data Destruction; T1561: Disk Wipe;			

Name	Origin	Targeted Industries	Targeted Countries	
BlueNorOff (APT 38, Stardust Chollima, CTG-6459, Nickel Gladstone, TEMP.Hermit, T-APT-15, ATK-117, Black Alicanto, Copernicium, TA444, Sapphire Sleet, TAG-71)	North Korea	Cryptocurrency, Financial	-	
	Motive			
	Financial crime			
TARGETED CVEs	-	Associated Attacks/Ransom Ware	Affected Products	
		ObjCShellz, RustBucket	-	
TTPs				
TA0005: Defense Evasion; TA0010: Exfiltration; TA0011: Command and Control; TA0002: Execution; TA0040: Impact; TA0042: Resource Development; T1583: Acquire Infrastructure; T1583.001: Domains; T1059: Command and Scripting Interpreter; T1204: User Execution; T1204.001: Malicious Link; T1588.001: Malware; T1588: Obtain Capabilities; T1020: Automated Exfiltration; T1071: Application Layer Protocol; T1105: Ingress Tool Transfer				

Name	Origin	Targeted Industries	Targeted Countries
SideCopy	Pakistan	Government	India
	Motive		
	Information theft and espionage		
Targeted CVEs	Associated Attacks/Ransom Ware	Affected Products	
	CVE-2023-38831	AllaKore RAT, Ares RAT, DRat, Key RAT	WinRAR
TTPs			
TA0042: Resource Development; TA0001: Initial Access; TA0002: Execution; TA0003: Persistence; TA0005: Defense Evasion; TA0007: Discovery; TA0009: Collection; TA0011: Command and Control; TA0010: Exfiltration; T1583: Acquire Infrastructure; T1583.001: Domains; T1584: Compromise Infrastructure; T1584.001: Domains; T1588: Obtain Capabilities; T1588.001: Malware; T1588.002: Tool; T1608: Stage Capabilities; T1608.001: Upload Malware; T1608.005: Link Target; T1566: Phishing; T1566.001: Spearphishing Attachment; T1566.002: Spearphishing Link; T1106: Native API; T1129: Shared Modules; T1059: Command and Scripting Interpreter; T1047: Windows Management Instrumentation; T1203: Exploitation for Client Execution; T1204: User Execution; T1204.001: Malicious Link; T1204.002: Malicious File; T1053: Scheduled Task/Job; T1053.003: Cron; T1547: Boot or Logon Autostart Execution; T1547.001: Registry Run Keys / Startup Folder; T1547.013: XDG Autostart Entries; T1036: Masquerading; T1036.005: Match Legitimate Name or Location; T1140: Deobfuscate/Decode Files or Information; T1218: System Binary Proxy Execution; T1218.005: Mshta; T1574: Hijack Execution Flow; T1574.002: DLL Side-Loading; T1222: File and Directory Permissions Modification; T1222.002: Linux and Mac File and Directory Permissions Modification; T1027: Obfuscated Files or Information; T1027.009: Embedded Payloads; T1027.010: Command Obfuscation; T1012: Query Registry; T1033: System Owner/User Discovery; T1057: Process Discovery; T1082: System Information Discovery; T1083: File and Directory Discovery; T1016: System Network Configuration Discovery; T1016.001: Internet Connection Discovery; T1518: Software Discovery; T1518.001: Security Software Discovery; T1005: Data from Local System; T1056: Input Capture; T1056.001: Keylogging; T1074: Data Staged; T1074.001: Local Data Staging; T1119: Automated Collection; T1113: Screen Capture; T1125: Video Capture; T1105: Ingress Tool Transfer; T1571: Non-Standard Port; T1573: Encrypted Channel; T1071: Application Layer Protocol; T1071.001: Web Protocols; T1041: Exfiltration Over C2 Channel			

Name	Origin	Targeted Industries	Targeted Countries
 <u>farnetwork (aka</u> <u>farnetwork1, jingo, jsworm,</u> <u>razvrat, piparkuka, and</u> <u>farnetworkit)</u>	-	Utilities, Construction, Engineering, Trading Companies, Healthcare, Hotels, Restaurants & leisure, Distributors, Road & rail, Media, Education Services, and Automotive	United States, Korea, Canada, Morocco, Saint Kitts and Nevis
	Motive		
	Develop ransomware		
	TARGETED CVEs	ASSOCIATED ATTACKS/RANSOM WARE	AFFECTED PRODUCTS
	-	Nokoyawa, JSWORM, Nefilim, Karma, and Nemty	-
TTPs			
TA0001: Initial Access; TA0002: Execution; TA0005: Defense Evasion; TA0007: Discovery; TA0009: Collection; TA0010: Exfiltration; TA0040: Impact; T1190: Exploit Public-Facing Application; T1059.001: PowerShell; T1027: Obfuscated Files or Information; T1083: File and Directory Discovery; T1113: Screen Capture; T1114: Email Collection; T1005: Data from Local System; T1490: Inhibit System Recovery; T1048: Exfiltration Over Alternative Protocol; T1486: Data Encrypted for Impact; T1491: Defacement; T1555: Credentials from Password Stores; T1059: Command and Scripting Interpreter			

Name	Origin	Targeted Industries	Targeted Countries
 <u>Lace Tempest (aka DEV-0950, FIN11)</u>	-	Defense, Education, Energy, Financial, Hospitality, Retail, Telecommunications, Technology, Transportation	Worldwide
	Motive	Financial crime, Financial gain	
	Targeted CVEs	Associated Attacks/Ransomware	Affected Products
	CVE-2023-47246	Clop ransomware, Gracewire	SysAid servers
	TTPs		
TA0042: Resource Development; TA0002: Execution; TA0003: Persistence; TA0005: Defense Evasion; TA0007: Discovery; TA0008: Lateral Movement; TA0009: Collection; TA0010: Exfiltration; TA0011: Command and Control; T1588.006: Vulnerabilities; T1588: Obtain Capabilities; T1059.001: PowerShell; T1543: Create or Modify System Process; T1505: Server Software Component; T1564: Hide Artifacts; T1059: Command and Scripting Interpreter; T1083: File and Directory Discovery; T1046: Network Service Discovery; T1057: Process Discovery; T1070: Indicator Removal; T1570: Lateral Tool Transfer; T1213: Data from Information Repositories; T1105: Ingress Tool Transfer; T1041: Exfiltration Over C2 Channel			

NAME	ORIGIN	TARGETED INDUSTRIES	TARGETED COUNTRIES		
 <p><u>TA402 (aka Extreme Jackal, Molerats, Gaza Cybergang, Gaza Hackers Team, Aluminum Saratoga, ATK 89, TAG-CT5)</u></p>	Palestine	Government, Foreign Affairs	Middle East		
	MOTIVE				
	Information theft and espionage				
	TARGETED CVEs	ASSOCIATED ATTACKS/RANSOMWARE	AFFECTED PRODUCTS		
			-		
TTPs					
<p>TA0001: Initial Access; TA0002: Execution; TA0005: Defense Evasion; TA0007: Discovery; TA0009: Collection; TA0010: Exfiltration; TA0011: Command and Control; T1059: Command and Scripting Interpreter; T1072: Software Deployment Tools; T1083: File and Directory Discovery; T1082: System Information Discovery; T1047: Windows Management Instrumentation; T1560: Archive Collected Data; T1105: Ingress Tool Transfer; T1041: Exfiltration Over C2 Channel; T1543: Create or Modify System Process; T1204: User Execution</p>					

NAME	ORIGIN	TARGETED INDUSTRIES	TARGETED COUNTRIES		
 <p><u>Winter Vivern (aka UAC-0114, TA473)</u></p>	Unknown	Government	Greece, Moldova, Tunisia, Vietnam, Pakistan		
	MOTIVE				
	Information theft and espionage				
	TARGETED CVEs	ASSOCIATED ATTACKS/RANSOMWARE	AFFECTED PRODUCTS		
			Zimbra Collaboration (ZCS)		
TTPs					
<p>TA0042: Resource Development; TA0001: Initial Access; TA0002: Execution; TA0005: Defense Evasion; TA0006: Credential Access; TA0010: Exfiltration; T1588: Obtain Capabilities; T1588.006: Vulnerabilities; T1588.005: Exploits; T1566: Phishing; T1059: Command and Scripting Interpreter; T1134: Access Token Manipulation; T1190: Exploit Public-Facing Application</p>					

Name	Origin	Targeted Industries	Targeted Countries
GhostSec (aka Ghost Security)	Unknown	Telecommunications Companies, Surveillance Systems, and Internet Of Things (IoT) Devices.	Russia, Israel, Columbia, Iran, South Africa, Nigeria, Pakistan, Iraq, United Arab Emirates, Lebanon, France, Brazil, Sudan, Myanmar, Nicaragua, Philippines, Canada
	Motive		
	Information theft, espionage and Financial crime		
	Targeted CVEs	Associated Attacks/Ransomware	Affected Products
	-	GhostLocker	-
TTPs			
TA0001: Initial Access; TA0002: Execution; TA0005: Defense Evasion; TA0007: Discovery; TA0009: Collection; TA0010: Exfiltration; TA0011: Command and Control; TA0040: Impact; T1059: Command and Scripting Interpreter; T1027: Obfuscated Files or Information; T1087.001: Local Account; T1659: Content Injection; T1543: Create or Modify System Process; T1560: Archive Collected Data; T1574: Hijack Execution Flow; T1057: Process Discovery; T1211: Exploitation for Defense Evasion; T1071.001: Web Protocols; T1059.006: Python; T1486: Data Encrypted for Impact			

Name	Origin	Targeted Industries	Targeted Countries
Scattered Spider (aka Starfraud, UNC3944, Oktapus, Storm-0875, LUCR-3, Scatter Swine, and Muddled Libra)	Unknown	Commercial facilities, Telecommunications, Technology, and Business-Process Outsourcing (BPO)	Worldwide
	Motive		
	Financial gain		
TARGETED CVEs	Associated Attacks/Ransomware	Affected Products	
	-	BlackCat/ALPHV Ransomware, AveMaria, Raccoon Stealer, and VIDAR Stealer	-
TTPs			
TA0043: Reconnaissance; TA0042: Resource Development; TA0001: Initial Access; TA0002: Execution; TA0007: Discovery; TA0008: Lateral Movement; TA0009: Collection; TA0011: Command and Control; TA0003: Persistence TA0004: Privilege Escalation; TA0005: Defense Evasion; TA0006: Credential Access; TA0010: Exfiltration; TA0040: Impact; T1657: Financial Theft; T1567: Exfiltration Over Web Service; T1585.001: Social Media Accounts; T1585: Establish Accounts; T1566: Phishing; T1660: Phishing; T1566.004: Spearphishing Voice; T1199: Trusted Relationship; T1078.002: Domain Accounts; T1078: Valid Accounts; T1648: Serverless Execution; T1204: User Execution; T1136: Create Account; T1556.006: Multi-Factor Authentication; T1556: Modify Authentication Process; T1484.002: Domain Trust Modification; T1484: Domain Policy Modification; T1578.002: Create Cloud Instance; T1578: Modify Cloud Compute Infrastructure; T1656: Impersonation; T1606: Forge Web Credentials; T1621: Multi-Factor Authentication Request Generation; T1552.001: Credentials In Files; T1552.004: Private Keys; T1552: Unsecured Credentials; T1217: Browser Bookmark Discovery; T1538: Cloud Service Dashboard; T1083: File and Directory Discovery; T1018: Remote System Discovery; T1539: Steal Web Session Cookie; T1021: Remote Services; T1021.007: Cloud Services; T1213.003: Code Repositories; T1213.002: Sharepoint; T1213: Data from Information Repositories; T1074: Data Staged; T1114: Email Collection; T1530: Data from Cloud Storage; T1219: Remote Access Software; T1486: Data Encrypted for Impact; T1567.002: Exfiltration to Cloud Storage			

NAME	ORIGIN	TARGETED INDUSTRIES	TARGETED COUNTRIES
 <u>Gamaredon (aka Primitive Bear, Winterflounder, BlueAlpha, Blue Otso, Iron Tilden, Armageddon, SectorC08, Callisto, Shuckworm, Actinium, Trident Ursa, DEV-0157, UAC-0010, Aqua Blizzard)</u>	Russia	Defense, Government, Law enforcement, NGOs and diplomats and journalists	Ukraine, USA, Vietnam, Chile, Poland, Germany, Hong Kong
	MOTIVE		
	Information theft and espionage		
	TARGETED CVEs	ASSOCIATED ATTACKS/RA NSOMWARE	AFFECTED PRODUCTS
	-	LitterDrifter	-

TPPs

TA0001: Initial Access; TA0002: Execution; TA0003: Persistence; TA0004: Privilege Escalation; TA0005: Defense Evasion; TA0011: Command and Control; T1140: Deobfuscate/Decode: Files or Information; T1027: Obfuscated Files or Information; T1102: Web Service; T1008: Fallback Channels; T1053: Scheduled Task/Job; T1047: Windows Management: Instrumentation; T1071: Application Layer: Protocol; T1091: Replication Through: Removable Media

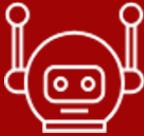
NAME	ORIGIN	TARGETED INDUSTRIES	TARGETED COUNTRIES
 <u>TA569</u>	Unknown	Education, Government, and Business Services	Worldwide
	MOTIVE		
	Information theft and espionage		
	TARGETED CVEs	ASSOCIATED ATTACKS/RANSOM WARE	AFFECTED PRODUCTS
	-	NetSupport RAT	-

TPPs

T1204.002: User Execution: Malicious File; T1059.001: Command and Scripting Interpreter: PowerShell; T1055: Process Injection; T1027: Obfuscated Files or Information; T1041: Exfiltration Over C2 Channel; T1074.001: Data Staged: Local Data Staging; T1547.001: Boot or Logon Autostart Execution: Registry Run Keys / Startup Folder; T1057: Process Discovery

NAME	ORIGIN	TARGETED INDUSTRIES	TARGETED COUNTRIES
 <u>SideWinder (aka Razor Tiger, Rattlesnake, T-APT-04, APT-C-17, Hardcore Nationalist, HN2, APT-Q-39, BabyElephant, GroupA21)</u>	India	Government	Bhutan, Nepal, and Myanmar
	MOTIVE		
	Information theft and espionage		
	TARGETED CVEs	ASSOCIATED ATTACKS/RA NSOMWARE	AFFECTED PRODUCTS
	-	Nim backdoor	-
TTPs			
TA0043: Reconnaissance; TA0001: Initial Access; TA0002: Execution; TA0003: Persistence; TA0005: Defense Evasion; TA0007: Discovery; TA0009: Collection; TA0011: Command and Control; TA0010: Exfiltration; T1598: Phishing for Information; T1566.001: Spearphishing: Attachment; T1059: Command and Scripting Interpreter; T1083: File and Directory Discovery; T1057: Process Discovery; T1056: Input Capture; T1053: Scheduled Task/Job; T1204: User Execution; T1547: Boot or Logon: Autostart Execution; T1543: Create or Modify System Process; T1211: Exploitation for Defense Evasion; T1132: Data Encoding; T1041: Exfiltration Over C2: Channel			

NAME	ORIGIN	TARGETED INDUSTRIES	TARGETED COUNTRIES
 <u>Mustang Panda (aka Bronze President, TEMP.Hex, HoneyMyte, Red Lich, Earth Preta, Camaro Dragon, Stately Taurus)</u>	China	Government	Philippines
	MOTIVE		
	Information theft and espionage		
	TARGETED CVEs	ASSOCIATED ATTACKS/RA NSOMWARE	AFFECTED PRODUCTS
	-	-	-
TTPs			
TA0001: Initial Access; TA0002: Execution; TA0003: Persistence; TA0005: Defense Evasion; TA0011: Command and Control; T1566: Phishing; T1204: User Execution; T1204.002: Malicious File; T1574: Hijack Execution Flow; T1574.002: DLL Side-Loading; T1036: Masquerading; T1547: Boot or Logon: Autostart Execution; T1547.001: Registry Run Keys / Startup Folder			

NAME	ORIGIN	TARGETED INDUSTRIES	TARGETED COUNTRIES
 RastaFarEye	Unknown	-	United States, Europe, Regions in Asia, South America, and Africa
	MOTIVE		
	Information theft and espionage		
	TARGETED CVEs	ASSOCIATED ATTACKS/RA NSOMWARE	AFFECTED PRODUCTS
	-	DarkGate	-
TTPs			
TA0001: Initial Access; TA0002: Execution; TA0003: Persistence; TA0004: Privilege Escalation; TA0005: Defense Evasion; TA0006: Credential Access; TA0007: Discovery; TA0009: Collection; TA0011: Command and Control; TA0010: Exfiltration; TA0040: Impact; T1566.001: Spearphishing: Attachment; T1566.002: Spearphishing Link; T1204.002: Malicious File; T1059.001: PowerShell; T1059.003: Windows Command: Shell; T1547.001: Registry Run Keys /: Startup Folder; T1055.012: Process Hollowing; T1543.003: Windows Service; T1027.002: Software Packing; T1027.007: Dynamic API: Resolution; T1027.009: Embedded Payloads; T1055.002: Portable Executable: Injection; T1574.002: DLL Side-Loading; T1622: Debugger Evasion; T1036.008: Masquerade File Type; T1555.003: Credentials from Web: Browsers; T1056.001: Keylogging; T1528: Steal Application: Access Token; T1010: Application Window: Discovery; T1217: Browser Bookmark: Discovery; T1083: File and Directory: Discovery; T1497.001: System Checks; T1614.001: System Language: Discovery; T1518.001: Security Software: Discovery; T1005: Data from Local: System; T1113: Screen Capture; T1115: Clipboard Data; T1071.001: Web Protocols; T1132.002: Non-Standard: Encoding; T1573.001: Symmetric: Cryptography; T1219: Remote Access: Software; T1041: Exfiltration Over C2: Channel; T1489: Service Stop			

NAME	ORIGIN	TARGETED INDUSTRIES	TARGETED COUNTRIES
 <u>DarkCasino</u>	Unknown	Cryptocurrency trading platforms, online casinos and network banks worldwide	Worldwide
	MOTIVE		
	Economic benefits		
	TARGETED CVEs	ASSOCIATED ATTACKS/RANSOMWARE	AFFECTED PRODUCTS
	CVE-2023-38831	-	RARLAB WinRAR
TTPs			
TA0042: Resource Development; TA0001: Initial Access; TA0002: Execution; TA0003: Persistence; TA0004: Privilege Escalation; TA0005: Defense Evasion; TA0006: Credential Access; TA0011: Command and Control; T1027: Obfuscated Files or Information; T1055: Process Injection; T1566: Phishing; T1140: Deobfuscate/Decode Files or Information; T1056: Input Capture; T1059: Command and Scripting Interpreter; T1588: Obtain Capabilities; T1588.006: Vulnerabilities; T1105: Ingress Tool Transfer; T1204: User Execution; T1204.002: Malicious File; T1203: Exploitation for Client Execution			

NAME	ORIGIN	TARGETED INDUSTRIES	TARGETED COUNTRIES
 <u>Lazarus Group (aka</u> <u>Labyrinth Chollima,</u> <u>Guardians Of Peace, Zinc,</u> <u>Nickel Academy, Group 77,</u> <u>Hastati Group, Whois</u> <u>Hacking Team, Newromanic</u> <u>Cyber Army Team, Hidden</u> <u>Cobra, Appleworm, APT-C-</u> <u>26, Atk 3, Sectora01, ITG03,</u> <u>TA404, DEV-0139, Gods</u> <u>Apostles, Gods Disciples,</u> <u>UNC577, UNC2970,</u> <u>UNC4034, UNC4736,</u> <u>UNC4899, Diamond Sleet,</u> <u>Jade Sleet, TraderTraitor)</u>	North Korea	Media, Defense, Information Technology	Japan, Taiwan, Canada, and the United States
	MOTIVE		
	Information theft and espionage, Sabotage and destruction, Financial crime		
<u>Hacking Team, Newromanic</u> <u>Cyber Army Team, Hidden</u> <u>Cobra, Appleworm, APT-C-</u> <u>26, Atk 3, Sectora01, ITG03,</u> <u>TA404, DEV-0139, Gods</u> <u>Apostles, Gods Disciples,</u> <u>UNC577, UNC2970,</u> <u>UNC4034, UNC4736,</u> <u>UNC4899, Diamond Sleet,</u> <u>Jade Sleet, TraderTraitor)</u>	TARGETED CVEs	ASSOCIATED ATTACKS/RA NSOMWARE	AFFECTED PRODUCTS
	-	LambLoad	-
TTPs			
TA0001: Initial Access, TA0002: Execution, TA0003: Persistence, TA0004: Privilege Escalation, TA0005: Defense Evasion, TA0011: Command and Control, TA0010: Exfiltration, TA0040: Impact, T1071.001: Web Protocols; T1059: Command and Scripting Interpreter; T1573.001: Symmetric Cryptography; T1098: Account Manipulation; T1566: Phishing; T1204: User Execution; T1047: Windows Management Instrumentation; T1543: Create or Modify System Process; T1574.002: DLL Side-Loading; T1070: Indicator Removal; T1573: Encrypted Channel; T1105: Ingress Tool Transfer; T1003: OS Credential Dumping; T1195.002: Compromise Software Supply Chain; T1195: Supply Chain Compromise; T1036: Masquerading			

NAME	ORIGIN	TARGETED INDUSTRIES	TARGETED COUNTRIES
 <u>Andariel (aka Silent Chollima, Stonefly, Plutonium, Onyx Sleet)</u>	North Korea	Media, Defense, Information Technology	Japan, Taiwan, Canada, and the United States
	MOTIVE		
	Information theft and espionage, Sabotage and destruction, Financial crime		
	TARGETED CVEs	ASSOCIATED ATTACKS/RA NSOMWARE	AFFECTED PRODUCTS
	-	LambLoad	-
TTPs			
TA0001: Initial Access, TA0002: Execution, TA0003: Persistence, TA0004: Privilege Escalation, TA0005: Defense Evasion, TA0011: Command and Control, TA0010: Exfiltration, TA0040: Impact, T1071.001: Web Protocols; T1059: Command and Scripting Interpreter; T1573.001: Symmetric Cryptography; T1098: Account Manipulation; T1566: Phishing; T1204: User Execution; T1047: Windows Management Instrumentation; T1543: Create or Modify System Process; T1574.002: DLL Side-Loading; T1070: Indicator Removal; T1573: Encrypted Channel; T1105: Ingress Tool Transfer; T1003: OS Credential Dumping; T1195.002: Compromise Software Supply Chain; T1195: Supply Chain Compromise; T1036: Masquerading			



MITRE ATT&CK TTPS

Tactic	Technique	Sub-technique
TA0043: Reconnaissance	T1598: Phishing for Information	T1598.002: Spearphishing Attachment T1589.001: Information: Credentials
	T1589: Gather Victim Identity Information	
	T1595: Active Scanning	
TA0001: Initial Access	T1588: Obtain Capabilities	T1588.006: Vulnerabilities T1588.005: Exploits T1588.001: Malware T1588.002: Tool T1588.003: Code Signing Certificates
		T1583: Acquire Infrastructure
		T1583.001: Domains T1583.005: Botnet
		T1584: Compromise Infrastructure
		T1584.005: Botnet T1584.001: Domains
	T1585: Establish Accounts	T1585.001: Social Media Accounts
	T1608: Stage Capabilities	T1608.001: Upload Malware T1608.005: Link Target T1584.001: Domains
TA0002: Execution	T1059: Command and Scripting Interpreter	T1059.006: Python T1059.003: Windows Command Shell T1059.001: PowerShell T1059.007: JavaScript T1059.005: Visual Basic
		T1059.002: AppleScript
		T1204: User Execution
		T1204.001: Malicious Link T1204.002: Malicious File
	T1203: Exploitation for Client Execution	
	T1047: Windows Management Instrumentation	
	T1129: Shared Modules	
	T1106: Native API	
	T1072: Software Deployment Tools	
	T1053: Scheduled Task/Job	T1053.003: Cron
		T1053.005: Scheduled Task
	T1648: Serverless Execution	
	T1569: System Services	

Tactic	Technique	Sub-technique
TA0003: Persistence	T1543: Create or Modify System Process	T1543.003: Windows Service
	T1505: Server Software Component	
	T1133: External Remote Services	
	T1098: Account Manipulation	
	T1574: Hijack Execution Flow	T1574.001: DLL Search Order Hijacking T1574.002: DLL Side-Loading
		T1547.001: Registry Run Keys / Startup Folder T1547.013: XDG Autostart Entries T1547.009: Shortcut Modification
	T1547: Boot or Logon Autostart Execution	
	T1176: Browser Extensions	
	T1136: Create Account	
	T1053: Scheduled Task/Job	T1053.003: Cron T1053.005: Scheduled Task
TA0004: Privilege Escalation	T1548: Abuse Elevation Control Mechanism	T1548.002: Bypass User Account Control
	T1543: Create or Modify System Process	T1543.003: Windows Service
	T1098: Account Manipulation	
	T1055: Process Injection	T1055.012: Process Hollowing T1055.002: Portable Executable Injection
	T1547: Boot or Logon Autostart Execution	T1547.001: Registry Run Keys / Startup Folder T1547.009: Shortcut Modification T1547.013: XDG Autostart Entries
	T1068: Exploitation for Privilege Escalation	
	T1134: Access Token Manipulation	
	T1484: Domain Policy Modification	T1484.002: Domain Trust Modification
	T1620: Reflective Code Loading	
	T1202: Indirect Command Execution	
TA0005: Defense Evasion	T1140: Deobfuscate/Decode Files or Information	
	T1112: Modify Registry	
	T1078: Valid Accounts	T1078.002: Domain Accounts
	T1055: Process Injection	T1055.012: Process Hollowing T1055.002: Portable Executable Injection
	T1036: Masquerading	T1036.005: Match Legitimate Name or Location T1036.008: Masquerade File Type T1036.003: Rename System Utilities
	T1622: Debugger Evasion	
	T1014: Rootkit	
	T1548: Abuse Elevation Control Mechanism	T1548.002: Bypass User Account Control
	T1564: Hide Artifacts	T1564.003: Hidden Window
	T1222: File and Directory Permissions Modification	T1222.002: Linux and Mac File and Directory Permissions Modification

Tactic	Technique	Sub-technique
TA0005: Defense Evasion	T1574: Hijack Execution Flow	T1574.001: DLL Search Order Hijacking T1574.002: DLL Side-Loading
		T1027.002: Software Packing T1027.011: Fileless Storage
	T1027: Obfuscated Files or Information	T1027.010: Command Obfuscation T1027.009: Embedded Payloads T1027.007: Dynamic API Resolution
		T1070.006: Timestomp
	T1070: Indicator Removal	T1070.004: File Deletion T1070.001: Clear Windows Event Logs
	T1497: Virtualization/Sandbox Evasion	T1497.001: System Checks
	T1562: Impair Defenses	T1562.001: Disable or Modify Tools
	T1556: Modify Authentication Process	T1556.006: Multi-Factor Authentication
	T1134: Access Token Manipulation	
	T1211: Exploitation for Defense Evasion	
	T1484: Domain Policy Modification	T1484.002: Domain Trust Modification
	T1218: System Binary Proxy Execution	T1218.005: Mshta T1218.007: Msieexec
	T1578.002: Modify Cloud Compute Infrastructure: Create Cloud Instance	
TA0006: Credential Access		T1555.003: Credentials from Web Browsers
	T1555: Credentials from Password Stores	
	T1040: Network Sniffing	
	T1003: OS Credential Dumping	T1003.001: LSASS Memory
		T1552.001: Credentials In Files
	T1552: Unsecured Credentials	T1552.004: Unsecured Credentials: Private Keys
	T1110: Brute Force	
	T1056: Input Capture	T1056.001: Input Capture: Keylogging
	T1539: Steal Web Session Cookie	
	T1556: Modify Authentication Process	T1556.006: Multi-Factor Authentication
TA0007: Discovery	T1528: Steal Application Access Token	
	T1212: Exploitation for Credential Access	
	T1482: Domain Trust Discovery	
	T1135: Network Share Discovery	
	T1082: System Information Discovery	
	T1040: Network Sniffing	
	T1007: System Service Discovery	
	T1083: File and Directory Discovery	
	T1057: Process Discovery	
	T1033: System Owner/User Discovery	

Tactic	Technique	Sub-technique
TA0007: Discovery	T1012: Query Registry	
	T1046: Network Service Discovery	
	T1049: System Network Connections Discovery	
	T1069: Permission Groups Discovery	
	T1010: Application Window Discovery	
	T1622: Debugger Evasion	
	T1018: Remote System Discovery	
	T1538: Cloud Service Dashboard	
	T1087: Account Discovery	T1087.001: Local Account
	T1217: Browser Information Discovery	
	T1497: Virtualization/Sandbox Evasion	T1497.001: System Checks
	T1016: System Network Configuration Discovery	T1016.001: Internet Connection Discovery
	T1518: Software Discovery	T1518.001: Security Software Discovery
	T1614.001: System Location Discovery: System Language Discovery	
TA0008: Lateral Movement	T1563: Remote Service Session Hijacking	
	T1210: Exploitation of Remote Services	
	T1091: Replication Through Removable Media	
	T1021: Remote Services	T1021.007: Cloud Services
		T1021.001: Remote Desktop Protocol
	T1570: Lateral Tool Transfer	
	T1072: Software Deployment Tools	
TA0009: Collection	T1560: Archive Collected Data	T1560.001: Archive via Utility
	T1115: Clipboard Data	
	T1005: Data from Local System	
	T1125: Video Capture	
	T1119: Automated Collection	
	T1113: Screen Capture	
	T1074: Data Staged	T1074.001: Local Data Staging
	T1056: Input Capture	T1056.001: Keylogging
	T1123: Audio Capture	
	T1114: Email Collection	
	T1213: Data from Information Repositories	T1213.003: Code Repositories
		T1213.002: Sharepoint
TA0010: Exfiltration	T1530: Data from Cloud Storage	
	T1185: Browser Session Hijacking	
	T1041: Exfiltration Over C2 Channel	
	T1020: Automated Exfiltration	
	T1048: Exfiltration Over Alternative Protocol	
	T1567: Exfiltration Over Web Service	T1567.002: Exfiltration to Cloud Storage

Tactic	Technique	Sub-technique
TA0011: Command and Control	T1102: Web Service	
	T1095: Non-Application Layer Protocol	
	T1105: Ingress Tool Transfer	
	T1132: Data Encoding	T1132.002: Non-Standard Encoding T1132.001: Standard Encoding
	T1071: Application Layer Protocol	T1071.004: DNS T1071.001: Web Protocols
	T1571: Non-Standard Port	
	T1573: Encrypted Channel	T1573.001: Symmetric Cryptography
	T1659: Content Injection	
	T1219: Remote Access Software	
	T1008: Fallback Channels	
TA0040: Impact	T1001: Data Obfuscation	
	T1489: Service Stop	
	T1485: Data Destruction	
	T1490: Inhibit System Recovery	
	T1486: Data Encrypted for Impact	
	T1496: Resource Hijacking	
	T1561: Disk Wipe	
	T1498: Network Denial of Service	
	T1529: System Shutdown/Reboot	
	T1491: Defacement	
	T1657: Financial Theft	
	T1499: Endpoint Denial of Service	

Top 5 Takeaways

#1

In November, there were **eleven zero-day** vulnerabilities, and two were celebrity vulnerability. One of these vulnerabilities "Citrix Bleed" was exploited since August 2023.

#2

Throughout the month, various ransomware strains including LockBit ransomware, HelloKitty ransomware, TellYouThePass ransomware, Clop ransomware, NoEscape Ransomware, BlackCat/ALPHV Ransomware, actively targeting victims.

#3

There were a total of 20 active adversaries identified across multiple campaigns. Their focus was directed toward the following key industries: Government, Technology, Financial, Manufacturing, and Defence.

#4

Numerous malware families have been observed targeting victims worldwide. These include **AveMaria**, **Raccoon Stealer**, **VIDAR Stealer**, **GhostLocker**, **Ducktail**, **Atomic Stealer** and **LambLoad**.

#5

Finally, the critical zero-day vulnerability identified as **CVE-2023-38831** exploited by **DarkCasino** in phishing attacks, launching the final malicious payload, **DarkMe**.

Recommendations

Security Teams

This digest can be used as a guide to help security teams prioritize the **22 significant vulnerabilities** and block the indicators related to the **20 active threat actors**, **52 active malware**, and **204 potential MITRE TTPs**.

Uni5 Users

This is an actionable threat digest for HivePro Uni5 customers, who can get comprehensive insights into their threat exposure and take action easily through the HivePro Uni5 dashboard by:

- Running a scan to discover the assets impacted by the **significant vulnerabilities**
- Testing the efficacy of their security controls by simulating the attacks related to **active threat actors**, **active malware**, and **potential MITRE TTPs** in Breach and Attack Simulation(BAS).

Hive Pro Threat Advisories (NOVEMBER 2023)

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY
		1	2	3	4	5
		bug	sabotage	bug		
attack	alien	sabotage	sabotage	sabotage	attack	
13	14	15	16	17	18	19
	bug	bug	bug	bug		
attack	attack	attack	attack	attack		
20	21	22	23	24	25	26
alien	attack	attack	attack	attack		
27	28	29	30			
alien	attack	attack	attack			

Click on any of the icons to get directed to the advisory

bug	Red Vulnerability Report	sabotage	Amber Attack Report
bug	Amber Vulnerability Report	alien	Red Actor Report
bug	Green Vulnerability Report	alien	Amber Actor Report
sabotage	Red Attack Report		

Appendix

Known Exploited Vulnerabilities (KEV): Software vulnerabilities for which there are public exploits or proof-of-concept (PoC) code available, and for which there is a high risk of potential harm to an organization's systems or data if left unaddressed.

Celebrity Vulnerabilities: Software vulnerabilities that have gained significant attention and have been branded with catchy names and logos due to their profound and multifaceted impact. These vulnerabilities provide malicious actors with opportunities to breach sensitive systems, potentially resulting in unauthorized access and the compromise of critical information. This is also known as Celebrity Publicized Software Flaws.

Social engineering: is an attack that relies on human interaction to persuade people into compromising security. It involves various strategies aimed at extracting specific information or performing illicit activities from a target.

Supply chain attack: Also known as a value-chain or third-party attack, occurs when an outside partner or provider with access to your systems and data infiltrates your system. The purpose is to gain access to source codes, development processes, or update mechanisms in order to distribute malware by infecting legitimate programs.

Eavesdropping: Often known as sniffing or spying, is a significant risk in cybersecurity. Passwords, credit card information, and other sensitive data are easily stolen during these attacks as they are transmitted from one device to another. This type of network attack often occurs when unsecured networks, such as public Wi-Fi connections or shared electronic devices, are used.

Glossary:

CISA KEV - Cybersecurity & Infrastructure Security Agency Known Exploited Vulnerabilities

CVE - Common Vulnerabilities and Exposures

CPE - Common Platform Enumeration

CWE - Common Weakness Enumeration

☒ Indicators of Compromise (IOCs)

Attack Name	Type	Value
<u>LockBit ransomware</u>	SHA256	27389c160ceee51ca1f2b111ca8b221dc75b71cc699789da65802dc e082dfbb4, a5e6df754a4d3bb72f4d5c91d6b582e7e2c2f87ca838f5d976bc823 84a5ad2d1, 67b05e96f47db0447da53bedbf9aff265cd02562c12428d787fdab 0278ded2e, a2db758f099d8a6dec5fd500d033ce2fcdb89b58b53d938fdb9d9cba 2d91dba01, 2daa5fa152b627f5ae23d2e8fa4e3e399d4899729ad32f184e32d59 fd4dd20ef
<u>LIONTAIL</u>	SHA256	daa362f070ba121b9a2fa3567abc345edcde33c54cabefa71dd2faad 78c10c33, f4639c63fb01875946a4272c3515f005d558823311d0ee4c34896c2 b6612259, 2097320e71990865f04b9484858d279875cf5c66a5f6d12c819a34e 2385da88, 67560e05383e38b2fcc30df84f0792ad095d5594838087076b214d8 49cde954, 4f6351b8fb3f49ff0061ee6f338cd1af88893ed20e71e211e8adb6b9 0e50a3b8, f6c316e2385f2694d47e936b0ac4bc9b55e279d530dd5e805f0d963 cb47c3c0d, 1485c0ed3e875cbdfc6786a5bd26d18ea9d31727deb8df290a1c00c 780419a4, 8578bff36e3b02cc71495b647db88c67c3c5ca710b5a2bd53914855 0595d033, c5b4542d61af74cf7454d7f1c8d96218d709de38f94ccfa7c16b15f72 6dc08c0, 9117bd328e37be121fb497596a2d0619a0eaca44752a1854523b8a f46a5b0cb, e1ad173e49eee1194f2a55afa681cef7c3b8f6c26572f474dec7a42e 9f0cdc9d, a2598161e1efff623de6128ad8aafba9da0300b6f86e8c951e616bd1 9f0a572b, 7495c1ea421063845eb8f4599a1c17c105f700ca0671ca874c5aa5a ef3764c1c, 6f0a38c9eb9171cd323b0f599b74ee571620bc3f34aa07435e7c582 2663de60, 3875ed58c0d42e05c83843b32ed33d6ba5e94e18ffe8fb1bf34fd7d edf3f82a7, 1146b1f38e420936b7c5f6b22212f3aa93515f3738c861f499ed1047 865549cb, b71aa5f27611a2089a5bbe34fd1aafb45bd71824b4f8c2465cf4754d b746aa79, da450c639c9a50377233c0f195c3f6162beb253f320ed57d5c9bb9c 7f0e83999

Attack Name	Type	Value
<u>HelloKitty</u>	SHA256	c3c0cf25d682e981c7ce1cc0a00fa2b8b46cce2fa49abe38bb412da21da99cb7, 8c226e1f640b570a4a542078a7db59bb1f1a55cf143782d93514e3bd86dc07a, 8177455ab89cc96f0c26bc42907da1a4f0b21fdc96a0cc96650843fd616551f4
	Email	service@hellokittycat[.]online
	IPv4	172.245.16[.]125
	URL	hxxp://172.245.16[.]125/m4.png, hxxp://172.245.16[.]125/m2.png
<u>TellYouThePass ransomware</u>	SHA256	460b096aaf535b0b8f0224da0f04c7f7997c62bf715839a8012c1e1154a38984, 7d6877eb8a3e2da1e8b06e2ed41604c6c3d5ced8293f7cc7e760ba972303bd0e, 2fc2d747847eb04561a435e65954f0103101e2190458eb3c125deda49326c597, 533abb3f876c5ffc7e3a76874b0c4a3b4995848fa9a278c8a988af90945ecdac, dedeb1640850a6ef21cc0efb5f1f96309f62dc10308c6b6c35a9cdadaeffa13, 463ee4cee193b4e1eeee91df5c343658fb708ff2795146226dd779eb11580f58, 5c8710638fad8eeac382b0323461892a3e1a8865da3625403769a4378622077e, 7af5c37cc308a222f910d6a7b0759837f37e3270e22ce242a8b59ed4d7ec7ceb, 3e65437f910f1f4e93809b81c19942ef74aa250ae228caca0b278fc523ad47c5
<u>SparkRAT</u>	SHA256	e0b0fe364fe6118e0246d65eeb32a4b3d37c44737dd2aa8d2291af1482cbc99b, d5f2cef53e8355fe26e8c87f6212abf3a345cd1b82af97ac0bc540fd9dd1ed7, bc140d13eb3190d51c46ad5855f32f908b7617ab5b40d38b4e64914733beff85, 51635f8a613a1d7823318453db03d64990bc4d1bbc98cdc2d0fa70f1c70ee1c0
<u>Socks5Systemz</u>	SHA256	fee88318e738b160cae22f6c0f16c634fd16dbf11b9fb93df5d380b6427ac18f
<u>PrivateLoader</u>	MD5	6cc7d9664c1a89c58549e57b5959bb38
	SHA1	85b665c501b9ab38710050e9a5c1b6d2e96acccc
	SHA256	27c1ed01c767f504642801a7e7a7de8d87dbc87dee88fbc5f6adb99f069afde4

Attack Name	Type	Value
<u>Amadey</u>	SHA256	68cf6c33c3a11405e8f66b1cd769ac4b9ed53fa702d06323d737f86b b238f0aa, 31fcc145a7951bdb76f7635a0b7bb4ca6649fd8b2e6d5a166dfac138 a71200bc, 2260d1b05abe62e94794dfc3d91d34d4751c6ccbdd450c2d3bbf01c b1aa31eec, e865cb5fbed88a0ef8d09376530d4fd855358dba91fa3f3d1296fb03 085e8e06, 3141087bc31d396d4151e1bf8b61254374b503faefe444f17316ac4 0ba5c845b, 39a5de74cb6a87c849ac4d30e9902368f6638f27b98149b13ee8c6e 6c4dd646f, d6780e515a8143aa9d8097deae4cba874790690f6743c51f8e03a1a f4cf7c0b8, 8a9dda4423be29f85da1210beb83aab506609b9c03fcefd7bf022bd 97823a808, a6bd53b43ef7820cb928829288276a9dc67c2746b8e07f0e83413cf acd2edfea, 4b4e85691ca2565dff2b966ff4ad72d617bf65cf02b541add5c66fb8 a6747385, b8df7f85014ca1cd332cb971f07e4f78356e9d8c55cfcd3d88ea3c8 2806c555, 8543412d724c9c2353dc04e956e594341ae71a8aa4cb65778cd77d 117014a94d, 25fdb52a6c215c2d3f797ffd349a0d30526f2d5a2d3a6309ff257591f 1cf8f00, d721fb8b3424db73480e0f470438275fdea19ec670d7b0107f40571 d44612f9f, d3f2db4b59bc69967a1f9206c6f79420247c72bac298c840bbfedd7 5937bc6b2, 371c1e62cbc18626b2cc6ba6893b71e9a9d945fc5391b5b85ee4ff2 b7500f11e, 61afafb954376565e69f6a48e335320c00d529bf0677fe150f1217bf 1a7efce3, 1fb2e848188b19f262e131fe524d450413b8e739c50c252a40291e6 434bf396b, 06fcfe784a220b6515b8db1471567625bd8150878b404c8c96954e 37c556488e, 931008fbe82ffffa6412e9539e6a32e309032e76bba0b112ef730a95 51df80110

Attack Name	Type	Value
<u>Jupyter Infostealer</u>	SHA256	c03ff646f732bf3a13b52e4786828af05a211ad69674cc2c11089681bc67ece9, e7ded7fb9f1aa432a3eb598d00157afb67b201647da234f785397a117f046e34, 1d322817bea6534d8b55282eb227a1fcc076b9d60b8b2fa0d3f756f4e38085c, d7f8a922f22d105d5190e91efb592335d5ccdee0fe3615dc3863cdef90a97738, 6738651649eedf22d352fcbb3942125487d63c26d7243fee8a25d295187996, df3bba9d570e70caa2f7eb716d9c2c371b535171fee4320af359a85662c45af7, 31cff99a12e1f7b8ae8966021b305d9bf2e2b7276b5c6857bfc45e8d833868f7, 67ddf04e5f8d7668ce666d00af3b3d7212bff8ded5999d36d131a77a4d5bd890, 8dae48b2f3cb1a57d4aff42417bbeace09e7329e0e06c525140a8f65755075df, 23e725d71caa459c745bdad9267d6164096223a4f5f2df03a92d9b49b195386f, 631685a0368e3b2dccea434258beb18dddb47532c17144b455f4218215ba8ceb, cc3d26f0938038eaa113e22640f330275c791e997ff7e822101c174cb693cba0, 1d944510c663c8c452c1784920172d16af4fa1db8a47aba9a5af973665a02a5a, 4f97380eaf66818246136a840df90424e06d6a931a630a42581c0ef5d9825736, 3f55947c29d8b3c50038dd7756e4bb1edb3908318df6f0df082d311582cc7df9
<u>MultiLayer</u>	SHA256	38e406b17715b1b52ed8d8e4defdb5b79a4dde9a3381a9f2276b00449ec8835, f65880ef9fec17da4142850e5e7d40ebfc58671f5d66395809977dd5027a6a3e
<u>PartialWasher</u>	SHA256	ec7dc5bfadce28b8a8944fb267642c6f713e5b19a9983d7c6f011ebe0f663097
<u>BFG Agonizer</u>	SHA256	c52525cd7d05bddb3ee17eb1ad6b5d6670254252b28b18a1451f604ffff932a4
<u>sqlextractor</u>	SHA256	a8e63550b56178ae5198c9cc5b704a8be4c8505fea887792b6d911e488592a7c

Attack Name	Type	Value
<u>ObjCShellz</u>	SHA256	ca6d8b8a84e40adb8949f37eef65315d1d25283583c0a65921414611e615b27d, cde067b700e5f39e276a104497bc3ae0a5677977376a1b4c87de3d03730000bf, 462f4ccc290b3cc87cdce2a82aa3f0cb48140a88b590ee175ef9c24180b545c7, fe31f8cba8fc3832da136778aa28c406bf8ef04b448cba076ff7f5f3b8be7683, 1219c2c14afd2db469b0ae479236ab45abd20f6092592b539e04ba7aceec25e2
<u>RustBucket</u>	SHA256	812c795908f38bdb5cc20487569e53e04dfda8ad87ebe7156f3fb2fed1ab0b9b, 9fb57fca174506e96e2eda8db31a193b7476ce076557ff10617cdcae4d5716aa, a43c3097adb0d82eceb867957b54cc29e863d983daa547102361c59c0ac2a804, 070b2723a925d0788ddc3e5e4a214b7c64c61d44e5d01ca5bbe589f45256aa56, aa109f4fe27ed1f69e78a5aeba5356618ba24d8188077f0361c25a2e0d88874c
<u>AllaKore RAT</u>	IP	38.242.149[.]89:61101
	SHA256	877dd8f41c3ba0172907fa90734fce8bcd39919bd24162788b47770da9b99a1b, afe63fb7f4841748dc56f20a2eb6a313eac613c22cdf23694af172c77af88a2d, 1c12c0c62642ebbabb1fabcf7bd56ffc9c1450e622f6d7ddba08b36ac3ad8b04e6, aad714bbff3546d3352baa53324c2f3e6be6ca61d5d397cc33b09ed470b4dda5, 58d88fd112acdf7161a83a29f4b74f6e697bb520c49e4ec740e9d46cad33e8b, faa422583f5a7e7d7c02be9a26babe2554412caa46135069f5ebb8673e9ef87b, 4896f8e0166fd0a313727ee94a65fe3a641e2feed3055523e2330fb0028b2c16, c6e59cefdf4dfc83aebf8e4a7a054f6a0820f7f52ceb03566a837823d29a7c7, c1ef58bc181bd3175d8b2f023299d261d40642bcfd2692251eb254cf5fdc3182
<u>Ares RAT</u>	IP	38.242.220[.]166:9012, 161.97.151[.]220:7015
	SHA256	b88db92adab9bd72ef9a959de450aa1d4cad32415d0364832393820b355a238e,

Attack Name	Type	Value
<u>Ares RAT</u>	SHA256	6d911bfb01daa6f3acaf3ccb33b432d806c82b2b35c0c3408d822bf8c6b4c00, e93a7924bde0c145485edfa6307bdcbba80972390f4fba35e57c215c20e8c43, 7cc6d203daa31ee9296848c85cfbd6f6e1b90126d9b02ab8b916922842b316a2, 8581920c2ddbce49fde6c18eab3853fc6ea30983215ab785fb399d89c7bba7a, 1a763a883378ba1b4a22706267612ca7a19ff30217266622d2f094d7846c654f, 23ef884798a128d49ac864e9fce49047d3d10e845ec330ab22f059f0d4e35436, f5dddb1cd616f63a21d85d5970b5826c803069ca83b21e9751d28579ee6ebfec, e750e151e11eba9d0ab2f814dd24b2d1551eaf9cb95ab99e951d66619159219e, bf399563930b4af267c2d415b5d5cb208c2eeb9a37536437c993a311e0211e95
	IP	38.242.149[.]89:9828
<u>DRat</u>	SHA256	a216a8fd3f38baaca464642c733148d158256ef5e8156fb70b61e1993fb2abb7, 3dbb8941df5873feafec4b679522a8c237ba16fa045b8332a77b965c5a9ba167, 81259df59d29c22b1c29f178041396605ad2cacd696afe10cd3ba5ffc08278a3, 2f908408f0584fc2f529620c1ac492e766f603ca90618f1d4943ec214018d86b, ff7ca2e01237a0eaaed1f4523069f4c167cf84029dc766157ab10304e9d8c315, 20b4d856ee4b11e2a859bd83d2cd0e0a8c92c739a9753b5c98ee36af27b017e3, 612a094dc4324cb185b17ec8ce76404768b5c620059b2d7fc99a2fdc43e3a182, ee26deb66c5dbc66c0bcc6334826d203373fc59a8db4ce0173ece660506267, 64937789f8fab1ef5eba05ba2c2ffaaf8bbc80c016efac1b377ffadf8677da9, 5d42a118f2f693c04e46ca7c89d4d10e8d2cf46ab2841d283d66c17859c0ee57, ec5f5674c3172d59252dac023e52f99f530c89c35bd2a03197a868fbf58d40f3
<u>Key RAT</u>	IP	207.180.192[.]77:6023

Attack Name	Type	Value
<u>Key RAT</u>	SHA256	df2426f378c8440ee906e3353513f57bd5e531b813e3d944ed85f995da1771e6, 28d45335ac6d45d1d7fbe9297f993dafce3dbc894c1719ca3f7f2ca458ec2c4d, 4a6e7e12ae447b26cc9f490a324ba1795444987e7a5a602a167ba0716ad8d911, 22b366c6bd4e5d8669f01a806eaf2a3aedcc77fb018ada01c31c5c7867b6be35, 6104be5bb34e14ebbeaa330085cd08dfca0782a2cca7099594cc85cf87dd6abc, c7b70220ffa115b777b782698bd435dedf7e4d5aaebabc2230b85b26b55d189c, 68597413352459cb460a08d9fcacf7650c36223bd0bc3eaa42a1c2f9c2dd939, 9d34900d4d58aa60f09f6d428be018ac9d2850b05a432d371d1c236ae3e204b2, 7dcdc9d0722b6e103bd80394e8eee19d8201a67f387a1e24a9d0b6c260ecf5ec, 7636f7f8f573b806bd473e89a82d404fa692085b8ebd3d03238f69e61e20aa14
<u>Millenium RAT</u>	MD5	eba4be8ed0e9282976f8ee0b04fb2474
	SHA1	f4d698ece0ff6af36c1a2e9108ea475518df0aa7
	SHA256	6d207c1e954f9d60f693e17e63df73fb8e954d02544b5d52b8b18c4ab86a267e
<u>BlazeStealer</u>	SHA256	77e183e63c70a44e87277be35b63817e185efcf1b8ab46937626904923251bbe, fb58f3f04e149b97a01c16a3bfedcb0ff33dc476dbab469fe011e3a379f2b00a, 87fda7a9d8156a9b3ca3ea92173c9c5c5abbd4a7e9f17c1b81e8921914cd5306, cce28cfab447c153bc82993857b2ae865eab73c996d4db705ab1df6f1f29c40, b6c51f8700c067604354dc3f41caf76ac7e3235fa7983c7407e18729dd94187, 9c3637d925b3bb46ad68e7667e5958cc6e0926d9b12f022c6e0e990d63f45a9d, a0422225d67779574006c04bd95bb19c02c5dd94f0af009606d58cf0b3854d6d, 14288b82c089fd1edd66feef6b0ff656d723f2e893b8c2574495b64c48b762a5, 51d5f41603a4a311c63e3db5d1cf8d5ddba28aa5cdabff62cad9f646fce8b5da, 716df8c14081570de5489c54a6e1d87d28f5d9d6848ab2b11654a5a3fbb29880

Attack Name	Type	Value
<u>Nokoyawa</u>	MD5	8800e6f1501f69a0a04ce709e9fa251c, 1e4dd35b16ddc59c1ecf240c22b8a4c4, f23be19024fcc7c8f885dfa16634e6e7, a2313d7fdb2f8f5e5c1962e22b504a17, 46168ed7dbe33ffc4179974f8bf401aa, 2e936942613b9ef1a90b5216ef830fbf, feb7b1e0161df136c3d385bfd2d4b247, c159afb7d2111690326cad610776db34
<u>JSWORM</u>	SHA256	46761b8b727f3002d1c73fa6c8568ebcf2ec0066666251f66dcda9d4 268e03e8
<u>Nefilim</u>	SHA256	08c7dfde13ade4b13350ae290616d7c2f4a87cbeac9a3886e90a175 ee40fb641, 205ddcd3469193139e4b93c8f76ed6bdbbf5108e7bcd51b48753c2 2ee620276, 5da71f76b9cae411658b43370af339ca20d419670c755b9c1bfc26 3b78f07f1, 7a73032ece59af3316c4a64490344ee111e4cb06aaf00b4a96c10ad fdd655599, eacb729bb96cf2eddac62806a555309d08a705f6084dd98c7cf9350 3927c34f, ee9ea85d37aa3a6bdc49a6edf39403d041f2155d724bd0659e6884 746ea3a250, f51f128bca4dc6b0aa2355907998758a2e3ac808f14c30eb0b0902f7 1b04e3d5, fdafea45c8679a161c6590b8f5bb735c12c9768172f81c930bb68c93 a53002f7, 24ada19b269279612370bdf16f2becc1d5b7e0f69821050e2d9b48c fc874dca0, b8066b7ec376bc5928d78693d236dbf47414571df05f818a43fb5f5 2136e8f2e, 7de8ca88e240fb905fc2e8fd5db6c5af82d8e21556f0ae36d055f623 128c3377, 7a73032ece59af3316c4a64490344ee111e4cb06aaf00b4a96c10ad fdd655599, 5da71f76b9cae411658b43370af339ca20d419670c755b9c1bfc26 3b78f07f1, 24f1b3b9562ffa9b87b1497397c3da9dff9f872f96b77d2643b18f9 846aaafaa, b227fa0485e34511627a8a4a7d3f1abb6231517be62d022916273b 7a51b80a17, 0125e74c95d3e2762f7e29dc833592f33d5ded892ba4708e2b519e b5f400c2ee, 08c7dfde13ade4b13350ae290616d7c2f4a87cbeac9a3886e90a175 ee40fb641,

Attack Name	Type	Value
<u>Nefilim</u>	SHA256	fdaefa45c8679a161c6590b8f5bb735c12c9768172f81c930bb68c93a53002f7, 35a0bcd28fd345f3ebfb37b6f9a20cc3ab36ab168e079498f3adb25b41e156f, 5ab834f599c6ad35fc0a168d93c52c399c6de7d1c20f33e25cb1fdb25aec9c6, 3080b45bab3f804a297ec6d8f407ae762782fa092164f8ed4e106b1ee7e24953, ea6ced3730495e2231c1a755fcc1aefac7622ac4bd5e269b2a5996572acb42f9, 2e25bdd600695cfed0d4ee3aca4f121bfebf0de889593e6ba06282845cf39ea, d4492a9eb36f87a9b3156b59052ebaf10e264d5d1ce4c015a6b0d205614e58e3, 5104b8abb22cca1b078dd5b86e61f515a73404b0269fe7e6765ec818fbdf830b, 2b4b2a707662973236ae9b2fc732533b5d7236b279a2fccb2874da07e09af4b3, 7d7c44f9c577c0af913d905b51797f17399d650de0331885abc8828c2696d37f, 8b35aa930dd7260060f12ff92f1447850fc1a6bd79a28ba05a2d4e54a3aad504, fd3c8be2d1ead92101e8909a85695a0a40c2576c87eefef6d32376a7fe22f1c, fcc2921020690a58c60eba35df885e575669e9803212f7791d7e1956f9bf8020, 3bac058dbea51f52ce154fed0325fd835f35c1cd521462ce048b41c9b099e1e5, 8be1c54a1a4d07c84b7454e789a26f04a30ca09933b41475423167e232abea2b, 353ee5805bc5c7a98fb5d522b15743055484dc47144535628d102a4098532cd5
<u>Karma</u>	SHA256	a63937d94b4d0576c083398497f35abc2ed116138bd22fad4aec5714f83371b0, 3ff1b90dbad5d78397fdc731c3a3c080d91fc488ac9152793b538b74a1e2d8f3, 4dec9a9044631caef283c7f39a576e4e5c1cc1e6a97ce5c60936a3a3d0097818, 124f3a5caf6eb464027f2865225a6a1238c3639e5b4a399f0f7f2dda7bd75aec, 0d037ee0252e4f26800bcf7c750f61d0c549b7ba0a522c75e8d96dcf4f689e27, 1c41acdc2e9d8b89522ebb51d65b4c41d7fd130a14ce9d449edb05f53bbb8d59, ad841882052c3f9d856ad9a393232e0a59d28e17c240d23258f1dac62f903ab8, 19417c0a38a1206007a0cc82c0fc2e19db897214d27d0998bc4dbac53cc2788d,

Attack Name	Type	Value
<u>Karma</u>	SHA256	a63937d94b4d0576c083398497f35abc2ed116138bd22fad4aec5714f83371b0, 34629751d8202be456dcf149b516afefc980a9128dd6096fd6286fe e530a0d20, 0d037ee0252e4f26800bcf7c750f61d0c549b7ba0a522c75e8d96dcf 4f689e27, 6c98d424ab1b9bfba683eda340fef6540ffe4ec4634f4b95cf9c70fe4 ab2de90
<u>Nemty</u>	SHA256	267a9dcf77c33a1af362e2080aaacc01a7ca075658beb002ab41e07 12ffe066e, 064debd941fb6b1ac7de62e4990f658ded67870f55f48757ab72a7 72c640995, 17f746d82695fa9b35493b41859d39d786d32b23a9d2e00f4011de c7a02402ae, c41f14cf5a0c8d407b70cf07f552a5ba26db3b23bfdbfae7b24e7ff8d e7ec1a7, dd228f63f0ef02749759ef6d75f9f84d5ba8b0787dadef0d41b39017 6ea5d6a1, 4cf87dd16d57582719a8fe6a144360f3dfa5d21196711dc140ce1a7 38ab9816e, abf148370f7cc9c16e20c30590a08f85208f4e594062c8a9e59c0c89 cd8ff43f, ddadfcc43e4576de65f5844396a08fec47410663a6b6921991206b7 a0df32ada, 57e25a37d8279fe563415d636b1983d447b5521ec6c024e18fd4d5 78840d2e20, 9913afe01dc4094bd3c5ff90ca27cc9e9ef7d77b6a7bdbf5f3042a825 1b96325, 1d828a6c85bd5896ea27eeb17483dfe3bef81e0bf31521c91bcd25 59a03da1f, 31ee05823a66851cf6965f32d02e767206785d0bf0c9fa65e7dcf1ffe d32c18e, 12da8dee83df90880d7d9cb4b0a7b608950bb57e9bc59c8b96f68c3 64350447c, d809ab5906fe6dba964cb30a21753213f5b077e28abb67680b2f28d 65cbfc83b, a7558dec9516122781243e791c982977660152813817fb7ed0035 9365fc0d3, e410854d9c8afe6e691c0ae638dfd04d792c3745dbb9e335f6f949e 7a6b298d8, 5439452012a052851fdd0625abc4559302b9d4f4580e2ec98680e9 947841d75d, a9f6d5ad40d5b073be92fc46666ce1f96e30c50494a018d472cfee56 ff2b8c65, a5590a987d125a8ca6629e33e3ff1f3eb7d5f41f62133025d3476e1a 6e4c6130,

Attack Name	Type	Value
<u>Nemty</u>	SHA256	3a061909a2631041b16d1d57212c1f44baca897efce50d095a141f8b7563db0b, 17864c4e21c0ebaf30cca1f35d67f46d3c3c33a5b8ea87d4c331e9d86d805965, a127323192abed93aed53648d03ca84de3b5b006b641033eb46a520b7a3c16fc, 2c41b93add9ac5080a12bf93966470f8ab3bde003001492a10f63758867f2a88, b227fa0485e34511627a8a4a7d3f1abb6231517be62d022916273b7a51b80a17, b8066b7ec376bc5928d78693d236dbf47414571df05f818a43fb5f2136e8f2e, 7a73032ece59af3316c4a64490344ee111e4cb06aaf00b4a96c10adfd655599, fcc2921020690a58c60eba35df885e575669e9803212f7791d7e1956f9bf8020, 8be1c54a1a4d07c84b7454e789a26f04a30ca09933b41475423167e232abea2b, 3080b45bab3f804a297ec6d8f407ae762782fa092164f8ed4e106b1ee7e24953, 5ab834f599c6ad35fc0a168d93c52c399c6de7d1c20f33e25cb1fdb25aec9c6, d4492a9eb36f87a9b3156b59052ebaf10e264d5d1ce4c015a6b0d205614e58e3, 35a0bcded28fd345f3ebfb37b6f9a20cc3ab36ab168e079498f3adb25b41e156f, 08c7dfde13ade4b13350ae290616d7c2f4a87cbeac9a3886e90a175ee40fb641, 3bac058dbea51f52ce154fed0325fd835f35c1cd521462ce048b41c9b099e1e5, 353ee5805bc5c7a98fb5d522b15743055484dc47144535628d102a4098532cd5, 52e25bdd600695cfed0d4ee3aca4f121bfebf0de889593e6ba06282845cf39ea, 7de8ca88e240fb905fc2e8fd5db6c5af82d8e21556f0ae36d055f623128c3377
<u>FakeBat</u>	SHA256	a80846156595af47a977182395583d0b981e091d1281258e81860a0edfdd0159, a1f64f609b0d28707f2132e54d3a19d80f36806557a6031cd8f3154fb8a559be, a80846156595af47a977182395583d0b981e091d1281258e81860a0edfdd0159, 37620313dd1e5277a53e3dcef980e29b2315f4fafef7376fc1a2b941432c0de39, d9c62b110e0049f7ca3f0ccaa7d0058adad9cfdfa27b8ab240ec0db70a8a2193

Attack Name	Type	Value
<u>Redline stealer</u>	SHA256	9f9b6cf7810c6aaadde785a65dd4c7f941c14ec4de7f68ecc6964353fa02e01e, 80af7bf074366eb628c1b08f30f3a8ec1ce44546cf119b7111b546ac edec7059, 5d50717f5a866456842ee76543682f0f500619c4f7b12c548be9ea1 c0e9c981b, 78dd1b88bea0150d68adb20296c9d819cabb3c587448e046558f97 851655b262, 7b867d7b59955eaf09166f3c519b468661dcce3fc54ad63e24db14a 26265a080
<u>Clop ransomware</u>	MD5	31e0439e6ef1dd29c0db6d96bac59446, 4431b6302b7d5b1098a61469bdfca982, 5e52f75d17c80dd104ce0da05fdfc362, 8bd774fbcb6f846992abda69ddabc3fb7, afe7f87478ba6dfca15839f958e9b2ef, dd5cee48cdd586045c5fb059a1120e15, f59d2a3c925f331aae7437dd7ac1a7c8
	SHA1	40b7b386c2c6944a6571c6dcfb23aaae026e8e82, 46b02cc186b85e11c3d59790c3a0bfd2ae1f82a5, 4fa2b95b7cde72ff81554cfbddc31bbf77530d4d, 77ea0fd635a37194efc1f3e0f5012a4704992b0e, a1a628cca993f9455d22ca2c248ddca7e743683e, a6e940b1bd92864b742fdb5ed9b2ef763d788ea7, ac71b646b0237b487c08478736b58f208a98eebf, ba5c5b5cbd6abdf64131722240703fb585ee8b56
<u>Gracewire</u>	MD5	88695dbddd4fc57025b523f4fca268d7, 80a20106ced1a5d9f350b1401dbe7d14
	SHA1	57ab5d9b5302644e91e3953062b40c5346b236e3, 753561bf6da3cbb75711d109ed0e38b7abb28db8
	SHA256	f92dbf7943590c2c4011f911ba9ba445010c9d5895b5c8b57a5da9c 8708c221d, 6d15a0807858dce0be652e480fa7f298482c7bbf2c1e116e6cf0a3d3 df95180f
<u>Ducktail</u>	SHA256	8eafccab8c6a80356c84c9ae3bd3603262069748be59a8d5aee4dfa 3cf4a00a3, 9cf88cf198e0070bb24868ce56f260f55a4b227e266ebcb37fdb831 83299ae5, c2e8bc6389ba6ba32a350312f4fdda33628c806587ade0836f3886e 2ffcaf9b2, 3097d80d4aa3abf2599058bf58d85aa8cec6ca6894c13c6d360dce1 62a5dd626, 1663d092935809dd5f3f0049463f4367ded67f2253b039d9b0c0551 0b2e4c94e

Attack Name	Type	Value
<u>IronWind</u>	SHA256	9b2a16cbe5af12b486d31b68ef397d6bc48b2736e6b388ad8895b588f1831f47, 4018b462f2fcf1b0452ecd88ab64ddc5647d1857481f50fa915070ff1858115, e2ba2d3d2c1f0b5143d1cd291f6a09abe1c53e570800d8ae43622426c1c4343c
<u>SharpSploit</u>	SHA256	26cb6055be1ee503f87d040c84c0a7cacb245b4182445e3eee47ed6e073eca47, ac227dd5c97a36f54e4fa02df4e4c0339b513e4f8049616e2a815a108e34552f, 6ab5a0b7080e783bba9b3ec53889e82ca4f2d304e67bd139aa267c22c281a368, 81fc4a5b1d22efba961baa695aa53201397505e2a6024743ed58da7bf0b4a97f, 3b2a6c7a39f49e790286185f2d078e17844df1349b713f278ecef1defb4d6b04, 7bddde9708118f709b063da526640a4132718d3d638505aafce5a20d404b2761
<u>NoEscape</u>	SHA256	0073414c5a03b20f6f255f400291de67f2a7268c461f90ea6ff0355ca31af07a, 2020cae5115b6980d6423d59492b99e6aaa945a2230b7379c2f8ae3f54e1efd5, 4175dae9b268fe5b4f96055ea0376417b5ddc2518d3bd11e20f0f8255bb4621e, 4d7da1654f9047b6c6a9d32564a66684407ed587cbaffa54ec1185fd73293d3e, 5300d7456183c470a40267da9cd1771d6147445b203d8eb02437348bf3169e0d, 53f5c2f70374696ff12adcaaf1bbe0e5dd1b1995d98f2e876b0671888b43128, 62205bf0a23e56524f2f1c44897f809457ad26bc70810008ec5486e17c7e64e2, 68bce3a400721d758560273ae024f61603b8a4986440a8ec9e28305d7e6d02b0, 68ff9855262b7a9c27e349c5e3bf68b2fc9f9ca32a9d2b844f2265dcc2bc0d8, 73c19eab8d2ae58db3968dd7de0e745db2d7709859305b113b748bb02494465e, 831a2409d45d0c7f15b7f31eddbbdfe7d58414499e81b3da7d9fdee28faf646, 8dd64ea7f226d3eb1e857b0086c0668542652cb37f8142dc000272bdb9569e31, 91c515d55fae6d21b106c8c55067ce53d42bef256bd5a385cadd104cf68f64ff,

Attack Name	Type	Value
<u>NoEscape</u>	SHA256	9d346518330eeefbf288aec7b2b6243bc158415c7fee3f2c19694f0e5f7d51c, 10d2b5f7d8966d5baeb06971dd154dc378496f4e5faf6d33e4861cd7a26c91d7, 21162bbd796ad2bf9954265276bfebea8741596e8fe9d86070245d9b5f9db6da, 46f1a4c77896f38a387f785b2af535f8c29d40a105b63a259d295cb14d36a561, c34c5dd4a58048d7fd164e500c014d16befa956c0bce7cae559081d57f63a243
	SHA1	ea1f7940271fc80d06b2f222506020b650ad41bc, 30f71a24c15dd81965b12996a79d914acf4f169e, 12dc0a2de3ad30201107bfcb679de5acacf31e5c, 30c60f18279ed5fd36e3ac2d3ba5ddbd5d1f624, 9cbc7417fa5ce2f6d87026337fc7892e4f485819, d38c613020cb4616783c8535380e28404f7eaebf, b17403e7dcb992ba8d2b56dd843406264d3910e5, 317f296131b37a73c9a5d253015821dfdc8b1190
	MD5	204f028c983f654be32b97e849edeaab, 47ae17d89c2d9b6acdc7458f5df1c6f7, 5779cec690b5bbc61687381ae8a8d518, 58b4a4eed74fbfbf104d0ffd92207018, a106c1236357c315722ddbd985c5613c, c850f6816459e3364b2a54239642101b
<u>GhostLocker</u>	SHA256	7e14d88f60fe80f8fa27076566fd77e51c7d04674973a564202b4a7cbfaf2778, ee227cd0ef308287bc536a3955fd8138&16a0228ac42140e9M308ae6343a3f, Oe484560a909fc06b9987db73346eaoca6750d523f2334913c23e061695f5cc, abac31b5527803a89c941cf24280a9653oee898a7a338424bd3e9b15d792972, 663ac2d887df18e6da97dd358ebd2bca55404fd4a1C8C1C51215834fc6d11b33, 9b6be74c2c144f8bcb92c8350855d35C14bb7f2b727551C3dd5C8054c4136e3f, ee227cd0ef308287bc536a3955fd81388a16a0228ac42140e9cf308ae6343a3f, Oe484560a909fc06b9987db73346efaOca6750d5232334913c23e061695f5cc, abac31b5527803a89c941cf24280a9653cdee898a7a338424bd3e9b15d792972, 663ac2d887df18e6da97dd358ebd2bca55404fd4a1c8c1c51215834fc6d11b33, Oe484560a909fc06b9987db73346efaOca6750d5232334913c23e061695f5cc, 15d874e24caf162bc58597ac5f22716694b5d43cf433bee6a78a0314280f2c80,

Attack Name	Type	Value
<u>GhostLocker</u>	SHA256	0e484560a909fc06b9987db73346efa0ca6750d523f2334913c23e0 61695f5cc, 4844f44c9de364377f574e4d6a8a77dc0b4d6a67f21ccbf693ac366e 52eaa8cb, 65d3a922754af96d8d722859ac31f3de96522d50659c67607021f2a c728f9630, a98f8468d70426ba255469a92d983d653f937d954e936e0ff5d9a0f 44f1bdf70, ee227cd0ef308287bc536a3955fd81388a16a0228ac42140e9cf308 ae6343a3f, 7d37eddf0b101ff2b633b2ffe33580bdb993a97fecc06874d7b5b071 19b9ec99, 4c09a012efff318b01a72199051815c5a7b920634fb6c7608267368 1f54f2ec3
<u>BlackCat</u>	SHA256	17fd1b0bda42ee4fd6c0444e22ee566c582efb51d72f7382dc089cfb fb705042, 82efdfd29b22cad8e80ef90940086986410d00ec4c42c547069612c 7b0f33eb1, a9c37c4caedf09aebcad23be27b6db636d54e94e0f9b86c1bb61da0 784269936, 1124a6eea74d6e128ac275ce462f2807cd900d49c87382db81f901e 60c8e7758, 76f99fbf8f91556c98848cabfb3fd85892939e410903e03da67e5171 02745102, 76f99fbf8f91556c98848cabfb3fd85892939e410903e03da67e5171 02745102
<u>AveMaria</u>	SHA256	33b1fec8b20ebd775dbe037a652b5002124a317b434208c400d5cf 933b0e68ef, fd770dfea61dde4dde009e95f4a4ea966ff588ee181a8afb1bb73080 3912dd73, c4f2e2bf5071a42ee6ca811a253e55adf09b1982bacf5f9b90149ff03 93950e0, 62de5582c8c8dad5e6ae1e6008e3883c72b59de0b17cec54be78a8 88d4097dc2, 40052b060229a0b036bdf73aa09ea1ecc6e73555f448dc092340ccb 342ec1669, c925c6fb78be7a4b617be38e6cf80e94cf30198a48689c94d78d42c ef12f8223, 568e609adc8d405cb059b471c7f99a2dbc2969642721cc4ce51e869 a6af35dca, f0b92472c6a95a379f7235c22460fdb3602d625a662141e7baecc48 c049ad715, a230a63b3011b2ebe1fb667cb661835fe34fb93bb6a1cbd4f132996 b437e947c, 7bcdcc2e607abc65ef93afd009c3048970d9e8d1c2a18fc571562396 b13ebb301, 4fd7411cc681154e27eede4332a010641db743700099c602f5ac1e6 1968c3264, e6df4f343401f5c3c79228940acc0dcadcd655e1e0e8010f9f67eb94 6d67e94a,

Attack Name	Type	Value
<u>AveMaria</u>	SHA256	3c4d55297278d1e2d4393d4b65f6ed5a4d88ebf590677521e95f084bab83b6bb, 2a11c5bca51d510efec348abaa05617f21e5b4ab08b67e6261d9830b4729e649
<u>Raccoon</u>	SHA256	184e98107496e5859dd0f09c42deffffaf0cc9362cc192f0e89bf2c4b20d82fd, fd3f9ee2a7b4e35be97140818562dc4470f90705cbd959e87c07ed983692e33d, abccbdb2a2eb219a82c3f446f74ac6ef93a3deb11e4c277dee8c106792d7b783, 5ff52ab9349cd6d7a7fc0d2596c3423cdfb5df668b363fb93bd686f9ab198910, 1e5c7dcfbe4a1e9da06229b4512229c463b0268832b9cb6cdb35a1153963be37, 43f48b33734f2b7ab20e3798845f8411723f643a15c9833b86942ab6beb9d4fe, 5566d651067c35b90b47039ec1384432ec89fc946188274fb5127a8874b194, 35efa67d11c826f739cedc44c759bf9f12b12deab0af24bd8a402eccb7157d97, 334f1cfbe30bc002491e179ac48e228e142e78f13a2fa5eaeb44bcf4cf2bf946, 61431a0d94e6995e43fa174b18ca64052374c5d2ff1743631e13154ca1cf0fab, 89b8c862587864fe60e46ee4f4e8cbba2d8c32081a04ad5df072c6f99f06f4e2, 529c26f60ac5ebc31836486d9fa29f3b139437f06b160ca7f2887d13126c937e, 0ea39ba88fb2afb12f328a24d8b0441c6c6d2220c8ceac1a1c0640c7d6b43ae4, 8352d5041c2baf4613361108ef86b62ce3814bfa543a52662d40ddf5dbf045a, 1e5b1cee1779ab2659fbaf465da3dfda327fdc83e78b73c4cebc241356ff00d9, 302886dba2ea9783a67247110cfabea3f94d1f78343b55f66edd58fc4be926f1, eeb5ee631e4e3dea3a6faf8fc70bf52d1814db8f5c6a6ebe729ae23df71879e5, 5320425988b0670455042dbd99d0c30b96ddf4710932dbe61b95711b185536b6, 0c1226d05d81a2f2f9ed910fff598bd00a0cb7ae43b3793735d45de1f35b838f, 31b6fba02c5c0d97a7ae7436a7e30793fe86f36ddf289e8eb53702dc0ef06b9
	URLs	hxxp://51.195.166.184/, hxxp://31.192.237.23:80/, hxxp://45.61.138.198:80/, hxxp://91.92.246.197:80/, hxxp://91.103.252.11

Attack Name	Type	Value
<u>Raccoon</u>	IPv4	193.222.96[.]7, 185.193.125[.]199, 194.87.31[.]58, 5.78.80[.]43, 5.78.81[.]39, 94.142.138[.]147, 157.90.161[.]111, 89.23.107[.]183
<u>VIDAR</u>	SHA256	3dae32e22775721f2f9de5fec79dbcd8d62adaeb057b47c4524e02d 130a43b25, ffaed8dcf0282df833b74faf419729dc20951ee7edbb58103fa5c582e 93d5f3a, 9a58dd63b51866541d91a5bae6260c27aeec7a4135cd67a6fb686f5 49d3646a6, 13e384c54054a094b8045928c8ec9d3697372e551e4887b4ea9e18 e319f0f40b, 48b7d39b9c19b0e6131928830add88e9c43e01e8218db17877abca 9a65d14a5d, 1eda38c94d7896c350c73e5ac87cf2cd65e96ba7d03cddc7f1302c5d 1b65ca88, c1f234ee29062e05c71fbb29d43b75e4a73aeccc95201dea7956fc6e 6a5949cf, 726855dc870ed0224d91891b898e542393149b0eaef7817aa332b7 1c13b22ae0, 6ecf9fd65dc1a4a9c7610510ac9f78a6663e75d736a8444c72e11a0 cc8d8d46, fc5336b039a9cc8e14d515f338c90a5a404249adab200032324c65f 055904255, 0e9783330259b925379f44dfdc9e8f86b545ad43e8b747a8214a7d7 e7617940e
	URLs	hxxp://5.75.246[.]163/, hxxp://5.75.246.163/vcruntime140[.]dll, hxxp://5.75.246.163/softokn3[.]dll, hxxp://5.75.246.163/nss3[.]dll, hxxp://5.75.246.163/msvcp140[.]dll, hxxp://5.75.246.163/mozglue[.]dll, hxxp://5.75.246.163/freebl3[.]dll, hxxp://5.75.246.163/sqlite3[.]dll, hxxp://168.119.173.77[:2087]/, hxxp://168.119.173.77:2087/vcruntime140[.]dll, hxxp://168.119.173.77:2087/softokn3[.]dll
<u>Kinsing</u>	SHA256	7f9f8209dc619d686b32d408fed0beb3a802aa600ddceb5c8d2a955 5cdb3b5e0, 8c9b621ba8911350253efc15ab3c761b06f70f503096279f2a173c00 6a393ee1, 511de8dd7f3cb4c5d88cd5a62150e6826cb2f825fa60607a201a854 2524442e2,

Attack Name	Type	Value
<u>Kinsing</u>	SHA256	4b0138c12e3209d8f9250c591fcc825ee6bff5f57f87ed9c661df6d14500e993, 999e4ebacda24b9431863e4cb1fd3e2d8e568ebb118b4a8e215a28dac8d8da32, 1015a16078b826a0a52bf746016fedf2c758dca4a2033a48a9da20e e0b439eca
<u>NetSupport RAT</u>	SHA256	213af995d4142854b81af3cf73dee7ffe9d8ad6e84fda6386029101dbf3df897, 28208baa507b260c2df6637427de82ad0423c20e2bceceb92ba5d76074dc347, 2d6c6200508c0797e6542b195c999f3485c4ef76551aa3c65016587788ba1703, 2e4bd5557aedd1743da5fab1b6995fbc447d6e9491d9ec59fa93ab889d8bccd1, 38684adb2183bf320eb308a96cdbde8d1d56740166c3e2596161f42a40fa32d5
<u>Nim backdoor</u>	MD5	7bea8ea83d5b4fe5985172dbb4fa1468, 04e9ce276b3cd75fc2b20b9b33080f7e, 92612dc223e8f0656512cd882d66f78b, c2184d8fd3dd3df9fd6cf7ff8e32a3a4, b2ab01d392d7d20a9261870e709b18d7, 30ddd9ebe00f34f131efcd8124462fe3
<u>DarkGate</u>	SHA256	ad36b909721d64a3c32678f4c2ca758d81661088ba1ed57bec50ef0ac4d4a871, 00985db874d9177de4a18999f7a420260b3a4665ba2b5b32aa39433ef79819df, 0f1545a7176c45b0e7f9198cac8972167e5846e8b84cd40926f7edf338eeace2, 10bfaeb0c00425c4749140d5c7d9f3d88537cf2f621ba7af5322b15cf205b896, 2b24c4c883a562d0326846ee1c92840144d1d755cdb721b24a35038ea92aa0e4, 6750f31ef5e1fe74c1121b0ab1308f93e09505a63322b6ce16fe04099ce8993e, 73c0d0f220a30b541e0855e8039b8050d1332ff03c3e0c8a35671bd5eb9d30be, 74729d4569691daf72e23849e91461471411f551639663e11e1091a48790611e, 74f21cf5ab72aad0f7f3cf3274a167c20e787f9513019510561f39d4230f3c4b, bc5ad215876055a8a6a097579e16d24e233a323a6157afbb6db49705ac12a1f1, bec37877e3bffa222efb5c5680c7defd2d917317293d7fa70e0882ad45290a40, e7b76e11101e35c46a7199851f82c69e819a3d856f6f68fa3af0636c 3efde0ca

Attack Name	Type	Value
<u>Atomic Stealer</u>	SHA256	4cb531bd83a1ebf4061c98f799cdc2922059aff1a49939d427054a556e89f464, be634e786d5d01b91f46efd63e8d71f79b423bfb2d23459e5060a9532b4dcc7b, 5b5ffb0d2fb1f2de5147ec270d60a3ac3f02c36153c943fbfe2a3427ce39d13d
	IPv4	194.169.175[.]117
	Domain	wifi-ber[.]com
<u>LambLoad</u>	SHA256	166d1a6ddcde4e859a89c2c825cd3c8c953a86bfa92b343de7e5bfbfb5afb8be
<u>InfectedSlurs</u>	SHA256	dabdd4b5a3a70c64c031126fad36a4c45feb69a45e1028d79da6b443291addb8, 3f3c2e779f8e3d7f2cc81536ef72d96dd1c7b7691b6e613f5f76c3d02909edd8, 75ef686859010d6164bcd6a4d6cf8a590754ccc3ea45c47ace420b02649ec380, f8abf9fb17f59cbd7381aa9f5f2e1952628897cee368defd6baa6885d74f3ecc, 8777f9af3564b109b43cbcf1fd1a24180f5cf424965050594ce73d754a4e1099, ac43c52b42b123e2530538273dfb12e3b70178aa1dee6d4fd5198c08bfeb4dc1, a4975366f0c5b5b52fb371ff2cb034006955b3e3ae064e5700cc5365f27a1d26, cd93264637cd3bf19b706afc19944dfb88cd27969aa0077559e56842d9a0f87, 8e64de3ac6818b4271d3de5d8e4a5d166d13d12804da01ce1cdb7510d8922cc6, 35fcc2058ae3a0af68c5ed7452e57ff286abe6ded68bf59078abd9e7b11ea90a, 7cc62a1bb2db82e76183eb06e4ca84e07a78cfb71241f21212af101cb308b2, 29f11b5d4dbd6d06d4906b9035f5787e16f9e23134a2cc43dfc1165127c89bff, cfbcbb876064c2cf671bdae61544649fa13debbbe58b72cf8c630b5bfc0649f9, a3b78818bbef4fd55f704c96c203765b5ab37723bc87aac6aa7ebfcc76dfa06d, ac43c52b42b123e2530538273dfb12e3b70178aa1dee6d4fd5198c08bfeb4dc1
<u>SwiftLoader</u>	SHA256	47b8b4d55d75505d617e53afcb6c32dd817024be209116f98cbbc3d88e57b4d1

Attack Name	Type	Value
KandyKorn	SHA1	62267b88fa6393bc1f1eeb778e4da6b564b7011e, 8f6c52d7e82fbfdead3d66ad8c52b372cc9e8b18, ac336c5082c2606ab8c3fb023949dfc0db2064d5, 26ec4630b4d1116e131c8e2002e9a3ec7494a5cf, 46ac6dc34fc164525e6f7886c8ed5a79654f3fd3, 8d5d214c490eae8f61325839fcc17277e514301e, 9f97edbc1454ef66d6095f979502d17067215a9d, c45f514a252632cb3851fe45bed34b175370d594, ce3705baf097cd95f8f696f330372dd00996d29a, e244ff1d8e66558a443610200476f98f653b8519, e77270ac0ea05496dd5a2fbccba3e24eb9b863d9, e68bfa72a4b4289a4cc688e81f9282b1f78ebc1f, 26ec4630b4d1116e131c8e2002e9a3ec7494a5cf, 46ac6dc34fc164525e6f7886c8ed5a79654f3fd3, 62267b88fa6393bc1f1eeb778e4da6b564b7011e, 8d5d214c490eae8f61325839fcc17277e514301e, 8f6c52d7e82fbfdead3d66ad8c52b372cc9e8b18, 9f97edbc1454ef66d6095f979502d17067215a9d, ac336c5082c2606ab8c3fb023949dfc0db2064d5, c45f514a252632cb3851fe45bed34b175370d594, ce3705baf097cd95f8f696f330372dd00996d29a, e244ff1d8e66558a443610200476f98f653b8519, e68bfa72a4b4289a4cc688e81f9282b1f78ebc1f, e77270ac0ea05496dd5a2fbccba3e24eb9b863d9
ParaSiteSnatcher	SHA256	0e7fb784a10d8cc942029477fee4c1b8907612e3f667970d5ca9fce8 85cac1d4, e06e25a13adce5c1889c613f12c269b4926f4900da155f4de5fedd46 e45c5807, 96309a0654110f4c9c20869b9f139c7aceea0d1f7f698892cdfd821f9 463e04f, b9f8ead09e78645f4a52290b88feafc899d3acf9db77625989205887 7bd9d250, 6d0a9cf9a80db3f228d51a8f078a6949bf96684cfb5f78f42a0941d0 70bc15e4, 9e882594b497f6bc99f6da26211c54d5005064423b1f93059406332 e36ae3eba, 1ebfe73932122e898c30098be4384a0fc9150565c3a340750b37b12 1ea7a55fa, 8915b71a1c7a4da5c1cf73cdafa1d24c5546ed203e2a2d17f997ec313 98bf85cc, 8603b20b548270423fb03c2138c16f5f863ead4c48eb0999167df86 9e2eef8a6, bcba29cd571b58e7f0bbf9d72105e50f1eddf915207e9147c554b18 922c5adf7, ec22d946dc9538100875b86d2f6035f3541f5e3f08698304b9591ef eea7d09a2, 1a3c5f97e7915b70c1371dd9a0265565fe86f7f347e303e7a6d8eaa d573d339b, 3f033626d5f4b0cb69e4e902d80d1c3c4de647562e359a0d890448 5799483e3b,

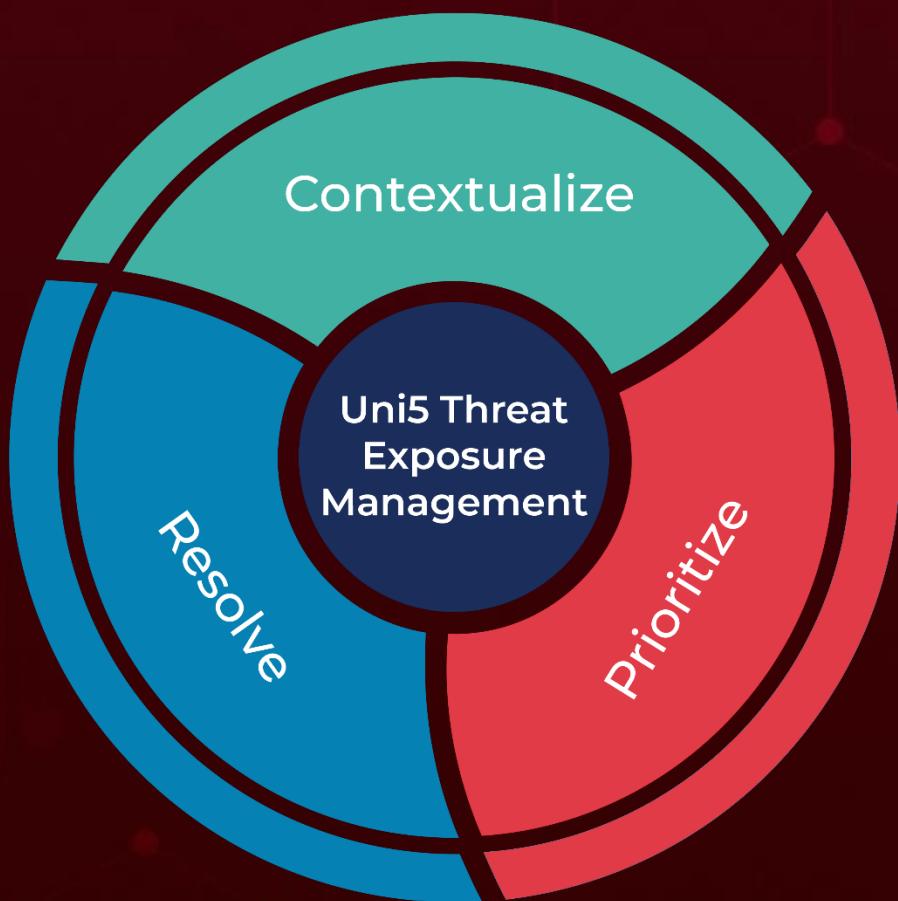
Attack Name	Type	Value
<u>ParaSiteSnatcher</u>	SHA256	71b9d8721defee1f8f1694ce4e2ae8b1a99b78baa8e7fc9dd11364e97c390ff8, 21f4b82b120d84a2b21f95d75a583f36d7116cc3768785a3d0f213b50e86b240, c08a6db547b833244dd93aca9441059efe65428c588f0db591bcc8157fe4b43f, 5d813c849a79c60440ae2a36117e29da1da6c7649c00156b5cfe6222322e4cd6, 049a80a962618d9b89fb0a2cf03ef2c3ee00975c5b424e209f073e3c7a491f2c, b5e07008f50ff56ffd0389340a037da43b6398d57bf345dda3e0661098bf5ae4, e59e36d652f454aab543722501ac23258d295ef0f1ecf7c97cad7720ceee6123, a21356a2294036d2b573e3f6350a198cd0c4e98d5c2e7ecc9d37089250a6c0c0, 260b650de3977580a86c63c7f13b0aaee606fe16feff552936eed8e3ad652627, e195d0548c52a7cdb142c6c5acda2af40e350bd9d606ae4e1c03c6aa246572b3, 77e314975b4d26998a6384c9cb0deda88b8fa5ea059e3fe7b48edd8a541f2315, 72f327f62710f60f43569741c2cb391b833b44c4dafe1f5d5c085a39c485b5df
<u>Djvu</u>	SHA256	61cbdd06eb0034a51074b1bcae4d2d7aff85f7e1fe61903481b1fb63508db4, ce00b1cb3ac152e4c3d6688e595146c2382616cb83139bac6ee798f0e2e99c19, 864f2a472db2e654cd2f2925be768a442d167c6d15c2a678ec81f713ff897b1d, c18b111c047ba4e0aa30ca19634ffd9f131aecb5dec7645c78a666e85e469b03, d0644b5e3e7dcad31d5918e4688e31d6fc691ce2e709e6033263774baf37c50e, f6f2310f44da2c4c97832cff60fb3f60719491f5971cf7fe22062d4ada705e32, 0c8969456b94f05ca3ee3f6b0518bd151fe0547150086980282f4ad1fc8a7bd6, 84161c7097bc5a675ed250ed222f1f4d0aea4c2dc48d623aecdf7fc44a7119c, 23c672f232c10ed80e8a361da94c54d07ecb2673d21bf663f75ab5dba43b2ae0, 91c21cadd1249480ace996ae3d3e1a0370976d9c4bd17bdade97b1bb92fc59e0, 895593614cf395846b5cdd2c8c4bc7adb87de14cc849e28632f1ab6ff49b43fb, 72a9bb670dc192dae57c0238afdb706bea501f8e0bf06b4fa4b8669741c93547,

Attack Name	Type	Value
<u>Djvu</u>	SHA256	40fff8c4d316ae5de858fdd429d684a96426ce701582d133718be7bea7ea5ac5, f9b5765e9f494c0c485774a401904ed83092fdbd6e19184a4ff48c74f6aed02e6
<u>Cerber ransomwar</u>	SHA256	5bd70163b5ee71238d37ffa0ff179e6a42fc28ff5e218c11502e8341b031b951, ff2ae546f2cb4f72aad3d330f3fd1b7231940c4a1b6d9df10a3870e1d7b7698e, d460a39b8a903a1d6a559515723fd55c7ed0a4c06fbce1635fc8e21662250f9e, f344b2556ca35b3cf957d4284dd00c26404795dff5790258dba2f70a916b2e51, 3ba6b2ddf2c9d3256993bb6a78e40b109176e6f4dd02c99916cc6ff9748f789c, 9377fe5800a21343f76d8067721ba3efa2fbff71f1d4feaf8980f7375f15eb39, a67dc54bb3c0185711abc873346b6d7410e07f9cbe22e620b586e1d63594d806, 7f48304f3484aa9549ca5f6ad4220fd0469563cb0eb6ce06bfa4a27e7db4d2ec, 594b4e3d6f60d8fddb8d6de5593ed38df821aad47d6255b6af16207f091212b

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