



KPMG Cyber Threat Intelligence Platform

APT28 – Unveiling Russia’s GRU Cyber Tactics



APT28, aka Blue Athena, Pawn Storm and various other aliases is a highly sophisticated hacking group affiliated with Russia's GRU military intelligence. Over the years, they have employed cyber espionage tactics such as spear-phishing and exploiting network vulnerabilities, targeting a wide range of sectors such as foreign affairs, energy, defense, transportation, and entities in government, military, and corporate sectors globally. Particularly active in Ukraine-related conflicts, they support Russia’s foreign policy and military objectives.

Attack is initiated by crafting spear-phishing emails with disguised attachments or scripts, tailored to specific individuals within target organizations. They exploit vulnerabilities in Cisco network equipment for reconnaissance and deploying malware payloads for further infiltration and persistence. A critical vulnerability in Microsoft Outlook (CVE-2023-23397) is exploited to escalate privileges for unauthorized access over victim machines. WinRAR code execution vulnerabilities (CVE-2023-38831) are leveraged for NTLM relay attacks, enabling lateral movement within the network. Scripts hosted on Mockbin evaluate User-Agent values and country codes before potentially redirecting users to PHP scripts on free web hosting domains to malicious payloads. A PowerShell script facilitates the theft of Net-NTLMv2 hashes, leading to data exfiltration via WebDAV requests. Cactus VPN exit nodes are used for credential phishing campaigns, connecting to hacked email accounts via IMAP for data exfiltration, while compromised EdgeOS routers are employed for malicious emails employing CVE-2023-23397.

APT28’s persistent and elusive nature over the past decade necessitates continuous innovation and adaptation in defensive strategies to effectively thwart their operations.

What should you do?

- Monitor Indicators of Compromise (IoCs) in your environment to identify anomalies.
- Ensure your Windows environment is patched to the brim and is protected with multi-factor authentication.
- Conduct a comprehensive, full spectrum, threat assessment exercise to uncover blind spots and improvement areas.

The KPMG Cyber Threat Intelligence Platform is an industry defining, research-based capability for enhanced visibility into cyber threats.

Our machine ingestible feeds and analysis are the result of automated, sensor-based intelligence metrics with dedicated, expert insights of each threat to provide you the appropriate context on a timely basis in industry standard formats such as STIX/TAXII/MISP.

These feeds are additionally co-related with our industry partners and independent research for additional context. The intelligence obtained is then curated from strategic, tactical and operational perspective to give you a wide-ranging view of cyber threats.

We also assist you with our renowned cyber incident response and threat hunting services in case you identify an active threat in your environment.

We offer a wide-range of services, including:

- Strategic threat intelligence report
- Machine ingestible threat intelligence feeds
- Threat intelligence driven pre-emptive threat hunting exercise
- Cyber Incident Response Services

Contact us:

KPMG in India Cyber Response Hotline : +91 9176 471 471

Atul Gupta
Partner, Head of Cyber Security,
KPMG in India
T: +91 98100 81050
E: atulgupta@kpmg.com

B V, Raghavendra
Partner, KPMG in India
T: +91 98455 45202
E: raghavendravr@kpmg.com

Sony Anthony
Partner, KPMG in India
T: +91 98455 65222
E: santhony@kpmg.com

Chandra Prakash
Partner, KPMG in India
T: +91 99000 20190
E: chandraprakash@kpmg.com

Manish Tembhurkar
Associate Partner,
KPMG in India
T: +91 98181 99432
E: mtembhurkar@kpmg.com

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KPMG Assurance and Consulting Services LLP, Lodha Exodus, Apollo Mills Compound, NM Joshi Marg, Mahalaxmi, Mumbai- 400 011 Phone: +91 22 3989 6000, Fax: +91 22 3983 6000.

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Indicators of Compromise: IP Addresses

166.0.24[.]2	89.96.196[.]150
42.98.5[.]225	5.199.162[.]132
62.4.36[.]126	144.76.16[.]109
69.51.2[.]106	149.50.208[.]22
73.80.9[.]137	194.14.208[.]15
24.11.70[.]85	194.14.217[.]63
45.83.90[.]11	14.198.168[.]140
61.14.68[.]33	74.208.228[.]186
95.85.72[.]160	87.249.139[.]239
80.246.28[.]58	183.178.180[.]158
85.195.206[.]7	202.175.177[.]238

Indicators of Compromise: Domains

mocky[.]io	webhook[.]site
mockbin[.]org	

Indicators of Compromise: Hashes

358d9271b8e207e82daf6ea67c1d198
24c9a871515d997106f5d59e343ae515
8cf9939cc180b5f63bb8cbd712085dc2
532e57f5f140a8e7e6c6bc27e552ae9b
2b9d21311c803ca26fa9741b37882c11
ce31e6a7bde3f2321d5a4b686ae16dc3
75d5bb70923f6873c395176df7f168bf
4b67eb93fb9abe16fb69929a90e9a24d
4beba318cfa8fbee08691815a8576d0f
75e1a44c80e64acce0322b8cdd641001
756ff05f86d3028c24b4769380c863b5
2599262f3fc50d7d4320acbb14ce40bc
c55d2eae6e2cd47be075e5e85a55056e
6128d9bf34978d2dc7c0a2d463d1bcdd
825a12e2377dd694bbb667f862d60c43



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Indicators of Compromise: Hashes

a758342ead4fd5a7c9543cedae3f0c76
988681231e47401983f67f64aa75fda7
050e2d68903681dbde4acd5ce83aea01
9724cecaa8ca38041ee9f2a42cc5a297
5f126b2279648d849e622e4be910b96c
acd9fc44001da67f1a3592850ec09cb7
8d1b91e8fb68e227f1933cfab99218a4
6fdd416a768d04a1af1f28ecaa29191b
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8d1d5a38b2f8ac0bb3ee511fe9052572599f3f9e
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4f3992b9dbd1c2a64588a5bc23f1b37a12a4355688d6e1a06408ea2449c59368



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Indicators of Compromise: Hashes

45e44afeb8b890004fd1cb535978d0754ceaa7129082cb72386a80a5532700d1
22ed5c5cd9c6a351398f1e56efdfb16d52cd33cb4b206237487a03443d3de893
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243bab79863327915c315c188c0589202f64b3500a3fee3e2c9f3d34e8e1f154
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