

HiveForce Labs

THREAT ADVISORY

**ACTOR REPORT**

Unmasking Earth Baku: New Tactics and Targets in Cyber Espionage

Date of Publication

August 13, 2024

Last updated date

August 23, 2024

Admiralty code

A1

TA Number

TA2024310

Summary

Attack Began: 2022

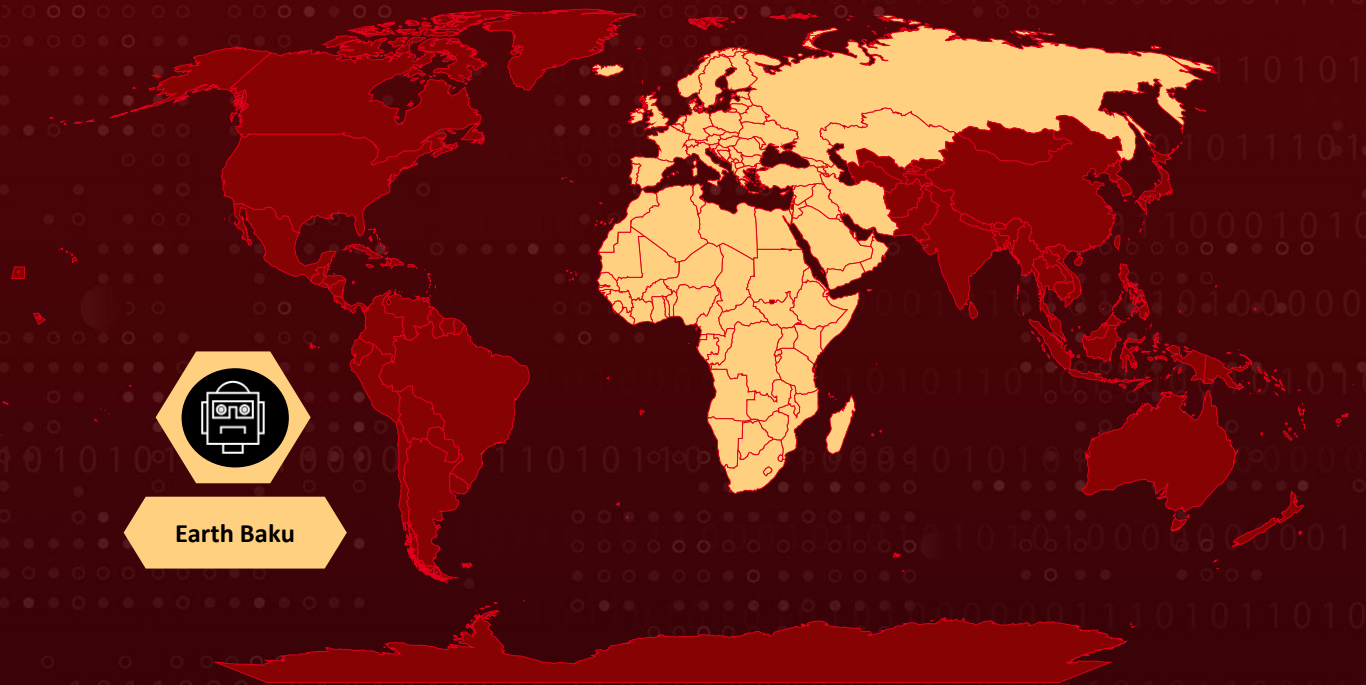
Actor Name: Earth Baku (aka APT 41, Double Dragon, TG-2633, Bronze Atlas, Red Kelpie, Blackfly, SparklingGoblin, Grayfly, Redfly)

Targeted Regions: Europe, the Middle East, Africa, Italy, Germany, United Arab Emirates, Qatar, Georgia, and Romania

Malware: StealthVector, StealthReacher (aka DodgeBox), SneakCross (aka MoonWalk), and Cobalt Strike

Targeted Industries: Government, Media and Communications, Telecommunications, Technology, Healthcare, and Education

Actor Map



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Actor Details

#1

Earth Baku, an advanced persistent threat (APT) actor, has recently expanded its operations from the Indo-Pacific region to Europe, the Middle East, and Africa (MEA). This shift includes targeting countries such as Italy, Germany, the UAE, and Qatar, with indications of activity in Georgia and Romania as well.

#2

The group's recent campaigns have broadened their focus, now encompassing critical sectors including government, media, telecommunications, technology, healthcare, and education. They exploit public-facing applications, particularly Internet Information Services (IIS) servers, to gain initial access and deploy sophisticated malware, including the Godzilla webshell, which facilitates further control over compromised systems.

#3

Earth Baku's toolkit has evolved to include advanced loaders like StealthVector and StealthReacher, which utilize AES encryption and code obfuscation techniques to evade detection. The newly introduced SneakCross backdoor leverages Google services for command-and-control operations, enhancing its modularity for updates and functionality. After breaching a system, the group employs various tools for persistence and data exfiltration, including a customized tunneling tool, Rakshasa, and MEGAcmd for transferring stolen data to cloud storage.

#4

Earth Baku's advancements in tactics and tools highlight an evolving threat landscape, necessitating robust cybersecurity measures. Organizations are advised to implement best practices such as the principle of least privilege, regular system updates, and proactive incident response strategies to mitigate risks associated with these sophisticated attacks.

Actor Group

NAME	ORIGIN	TARGET REGIONS	TARGET INDUSTRIES
Earth Baku (aka APT 41, Double Dragon, TG-2633, Bronze Atlas, Red Kelpie, Blackfly, SparklingGoblin, Grayfly, Redfly)	China	Europe, the Middle East, Africa, Italy, Germany, United Arab Emirates, Qatar, Georgia, and Romania	Government, Media and Communications, Telecommunications, Technology, Healthcare, Education
	MOTIVE		
	Espionage and Information theft		

Recommendations



Strengthen Public-Facing Applications: Regularly update and patch public-facing applications like IIS servers to close vulnerabilities that could be exploited for initial access.



Implement Robust Access Controls: Enforce the principle of least privilege, restricting access to critical systems and data, and closely monitor user permissions to prevent lateral movement by attackers.



Enhance Incident Response Capabilities: Develop and regularly test a proactive incident response plan that includes scenarios involving sophisticated malware, persistence mechanisms, and data exfiltration techniques.



Secure Backup Strategies: Follow the 3-2-1 backup rule, ensuring data backups are stored in different formats, with one copy air-gapped and off-site, and regularly test the integrity of these backups to ensure data can be restored in case of an attack.



Advanced Threat Detection and Response: Deploying advanced threat detection and response solutions is essential for identifying and mitigating sophisticated attacks. This includes using Endpoint Detection and Response (EDR) tools, Intrusion Detection Systems (IDS), and Intrusion Prevention Systems (IPS). These tools can detect unusual activity and provide alerts on potential intrusions, allowing for quicker response times.

Potential MITRE ATT&CK TTPs

<u>TA0011</u> Command and Control	<u>TA0002</u> Execution	<u>TA0003</u> Persistence	<u>TA0010</u> Exfiltration
<u>TA0005</u> Defense Evasion	<u>TA0001</u> Initial Access	<u>TA0004</u> Privilege Escalation	<u>TA0007</u> Discovery
<u>TA0040</u> Impact	<u>TA0008</u> Lateral Movement	<u>T1027</u> Obfuscated Files or Information	<u>T1082</u> System Information Discovery
<u>T1055.012</u> Process Hollowing	<u>T1055</u> Process Injection	<u>T1565</u> Data Manipulation	<u>T1056.001</u> Keylogging

<u>T1056</u> Input Capture	<u>T1021.001</u> Remote Desktop Protocol	<u>T1021</u> Remote Services	<u>T1071.004</u> DNS
<u>T1071</u> Application Layer Protocol	<u>T1133</u> External Remote Services	<u>T1068</u> Exploitation for Privilege Escalation	<u>T1059</u> Command and Scripting Interpreter
<u>T1574.002</u> DLL Side-Loading	<u>T1574</u> Hijack Execution Flow	<u>T1480</u> Execution Guardrails	<u>T1480.001</u> Environmental Keying
<u>T1027.007</u> Dynamic API Resolution	<u>T1620</u> Reflective Code Loading	<u>T1106</u> Native API	<u>T1562.001</u> Disable or Modify Tools
<u>T1562</u> Impair Defenses	<u>T1102.002</u> Bidirectional Communication	<u>T1102</u> Web Service	<u>T1573</u> Encrypted Channel
<u>T1592</u> Gather Victim Host Information	<u>T1590</u> Gather Victim Network Information		

✂ Indicator of Compromise (IOCs)

TYPE	VALUE
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TYPE	VALUE
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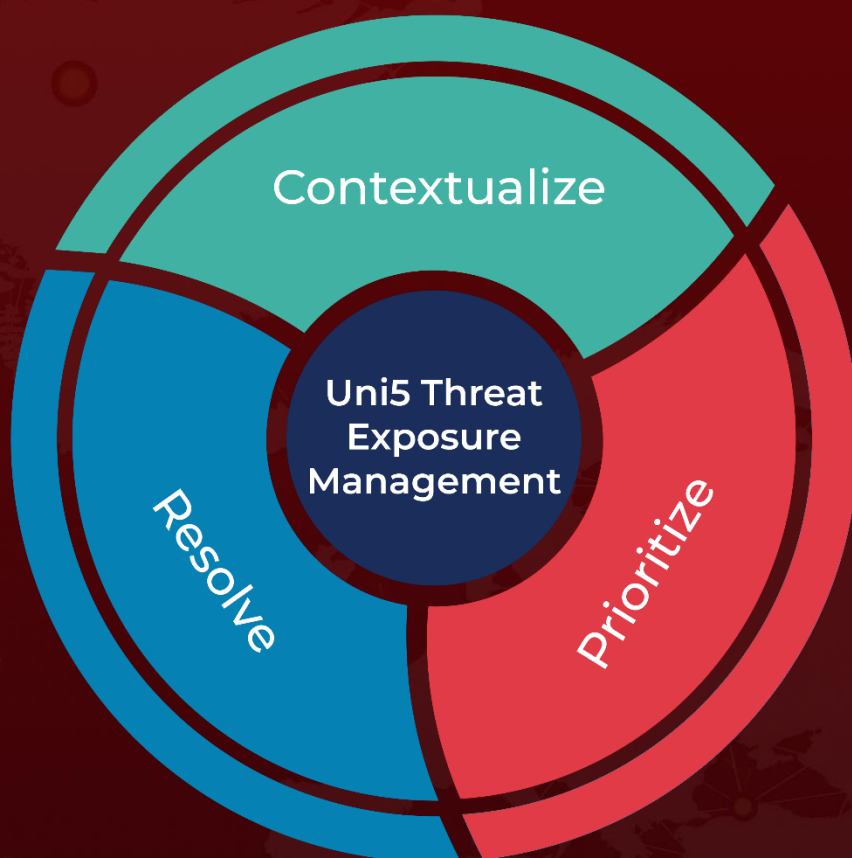
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<https://www.zscaler.com/blogs/security-research/moonwalk-deep-dive-updated-arsenal-apt41-part-2>

What Next?

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August 13, 2024 • 5:30 AM

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