



KPMG Cyber Threat Intelligence Platform

Scarab Ransomware – Unravelling CosmicBeetle’s Cyber Threat



CosmicBeetle, a threat actor group that resurfaced in May 2020, uses the Scarab ransomware. Scarab is a modular ransomware, that means it can be customized by the attacker. This ransomware shares code similarities with the Buran and VegaLocker malware. It uses Spacecolon toolkit, which can also function as a Remote Access Trojan (RAT), distributes the ransomware. Most Scarab variants employ an embedded Delphi-written ClipBanker, which actively monitors clipboard content to replace cryptocurrency wallet strings with attacker-controlled ones. CosmicBeetle targets victims in diverse sectors across France, Mexico, Poland, Slovakia, Spain, and Turkey. Their victims span various sectors, including healthcare, insurance, government, entertainment, environmental, and education.

Malware get distributed through the Spacecolon toolkit and gains initial access to target systems by exploiting vulnerabilities in web servers, brute-forcing RDP credentials, or using ScPatcher to install vulnerable Windows updates. Post access, the malware deploys ScHackTool used to launch other third-party tools that can be used to disabling security products, extract sensitive information, facilitate further access into the compromised system, dumps LSASS memory and clears its tracks. To evade detection, it employs multiple techniques like obfuscating its code, using legitimate Windows APIs, Mimicking legitimate processes and anti-emulation techniques which when executed, a fake error message pops up, if the “OK” button is clicked, ScHackTool terminates. To escalate its privileges on the network, the malware deploys another tool called ScInstaller. ScInstaller installs a backdoor called ScService on the compromised system which provides the malware with additional remote access and control over the compromised machine. ScService uses multiple C&C servers, all hardcoded and encrypted in the binary to exfiltrate the data and receives commands. Finally, the malware may choose to deploy the Scarab ransomware through ScService or manually and encrypts the system.

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: raghavendrabbv@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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Indicators of Compromise: IP Addresses

Indicators of Compromise: Domains

Indicators of Compromise: Hashes

214add3ebdd5b429fda7c00e7f01b864
0cfa58846e43dd67b6d9f29e97f6c53e
1d7d285f77ed5460fe9aada4c04dcfcf
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80b0745106a9a4ed3c18264ba1887bfff
b71921298c866e9d17fe83becf9a2107
88a354d8d051d4dd8c741cdf3e986244



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16bae91061e6410ddf2c17b544939d87
0b4146abe7ab84bfa66e1bb9b947fee3
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516c81438ac269de2b632fb1c59f4e36c3d714e0929a969ec971430d2d63ac4e
5d66919291b68ab8563deedf8d5575fd91460d1adfbfd12dba292262a764a5c99
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