# CHECKING THE INTEGRITY OF DATA USING THEIR HASH VALUES

**BY**

**SOMKENE RICHARD**

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## EXECUTIVE SUMMARY

This report examines the integrity of five provided hashes to assess the safety of the associated data for interaction. After conducting a security scan using specialized tools, three of the hashes were identified as malicious, indicating that their data is unsafe for interaction. The remaining two hashes were confirmed to be free of malicious content, making their data safe for interaction.

## INTRODUCTION

Integrity is a key component of the CIA Triad (Confidentiality, Integrity, and Availability), a fundamental framework for safeguarding and enhancing data security. In cybersecurity, integrity ensures that system information is protected from intentional or accidental modification. This can be achieved through mechanisms such as hash functions.

For this report, the provided file hashes includes;

7DBD0DF279062090C34F796EFC7DD239ECCD46B99B67AAC370D6048D5ADBB9EC

002ce0d28ec990aadbbc89df457189de37d8adaadc9c084b78eb7be9a9820c81

e4d098122d676445d7e89826b59fe891a9bb9d3c78226e402406688cae0f7a62

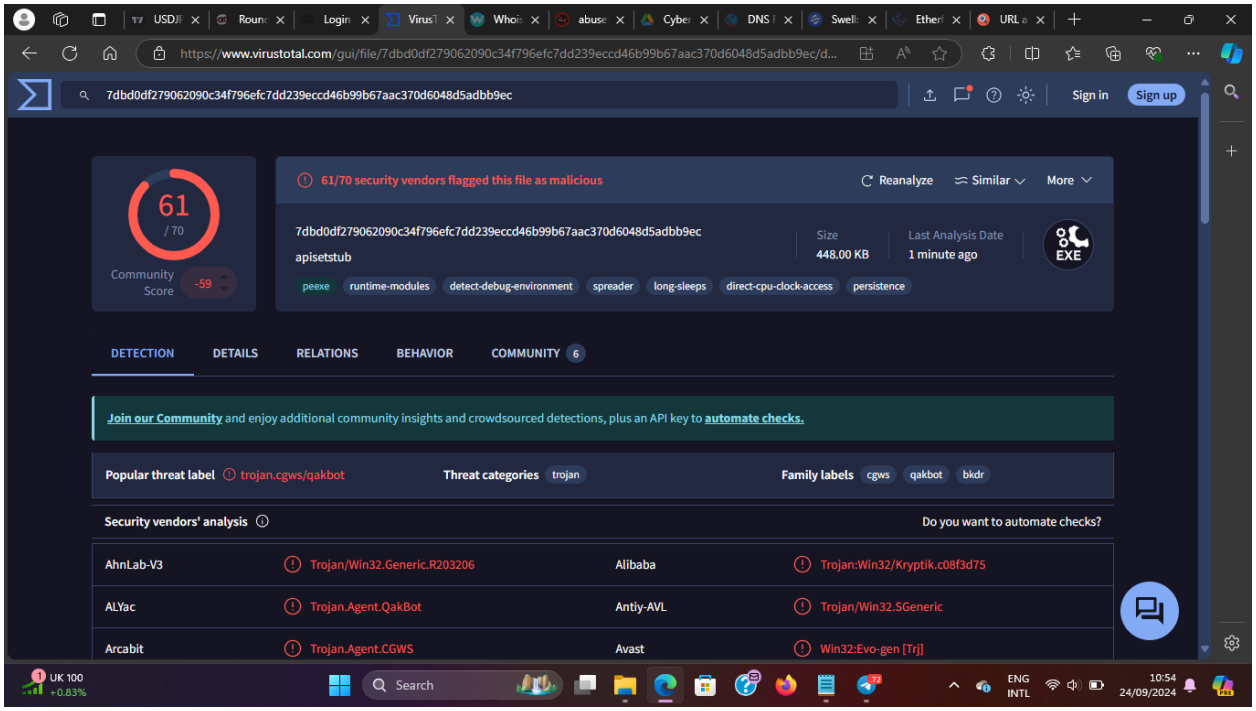
04631dabeccc7d887cc5317c6de48266272f1c90920d644c08895bc956ba3b3b

9389a00c0f655dbddcb4fa420c4690b7d0ca672e19771a0f5f2e3479f31a7232

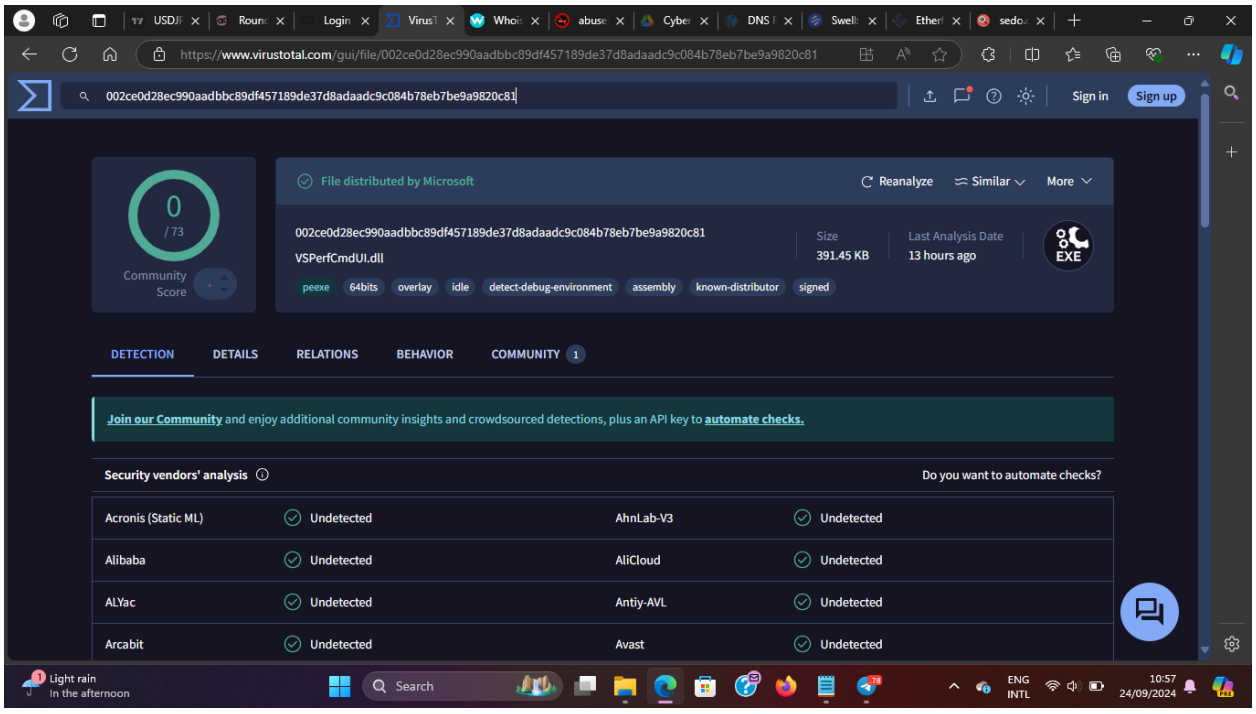
## TOOL

Virustotal

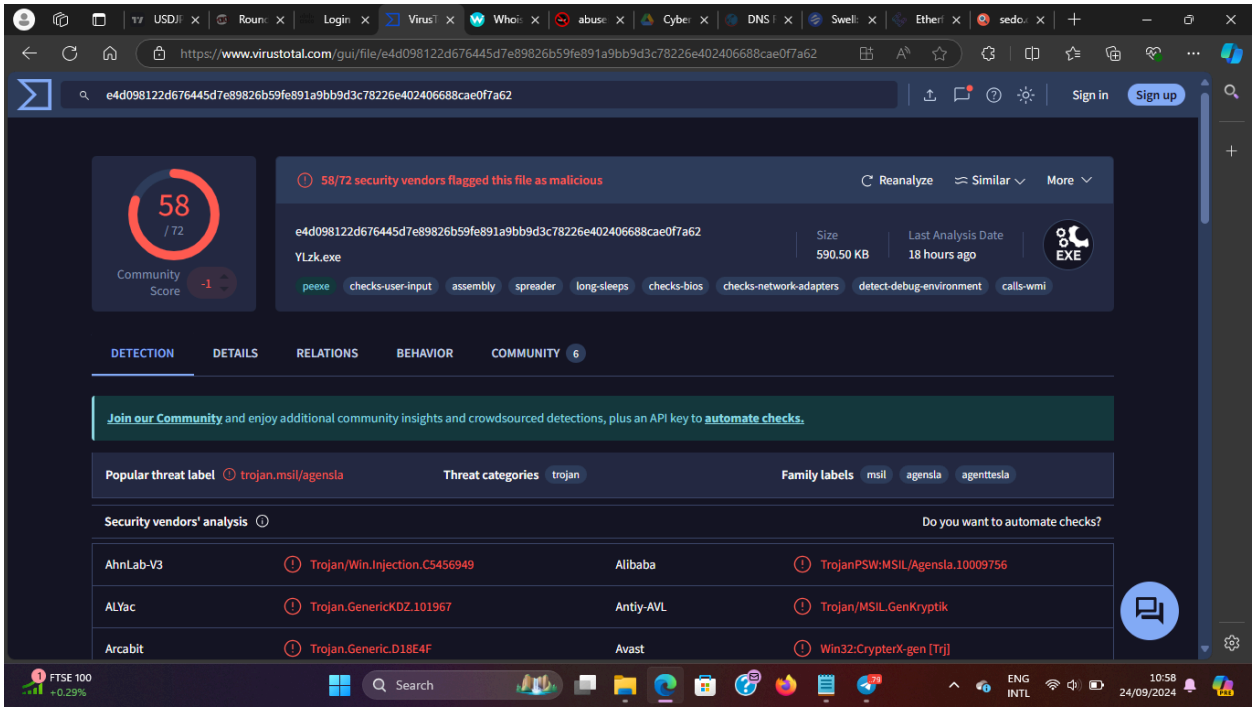
# ANALYSIS



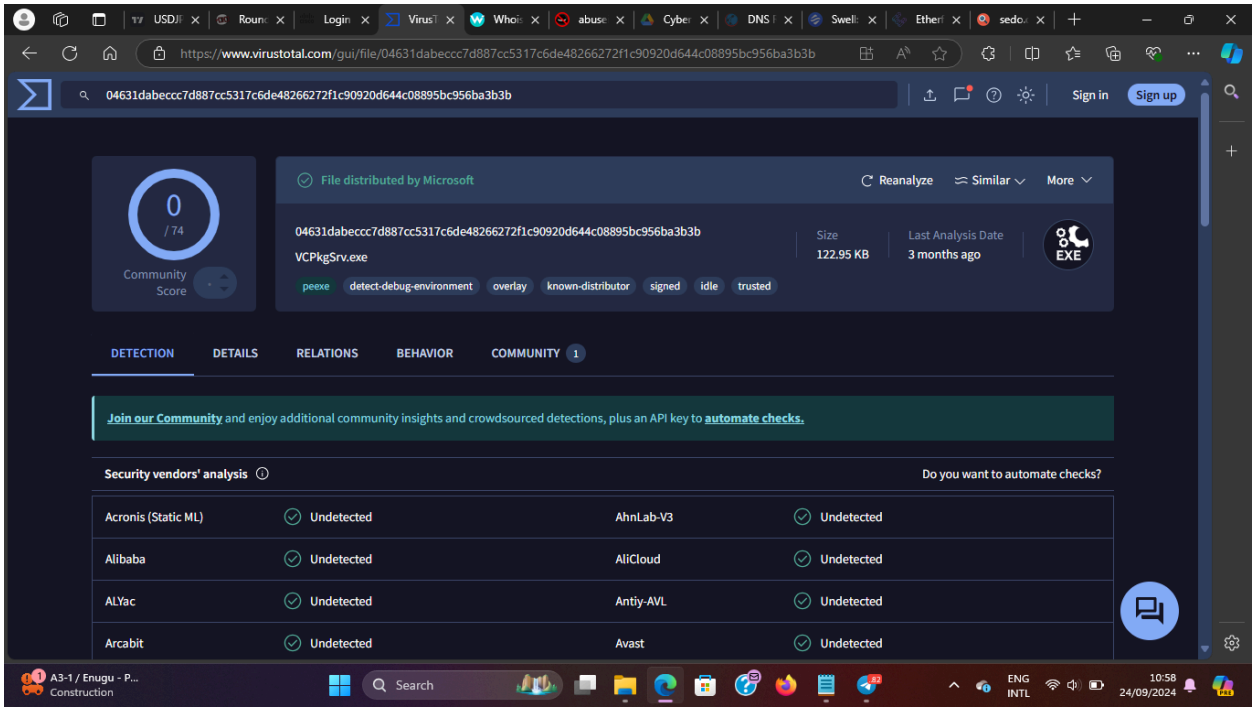

*This hash can be seen to be malicious*



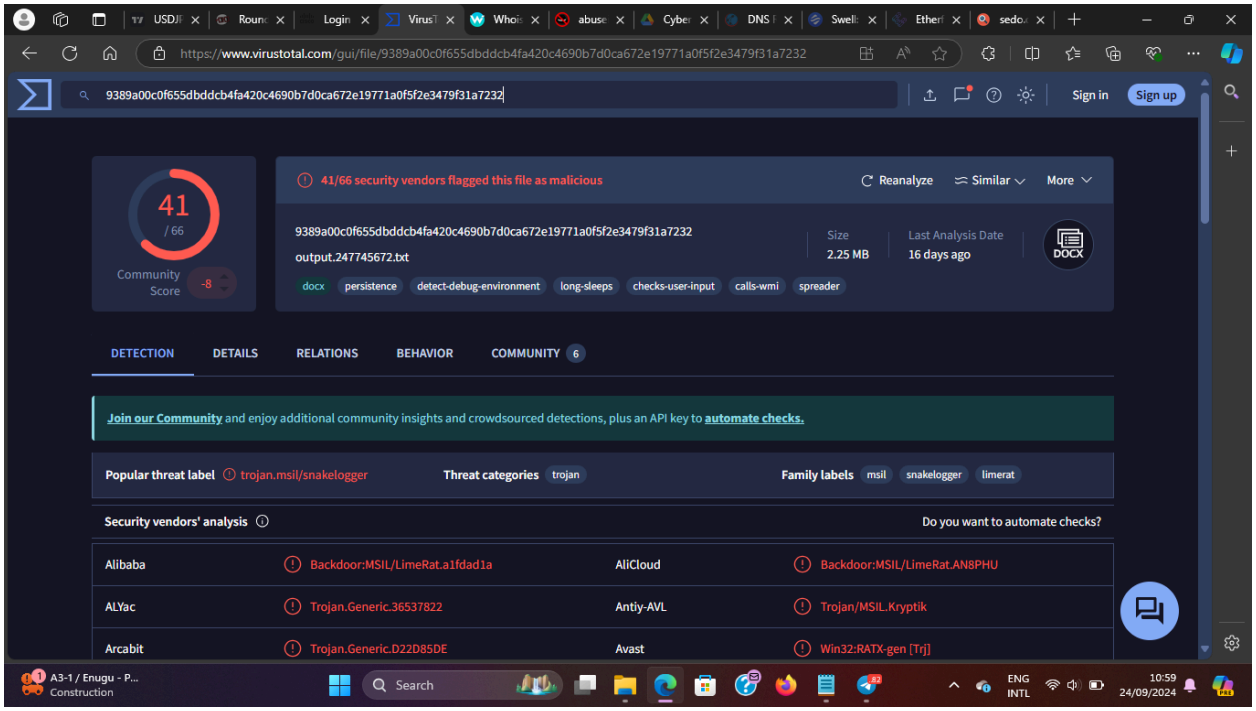

*This hash can be seen to be malicious free*




*This hash can be seen to be malicious*




*This hash can be seen to be malicious free*




*This hash can be seen to be malicious*

## RECOMMENDATIONS

1. Monitor for hash anomalies: doing this will help ascertain when a file has been altered or compromised.
2. Educating employees and individuals on the importance of data integrity and proper use of hashing.
3. Conduct regular hash verification to help detect any unauthorized modifications.
4. Regularly conduct security audits and assessments of your data integrity processes to identify weaknesses and areas for improvement.

## CONCLUSION

Using a secure and widely accepted hashing algorithm such as SHA-256 or SHA-3 for data integrity checks in cybersecurity is advisable as outdated or weak algorithms like MD5 or SHA-1 are susceptible to vulnerabilities.