

# CSE484-Cloud Computing (Lab activity 3)

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## I. QUESTION TO THE ANSWER NO.1

**I**BMD is designed to operate in a cloud computing environment, taking advantage of the scalability and flexibility of the cloud to detect malware and respond to security incidents. The system can also be integrated with existing security tools and services, such as firewalls and intrusion detection systems, to provide a comprehensive security solution for cloud computing environments. This is things are mentioned in the abstract part of the paper. The system has performance implications on cloud resources (including storage, processing power, databases, networking, and software applications) due to its use of computationally intensive ML algo and the need to monitor and accumulate data from various sources such as network traffic and system logs.

[1].

## II. QUESTION TO THE ANSWER NO. 2

**I**BMD model have advantages which are mentioned in the paper more precisely but not the disadvantages are focused much.

**Advantage:** IBMD is designed to operate in a cloud computing environment, taking advantage of the scalability and flexibility of the cloud to detect malware and respond to security incidents. The system can also be integrated with existing security tools and services, such as firewalls and intrusion detection systems, to provide a comprehensive security solution for cloud computing environments.

**Disadvantage:** Complexity: Implementation and maintenance can be complex. Security Concerns: Potential risks associated with analyzing sensitive data in cloud environments.

[1].

## III. QUESTION TO THE ANSWER NO. 3

**I**Can compare the paper;s model with previous ones by conducting tests on various performance metrics such as intrusion rates, encryption depth, processing speed, efficiency. Additionally, scalability, easy of implementation can provide valuable insights for comparison.

REN XIAOLI method: In 2019 she proposed the method which based on DYnamic Virtualization electronic stream cipher for cloud computing securtiy.

LIU YANG method: In 2021 he proposed the method which is based on Docker Technology additionally used Encryption depth evaluation to measure the strength of data encryption. Performance testing to examine speed and efficiency. [2].

## IV. QUESTION TO THE ANSWER NO. 4

**I**Can say Docker Swarm mode can be one example for managing DL model in this environment due to its simplicity, easy implementation and minimal requirements, low cost.

## V. QUESTION TO THE ANSWER NO. 5

**T**His architecture provides a cost effective alternative to traditional approaches such as dedicated hardware or cloud services by on-demand VM with multiple CPUs for DDL tasks. It offers efficient deployment and scalability without specialized GPU hardware those ar Expansive

## REFERENCES

- [1] J. K. Samuel, M. T. Jacob, M. Roy, S. P M, and A. R. Joy, "Intelligent malware detection system based on behavior analysis in cloud computing environment," in *2023 International Conference on Circuit Power and Computing Technologies (ICCPCT)*, 2023, pp. 109–113.
- [2] F. Dang, Y. Yang, H. Liu, and D. Li, "Research on cloud computing security based on virtualization security technology," in *2023 4th International Conference on Information Science, Parallel and Distributed Systems (ISPDs)*, 2023, pp. 418–421.