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Cloud denial of service detection by dendritic cell mechanism

(Conference Paper)

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Abstract

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The term cloud computing is not new anymore in computing technology. This form of computing technology previously considered only as marketing term, but today cloud computing not only provides innovative improvements in resource utilization but it also creates a new opportunities in data protection mechanisms where the advancement of intrusion detection technologies are blooming rapidly. From the perspective of security, cloud computing also introduces concerns about data protection and intrusion detection mechanism especially cloud computing are exposed to Denial of Service (DoS) attacks. This paper aims to provide DoS detection mechanism for cloud computing environment. As a result, we provide an experiment to examine the capability of the proposed system. The result shows that the proposed system was able to detect DoS attacks that conducted during the experiment with 94.4% detection rate. We conclude the paper with a discussion on the results, then we include together with a graphical summary of the experiment's result. © 2018 IEEE.

Author keywords

[artificial immune system](#)
[cloud computing](#)
[dendritic cell](#)
[denial of service](#)
[information security](#)
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Indexed keywords

Engineering controlled terms:

[Cells](#)
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Engineering uncontrolled terms

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[Denial-of-service attack](#)

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