

ABSTRACT

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The objective of this study is to evaluate the risk of occurrence of intruders in a system of cloud computing at distributed systems using fuzzy logic. Cloud computing is a topic that has been widely discussed and has been leveraging heated discussions, both in academic and in professional speaking. Although this technology is gaining market share, some academics are incredulous saying that is too early to draw conclusions. This is mainly because of a critical factor, which is the security of data stored in the cloud. For this thesis, we designed a distributed system written in Java, with the purpose of controlling a process of software's development in the cloud, which served as a case study to evaluate the approach proposed intrusion detection. This environment was built with five machines (being four virtual machines and one real machine). It was created two fuzzy inference systems for analysis of problems in network security implemented in Java, in the distributed environment. Several tests were performed in order to verify the functionality of the application, presenting a satisfactory outcome within this methodology.

Keywords: Analysis of intrusion detection systems; Fuzzy logic; Cloud computing; Software development.