Towards a Cybersecurity Model for Selecting the Secured Cloud Service Provider using Security Risk Approach

Abstract

Cloud computing is a rising field providing computation resources. It represents a new paradigm of utility computing and enormously growing phenomenon in the present IT industry and economy hype. The companies which provide services to customers are called as cloud service providers. The cloud users (CUs) increase and require secure, reliable and trustworthy cloud service providers (CSPs) from the market. So, it's a challenge for a new customer to choose the highly secure provider. In this paper, we propose a cybersecurity model to analyze and select the secured cloud service provider. This model uses a CSP Rank Framework for the group of cloud providers by assessing security risks in terms of confidentiality, integrity, availability, non-repudiation and authenticity which make decision of the more secured provider among the available providers list and justify the business needs of users in terms of security and reliability.

References


Index Terms

Computer Science

Distributed Systems

Keywords