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Cloud Computing Security: Threats and Countermeasures

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Abstract: Cloud computing has revolutionized the way IT organizations and IT teams manage their internal digital assets and workloads. One of the major drawbacks or limitations of cloud computing is security. Cloud computing comes with various threats and vulnerabilities, and new threats and vulnerabilities are discovered all the time. Every year, small to large security incidents are reported around the world. To our knowledge, there are no recent research articles covering recent advances in cloud computing security. To address this issue, this paper provides an analysis of recent cloud computing security literature. Expanding on the threats proposed by the Cloud Security Alliance, a taxonomy related to cloud computing threats and vulnerabilities is provided to educate cloud users and guide the cloud. providers to strengthen or review their security policies and practices. can do. In conclusion, we also provide a taxonomy of state-of-the-art countermeasures and solutions to protect the cloud from various threats.

Keywords: Cloud computing, security, vulnerabilities/threats and counter measures.

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