

Impact of Cloud Computing in Today's ERA: A Critical Analysis

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Abstract: Cloud computing is a relatively new technology that uses a distributed network of servers and clients to store and process data in real time. It provides users with more options and less overhead by way of scalable, on-demand services at lower costs. New technologies also raise several questions regarding personal safety and confidentiality. Most importantly, cloud computing relies on CIA (Confidentiality, Integrity and Availability). The biggest worry regarding security is the multi-location of private data, the place where the data is to be held, different rules for processing data, and data commotion, in which different categories of data can get mixed up if they are not handled and stored separately. Research is ongoing, and ensuring that sensitive user data and information is kept private is essential for protecting systems from a wide range of well-known dangers. There are many security risks and concerns that cloud computing must address.

In this paper, we discuss the importance of data security, review the different types of security aspects and concerns, threats, attacks, and vulnerabilities that are affecting the Cloud Computing environment, and identify relevant existing solution directives to strengthen security, privacy, and tools for protecting against the various attacks in the Cloud.

The term "cloud computing" refers to a new computing paradigm in which multiple computers and networks are interconnected in real time. It gives customers more options and requires less investment in infrastructure while providing them with on-demand services that are both affordable and scalable. There are numerous privacy and security concerns that arise along with the advent of new technologies. Cloud computing's primary features are CIA (Confidentiality, Integrity and Availability). The biggest worry regarding security is the multi-location of private data, the site where the data is to be held, the varying regulations for processing data, and the data turmoil in which different categories of data can get mixed up if they are not handled and stored separately. It is a hot topic of study to find ways to protect users' personal information while simultaneously fending off the many threats that are currently at large. Cloud computing faces its own set of security challenges and dangers.

In this paper, we discuss the importance of data security, review and Present the result various aspect of different types of security aspects and concerns, threats, attacks, and vulnerabilities that are affecting the Cloud Computing environment, and then identify pertinent existing solution directives to bolster security, privacy, and tools for protecting against the different attacks that are prevalent in the Cloud.

Keywords: DDos Attack, HTTP Attack, flood attack.

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