Data Security in Cloud Computing

Abstract

This paper discusses the security of data in cloud computing. It is a study of data in the cloud and aspects related to it concerning security. The paper will go in to details of data protection methods and approaches used throughout the world to ensure maximum data protection by reducing risks and threats. Availability of data in the cloud is beneficial for many applications but it poses risks by exposing data to applications which might already have security loopholes in them. Similarly, use of virtualization for cloud computing might risk data when a guest OS is run over a hypervisor without knowing the reliability of the guest OS which might have a security loophole in it. The paper will also provide an insight on data security aspects for Data-in-Transit and Data-at-Rest. The study is based on all the levels of SaaS (Software as a Service), PaaS (Platform as a Service) and IaaS (Infrastructure as a Service).