

A review of cloud migration techniques and models for legacy applications: key considerations and potential concerns

ABSTRACT

Legacy systems refer to the applications designed for a particular client that have been in use for a long period of time and developed using obsolete technologies. They are often business-critical systems therefore any changes here inevitably will affect the other parts of the system. Although these systems are considered to be outdated, they are too costly and risky for an organization to replace it. Cloud computing provides a new platform for organization that promises flexible scalability, business agility, high availability and reduction in costs. Considering these benefits, migration of legacy systems to cloud is a lucrative option for many organizations. However the architecture of these legacy applications require a tested, fool-proof and risk free approach for migration. Limited migration models or frameworks have been proposed which caters issues of legacy systems migration to cloud platform. Many of these cloud adoption techniques and models emphasize on the generic phases and procedures on migrating the applications and data to cloud. However some of these models are more flexible, and provide better approaches compared to others. This research explores the issues associated with the legacy applications with regards to their migration on cloud and reviews the existing techniques and models that have been proposed in this context.

Keyword: Cloud computing; Cloud migration models; Cloud migration techniques; Legacy systems