

A Cloud Interoperability Broker (CIB) for data migration in SaaS

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Abstract

Cloud computing is becoming increasingly popular. Information technology market leaders, e.g., Microsoft, Google, and Amazon, are extensively shifting toward cloud-based solutions. However, there is isolation in the cloud implementations provided by the cloud vendors.

Limited interoperability can cause one user to adhere to a single cloud provider; thus, a required migration of an application or data from one cloud provider to another may necessitate a significant effort and/or full-cycle redevelopment to fit the new provider's standards and implementation.

The ability to move from one cloud vendor to another would be a step toward advancing cloud computing interoperability and increasing customer trust. This study proposes a cloud broker solution to fill the interoperability gap between different software-as-a-service providers. The proposed cloud broker was implemented and tested on a real enterprise application dataset. The migration process was completed and it worked correctly, according to a specified mapping model.

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