

Abstract

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A Framework for ing Cloud Service Provider Based on Service Level Agreement Assurance

Cloud Computing has become a promising technology that offers a commoditized service to the software, the platform and the infrastructure where they are delivered as a service. It faces several challenges, one of which is responding to customers' requirements on-demand. This will be achieved only through creating an agreement which is referred to a Service Level Agreement (SLA) that guarantees the customers' rights. In addition, more and more providers are currently emerging, thus it's difficult for customers to the most reliable one. It is important to have a methodology that might map the customers' requirements which are called in SLA Service Level Objective (SLO), so as to determine the different criteria for ing the best cloud providers. Thus in this work, we present a framework that represents an index of providers and allow customers to evaluate Cloud service offerings and rank them based on their abilities. This research intends to integrate the automated SLA negotiation among the four cloud agents with the measurement of Quality of Service (QoS) which is called Service Measurement Index (SMI). Such an index should be guaranteed from the provider through the SLA which meets the specifications from the customers' requirements. In general, this framework suggestion intends to improve the QoS assessment rather than the traditional ones which don't fit the dynamic nature of Cloud.