

Enhancing service quality through Service Level Agreement (SLA) full implementation

ABSTRACT

Various SLA monitoring systems are proposed by different features and abilities to evaluate the agreed SLA. The current SLA monitoring systems in cloud computing for its structural, behavioral characteristics and situation are also in place. The systematic reviews of a well-known methods and approaches shows a significant numbers of researches been done in this area. Based on the number of effort and researches, the quality of services should proportionately increase alongside them. We look this matter from the perspectives of enforcement, that evident the stand of quality of services. Service Level Agreement (SLA) enforcement impact measures is a potential research area to be explored. Assumptions that this study is making are, SLA management will become better by a firm enforcement, where every customers are responsible to launch report of bugs or mischief of services such as unsatisfactory quality or service unavailability to a collection pool, and the provider will react immediately to the complaints so that the total downtime not exceeding the SLA value, with efficient enforcement. This study establishes fundamental theory to measure enforcement impact to SLA monitoring and management. We proposed eight activity phases from formulating until analyzing and decision formation. Descriptive statistics is utilized to analyze the extracted data. The SLA validation detection is the most frequent purpose of SLA monitoring systems in cloud by 58% and throughput is checked as an attribute target by 28%. The self-monitoring SLA, self-healing system, hierarchical structure are recognized points of SLA monitoring systems which need improvement before the enforcement could be based upon.

Keyword: Service Level Agreement; Enforcement; Monitoring; Cloud computing; Quality of service