

## **Conversion of SLA document into Fuzzy Rule base approach and applied in MAPE-K**

### **Abstract**

A Service Level Agreement (SLA) is the legal catalyst to monitor any contract violation between end users and ISPs and is embedded within a Quality of Service (QoS) framework. It strengthens and advances the quality of control over the user's application and network resources and can be further stretched to fulfill the QoS terms through negotiation and re-negotiation. Moreover, the present literature does not focus on the combination of rule-based approaches and adaptation together to update the established learning repository. Therefore, this mainstream of this research in the context of SLAs is to fill in this gap by addressing the combination of rule-base uncertainties. The key to this exercise is the conversion of signed SLA document into set of rules in the rule base approach. © 2020 IOP Publishing Ltd. All rights reserved.

### **Keywords**

Internet Service Provider; MAPE-K and Fuzzy; Quality of Service; Service Level Agreements