

# A Quality of Service Management Framework Based on User Expectations

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**Abstract.** The ability to gauge the quality of a service is critical if we are to achieve the service oriented computing paradigm. Many techniques have been proposed and most of them attempt to calculate the quality of a service by collecting quality ratings from the users of the service, then combining them in one way or another. We argue that collecting quality ratings alone from the users is not sufficient for deriving a reliable or accurate quality measure for a service. This is because different users often have different expectations on the quality of a service and their ratings tend to be closely related to their expectations, i.e. how their expectations are met. In this paper, we propose a quality of service management framework based on user expectations. That is, we collect expectations as well as ratings from the users of a service, then calculate the quality of the service only at the time a request for the service is made and only using the ratings that have similar expectations. We give examples to show that our approach can result in a more accurate and meaningful measure for quality of service.