

Reliable QoS Monitoring Based on Client Feedback

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Intellectual Property

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Publications

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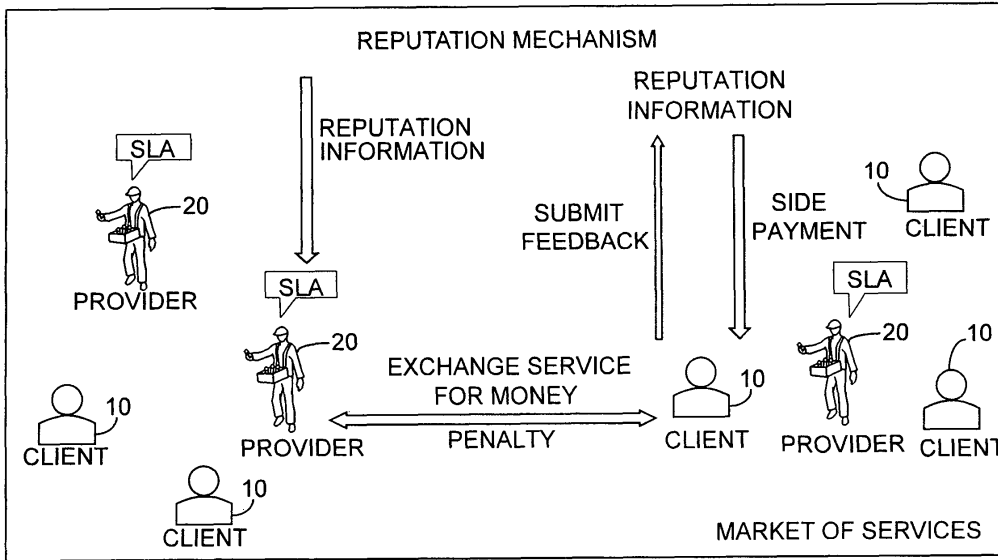


Figure 1: Quality of service monitoring of a service level agreement using a client-based reputation mechanism encouraging truthful feedback

Description

An increasing fraction of a modern economy consists of services that are generally provided under a contract or Service-level agreements (SLAs) that fixes the type and quality of service (QoS) to be provided as well as penalties if these are not met. With current technology, reliably monitoring the quality of a communication service requires constant communication with a neutral third party and would be almost as costly as providing the service itself. The cost of this monitoring remains a major obstacle to wider adoption of a service-oriented economy. The present invention relates to a system and method for accurately monitoring the quality of service as actually delivered while minimizing the cost.

Advantages

Our novel QoS monitoring mechanism is based on quality ratings from the clients. The system incorporates the reports of each user that actually observed the quality of service and estimates the

quality of service as delivered from an aggregation of these reports. A reputation mechanism collects the ratings and computes the actual quality delivered to the clients. While the system and method can be used for a wide range of services, they are particularly suitable for monitoring Service Level Agreement that are provided to a large group of users that are treated equally by the service provider.

Applications

- Monitoring Service-level agreement
- Service monitoring (Telecom, Information, Computation, Utility)