Many online businesses offer services to the users that are complex in nature. A number of simple services need to be combined to form a composite service. User demands may include not only complex functional requirements but may also pertain to specific QoS and security needs. The overall QoS of the composite service and the offered security may be decided by the QoS and the security support given by each individual constituting component. In this paper, a methodology has been proposed to form complex service sets using component services with matching QoS values that shall also offer a minimal of security support satisfying user's requirement. Availability, response time and throughput are important QoS parameters. Taking into account, the user's requirements related to confidentiality, integrity and authentication, service sets are presented to the user in the form of a list such that the set with highest level of compatibility appears at the top. The proposed method thus is very useful for the user and enables him to avail the complex service that suit the best to his needs.
A Methodology to Compose Web Services using Compatible Components based on QoS and Security Requirements of the Users

- Pinar Senkul, "Composite Web Service Construction by Using a Logical Formalism", 22nd International Conference on Data Engineering Workshops (ICDEW&apos;06), IEEE, 2006, pp 56.
- Mikhail Matskin, Peep Küngas, Jinghai Rao, Jennifer Sampson, Sobah Abbas Petersen, "Enabling Web Services Composition with Software Agents", Proc. of Internet and Multimedia Systems, and Applications (IMSA 2005), Honolulu, Hawaii, USA, pp. 93-98.

Index Terms

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