Abstract

Recently, most enterprises adapt Web services technologies for designing and building complex inter-enterprise business applications. These applications are built by the coordination between set of Web services. Therefore, checking the compatibility between two services to guarantee that they can interact correctly is an important issue. In case of service update or replacement, there is a need for checking the replaceability to ensure that the new service is compatible with all the services which were compatible with the replaced one. These two type of checking are based on the services descriptions. Enriching services descriptions by including their behaviours is becoming more and more important. This behaviour can be described by business protocols representing the possible sequences of message exchanges. Since a lot of Web services use access control policies to restrict the access to authorized consumers, these policies should be a part of the service description. Checking compatibility and replaceability between Web services by analyzing their business protocols after assigning the access control policies is the main contribution of this work. Access control policies will be presented using ontology.