A RESTFull Interface for Scalable Agents based Cloud Services

Tasquier L. (1), Venticinque S. (2), Di Martino B. (2)

(1) Dipartimento di Ingegneria Industriale e dell'Informazione, Via Roma 29
(2) Seconda Università di Napoli, Dipartimento di Ingegneria dell'Informazione, Via Roma 29, 81031, Aversa - CE

Parole chiave: Cloud, IAAS, Agents, Service Brokering, Resource Provisioning, OCCI

Agent technology provides asynchronous mechanisms that could represent the best choice for effective programming of Cloud, due to the unpredictable behaviour of the network. Cloud Agency is a collection of agent based services for provisioning, monitoring and autonomic reconfiguration of Cloud resources at infrastructure level, which go beyond the common offer by commercial providers and by open Cloud technologies. Its service interface provides methods for orchestrated executions of agents that implement a scalable solution for provisioning and management of Cloud resources at infrastructures level. Cloud Agency extends the Open Cloud Computing Interface (OCCI) proposal of standard. We present the design of Cloud Agency Interface and the implementation of an RESTfull to/from ACL gateway that allows for the communication between the Cloud world and the agents' one, being compliant with OCCI and extending its model and services. We investigate performance and scalability of the proposed solution.


