Agent's role in grid environments during resource discovery: a review

ABSTRACT

The grid and agent communities both develop concepts and mechanisms for open distributed systems, albeit from different perspectives. Discovering the resources in grid environments may cause lots of challenges. In this paper, a number of previous works on resource discovery process are reviewed, compared and criticized with the main focus on comparing their perspective they used to reduce the bandwidth consumption. The challenges, advantaged and disadvantages are articulated based on two main approaches: models that, do the resource discovery without using agents and resource discovery models that used agents as an applicable technology. Each of these two approaches will be studied both in grid and peer to peer environments.