Using Machine Learning to learn Cloud Adaptation Rules

Description

Cloud computing systems adapt their resource usage to the current demand on the application as characterized by its workload. In most systems used in practice, the adaptation rules are very simplistic like adding a VM in case existing VMs reach a certain utilization threshold.

One idea to improve the situation is to let a computer learn good adaption rules itself. Techniques from the AI area can be applied for this like machine learning or fuzzy reasoning as in [1].

The objective of this seminar topic is to investigate and classify the current state of the art in adaptation logic for elastic cloud computing systems that is able to learn good adaptation rules themselves.

References


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