on-running services of the cloud users, in order to ensure high QoS. One can notice many similarities between cloud brokering and Internet shopping issues motivated by the problem of buying multiple products from different e-commerce web sites. During the conference the author present many links to different e-commerce trading options were cloud computing, cloud brokering, e-commerce, Internet shopping, and some new others approaches come together.

A generic approach for heterogeneous scheduling

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This work aims at studying efficient scheduling strategies in the context of hybrid parallel multi-core platforms composed of two kind of resources, namely standard multicores and accelerators (GPUs). We put emphasis on general purpose policies developed at the middleware level (by opposition to codes tuned by the expert users for specific applications). We survey several recent results in various situations (off-line/on-line scheduling, for independent tasks, precedence relations, sequential and parallel tasks), which allow us to derive a general methodology for managing hybrid resources.

Single machine scheduling: an upper bound on maximum lateness

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The following classical NP-complete scheduling problem is considered. There is a single machine and a set of jobs to be processed. The goal is to construct an optimal schedule with respect to criterion minimization of maximum lateness. We construct the measure of insolubility E for a set of polynomial solvable instances. Then, we project the considered instance on 3n-dimensional unit sphere and we estimate an upper bound on a metric distance between the considered instance and polynomial solvable area equals $E < 1$ when parameters of jobs are real and $E < 1/sqrt2$ when parameters of jobs are positive. We also present some bad instances to prove that the bound is tight for a considered set of polynomial solvable areas. In addition we present some properties of instances with the largest metric distances. Analysis of the efficiency of suggested method and numerical experiments are also presented.