Towards automatic parallelization of sequential programs and efficient use of resources in HPC centers

High-Performance Computing (HPC) is becoming increasingly required by scientists of all branches in order to achieve their desired research results. However, carrying out their research in an HPC center can be a difficult task when they are new to parallel programming. These users need support in the parallelization and optimization of their codes, in order to obtain reliable results as well as make efficient use of the available resources. For this purpose, a novel code analyzer for automatic parallelization of sequential codes is presented, focused on resource management of a supercomputing center, where efficient scheduling decisions and energy saving become key challenges. Thus, this paper aims to introduce the analyzer so as to demonstrate the importance of using it, specially in terms of efficiency, when running parallel codes in HPC centers.

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Noticias relacionadas:

- COMPUTAEX presenta una ponencia en el Congreso HPCS 2016 [1].

Enlaces
[1] http://www.cenits.es/noticias/18072016-computaex-presenta-ponencia-congreso-hpcs-2016