

ALiCE: A Java-based Grid Computing System

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Abstract—A computational grid is a hardware and software infrastructure that provides dependable, consistent, pervasive, and inexpensive access to high-end computational capabilities. This talk is divided into three parts. Firstly, we give an overview of the main issues in grid computing. Next, we introduce ALiCE (Adaptive and Scalable Internet-based Computing Engine), a platform independent and lightweight grid. ALiCE exploits object-level parallelism using our Object Network Transport Architecture (ONTA). Grid applications are written using ALiCE Object Programming Template that hides the complexities of the underlying grid fabric. Lastly, we present some performance results of ALiCE applications including the geo-rectification of satellite images and the progressive multiple sequence alignments problem.

[Full Text Not Available]