
Implementing Distributed Simulations in Grid Computing Environments*

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ABSTRACT

Grid Infrastructure and popular Grid computing toolkit Globus Toolkit 3.0 (GT3) and SUN Grid Engine are introduced in this paper. A prototype of advanced distributed simulation system based on Grid computing is developed, working mechanism and programming model of this system is also discussed in this paper. Simultaneously, a three-dimension simulation experimentation oriented Grid computing about two collided black holes is described in this paper. The result indicates that computing capacity can be greatly improved by using Grid computing in advanced distributed simulation system.

Keywords: Grid, Grid Computing, Advanced Distributed Simulation, Globus

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