

On utilization of the grid computing technology for video conversion and
3D rendering

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Abstract

In this paper, we investigate the recent popular computing technique called grid computing, and use video conversion and 3D rendering applications to demonstrate this technology's effectiveness and high performance. We also report on developing a resource broker called Phantom that runs on our grid computing testbed and whose main function is querying nodes in grid computing environments and showing their system information to aid in selecting the best nodes for job assignments to have the jobs executed in the least amount of time.

Keyword : Grid computing; Resource broker; Job submission; Video conversion; 3D rendering