Network Architecture for Real-Time Distributed Visualization and 3D Rendering

Lamei Yan¹, Xiaohong Zeng¹, M.Mat Deris²

¹Zhuzhou Institute of technology, Hunan, China,412008

E-mail: y.lm@163.com Tel: 0733-2622808, 13017120018

²Department of Computer Science, University College of Science & Technology Malaysia

E-mail: mustafa@uct.edu.my

ABSTRACT

Online visualization enables developers to test, debug, and monitor the behavior of distributed systems, while they are running. In this paper ,we present a new network architecture for 3D real-time visualization that utilizes a cluster of conventional PCs to generate high-quality interactive graphics. A distributed real-time system for visualization and 3D rendering is presented which uses distributed interaction for control. Our work is unique in that it supports both an online and off-line visualization and rendering of a distributed system.

Key words: real-time rendering; distributed visualization system, visualization