Research on the Architecture-based Adaptive Grid Application

Guoyou Zhang¹, Yinzhang Guo¹¹Computer Department, Taiyuan Heavy Machinery Institute Taiyuan, Shanxi, 030024, China

Email: guoyouzh@i618.com.cn Tel.: +86 (0)351-6220101

ABSTRACT

Grid application has emerged for the distributed computing infrastructure. But few consult it from software architecture. In this paper, the analysis of grid infrastructure and its application was prompted from the view of software architecture firstly. The architecture of grid is based on three-layer. Then according the nature of grid, we denote the architectural model of adaptive grid application. The mechanism of adaptation management is by divided it from application and can be generalized from particular system.

Keywords: grid computing, software architecture, adaptive grid computing, adaptive software.