

Task Allocation in Component Based Global Software Development

Dilani Wickramaarachchi¹, Richard Lai²

^{1,2}Department of Computer Science and Computer Engineering, La Trobe University, Melbourne, Australia

¹dwickramaarachchi@students.latrobe.edu.au, ²r.lai@latrobe.edu.au

Abstract - Global Software Development (GSD) has recently evolved and embraced by the competitive software industry today. The major attraction for GSD has occurred due to greater availability of human resources in distributed zones at low cost and advancement of communication technology. However, realization of expected benefits is not good as predicted since it involves some hidden cost. Therefore, obtaining the maximum benefit from GSD is a new challenge in this discipline. Since communication and coordination cost is a dominant factor in hidden cost, minimization of it will help to achieve the objective. Proper task allocation is particularly important since it can reduce communication and coordination overheads. There is no proper task allocation method for Component Based GSD. In this paper, we present a module formulation mechanism based on Component Based System Specification (CBSS) written in Unified Modeling Language (UML) identifying component dependency through interfaces. Further, it suggests allocation of work to different sites considering site dependency characteristics.