SAURASHTRA UNIVERSITY, RAJKOT

Abstract

ANALYSIS & DESIGN OF A MODEL FOR E-COMMERCE APPLICATION USING GRID COMPUTING

by Milan Vachhani

The present Research work is an attempt to suggest a model which is based on Grid Computing for E-Commerce Application. It has been observed that Grid is an infrastructure which involves integrated and collaborative use of computers, networks, databases and scientific instruments owned and managed by multiple organizations. Grid applications involve large amounts of data and/or computing resources that require secure resource sharing across organization. Grid middleware provide users with seamless computing ability and uniform access to resources in heterogeneous Grid environment. In fact, Grid is the growing technology of new era. In the country like India which has many Toll Tax Booths where manual toll tax is going to collect and that is the waste of time and also fuel. To achieve a speedy and non obstructed transport, there is need for some e-commerce model which will cut down on every loss. My proposed model in this thesis can be use for Toll Tax Booth. I have analyzed many grid computing models and suggested new grid model. Based on suggested model, each vehicle should have RFID tag. When vehicle passes from the toll tax booth the charges should be deduced from the vehicle owner’s account. For this process, need more processing power so this thesis suggests the grid model which is distributing the load among connected machines. This thesis contains the implementation of this model with demonstration. This implementation is done using Java language and MySQL database.