

A performance study of routing protocols for mobile grid environment

ABSTRACT

Integration of mobile wireless consumer devices into the Grid initially seems unlikely due to limitation such as CPU performance, small secondary storage, heightened battery consumption sensitivity and unreliable low-bandwidth communication. The current grid architecture and algorithm also do not take into account the mobile computing environment since mobile devices have not been seriously considered as valid computing resources or interfaces in grid communities. This paper presents the results of simulation done in identifying a suitable ad hoc routing protocol that can be used for the target grid application in mobile environment. The simulation comparing three ad hoc routing protocols named DSDV, DSR and AODV.

Keyword: Mobile computing; Grid; Routing protocols; NS-2