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## Topology Design For Dynamic Communication Network Applying Nash Equilibrium Concept

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**Abstract:** Designing the topology of a complete network depends on many criteria, for the best possible performance we represent the optimal modeling of network parameters. Topology design of a computer network focuses on finding the network configuration with the best possible performance given some optimization criteria. Here main focus is on three schemes such as price of establishing a link, path-delay and path congestion. To calculate the performance of three schemes Game theory concept is introduced to manipulate the cost. The concept of Nash equilibrium is introduced for the suboptimal network performance. Till now there are no such technique found to provide optimal performance in a dynamically changing environment. My proposed system introduce a technique called TBLM (Time base location management). This approach is based on the arbitrary probability distribution. In addition, cost optimization can also be done using CWLU (Call without location update). This proposed system will overcome the drawback of existing system and it also increase the efficiency of Quality of service.