# Abstract

*Hybrid Ad Hoc network is a network formed from a collection of wireless mobile nodes that communicate with each other without a fixed infrastructure (Manet) and network infrastructure. Hybrid Ad hoc network topology changes according to the Manet behaviour, where each node in the network are free to move where and whenever he wants. Based on the network conditions change then the search path that is effective, optimal and do not overload the link is one thing that becomes a problem in hybrid ad hoc networks. There are two types of routing protocols that can run on a hybrid ad hoc networks, namely proactive and reactive routing protocols, the combination of these two properties are the type of routing protocols produce a combination of hybrid routing protocols, for example zrp. One example of proactive routing protocols is dsdv. In this thesis the two routing protocols are simulated in a scenario of hybrid ad hoc network conditions by using the network simulator 2. The simulation results were then analyzed and produced the ZRP has a value of routing overhead, convergence time and the end to end delay is better than dsdv, but dsdv have a value of routing overhead and end to end delay is better at low mobility and the early delivery of data packets for 2mb. Performance evaluation of protocols DSDV and ZRP are viewed from the parameters: packet delivery ratio, packet loss ratio, end to end delay, convergence time and routing overhead*

***Keyword*** *: zrp, dsdv, packet delivery ratio, packet loss ratio, end to end delay, convergence time and routing overhead, hybrid ad hoc networks, Manet, proactive*