

# *Comparative Study of Routing Protocols Convergence using OPNET*

## *Chapter Five: Conclusion & Recommendation*

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### **5.1 Conclusion:-**

In this project, would used OPNET as tool to analyze and compare the performance of three routing protocols commonly used in today's networks: RIP, OSPF and EIGRP.

In conclusion, my simulations confirmed that EIGRP is the best choice of term for all network topologies implemented as it has a fast convergence, while also efficiently utilizing bandwidth.

### **5.2 Recommendation:**

The only varying parameter in our analysis, other than routing protocol of course, was the size of the network topology. Improvement or future works for this project can include adding metrics on interfaces such as cost, bandwidth, distance, Bit Error Rate (BER), and delay. Furthermore, various network topologies (in terms of size, routers and links used) can be implemented for comparison of performance between these routing protocols. Since OSPF is the most complex routing protocol, more time could be spent on analyzing it to find the value of parameters that need to be set in order for it to perform optimally.

Another possibility is to implement real network topologies used, perhaps in a university campus a company office, or a larger network size while also modifying the network parameters, such as interfaces, to those of the actual scenario being analyzed.