ABSTRACT

Routing protocols are very important use in modern communication networks. Routing protocols are used to determine the shortest path to the destination. One of the routing mechanism is dynamic routing in which there are various kinds of routing protocols, eg OSPF (Open Shortest Path First).

OSPF is an routing protocol open standard that has been implemented by a large number of network vendors. OSPF works by a Dijkstra algorithm. To know more clearly about the performance of OSPF, required an analysis of the parameters of the routing protocol.

In this final project designed a network topology. Design a network topology is implemented using Cisco routers. Then the router is configured under OSPF configuration to study the performance of OSPF, and then applied to some services using scenarios that have been determined. Routing process is done several times for each parameter. The parameters analyzed are bandwidth and link failure.

In this final project, analysis was performed on the parameters of OSPF is the bandwidth and the input parameters is a link failure. So that the result of the analysis, it can be seen the performance of OSPF routing protocol.

Keywords: routing protocol, OSPF, bandwidth and link failure.