

## ABSTRACT

LMDS (Local Multipoint Distribution Service) system is one of wireless technological approach to provide broadband service base on point to multipoint technology with operate frequency between 27 GHz till 31 GHz. Available bandwidth at least equal to 1 GHz, LMDS system able to bring voice information, video, and the high-speed data to and from client, subscriber in simultan

By using MPLS ( Multi Protocol Label Switching) architecture as a routing technology, able to optimize network and offer value added service. MPLS simplify packet routing as well as supporting QoS with bandwidth reservation and traffic priority.

This research is using MPLS CR-LDP technique as a platform on core network LMDS. As a result, this research show that utility improvement on core network LMDS which consist delay, throughput, and packet loss caused be obtained MPLS have load balancing methode