Abstract

In order to reduce power consumption among optical networks power saver method is used. The technique of reducing power consumption had been widely used in wireless networks. Previous studies have focused on improving performance of passive optical network only, since it had been proved to be most efficient network. But here, P2P and AON are also studied since,
they are equally important. First various optical networks (P2P, PON, and AON) are analyzed through simulations without using power saving method. Results are compared for best network under varied conditions. In the next section, power saver method is used and networks are analyzed for power consumption. After that, the comparative analysis between power ignoring method and power saving method is done. Comparative analysis shows that PON consumes 9.435 W of power using optimization method and is less costly amongst these three networks.

Reference


Performance Analysis of Optical Networks and their Improvement using Power Saving Method

Index Terms

Computer Science
Optical Networks

Key words

Power Saver Method
Optical Networks