## **Abstract**

As time went on it became more developed technology, communication must rely solely on cable *networks* are now widely use *wireless networks* more efficiently. In the *wireless network* itself has evolved with the advent of *mesh networks* that have a large area coverage and high reliability. In this paper the design and analysis capabilities of the *network mesh* with *Optimized Link State Routing* protocol (OLSR). Tests were carried out by *self*-designed topology using a Linksys *wireless* router, as well as open source OpenWRT firmware. Analysis undertaken include *self-configure*, *self-healing*, and packet loss.

Based on the results of experiments that have been conducted of the performance of *mesh networks* with OLSR, the ability to *self-configure* and *self healing* is influenced by parameters HELLO message.

**Keywords**: *mesh network*, OLSR, *Self Configure*, *Self Healing*, Packet loss, Hello Message