

ABSTRAK

Nama : VEBBY APRILYAN ALHADI
Program Studi : Teknik Elektro
Judul : IMPLEMENTASI DAN UNJUK KERJA *HYBRID WIRELESS MESH NETWORK* DENGAN MENGGUNAKAN *ROUTING PROTOCOL AODV-UU* DAN *UOBWINAODV*

Wireless Mesh Network merupakan teknologi jaringan *wireless* yang dipercaya dapat meningkatkan peranan penting dalam *wireless mobile network* dimasa yang akan datang. Teknologi ini memiliki kemampuan mengkonfigurasi dan mengorganisasi dirinya sendiri, sehingga mampu membuat dan menjaga konektivitasnya serta memiliki jangkauan luas karena menggunakan sistem *multihop*. Dalam penulisan skripsi ini akan dibangun *testbed wireless mesh network* tipe *hybrid* menggunakan perangkat *mesh client* dan *mesh router* dengan *routing protocol AODV-UU* dan *UoBWinAODV*. *Mesh router* dimodifikasi dengan menggunakan *firmware opensource OpenWrt*. *Testbed* tersebut digunakan untuk menguji performansi *self configure*, *self healing* serta parameter-parameter seperti *throughput*, *latency* dan *jitter* melalui beberapa skenario pengujian tertentu.

Kata kunci :
wireless mesh network, *AODV-UU*, *UoBWinAODV*, *OpenWrt*, *multihop*.

ABSTRACT

Name : VEBBY APRILYAN ALHADI
Study Program: Electrical Engineering
Title : IMPLEMENTATION AND PERFORMANCE SYSTEM
HYBRID WIRELESS MESH NETWORK USING ROUTING
PROTOCOL AODV-UU AND UOBWINAODV

Wireless Mesh Network is a wireless network technology that trusted can increase important role in the future of wireless mobile network. Its has an ability in self configured and self organized, so that can make and maintain the connectivity and also has a large range because its used a multihop system. In this final project will be built a hybrid wireless mesh network testbed using a mesh client and mesh router device with AODV-UU and UoBWinAODV routing protocol. The mesh router device is modified using opensource firmware OpenWrt. The testbed will be used to test a self configure, self healing and also a network parameters such as throughput, latency and jitter performance through some of testing skenario.

Keywords :

wireless mesh network, AODV-UU, UoBWinAODV, OpenWrt, multihop.

