ABSTRAK

Routing protokol Epidemic merupakan salah satu *routing* protokol di jaringan oportunistik, yang mekanisme pengiriman pesannya seperti banjir *(flooding)* yang memenuhi jaringan dengan salinan-salinan pesan. Nilai ketertarikan *(interest)* merupakan sebuah nilai yang menandakan kesukaan terhadap sesuatu hal, seperti hobi, atau artis penyanyi wanita. Pada kehidupan nyata, setiap orang memiliki ketertarikan (interest) atas sesuatu hal. Dengan mengadopsi nilai ketertarikan tersebut kedalam *routing* protokol Epidemic, maka terdapat beberapa variasi dalam *routing* protokol Epidemic. *Routing* protokol Epidemic WithoutInterest (buta) yaitu *routing* prokol yang tanpa memperhatikan nilai ketertarikan *(interest) node* yang ditemui. *Routing* protokol Epidemic WithInterest (kesaaman ketertarikan) yaitu routing protokol yang mekanisme pengiriman pesannya memperhatikan nilai ketertarikan *(interest) node* yang ditemui harus sama. *Routing* protokol Epidemic WithInterestCommunity, yaitu *routing* protokol yang memperhatikan nilai ketertarikan *(interest)* dan daftar tetangga pada komunitasnya dalam mekanisme pengiraman pesannya.

Dalam penelitian ini, matrik unjuk kerja yang digunakan adalah Total *Relayed*, *Average Convergence Time* dan Total *Delivered Interest*. *Routing* Protokol Epidemic WithoutInterest menunjukkan unjuk kerja yang baik dalam *update* informasi dan kesuksesan pengiriman pesan, namun mempunyai beban jaringan yang tinggi. Sedangkan *routing* protokol Epidemic WithInterest mempunyai beban jaringan yang rendah, namun pada *update* informasi dan kesuksesan pengriman pesan rendah. Pada *routing* protokol Epidemic WithInterestCommunity dengan memainkan nilai *familiarthreshold*nya dapat mengimbangi unjuk kerja dari kedua variasi *routing* protokol berbasis *interest* lainnya.

ABSTRACT

An Epidemic Routing Protocol is one of the Routing Protocol in opportunistic network that the mechanism of the sending a message like flooding which fulfill a network with coppies of messsage. The value of interest is a value that indicates the favorite of the things such as, hobbies, actress and singer. In real life, everyone has his/her own interest in something. By adopting the value of interest into Epidemic Routing Protocol, there are some variations in Epidemic Routing Protocol. The first is Epidemic Routing Protocol WithoutInterest, it is without regard to the interest's value of node which is found. The second is Epidemic Routing Protocol WithInterest, that the mechanism of the sending a message has a regard to the interest's value of the same node. The third is Epidemic Routing Protocol WithInterestCommunity, it has a regard to the interest's value and list of its community in sending's mechanism.

In this research, the matrix's performance which is used are Total Relayed, Average Convergence Time, and Total Delivered Interest. Epidemic Routing Protocol WithoutInterest shows the good performance in information updating and successes the sending of message but has a high network loading. Meanwhile, Epidemic Routing Protocol WithInterest has a low network loading and also in information updating and successes of the sending a message. In Epidemic Routing Protocol WithInterestCommunity, by using its familiarthreshold's value can balance the performance of the two variations of Routing Protocol based on other interests.