

## CHAPTER V

### CLOSING

#### 5.1 Conclusion

After conducting the process of experimentation and testing of research with both the BCP Protocol Over PPTP and PPPOE, the authors get the following conclusions:

There is a difference in testing the two methods measured using the Qos parameter consisting of Throughput, Package Loss, Delay, and Jitter. Comparative data to determine which method is better and can optimize network performance between BCP Over PPTP and PPPOE is obtained from the data that has been processed and the following is the conclusion:

1. In the aspect of PPPOE, throughput quality is superior when compared to BCP Over PPTP, seen from the average value of testing on the PPPOE method with a value of 1,213Kbps and the BCP Over PPTP method with a value of 598 Kbps. However, both of these methods in the THIPON table QoS parameters have the same position, namely Very Good. The greater the value of throughput, the better the quality of sending the resulting data.

2. In the aspect of packet loss quality, the BCP Over PPTP and PPPOE methods are all superior because both methods have a packet loss value of 0% at the time of testing. The values of these two methods are included in the QIP parameters THIPON table having the same position, which is in the Very Good category. Which means no data is lost when the data transmission process is

taking place, the smaller the packet loss value, the better the quality of the integrity of the data packet sent and received.

3. In the aspect of Delay quality on the BCP Over PPTP, the method is superior if it is built with PPPOE seen from the results of the test values that have been averaged on the BCP Over PPTP method is worth 8.02370905ms and PPPOE is worth 11.39691195ms. Based on the THIPON table both methods have a standing the same is equally included in the Very Good category with a large delay of <150ms which means that the smaller the delay value the faster the packet data will be sent on the network and the more optimal the internet network.

4. In the aspect of Jitter quality in the BCP Over PPTP, method is superior compared to the PPPOE method, seen from the results of the test values that have been averaged on the BCP Over PPTP method worth 0.0197353ms and PPPOE worth 2.368294226ms. Based on the THIPON table, both methods have the same position, which is included in the category of Very Good. The smaller the jitter generated, the faster the packet data will be sent on the network.

The BCP Over PPTP and PPPOE methods have different advantages and disadvantages to the results of Qos analysis and processing with their parameters, from the parameters measured by the researcher to conclude that the BCP Over PPTP method is better than PPPOE. Although seen through the PPPOE throughput value, it is superior to having more packages sent and received within 5 minutes. However, the BCP Over PPTP delay parameter is superior because of the total delay produced by having a smaller value, a very good packet loss

because there is no packet loss at all, and so is the Jitter parameter, but from the results of 2 methods with 4 parameters, the BCP Over PPTP method is superior to 3 parameters and 1 parameter for the PPPOE method, thus the overall BCP Over PPTP method is superior to PPPOE.

## 5.2 Recommendations

After conducting research the authors have suggestions separately can develop this research to be better, namely:

1. To analyze network performance, the writer prescribes the use of company objects directly, so that in the future these methods can be directly applied to improve network performance in a company.
2. To analyze a network, don't focus on just one application. Can use applications other than Wireshark, so that the stronger the results that will be obtained in analyzing performance