

ABSTRACT

TACACS + is one of the technologies used to manage users. Using a concept consisting of AAA Authentication, Authorization, and Accounting. Authentication is to check the validity of the user is registered in the database. Authorization is limited user so that not just anyone can access the sistem in order to maintain security. Accounting is the recording of user activity for the network. TACACS + server can be used in a variety of topologies for authentication between routers that are connected to the PPP, the user log on the website, as well as user login to a hotspot. Authentication is used on the TACACS + username and password. User data can be stored in a variety of media both in flat files, MySQL, or LDAP.

In this final project, the author create an Authentication service in network device. This network enables the authentication process becoming more centralized because there is authentication server which is using Tacacs+. Tacacs+ server applied only in authentication process and then using on 2 servers. The implementation of those 2 servers enable the failover process which means if one of the server get down time then the servers task handed over to others server.

The results obtained from this final analysis is Average value of delay, jitter, and throughput got from scenario 1 in stable network are 0.083759057 ms, 0.03282085 ms, and 179.1694 Bps, and for unstable network has 0.173974266 ms, 0.026892913 ms, dan 227.632 Bps. Average value of delay, jitter, and throughput got from scenario 2 in stable network are 0.160953433 ms, 0.008289673 ms, and 242.507 Bps, and for unstable network has 0.197328025 ms, 0.006268533 ms, and 363.8588 Bps. In scenario 3, the throughput average differences delay, jitter and throughput is 0.086425943 ms, 077462859 ms , and 47.55520 Bps.

Keyword: Tacacs +, Security, AAA, Authentication, Failover