ABSTRACT

Simple Network Managment Protocol (SNMP) is a protocol designed to enable

administrators to monitor the state of a network. SNMP server would store a lot of

information related to the monitored devices, Therefore SNMP requires an authentication

system that is able to identify each client. To reduce the level of aggression and minimize

the possibility of attacks against password, administrator made Two Factor

Authentication System using One Time Password (OTP) method.

Mobile One Time Password (MOTP) is a one of OTP authentication method

where the administrator is required to use a dynamic passwords and using a mobile

phone as a token generator. This final project will be implementing a authentication

systems using MOTP method on the SNMP server, then do testing and analyze of issues

at MOTP Collison, MOTP time required to identify a client, experiment to sniff the token

during the sending process, memory consumption and CPU usage of MOTP

authentication system, enhanced features to limiting the duration of the login and access

authority.

From the research, can be seen that MOTP can verifying every client that want

to access SNMP server, but the tokens that generated by MOTP still can be sniff by an

unauthorized person. MOTP proved that MOTP not affected by Collison issue on MOTP

tokens. MOTP also has average verification time and CPU usage that is less favorable

than auth_basic authentication methods, but MOTP has the features to limiting the

duration of login and access authority.

Keywords: SNMP, Two Factor Authenticatiom, MOTP

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