ABSTRACT

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Title : Network Security in IoT using Traffic Authentication Algorithm

Internet of things has been a phenomenon today. The condition where objects that previously could not connected to the Internet, now can be connected. But, behind all the advances there are negative effects of it such as the security gap of the system. So there would be needs about some method of security and defense to protects the system from irresponsible people.

With that problem, comes out an idea to develop a method of security and defense by adopting some part of traffic authentication algorithm. The function of traffic authentication itself as a pillar of defense in detecting and mitigating DoS attack. Also there is a security system using encryption - decryption process to do some authentication on the server so it can be confirmed that the data which server received was verified.

The output of this research is a system of security and defense in IoT network that has been passed some scenarios of attack, so the final result is a system that can resolve some problems caused by security gap in IoT network itself. From the implement of this system, the gained report is a improvement in VEA-bility metrics by 387 % from previous research.

Keyword: Internet of Things, Traffic Authentication, Cryptography, Network Security