ENHANCED SNMP METHOD FOR IOT ENVIRONMENT

A PROJECT REPORT

Submitted by

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In partial fulfillment for the award of the degree

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BONAFIDE CERTIFICATE

Certified that this project report titled "**Enhanced SNMP method for IOT environment"** is a bonafide work of **Thilak Raj G S (810015104098) and Tamil Selvan S(810015104319)** who carried out the work under my supervision, for the partial fulfillment of the requirements for the award of the degree of Bachelor of Engineering in computer science Certified further that to the best of my knowledge and belief, the work reported herein does not form part of any other thesis or dissertation on the basis of which a degree or an award was conferred on an earlier occasion.

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DECLARATION

I hereby declare that the work entitled **"Enhanced SNMP method for IOT environment"** is submitted in partial fulfillment of the requirements for the award of the degree in B.E, in University College of Engineering, BIT Campus, Anna University**,** Tiruchirappalli. It is record of our own work carried out by us during the academic year 2017-2018 under the supervision and guidance of **Mr.S.ANUVELAVAN**, Assistant Professor, Department of Computer Science and Engineering, BIT Campus, Anna University, Tiruchirappalli. The extent and source of information are derived from the existing literature and have been indicated through the dissertation at the appropriate places. The matter embodied in this work is original and has not been submitted for the award of any other degree, either in this or any other university.

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I certify that the declaration made above by the candidate is true.

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ABSTRACT

Efficient network management techniques are critical in providing Seamless connectivity and Session connectivity between a mobile node and the network during its movement. This approach suffers from security limitations as anyone can access the network, due to less security offered in the network. Meanwhile, alternative solutions are not feasible due to the current limitation of the IP semantics, which strongly tie address information to location. In this project, a framework using a new strategy is created i.e., wireless SNMP method enhanced with IoT by exploiting mac-binding and a Machine Learning algorithm. SNMP uses ICMP messages to enhance the mechanism of request and reply functions. The mac-binding technique is used along with a Machine Learning algorithm to make the network management work automatically.

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LIST OF ABBREVIATION

SNMP	–	Simple Network Management Protocol
IOT	–	Internet of Things
ARP	–	Address Resolution Protocol
NMS	–	Network Management System
BS	–	Base Station
RFC	–	Remote Function Call
MIB	–	Management Information Base
TCP	–	Transmission Control Protocol
ICMP	–	Internet Control Message Protocol
IDE	–	Integrated Development Environment