

ENHANCED SNMP METHOD FOR IOT ENVIRONMENT

A PROJECT REPORT

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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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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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TABLE OF CONTENTS

CHAPTER NO.	TITLE	PAGE NO.
	ABSTRACT	Iii
	LIST OF FIGURES	Xii
	LIST OF SYMBOLS AND ABBREVIATIONS	Xiii
1	INTRODUCTION	1
	1.1 Introduction to IOT	1
	1.2 SNMP	3
	1.3 Machine Learning	7
2	LITERATURE SURVEY	9
3	SYSTEM ANALYSIS	13
	3.1 Existing System	13
	3.2 Proposed System	14
4	SYSTEM SPECIFICATION	16
	4.1 Hardware Requirements	16
	4.2 Software Requirements	16
5	SYSTEM DESIGN	17
	5.1 System Architecture	17
	5.2 Module Description	18
	5.2.1 Creation of Smart Intranet Environment (SIE)	18
	5.2.2 Creation of IoT Environment enhanced to SNMP(IS)	21
	5.2.3 Integrating working of IS and C5.0(Smart IS)	24
	5.3 Project Diagrams	26
	5.3.1 Use Case Diagram	26
	5.3.2 Sequence Diagram	27

CHAPTER NO.	TITLE	PAGE NO.
6	RESULT AND OUTPUT	29
7	CONCLUSION AND FUTURE ENHANCEMENT	36
7.1	Conclusion	36
7.2	Future Enhancement	36
	APPENDICES	39
	REFERENCES	40

LIST OF FIGURES

FIGURE NO.	TITLE	PAGE NO.
1.1	Introduction to IoT- infographic	3
1.2	SNMP Architecture	6
1.3	SNMP Packet Format	6
1.4	Types of Machine Learning	7
5.1	System Architecture	17
5.2	Comparison of the connected devices in Intranet and IoT	25
5.3	Use case Diagram	26
5.4	Sequence Diagram 1	27
5.5	Sequence Diagram 2	28
6.1	Nmap-Port Scanning (1)	29
6.2	Nmap-Port Scanning (2)	30
6.3	Nmap-Port Scanning (3)	31
6.4	ARP mac-binding (1)	32
6.5	ARP mac-binding (2)	33
6.6	C5.0 algorithm implementation	34
6.7	C5.0 algorithm implementation with csv	35

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