ROUTING THE PROTOCOL FOR THE INTERNET OF THINGS TO AWARE OF MOBILITY ENERGY

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ABSTRACT

In various applications of the Internet of things, P2P communication (person to person) and the mobility of the energy is the basic requirement. For using such applications, the mobility of energy must be supported by the routing protocols, and the maximum routes of optimum P2P needed to be discovered as well as the efficiency of the energy. The energy in the nodes that are present in the internet of things is very limited. In case of trying to deplete the energy in a faster pace, it will lead to create a hole of energy in the surface of the internet. This study describes the various impacts of routing the protocol for the Internet of Things to be aware of mobility energy. This study also depicts the pros and cons of IoT along with the challenges faced while of routing the protocol for the Internet of Things to be aware of mobility energy and the recommendation for it.

KEYWORDS: IoT, protocol, IoMT, energy

I. INTRODUCTION

A routing protocol is a process to detect the best route or path that goes to multiple nodes from a single node or into another single node for transferring the data and other information between different networks and it helps to identify how the technique of routing helps in the routers to communicate between the routers to achieve the tasks of communicating. There are basically 7 types of protocols in the routing system, such as the protocol of routing information, the protocol of gateway interior, the protocol of enhancing the interior gateway routing, the Protocol of opening the shortest path first, the protocol of exterior gateway, the protocol of border gateway, and lastly the protocol of immediate system to immediate system [2].

Aim: The aim of the study is to understand the concept of routing the protocol for the Internet of Things to be aware of mobility energy.
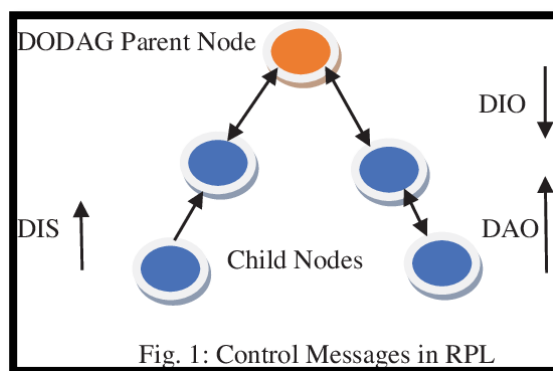

Figure 1: Improved Mobility Aware Energy Efficient Routing Protocol
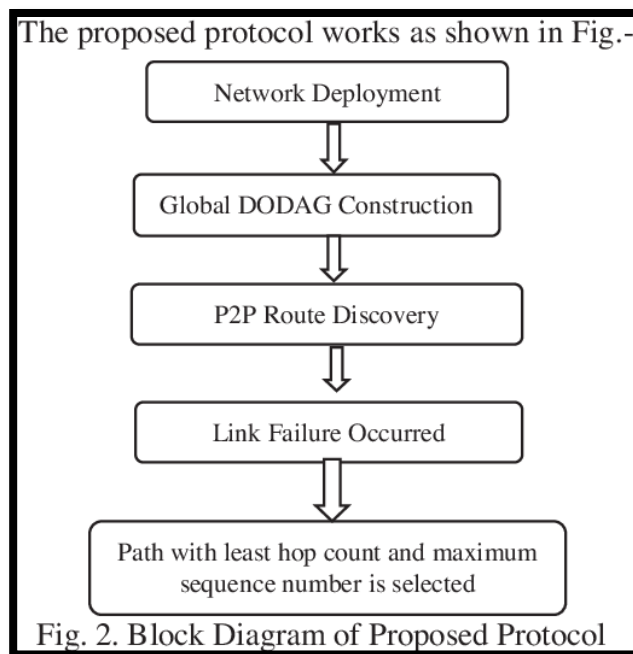
(Source: 10)

II. OBJECTIVES

- To identify the concept of routing the protocol and its use for the Internet of Things to aware of mobility energy
- To analyze the impact of routing the protocol for the Internet of Things to aware of mobility energy
- To evaluate the challenges faced while routing the protocol for the Internet of Things to aware of mobility energy
- To improvise recommended strategies for mitigating the challenges faced while routing the protocol for the Internet of Things to be aware of mobility energy

RQ1: What is the basic concept of routing the protocol for the Internet of Things to be aware of mobility energy?

RQ2: What is the impact of routing the protocol for the Internet of Things to be aware of mobility energy?

RQ3: What are the challenges faced while routing the protocol for the Internet of Things to be aware of mobility energy?

RQ4: What is the recommendation for solving the issues faced while routing the protocol for the Internet of Things to be aware of mobility energy?

Figure 2: Block Diagram of Proposed Protocol

(Source: 2)

III. METHODOLOGY

The methodology is a process of choosing, selecting, identifying, collecting, processing, evaluating and analyzing the data and information to achieve a desired outcome based on the topic of the research [1]. The chosen philosophy for conducting this

research is Interpretivism research philosophy. Interpretivism is a method that is based on the social norms, beliefs and culture of the society in that human live. It is based on the belief that reality is multiple and subjective and constructed by society. Someone's reality can be very different from the other. The chosen research approach for conducting this study is the inductive research approach. The inductive research approach is a process of evaluating qualitative data that is also systematic. This approach is guided by a unique and specific analysis of the determined objectives of the research. The chosen research design for conducting this study is exploratory. The purposes of using this design that to identify the issue more prominently to conduct the research with more precision. The main focus of this research design is to uncover new insights and new ideas. The research is using a secondary data collection method and the data will be qualitative data [3]. As the name suggests, these data and information are previously collected and evaluated and the researcher collects these data from a secondhand source. The data analysis will be done in the thematic analysis method and a coding will be generated.

Figure 3: Secondary Research Methods

(Source: 1)

IV. THE IMPACT OF ROUTING THE PROTOCOL FOR THE INTERNET OF THINGS TO BE AWARE OF MOBILITY ENERGY
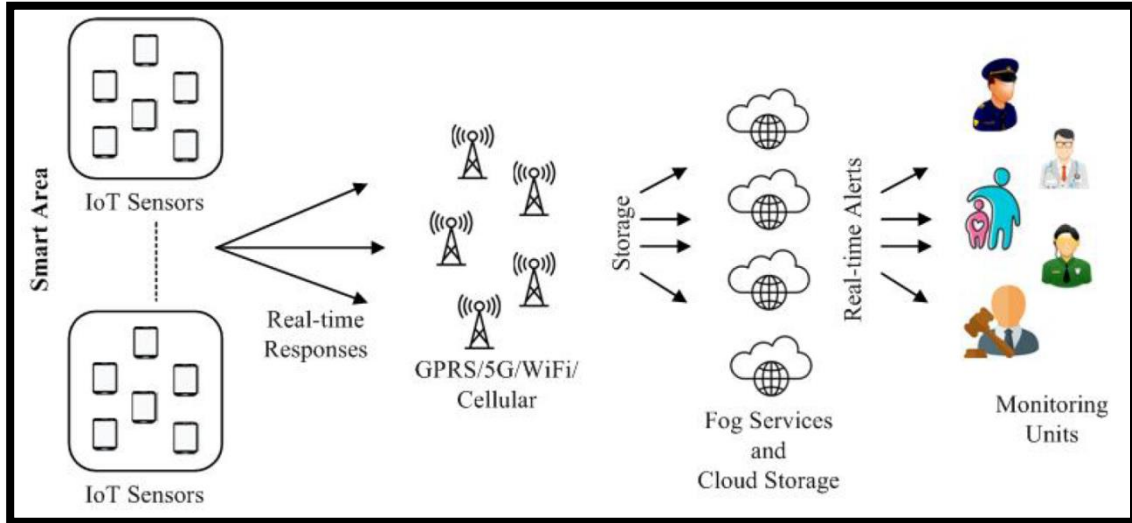
Figure 4: Electronics

(Source: 5)

The devices of IoT that are linked from person to person will create more chances for start-ups to build an advanced ecosystem of the internet, with the help of new cutting-edge technology, such as advanced information, NL, 5g and developing software [5]. As a result, the energy system will be moved as well as new stat ups will start emerging. It will bring more futuristic technology and build an industry that is assisted by data and information.

Table 1: The pros of IOT

The Pros of IOT
• Easily accessible • Better communication [9] • Saves money

(Source: 9)

V. THE CHALLENGES FACED WHILE ROUTING THE PROTOCOL FOR THE INTERNET OF THINGS TO BE AWARE OF MOBILITY ENERGY

Table 2: The Cons of IOT

The Cons of IOT
• Job cuts
• Privacy and security [8]
• Dependability [10]

(Source: 8)

There are a few major challenges faced while routing the protocol for the Internet of Things to be aware of mobility energy, such as node deployment, model of the data delivery, consideration of the energy, heterogeneity of the link or the node, scalability, tolerance of the fault, dynamics of the network, media transmission, coverage, connectivity, service quality and lastly aggression of the data or cast converge [4].
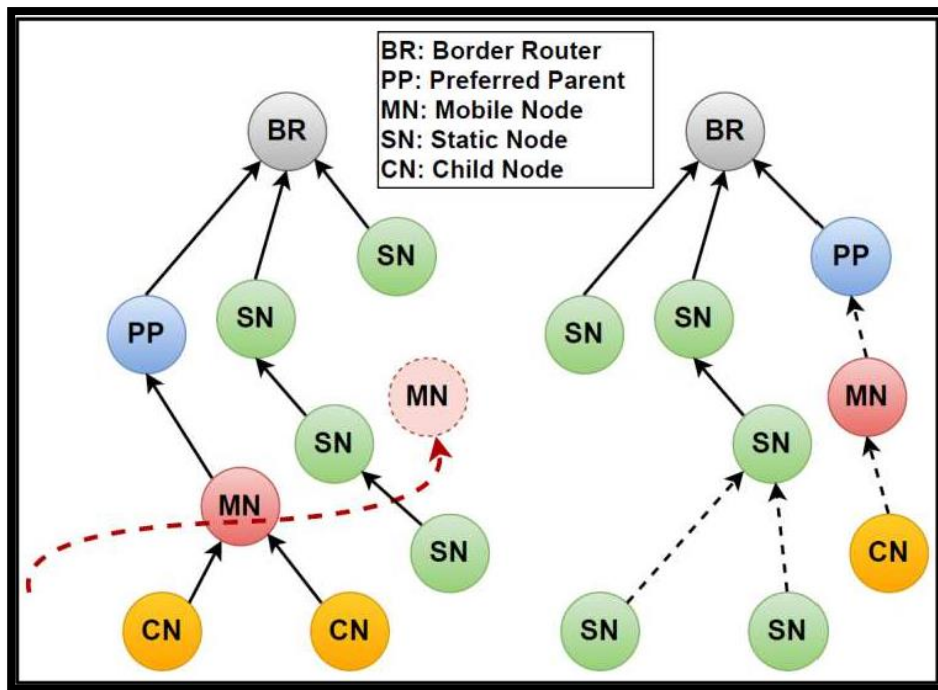

Figure 5: Queue Aware Routing Protocol

(Source: 4)

VI. THE RECOMMENDATION FOR SOLVING THE ISSUES FACED WHILE ROUTING THE PROTOCOL FOR THE INTERNET OF THINGS IS TO BE AWARE OF MOBILITY ENERGY

In this study, all the important aspects of IoT have been discussed. However, there are some challenges faced while routing the protocol for the Internet of Things to be aware of mobility energy, such as choosing the best routing protocol is important [7]. For choosing the best routing protocol there are some factors that need to be followed, such as the metric of the protocol (it can be the bandwidth or the hop count), the traffic amount that is going to happen, the size of the network, the support from the VLSM and the redundancy for the network. In the case of choosing a routing protocol, if these are followed, this can lead to more improvement. Enhanced interior gateway routing protocol (EIGRP) is the most reliable routing protocol that can help to get the maximum efficiency in this field [6].
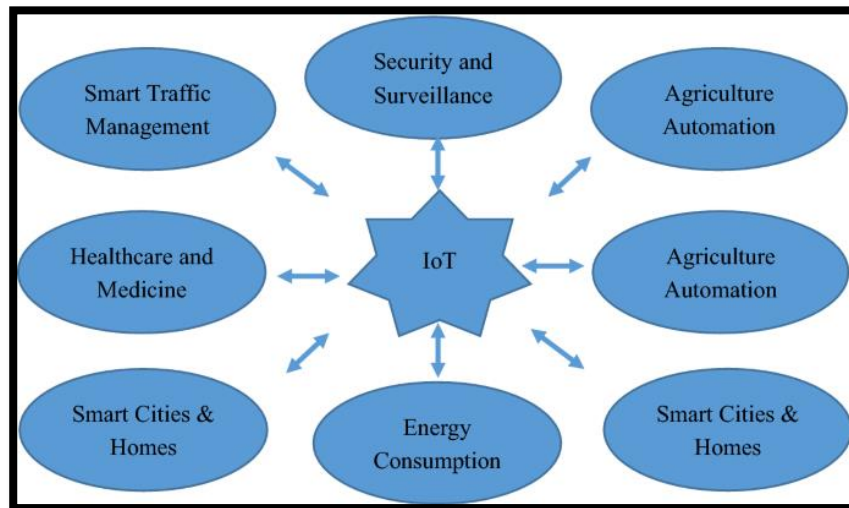

Figure 6: IOT Is a Revolutionary Thing

(Source: 7)

X. PROBLEM STATEMENT

Acquiring all the data from a secondhand source is not as easy as it sounds and it is very time taking. The whole subject of IoT still has a long way to go in the research. So all the results are not properly defined and it cannot be said that it is the final outcome. All the research material that is available in the public domain is not very related to this topic.

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