ISSN 2348-1196 (print)
International Journal of Computer Science and Information Technology Research ISSN 2348-120X (online)
Vol. 3, Issue 2, pp: (472-473), Month: April - June 2015, Available at: www.researchpublish.com

Wireless Sensor Networks

Samir Hamada, Mohit Thodupunuri

[1] Professor, [2] Student, Department of CS, University of Bridgeport Bridgeport, Connecticut.

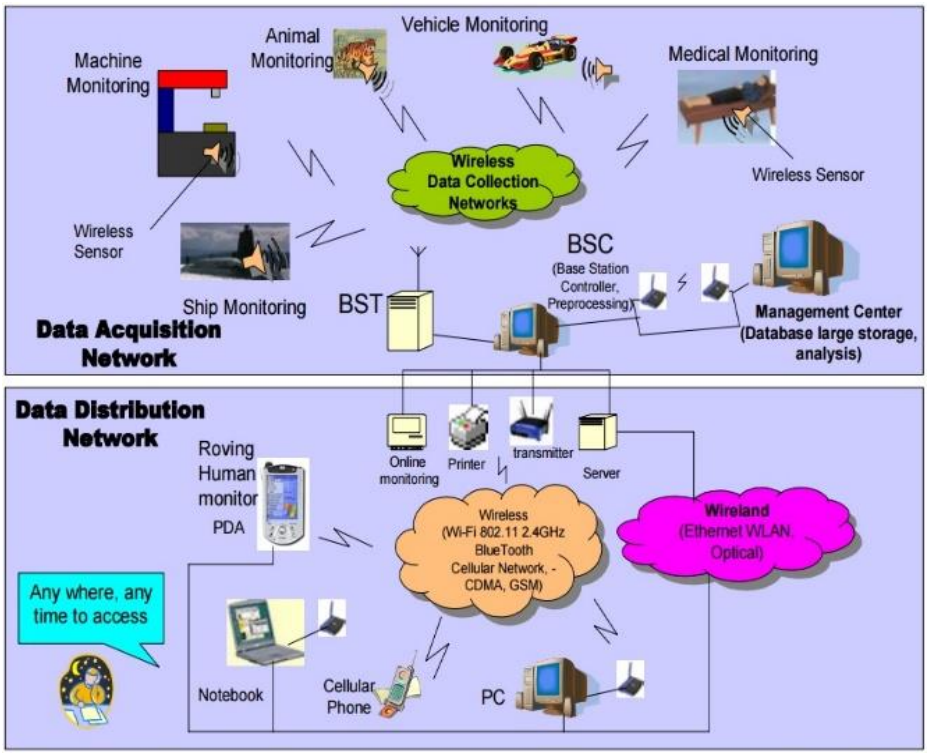
***Abstract*: Wireless Sensor Networks are used to monitor the physical environment using data fetched from sensors. This paper discusses about the protocols used with Wireless Sensor Networks and the positioning of the sensors to increase the efficiency of the network.**

***Keywords:* Wireless Sensor Networks, monitor, protocols, environment, positioning.**

I. INTRODUCTION

A Wireless Sensor Network (WSN) is a collection of numerous sensor nodes that are used to detect and monitor the corporeal and environmental conditions (Suruliandi, &Sampradeepraj, 2015, p. 1). WSN finds its use in a variety of applications such as traffic surveillance, monitoring pollution, military, fire detection, and many more. WSNs are gaining remarkable attention for their applications in various fields (Suruliandi, &Sampradeepraj, 2015,

Like any living organism senses the environment with the help of sensory organs like eyes, ears, nose, and skin; real-time sensory data from the surroundings is required to create a smart environment (Lewis, 2004, p. 1). A WSN utilizes different sensors with different modalities according to the application and the environment the WSN is trying to monitor. Figure 1, gives an example of a Wireless Sensor Network and demonstrates data acquisition and data distribution methods (Lewis, 2004, p. 1).



There are many aspects of a Wireless Sensor Network for it to work efficiently such as the protocols used for communication, positioning of the sensors etc. In this paper, we will look at the Multicast protocol, ZigBee protocol and how positioning of the system affects the efficiency of the WSN.

II. MULTICAST ROUTING PROTOCOL

Communication may be one to one or one to many. In networking terms, one to one communication is known as Unicast and one to many communication is generally known as Broadcasting. Broadcasting consumes more bandwidth than required and is a poor way of communication. To overcome the problem of broadcasting, multicast routing protocol is used to communicate from one to many. Multicast communicates to only desired destinations and saves bandwidth unlike broadcast that communicates to all the devices even when not required.

Actually intended to stop the piracy by blocking websites that distribute pirated material by blocking their IP address and removing from DNS server, which can be, viewed it as against the principles of neutrality where equality is one of the important factor. We must strive to obtain different solutions to the problem rather than blocking out websites for some user error to post pirated material (Magid, 2012).

III. CONCLUSION

If the ISP are allowed to divide the internet, content providers and end users will be forced to pay high premiums for accessing the content and if the ISPs are allowed to rule the internet, they can be a gatekeeper who can have a say on what content must be accessed and what should not be which is against the internet principles. I think if the Internet is divided, end users are at greatest loss.

REFERENCES

[1] Suruliandi, A. s., &Sampradeepraj, T. s. (2015). A survey on multicast routing protocols for performance evaluation in wireless sensor network. ICTACT Journal on Communication Technology, 6(1), 1057-1065.

[2] Lewis, F. (2004). Wireless Sensor Networks. Retrieved 5 8, 2015, from Unibs.it: http://www.ing.unibs.it/~wsnlab/-download/WirelessSensorNetworks.pdf

[3] Lewis,F.(2004).WirelessSensorNetworks.Rerieved 5 8, 2015, from Unibs.it: http://www.ing.unibs.it/~wsnlab/ download/WirelessSensorNetworks.pdf