BEIOX: The BATMAN Enabled Internet of X

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Abstract

It is anticipated that by 2020 as many as 20 to 50 billion devices will be connected to the Internet. To enable this connectivity IPv6 has been proposed as the only possible variant of IP communication protocol to provide addressing and routing to such a large number of devices. On the other hand enterprises have been reluctant to switch to IPv6 being incompatible with existing IPv4. Similarly most of the end-users and households are least determined to adopt IPv6 for their personal devices. This justifies the need for a communication and routing protocol that is pre-installed on all embedded devices and does not require any configuration by the end-users for transparent connectivity to the Internet. We propose the use of a variant of Better Approach To Mobile Adhoc Networking protocol called BATMAN Low Energy (BATMAN-LE) for use in various IoT scenarios due to its availability, practicality and ease of use.

References

1. Dr. Ovidiu Vermesan, Dr. Peter Friess. “Digitising the industry internet of things
connecting the physical, digital and virtual worlds”. The Netherlands: River Publishers, 2016.


Index Terms

Computer Science Networks

Keywords

BATMAN, BATMAN Low energy, IoX, BEIOX, Mesh Networking.