Abstract

Excessive demand and the urgent need for the development of smart cities, evoke the need to provide the capacity for more low-resource devices to communicate and collaborate at a distance, in order to make the concept of the internet more real and practical. For this, IETF "IPv6 over Networks of Resource-constrained Nodes" (6lo) workgroup works on equipment of all resource constrained devices by IPv6 protocol to integrate the internet. From the security point of view, this integration is not without risks, the Internet carries many dangers and current security mechanisms are very greedy for such devices. This paper analyses potential security threats in 6lo as a particular case of mobile ad hoc networks, and provides some countermeasures ideas, in particular, the two principal security defense lines: the cryptography as a first line and the intrusion detection system as the second line.
References


Index Terms

Computer Science

Security

Keywords

Smart cities  6lo  6LoWPAN  Internet of Things  Network Security.