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Abstract

The Internet of Things (IoT) is profoundly affecting people's routine lives in various fields ranging from petite wearable devices to enormous commercial systems and it has been predicted that in upcoming few years, more than 50 billion devices will become the part of the IoT as many of these applications have already been developed. However, the maintenance of security and privacy is a great challenge that restricts the broad implementation of IoT. As the Internet of Things has no standardized architecture, so various types of attacks occurred on different layers of IoT. Some proficient security methods have already developed to protect the IoT system but not enough, so, there is a dire need to do more. This paper describe the security challenges facing four basic layers of IoT and suggest the protective measures to enhance the reliability and robustness of the IoT. Also, portrays the comparative analysis of security challenges between IoT and traditional network.

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Keywords

Internet of things, security, privacy, layer architecture, security challenges, protective measures