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Privacy for the Internet of Things and its Different Dimensions

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Abstract : The Internet of Things is a concept that has fundamentally changed the way information technology works and communication environments. This concept, which is referred to as the next revolution in the field of information and communication technology, takes advantage of existing technologies such as wireless sensor networks, RFID, cloud computing, M2M, etc., to the final slogan of providing the possibility of connecting any object anywhere and everywhere. This use of technologies, along with the possibility of providing new services, also inherits their threats, and although the Internet of Things is facing many challenges, it can be said that its most important challenge is security and privacy, and perhaps even a more tangible challenge is privacy. In this article, we will first introduce the definition and concepts related to privacy, and then we will examine some threats against the privacy of the Internet of Things in different layers of a typical architecture. Also, while examining the differences and the relationship between security and privacy, we study different dimensions of privacy, and finally, we review some of the methods and technologies for improving the level of privacy.

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