The Internet of Things Ecosystem: Survey of the Current Landscape, Identity Relationship Management, Multifactor Authentication Mechanisms, and Underlying Protocols

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Abstract : A critical component in the Internet of Things (IoT) ecosystem is the need for secure and appropriate transmission, processing, and storage of the data. Our current forms of authentication, and identity and access management do not suffice because they are not designed to service cohesive, integrated, interconnected devices, and service applications. The seemingly endless opportunities of IoT are in fact circumscribed on multiple levels by concerns such as trust, privacy, security, loss of control, and related issues. This paper considers multi-factor authentication (MFA) mechanisms and cohesive identity relationship management (IRM) standards. It also surveys messaging protocols that are appropriate for the IoT ecosystem.
Keywords : identity relation management, multifactor authentication, protocols, survey of internet of things ecosystem

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