Authentication framework for wireless sensor networks

Authentication protocols as applicable to WSN are broadly classified under two groups: Message Authentication Code based like μ-TESLA and Digital Signature based like TinyECC, TinyPK etc. However, these protocols have various disadvantages like Scalability, Delay Disclosure, DoS attacks, Revocation of nodes, Time Synchronization. There is a need to understand and develop new protocols which can be based on zero knowledge authentication, Identity Based Digital Signature, IP based WSN with SSL solutions etc. This paper discusses and analyses new authentication frameworks suitable to wireless sensor networks.

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