Survey on IoT Security Issues and Security Protocols

Internet of Things (IoT) is a trending technology in the modern day. It has been so popular that there have been millions of applications developed on this technology. The popular products of IoT include Smart home, Wearable, Smart city, Smart grid, Industrial Internet, Connected car, smart farming etc. The wide range of usage of IoT system has introduced a lot of thinking in security concerns surrounding these systems. There are back draws associated with the different security measures incorporated with the applications. The survey paper defines all the security concerns and the so far introduced security protocols in the IoT environment.

Abstract

Internet of Things (IoT) is a trending technology in the modern day. It has been so popular that there have been millions of applications developed on this technology. The popular products of IoT include Smart home, Wearable, Smart city, Smart grid, Industrial Internet, Connected car, smart farming etc. The wide range of usage of IoT system has introduced a lot of thinking in security concerns surrounding these systems. There are back draws associated with the different security measures incorporated with the applications. The survey paper defines all the security concerns and the so far introduced security protocols in the IoT environment.

References

2. Reem Abdul Rahman, College of Technological Innovation and Babar Shah College of Technological Innovation,"Security analysis of IoT protocols: A focus in CoAP"
3. Somia Sahraoui LaSTIC laboratory, Computer Science Department University of Batna and Azeddine Bilami LaSTIC laboratory, Computer Science Department University of Batna,"Compressed and Distributed Host Identity Protocol for End-to-End Security in the IoT"

4. Surapon Kraijak, Panwit Tuwanut, King Mongkut’s Institute of Technology Ladkrabang,"A survey on IoT architectures, protocols, applications, security, privacy, real-world implementation and future trends"

5. William M.S. Stout, Vincent E. Urias Sandia National Laboratories,"Challenges to Securing the Internet of Things"

6. Arsalan Mohsen Nia, Student Member, IEEE and Niraj K. Jha, Fellow, IEEE,"A Comprehensive Study of Security of Internet-of-Things"


8. Teng Xu, James B. Wendt, and Miodrag Potkonjak Computer Science Department, University of California, Los Angeles,"Security of IoT Systems: Design Challenges and Opportunities"


10. Surapon Kraijak, Panwit Tuwanut, Information Technology Faculty, King Mongkut's Institute of Technology Ladkrabang, Bangkok, Thailand,"A survey on internet of things architecture, protocols, possible applications, security, privacy, real-world implementation and future trends"


12. Poulami Das, Debapriya Basu Roy, and Debdeep Mukhopadhyay,"Secure Public Key Hardware for IoT applications"


**Index Terms**

| Computer Science | Security |

**Keywords**

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