Abstract

With the rapid advancements in the mobile, Internet and wireless technologies, the computing environment is seamlessly getting integrated into the physical world and being connected to the Internet leading to Internet of Things (IoT). In this environment, heterogeneous devices can communicate with one another, leading to innovative applications in healthcare. Malware in IoT environment possesses a great challenge due to interconnected and interoperated systems. Traditional signature based anti-malware solutions will not suffice to healthcare based IoT devices. The paper presents a novel approach of using whitelisting in IoT-based healthcare medical devices and illustrate the performance improvements over traditional solutions.

References

Combating Malware with Whitelisting in IoT-based Medical Devices


15. S. A. C. DeCato, "Increasing the security on non-networked ground support equipment: Analyzing the implementation of whitelisting protection," 2016 IEEE AUTOTESTCON, Anaheim, CA, 2016, pp. 1-5.

16. NIST Whitelisting Guide


Index Terms

Computer Science

Information Sciences

Keywords

Internet of Things (IoT), Whitelisting approach, Medical devices, Signature based Anti-Virus (AV), Malware