A Study of Issues and Mitigations on Distributed Denial of Service and Medical Internet of Things Devices

Authors : Robin Singh, Jing-Chiou Liou

Abstract : The Internet of Things (IoT) devices are being used heavily as part of our everyday routines. Through improved communication and automated procedures, its popularity has assisted users in raising the quality of work. These devices are used in healthcare in order to better collect the patient's data for their treatment. They are generally considered safe and secure. However, there is some possibility that some loopholes do exist which manufacturers do need to identify before some hacker takes advantage of them. For this study, we focused on two medical IoT devices which are pacemakers and hearing aids. The aim of this paper is to identify if there is any likelihood of these medical devices being hijacked and used as a botnet in Distributed Denial-Of Service attacks. Moreover, some mitigation strategies are being proposed to better secure