

With the advent of smart homes, smart cities, and smart everything, the Internet of Things (IoT) has emerged as an area of incredible impact, potential, and growth, with Cisco Inc. Typically, these IoT devices are limited in compute, storage, and network capacity, and therefore they are more vulnerable to attacks than other endpoint devices such as smartphones, tablets, or computers. We review and categorize popular security issues with regard to the IoT layered architecture, in addition to protocols used for networking, communication, and management. We outline security requirements for IoT along with the existing attacks, threats, and state-of-the-art solutions. Furthermore, we tabulate and map IoT security problems against existing solutions found in the literature. predicting to have 50 billion connected devices by 2020.