Cyber warfare trends and future

Abstract

Nowadays, an old fiction known as cyber warfare is coming true. US Pentagon declared Cyber Warfare as "Act of War" [1] which makes the Cyber Warfare one of the battlefields (sea, ground,space and air) [2]; if any type of cyber warfare gets detected, the identified source of the attack is responsible of any serious reactions. Cyber warfare is a fast growing concept which requires more investigation and research to avoid possible consequences such as loss of lives and resources. The possibility of getting enormous damage from Cyber-attacks currently are practiced according to real life experiences have been conducted by US cyber research teams [3][4]. In this paper we first explain some basic concepts of cyber warfare and clarify the area of discussion. Then we introduce well-known cyber-attacks and available defensive techniques against it. Finally, we focus on possible effects of the cyber-attacks on potential targets such as Electric Power Infrastructures network.