

Fortifying Cyber Resilience

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Abstract: *Ensuring secure communication between different zones during armed action is the main goal of this project. The majority of communications take place by wireless (satellite) means because this is the medium that attackers target the most. As such, it is the responsibility of the informing general officer to guarantee a secure communication channel. We now introduce the idea of ransomware, which is a type of software that prevents a user from accessing their data or device and then demands payment in order to unlock it. These days, ransomware assaults are more common due to the rise of cryptocurrencies. Crypto-ransomware, the most dangerous type of ransomware, encrypts the victim's important files and demands payment in ransom. Malware of the ransomware type encrypts computer files, rendering them unreadable by the user. After that, the attacker demands a ransom from the user in return for the key that unlocks the data, thus extorting them. Cybercriminals first infiltrate a system, encrypt all data, and then demand payment in bitcoin for the victim's decryption key. This is how ransomware operates. Some ransomware operators will employ multiple extortion tactics in addition to breaking into a system and inserting encryption malware. These tactics include copying and obtaining the unencrypted data, embarrassing the victim on social media, threatening further attacks like denial-of-service attacks, or disclosing the stolen data to customers or the dark web.*

Keywords: Response to Incidents and Recovery Activities, Security Measures, Mitigation of Risk, Techniques for Detecting Ransomware Defense Plan

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