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Sommario/riassunto

Mobile Ad Hoc Networks (MANETs) are a popular form of network for data transfer due to the fact that they are dynamic, require no fixed infrastructure, and are scalable. However, MANETs are particularly susceptible to several different types of widely perpetrated cyberattack. One of the most common hacks aimed at MANETs is the Black Hole attack, in which a particular node within the network displays itself as having the shortest path for the node whose packets it wants to intercept. Once the packets are drawn to the Black Hole, they are then dropped instead of relayed, and the communication of the MANET is thereby disrupted, without knowledge of the other nodes in the network. Due to the sophistication of the Black Hole attack, there has been a lot of research conducted on how to detect it and prevent it. The authors of this short format title provide their research results on providing an effective solution to Black Hole attacks, including introduction of new MANET routing protocols that can be implemented in order to improve detection accuracy and network parameters such as total dropped packets, end-to-end delay, packet delivery ratio, and routing request overhead. Elaborates on the basics of wireless networks, MANETs Explains the significance behind the need of wireless networks and MANET security Understand MANET routing protocols, namely the ADOV method
