



RESEARCH ARTICLE

Enhanced Anomaly Detection IDS-Based Scheme for Dynamic MANET on-Demand (DYMO) Routing Protocol for MANETS

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Abstract— Mobile Ad hoc network (MANET) is a kind of wireless network which has no infrastructure. Security is an essential requirement in mobile ad hoc network to provide protected communication between mobile nodes. Due to unique characteristic of MANETs, it creates a number of consequential challenges to its security design. In this paper, we propose a new anomaly-detection scheme for Dynamic MANET On-demand (DYMO) Routing protocol based on dynamic learning process that allows IDS system to monitor the network and updating the training data at particular time interval. In the dynamic environment, a trustable node (IDS system) in the network will do monitor process of each node in the network using dynamic training data. The dynamic learning process involves calculating the projection distances based on multidimensional statistics using weighted coefficients. For maintaining security the data packet are send in the encrypted format using RSA algorithm.

Key Terms: - Anomaly Detection; DYMO Protocol; MANETS; Security; IDS; Weighted Coefficients

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