

22. AN ENHANCED IDENTITY BASED DIGITAL SIGNATURE SCHEME FOR PROVIDING SECURED AND EFFICIENT DATA TRANSMISSION

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The secure routing in the cluster based wireless sensor networks are difficult to achieve where the clusters are formed energetically and sporadically. The deficiency by using the symmetric key pairing is overcome by the asymmetric key management. The identity based digital signature scheme is used in this paper, to reduce the overhead caused due to node verification and authentication. The number of alive nodes in the fixed network deployment in a WSN is attained through the SIBOOS scheme and selecting the cluster head based on the highest energy available in the node. The vampire attack is one of the non protocol oriented, routing layer and denial of service attack. This attacker node is present inside the network and power of the node is higher, whereas the attacker node causes higher energy consumption for a normal data transmission in the network thus draining the energy resource of the remaining node. Identification of such a node is quite challenging and this is done by the sleep and wake up method.

Index terms- digital signature, IBOOS, vampire node, wireless sensor network.

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