Abstract

Routing Algorithms in the wireless environment are differentiating into different kinds like Geographical, Geo-casting, Hierarchical, Multi-path, Power-aware, and Hybrid routing algorithms. The typical objective of this paper is to explore Swarm Intelligence based routing protocols especially Bee-Inspired based routing protocols for providing multipath routing in Wireless ad hoc networks (WANETs). WANETs influence an agent-based routing protocol that defines a number of rules including that the majority of the participating nodes follow. Using routing technique, nodes are interconnected jointly so as to reduce computational and resource costs. Swarm Intelligence uses agent-like entities from insect's societies becoming a metaphor to fix the routing problem. Various insects interchange details based on their activities been performed along with the surroundings in which they operate to ensure to perform their tasks within an adaptive, efficient and scalable manner. It has been observed that the Bee-Inspired routing has not yet used compression algorithm to apply the bandwidth in more proficient manner. Therefore this paper proposes a LCBEEIP protocol who has utilized BEEIP protocol along with the feature of Loss Less data compression. The experimental results in the proposed
technique have clearly shown that the proposed technique outperforms over the available techniques.

References

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**Index Terms**

Computer Science  
Networks

**Keywords**

WANETs, BEEIP, Lossy Compression, Lossless Compression