Abstract

Ensuring efficient and fast data aggregation technique is one of the challenging task when it is considered for large-scale wireless sensor network (WSN). The problems of presence of single sink, distance between sink and cluster, as well as type of presence of dynamic task to be performed within different cluster is extremely difficult to address for reliable data aggregation technique in WSN. Therefore, the proposed system introduces a novel cylindrical topology of WSN that ensures an efficient task allocation strategy in large-scale WSN architecture. The performance of the data aggregation process is further increased by considering presence of multiple mobile sink that adds exponential benefits to the task allocation policy proposed. The results simulated in MATLAB shows satisfactory performance by considering packet delivery ratio, delay minimization, and completion time of data aggregation process.

References

- Rauthan, J. S., Mishra, S., An Improved Approach in Clustering Algorithm for Load

Index Terms

Computer Science
Networks
Keywords