IIIT - BHUBANESWAR

FIRST PROJECT REPORT

On

Query Optimization

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Abstract

The leader election is an important problem in distributed system as data is distributed among different nodes which are geographically separated. For maintaining co-ordination between the nodes, leader node has to be selected. The main role of an elected node is to manage the use of a shared resource in an optimal manner.

Leader election algorithms are designed to be economical in terms of total bytes transmitted, and time. The algorithm suggested by Gallager, Humblet, and Spira[1] for general undirected graphs has had a strong impact on the design of distributed algorithms in general, and won the Dijkstra Prize for an influential paper in distributed computing.

References

- [1] Mohammad Reza Effat Parvar, Nasser Yazdani, Mehdi Effat Parvar, Aresh Dadlani, Ahmad Khonsari,"Improved Algorithms for Leader Election in Distributed Systems".
- [2] Tai Yun Kim," A Leader Election Algorithm in a Distributed Computing System", Department of Computer Science, Korea University-1, Ga, Anam: Dong, Seoul, pp. 136-701, KOREA.
- [3] Gurdip Singh," Efficient Distributed Algorithmris for Leader Election in Complete Networks", Department of Computer Science SUNY at Stony Brook.
- [4] Yuan-Chieh Chow Kenneth C.K. Luo Richard Newman- Wolfe,"An Optimal Distributed Algorithm for Failure-driven Leader Election in Bounded-Degree Networks".
- [5] Sung-Hoon Park, Yoon Kim Jeoung Sun Hwang, "An Efficient Algorithm For Leader-Election In Synchronous Distributed Systems".
- [6] M. Gholipour, M. S. Kordafshari, M. Jahanshahi, A. M. Rahmani," A New Approach For Election Algorithm in Distributed Systems".
- [7] Mahdi Zargarnataj," New Election Algorithm based on Assistant in Distributed Systems".

