عنوان مقاله:

Dynamic Hub Covering Problem with Flexible Covering Radius

محل انتشار:

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خلاصه مقاله:

One of the basic assumptions in hub covering problems is considering the covering radius as an exogenous parameter which cannot be controlled by the decision maker. Practically and in many real world cases with a slight increase in costs, to increase the covering radii, it is possible to save the costs of establishing additional hub nodes. Also change in problem parameters during the planning horizon is one of the key factors causing the results of theoretical models to be impractical in real world situations. To dissolve this problem, in this paper a mathematical model for dynamic single allocation hub covering problem is proposed in which the covering radius of hub nodes is one of the decision variables. Also Due to NP-Hardness of the problem and great computational time required to solve the problem optimally, an effective genetic algorithm with dynamic operators is proposed afterwards. Computational results show the satisfying performance of the proposed genetic algorithm in achieving satisfactory results in a reasonable time

کلمات کلیدی:

hub location problem, dynamic hub covering problem, flexible covering radius, dynamic genetic algorithm