

Intelligent Rescheduling Trains for Air Pollution Management

Authors : Kainat Affrin, P. Reshma, G. Narendra Kumar

Abstract : Optimization of timetable is the need of the day for the rescheduling and routing of trains in real time. Trains are scheduled in parallel with the road transport vehicles to the same destination. As the number of trains is restricted due to single track, customers usually opt for road transport to use frequently. The air pollution increases as the density of vehicles on road transport is increased. Use of an alternate mode of transport like train helps in reducing air-pollution. This paper mainly aims at attracting the passengers to Train transport by proper rescheduling of trains using hybrid of stop-skip algorithm and iterative convex programming algorithm. Rescheduling of train bi-directionally is achieved on a single track with dynamic dual time and varying stops. Introduction of more trains attract customers to use rail transport frequently, thereby decreasing the pollution. The results are simulated using Network Simulator (NS-2).

Keywords : air pollution, AODV, re-scheduling, WSNs

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