

Station Shunting Rescheduling Algorithm for Supporting Dispatchers Under Train Traffic Disruption

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When trains are delayed, a station shunting dispatcher must modify its shunting schedule according to the train control room about the train rescheduling plan. However, it is difficult to produce a modified schedule quickly because the dispatcher has to consider the track layout and the complicated interference of train routes. Therefore, we develop a shunting rescheduling algorithm for supporting dispatchers. The algorithm uses the predicted diagram, in addition to the patterns of arrival/departure tracks and shunting routes, which are predetermined in advance. The results of the application to the real shunting schedule confirm that the algorithm produces a rescheduling plan in a short time with good quality.