

Development of the Empty Container Simulation Game

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abstract

Containers are commonly used as an effective and relatively inexpensive method for transporting goods. Unfortunately, there are often imbalances between the number of import and export containers, and some ports have a surplus of empty containers while others have a deficit. The Empty Container Simulation Game was developed to address these problems. The game is a computer role playing simulation that simulates the distribution of empty containers in order to solve empty container imbalances among ports. An optimal solution is obtained by the computer using linear programming (LP). Upon completion of the game, a player's game results are displayed along with the LP solution. The game interface was designed to provide easy access and operation. This game will serve to provide an easy understanding and planning for empty container management.