

Cockpit Crew Scheduling Problem

Overview: Using the Approved Schedule Available for the Flight Legs, an Optimization Program is Designed to Generate Optimal Pairings



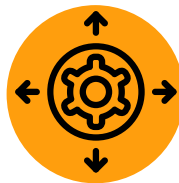
Objective

Selection of minimum no. Pairings required to cover all flight legs at least once, with user-defined or as few layovers and deadheads as possible



Inputs

- Aircrafts
- Legs
- Timing
- Frequency



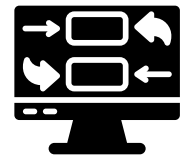
Depth First Approach

- Enumeration of Duties & Pairings Combinations



Linear Optimisation

- Run Optimization for Selected Scenarios
- Carried out in Python
- 8GB RAM Windows 8 System



Output



Details of Optimized Pairings obtained as Output in an Excel Sheet

