

# Operations & Commercial Solutions NetLine Fleet Assigner

A major goal of network management and flight scheduling is the maximization of your airline's overall profitability. To achieve this goal, it is essential for you to use your available capacity as efficiently as possible by assigning the right aircraft type to the right flight while ensuring operational feasibility.

The NetLine Fleet Assigner will help you achieve your goal by automating and considerably speeding up the fleet assignment process. It will improve your schedule profitability by changing the aircraft type assigned to individual flight legs in compliance with your user-defined restrictions. The result is a re-fleeted but feasible schedule scenario with increased profitability.

## Automated maximization of your airline's overall profitability

- Higher profitability for same schedule by assigning the best aircraft types to the right flights
- Benchmark showed profitability boost of up to 600 TEUR per month for a mid-sized airline
- High-speed computation of algorithms enables evaluation of multiple scenarios for best profitability

### Flexible rule definition for realistic and feasible optimization models

- Automation of the fleet assignment process, including automatic aircraft maintenance planning
- Maintains operational feasibility while complying with user-defined restrictions
- Flexible cost model reflects your airline's specific cost structure

### Full integration in NetLine/Sched and NetLine/Plan

- Simple use of all data, rules and schedules from both core applications
- · No need to implement and maintain data twice
- Seamless implementation of optimization results in both core applications

NetLine is one of the world's leading software solutions for the airline industry. This integrated, modular product line provides optimal support for the entire process of planning and controlling airline resources.

### **Features and functions**

The optional NetLine Fleet Assigner add-on module provides the following features and functions.

#### Optimal re-fleeted schedule scenario

To achieve optimal profitability, the NetLine Fleet Assigner takes into account O&D-based (or segment-based) passenger number forecasts, estimated revenue and operating costs. Based on a cost and revenue analysis, this optimization tool identifies the candidates for capacity adjustments and takes the necessary actions. The result is a re-fleeted schedule scenario with increased profitability.

#### Advanced and configurable optimization algorithm

The NetLine Fleet Assigner uses an advanced optimization algorithm to ensure both profitability and short run times. The optimization process supports a variety of features, including

- O&D passenger forecasts
- · flight cancellations
- · long-term and short-term optimization
- · automatic aircraft maintenance planning
- schedule robustness and ground time consideration
- various aircraft type restrictions related to geography or flight number
- handling of different ac owner with different flight and aircraft restrictions
- · feasibility evaluation

The user can choose between two basic optimization goals: "minimize costs" or "maximize revenue." The two goals may be pursued independently or simultaneously. If both are applied, this results in profit maximization.

#### Easy rule modeling

The NetLine Fleet Assigner enables you to individually model all operational and commercial restrictions in the optimization process with a variety of user-defined restrictions and constraints. These include rules for counts (swap count, seat capacity, etc.), fleets (forbidden/required fleet, etc.), load factors (spill limits, etc.) and other important topics (through flights, service type restrictions, etc.).

During the implementation phase, Lufthansa Systems experts will support you in setting up the rules and configuration. As an additional option, we can also offer you consulting to ensure that your airline gets the maximum benefit from the NetLine Fleet Assigner.

#### Flexible cost model

The NetLine flexible cost model used for re-fleeting is the perfect way to reflect your airline's cost structure in the optimization calculation. It enables flexible cost type definitions as well as the definition of cost calculation algorithms.

#### **Extensive reporting**

The NetLine Fleet Assigner comes with an extensive reporting function. It provides a broad selection of before/after reports regarding the different optimization figures, such as profit, costs, capacity, utilization, etc. In addition, the NetLine Fleet Assigner uses the capability and flexibility of the NetLine/ Sched Tactical Profitability Evaluation Model (TPEM) and the vast range of views and scenario analysis options in NetLine/Plan.

#### Full integration into NetLine suite

The integration of the NetLine Fleet Assigner into the NetLine/Sched schedule management solution and the NetLine/Plan network planning application will enable you to use all schedules, rules and data from the base systems without the need to maintain them twice. It also means that every calculated optimization result can be implemented easily – without having to transfer any data.

#### Strategic vs. tactical fleet assignment

Since strategy-oriented network management has different objectives and time frames than tactical schedule management, the NetLine Fleet Assigner has some different features for each task, such as the schedule period and source of passenger demand data.

→ Are you interested in finding out how to improve your overall profitability by up to half a million euros per month? Then don't hesitate to contact us!

### **NetLine**

→ NetLine/Plan

The network planning solution

NetLine/Sched

The schedule management solution

NetLine/Ops++

The operations control solution

NetLine/Crew

The crew management solution