



NetLine/Load

Achieve significant productivity increase with advanced load controlling

Reduce fuel costs and benefit from additional payload through trim and payload optimization while simultaneously boosting your load controllers' productivity. NetLine/Load, Lufthansa Systems' advanced weight and balance solution raises your load control to the next level by providing full automation, flexible configuration options, and simultaneous interaction of all involved teams.

Boost your profitability while reducing costs

NetLine/Load consolidates all relevant load parameters (regulations, technical aircraft data as well as passenger, baggage, cargo, mail, operational schedule, and flight planning information) to calculate the optimum weight and trim conditions – fully automated and highly configurable.

The powerful application optimizes your airline turnaround and on-time performance by improving the load planning and loading process. The results are reduced fuel costs, higher productivity, and increased operational stability.

Increase your productivity by up to 280%

- Reduce the handling lead time by simultaneously working on a flight in the back office, at the ramp, or in the cockpit
- Benefit from completely automated and time-driven aircraft handling and auto load planning
- Manage by exception – supported by timely warnings and alerts

Save costs and increase revenue options

- Save up to 0.5 % fuel costs with optimized trim
- Gain additional revenue through extra payload capability
- Reduce staff costs in the back office and at the ramp by using full automation and the NetLine/Load MobileSolution

Improve operational stability, flexibility and future-fitness

- Automation and integrated chat functionality help reduce delays in case of last-minute changes
- Apply business rules, processes and automated flight tasks to your load control environment
- Stay future-proof with a state-of-the-art system framework for further enhancements and continuous developments

Features and functions

Process-oriented information management

Lufthansa Systems' next-generation weight and balance solution, NetLine/Load, provides state-of-the-art load planning covering all relevant aspects and phases of load control.

Safety and legality checks

NetLine/Load contains all functionalities to safely load and dispatch an aircraft, including any legally required documentation.

Multiple use

NetLine/Load supports various airline business models, the most common aircraft types, and centralized or decentralized load control approach. It can handle one-way and multi-leg flights. It allows the management of multiple airlines, flights, and departure airports simultaneously.

Streamlined workflow

The powerful solution offers a streamlined workflow with dispatch and easily integrates different data sources such as booking estimates, check-in figures, fuel, baggage, cargo, and mail data, as well as other third-party-provider inputs.

Management by exception

This feature allows the controller to focus and take action quickly on problem-affected flights and critical load processes within one single flight. All flight data is updated automatically via incoming interface streams.

Full automation

Flights can be handled completely automated based on time thresholds that continue even in the event of manual intervention. A drag-and-drop feature for load distribution or rule-based auto load planning reduces lead handling time and errors.

The screenshot displays the NetLine/Load software interface for flight XX111/05 HAM - MUC. The top navigation bar includes options like 'A/C Config', 'History', 'NOTOC', 'Cargo Fin', 'EzFW', 'LI', 'Fuel', 'Ramp Fin', 'Check In Open', 'L/S', 'Allowance', 'ACK', and 'Leg Closure'. Below this is a 'Load Summary' section with a 'Load Table - All weights in kg' table.

SBY	ULD	Number	Airline	Special	E/A	Weight	Pieces	Volume	Origin	Orl.Sta.	Destination	Category	Position	Remarks
<input type="checkbox"/>	PAG	XX	XX	E		2000	0	0.0	HAM	HAM	MUC	C	23P	
<input type="checkbox"/>	PMC	XX	XX	E		3000	0	0.0	HAM	HAM	MUC	C	31P	
<input type="checkbox"/>	PMC	XX	XX	E		1500	0	0.0	HAM	HAM	MUC	C	22P	
<input type="checkbox"/>	AKE	XX	XX	E		750	50	0.0	HAM	HAM	MUC	B	32L	
<input type="checkbox"/>	AKE	XX	XX	E		750	50	0.0	HAM	HAM	MUC	B	32R	
<input type="checkbox"/>	AKE	XX	XX	E		465	31	0.0	HAM	HAM	MUC	FB	33R	
<input type="checkbox"/>	AKE	XX	XX	E		150	10	0.0	HAM	HAM	MUC	B	33L	

Below the table, a graphical bar chart shows weight distribution with labels like 'LITOV 66.04', 'Underload 24844 kg', 'AFT LIMIT 97.18', 'AFT LIMIT 94.22', 'LIZFW 73.62', 'FWD LIMIT 18.11', 'FWD LIMIT 30.12', and 'AFT 1383 kg / FWD -1383 kg'. The 'Load Plan - All weights in kg' section shows a cabin layout with seats 43L-41R, 34L-31L, 25L-11L, 43R-41R, 34R-31R, 25R-11R and their respective weights and remaining capacities.

NetLine/Load Load Data View: All relevant load and trim data in table and graphical view

Features and functions

Roles and tasks

NetLine/Load supports role-based user concepts (load controller, ramp, baggage and cargo agent, pilot, etc.) with configurable user rights and roles to execute specifically assigned tasks.

Configurability

Many features can be controlled by customer-defined business rules (for instance individual baggage or off-loading priorities) and configurable automated flight tasks. Any operating carrier's rules and processes can be applied.

Planning and accuracy

A high level of planning accuracy is achieved using prognosis, historic data, and detailed rules for pax and/or bag average weights, bag factors, portable water, etc.

Checks, alerts and warnings

All entered data is checked for validity, considering aircraft limitations and dangerous goods restrictions. The system contains warnings and alerts to help load control agents to complete all necessary inputs and actions. Incompatibility of dangerous goods and ZFW tolerance checks provide safety throughout the process.

High usability

NetLine/Load presents all necessary information in a user-friendly, process-oriented GUI with intuitive screen navigation. The user always has immediate access to the weight and balance data, process flow, and current handling status of the flight. The solution significantly improves agent productivity with onscreen help and reduces errors by automatically capturing data from messages.

Cargo functionality

NetLine/Load offers a comprehensive cargo functionality for all kinds of freighters and 'preighters' including all required structural checks.

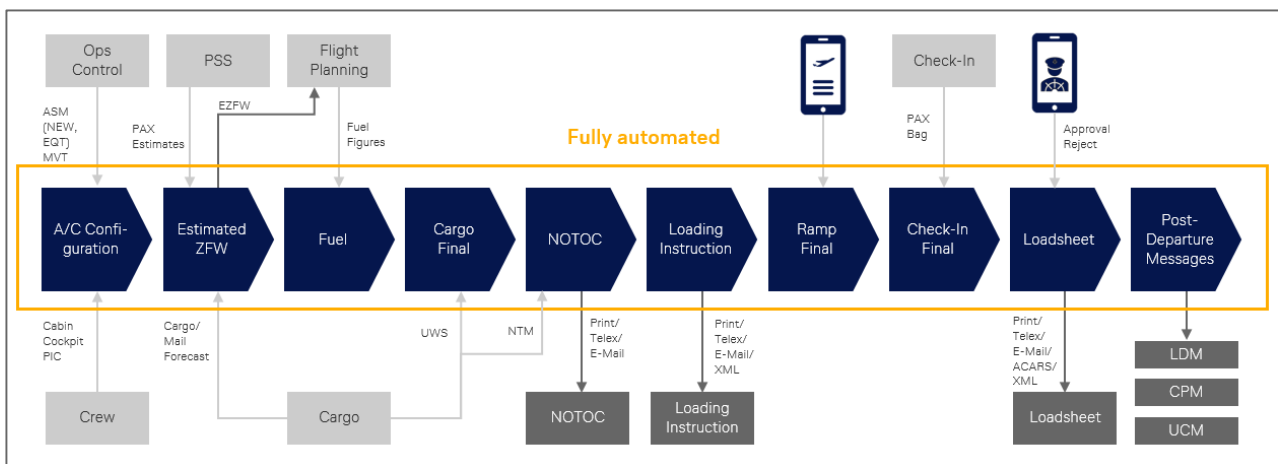


Communication

A highly user-friendly chat functionality allows instant exchange of information between all involved parties, so everybody stays on the same page, reducing time-consuming calls to a minimum.

Messaging and documentation

The system enables viewing all associated messages and reports by flight. NetLine/Load provides documents (e. g. loading instructions, and/or load sheets) via telex, e-mail, or printout. Load sheet delivery to the cockpit is possible via ACARS or the brand-new NetLine/Load CockpitSolution. Post-departure messages (LDM, CPM, UCM) are sent automatically. A comprehensive log file for the corresponding flight is created.



NetLine/Load covers all relevant aspects of the airline core business load control process

Features and functions

Decision support

NetLine/Load indicates the ideal trim zone and shows the remaining underload. It allows the immediate view of the actual trim for monitoring and warns if the load plan is 'out of balance'.

Seamless integration

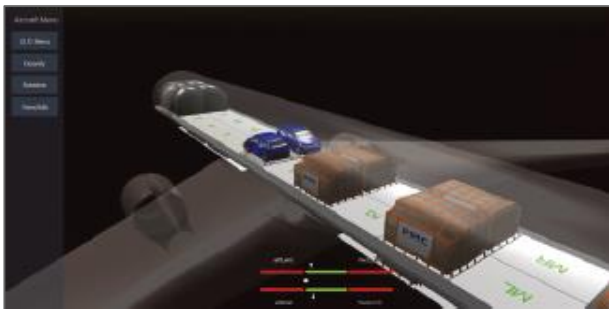
The runtime environment has been derived from the latest industry best practices. It can easily be integrated into an airline's existing IT landscape and connected to any passenger management system and flight planning system. The easy integration is facilitated by a service-oriented approach on an open systems platform and the use of an enterprise service bus.

Future-proof and cloud-ready technology

NetLine/Load has been built on modern and proven JEE technology for business logic, providing high availability and scalability by configuration. A browser-based client provides worldwide access and flexibility by simply logging in from any web-enabled PC. The system architecture is expandable and easy to maintain and administer. Lufthansa Systems offers NetLine/Load preferably as a hosted cloud solution.

Looking ahead of time - 3D Loadplan

This prototype represents the 2D version in a user-friendly screen with intuitive navigation. It provides load controllers with a realistic view of what the load plan will look like on completion. The 3D technology helps the Load Controller to get a better evaluative understanding of the solution - for better results.



Netline/Load 3D Loadplan: Realistic view on the loadplan for better results

NetLine/Load add-on modules

NetLine/Load generates additional value through fully integrated add-on modules:

NetLine/Load RampMobile

is designed for mobile devices, allowing the ramp agent to update the system directly from the apron. As a result, the load control process is more efficient and less error-prone. A chat functionality enables the immediate exchange of information.



NetLine/Load RampMobile : Highly user-friendly loadplan view via tablet or smartphone

NetLine/Load CockpitMobile

completes the work circle by integrating the cockpit into the load control process and simplifying the whole ground handling process. It opens up high saving potential and completely flexible load control workflows.

NetLine/Load ShiftManager

enables the shift manager to distribute flight legs manually or automatically to load controllers daily, based on flexible configuration rules.

NetLine/Load FreighterModule

guarantees safe operation for any carrier running main deck cargo aircraft. All relevant structural and legal checks are executed at any point of load change and document creation.



For more information: marketing@LHsystems.com

NetLine

→ **NetLine/Plan**
Network planning

→ **SchedConnect**
Codeshare management

→ **NetLine/Ops ++**
Operations control

→ **NetLine/Sched**
Schedule management

→ **NetLine/Crew**
Crew management

→ **NetLine/Load**
Weight & balance