



TAKING OPTMIZATION PERFORMANCE TO NEW HEIGHTS

KLM Royal Dutch Airlines (Koninklijke Luchtvaart Maatschappij NV) was founded on 7 October 1919, making it the oldest operating airline in the world. Headquartered in the Netherlands, with its hub at Amsterdam Schiphol Airport, KLM is now part of the Air France-KLM Group, with its core activities encompassing passengers, cargo, and engineering & maintenance.

Managing approximately 35,000 employees, 3147 pilots, and a fleet of 168 planes (excluding subsidiaries), KLM operates scheduled passenger and cargo services to 160 destinations worldwide, carrying more than 34 million passengers and 621,000 tons of cargo each year.



THE CHALLENGE

Pilots, planes, and people. These are the critical pieces in KLM's planning puzzle. The airline needs to plan the pilot capacity based on the expected flight network in the coming two to five years, which includes assigning and training KLM pilots to the respective aircraft types while taking into consideration many rules and regulations.

This is a highly intricate process, as KLM needs to account for each pilot's seniority, the types of aircraft they are qualified to fly, and the seating capacity of each plane. In addition, KLM also needs to factor in vacation planning as well as a complex environment with regulations and unions. With 3147 pilots and 168 planes stretched across 145 destinations, KLM requires a robust yet flexible solution to handle such a complex planning process.



The airline selected DELMIA Quintiq to provide planning solutions to solve their tactical and strategic concerns. The chosen systems are CoPS (Cockpit Planning System), for planning pilot transitions, aircraft assignments, and vacations; and Simplex, for planning the pilots' simulator training sessions.

With DELMIA Quintiq software and support from The Logic Factory, KLM was able to reduce the time spent planning pilot transitions, create an overview and insights into the complex long-term planning puzzle, and provide a single data platform for managing pilot demand and supply. The system ultimately helped KLM increase the efficiency of their planning and optimize workforce and pilot management. Five-year plans that typically took one month to create, can now be completed overnight.

It is imperative that the CoPS and Simplex systems run smoothly, as they handle planning on a massive scale involving pilot assignments over several years, all while dealing with constantly shifting parameters, such as when COVID-19 affected staffing requirements.

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CoPS is a critical application that interfaces and integrates with many other systems. If one system is not working, it affects the other systems and creates a chain reaction that leads to further complications.

*Henk Verweij
Functional Application Manager*

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KLM needs to be able to monitor the health of its systems in a way that is not only consistent and insightful but delivered in a way that is easy to understand for its users. However, system reports can often be too technical for users to decipher.

THE SOLUTION

Through its System Health Check (SHC), The Logic Factory helps KLM to analyze DELMIA Quintiq system reports, converting them into a format that is easier to understand. As part of the System Health Check, experienced consultants from The Logic Factory translate technical system reports into straightforward, actionable language, thereby enabling users to quickly identify and prioritize issues, and letting them make informed decisions.

TLF follow ITIL processes and all Technical Application Engineers are ITIL certified. Furthermore, TLF's engineers adopt the CAPA (Corrective and Preventive Action) method of working, which ensures the systems run smoothly and efficiently through active tracking and direct responses to new errors. Through SHC, TLF keeps its teams actively involved in the well-being of their customers while focusing on improvement and stability.

As part of their Continuous Services, the System Health Check provides KLM with the following:



Statistics of Errors

To help customers get an overview of their system's health, The Logic Factory lists how often an error occurs in each timeframe. SHC reports are presented in an easy-to-understand format that offers a score for the system's health as well as statistics on the number of occurrences of an error.

With that, KLM's users have a clear understanding of incidents and structural issues that they need to address. In addition, the SHC reports also help determine whether an error has stopped occurring after a new software release or update.



Classification of Severity

While KLM regularly receives system reports from the CoPS and Simplex systems, it's often difficult to determine the severity of the issue and which problem to resolve first.

The Logic Factory, as a certified DELMIA Quintiq Platinum Partner with the largest team of experts outside of Dassault Systèmes, can monitor occurring errors and help organizations classify them into high, medium, and low priority.

This is particularly helpful for users in prioritizing errors to investigate and fix, as well as identifying malfunctions and potentially disastrous issues that need to be resolved urgently.



Custom Comments and Support

A unique service offered as part of their support, The Logic Factory's consultants provide organizations with custom comments to help users better understand system errors, their classifications, and the steps needed to resolve the issue.

The consultants personally convert technical terms in the easy-to-comprehend text, and send that along with a summary of the score and detected errors.

These comments also help customers proactively identify problems that will become hindrances down the line and subsequently identify areas for improvements and enhancements.

The Logic Factory also has quarterly meetings with customers to discuss these issues further to ensure that their solutions are operating at their best.



With the System Health Check, we can address urgent issues as soon as they arise, ensuring the system's continuity.

*Henk Verweij
Functional Application Manager*



THE OUTCOME

Regular system health checks are helpful for organizations to understand and optimize the overall performance of their planning software. They provide actionable advice on how to mitigate potential issues that could impact daily actions and equip their users with insights into the existing infrastructure.

Through the System Health Check provided by The Logic Factory, KLM was able to address potential issues better and proactively work on fixing them. As a whole, System Health Check helps KLM with the following:

- 1 Picking up potentially disastrous issues that need to be solved urgently, thus avoiding massive disruptions across KLM's vast and complex operations.**
- 2 Proactively identify problems that could lead to costly malfunctions down the line, allowing the user to address them before they occur.**
- 3 Identify areas for improvement and enhancements, helping KLM boost its performance and avoid future issues.**

This is all part of The Logic Factory's focus on long-term partnerships and continued customer support. "The Logic Factory's support is excellent. Whether an incident report is classified as low, high, or critical, they respond quickly and provide us with the necessary solutions. If our technicians are unable to address an issue, The Logic Factory is always on hand to help," said Verweij.

By breaking down and clearly explaining technical issues and correctly classifying the urgency of each error, System Health Check helps KLM make faster and wiser decisions. Ultimately, SHC helps KLM's critical applications to continue running unhindered, ensuring the continuity of a complex system.





Welcome
on board

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*Henk Verweij
Functional application manager (FAM)*

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ABOUT THE LOGIC FACTORY

The Logic Factory (TLF) is an independent global supply chain planning and optimization consultancy focused on delivering lasting value and sustainable growth. We empower companies to improve performance by identifying what makes them unique and building tailored solutions for greater efficiency. From consulting and implementation to post-go-live support, we guide clients every step of the way to ensure business success. Trusted by single-site operations and global leaders alike, we build long-term partnerships grounded in collaboration and shared success—turning complexity into clarity and enabling smarter decisions for a better future.

Are you interested to know more? Get in touch.

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 [thelogicfactory.com](https://www.thelogicfactory.com)

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