Air France-KLM

Cloud and on-premises service provisioning and lifecycle management orchestration with HCM and OO improves time to market and boosts productivity by 400%.

Who is Air France-KLM?
Air France-KLM is a major global air transport player. Its main businesses are passenger transportation, cargo transportation, and aeronautical maintenance. It reaches over 300 destinations, transporting more than 100 million passengers a year.

Requirement to Deliver Services Faster and at Reduced Costs
IT Operations is a huge organization within Air France-KLM. It employs over 3,000 people and is responsible for 8,000 UNIX/Linux servers running over 2,000 applications from three datacenter locations. The IT organization serves 90,000 internal users. The travel industry has been hit hard by COVID-19. In these COVID and post-COVID times, IT costs are continually scrutinized, as Christine Nespoulous, Automation and Cloud Manager for Air France-KLM explains: “More than ever, our objective is to deliver services faster and at a reduced cost. Improving automation is the best way of achieving this. It reduces manual effort and human errors, while improving service quality.”

Air France-KLM has a long history with Micro Focus. In 2011 it implemented Micro Focus Operations Orchestration (OO) to automate end-to-end processes, adding Micro Focus Cloud Service Automation (CSA) to create a single management point.

Migration to HCM with OO Delivers an Improved Approach to Automating Processes
To gain broader cloud management and more powerful provisioning capabilities Air France-KLM more recently implemented Micro Focus Hybrid Cloud Management (HCM). Automation workflows were successfully migrated from CSA to HCM.

At a Glance

- Industry
  Transportation

- Location
  France

- Challenge
  Deliver IT services faster and at reduced cost in challenging times by improving efficiency at scale and introducing orchestration as code

- Products and Services
  Micro Focus Hybrid Cloud Management
  Micro Focus Operations Orchestration

- Success Highlights
  + 400% productivity improvement through parallel workflow execution and reuse
  + Cloud-based containerized environment promotes DevOps continuous delivery
  + Workflow creation in hours instead of days
  + Flexibility and ease-of-use through full integration capabilities
Over the years a rich service catalogue was built with over 300 unique self-service blueprint models for the end-users. As serving internal users, reducing inefficiencies, and streamlining automation practices grew in importance, the team recognized that continuous development and seamless communications between all components was crucial to future success. Air France-KLM needed to promote reuse, high automation scalability, and integration with other components, while creating a one-click self-service for customers. HCM and its embedded OO engine delivered flexible and swift deployment options across clouds and other environments, as well as Orchestration/Infrastructure as code, delivered through open source tool CloudSlang, a flow-based orchestration tool for deploying and managing services (e.g., applications, infrastructure services). It also facilitated DevOps use cases through the use of readily available integrations and workflows.

Trajce Golomeov, Automation and Cloud Technical Architect with Air France-KLM, comments: “We wanted to improve our efficiency at scale, and found that Micro Focus Hybrid Cloud Management (HCM) and its new workflow designer might be just the way to go. This enables people like me, who don’t have relevant advanced automation clustering experience, to create automated workflows in a matter of hours.”

Moving to an orchestration as code model also meant that large workflows could be converted to small reusable micro workflows which offer a better experience to customers via API. Approximately 450,000 workflow transactions are executed through the OO and CSA environment every year, so before making any new platform decisions, the Air France-KLM team hosted a one week workshop with Micro Focus Professional Services and R&D to identify any issues and correctly size HCM before starting the work. “We found we were missing some CloudSlang content we needed. Micro Focus R&D took the request on board and to our amazement it was resolved within four weeks.”

OO integrates with all of the platform components, such as VMware, Cisco, Terraform, and Ansible Tower, through API interfaces which are brokered via HCM. This gives flexibility and promotes workflow reuse. OO does not just orchestrate complex workflows, it also gathers statistics and KPIs for more advanced data-driven decision making at a business level. Large and complex workflows were split into sub-flows and organized into micro flows. These are less complex and can be activated in one-click via the service catalogue for tasks such as restarting a server or deploying a software-defined network.

Cloud-Driven Scalability, Reuse, and 4x Faster Workflow Execution

A library of thousands of out-of-the-box workflow items saves time automating virtually all repetitive IT actions. These can run in parallel, completely transparent to the master flow. “Concurrent HCM workflows execute up to four times faster than the traditional single-flow sequential execution, so there are huge time gains,” says Trajce Golomeov. “This gives us the scalability we wanted. In a full lifecycle management orchestration we have reduced our time to market and improved the quality of our service.”

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The new cloud-based architecture is containerized to support an agile, DevOps approach and continuous delivery. HCM tracks service usage and costs across all applications in development, testing, and production environments for full transparent optimization. “Having seen this early success, we now aim to move all our workflow development from OO Studio to HCM Web Designer,” concludes Christine. “We want to widely adopt orchestration as code and HCM Web Designer and give other teams the opportunity to contribute and benefit from our automation projects.”