THE ESSENTIAL ROLE ORCHESTRATION PLAYED IN BRAZILIAN RETAILER MARISA'S DIGITAL TRANSFORMATION



At Marisa, we are proud of our heritage of being a leading Brazilian retailer for 75 years. Much has changed since our founding, and one of the biggest recent changes happened within our IT systems. Our team was hired by the CIO to lead a major transformation project to break down silos and integrate data from all aspects of the business so we could better connect with our customers.

To get the new business insights we required, we knew we would need new tools. SAP[®] would remain our system of record, but beyond that we were not committed to keeping many elements of our current-generation system, which included Control-M. Our team had the freedom to completely modernize and select the software and other tools that would best fit our goals and future-proof our business. We used that flexibility create an infrastructure designed to take advantage of the powerful data, analytics, and reporting capabilities available today.

The result is a hybrid cloud environment with data being used simultaneously for analytics and other functions in multiple locations. Some of the key elements include:

- SAP Business Warehouse (SAP BW)
- Informatica
- Data Lake on Amazon Web Services (AWS)
- Azure Databricks
- SQL Server
- Amazon Redshift
- Power Bl
- MicroStrategy

- Airflow
- Control-M

Yes, Control-M is on the list, despite our initial thought that we would have to replace it because so many workloads and systems were being updated or replaced.

After we identified many of the elements that would be essential in our responsive new architecture, we began to focus on how we could integrate and orchestrate it all. The complexity became frustrating as we learned about the limitations that each component had for integrating its workflows with others. We had counted on Airflow to solve those challenges, but it had its own limitations. That was the point where we realized Control-M was not part of the problem with our IT systems, it was an essential part of the solution.

Our modernization was driven by the principle of bringing together data from more sources, using best-of-breed solutions. We saw that the limitations of domain-specific tools would be a barrier to realizing our vision and getting the most complete insights possible. We then took a closer look and realized that Control-M was capable of doing much more than what we had been using for. That includes its many integrations with modern data and cloud technologies, so our staff could continue to work with their preferred tools, while allowing Control-M to orchestrate all the operations.

The daily executive report we produce is an excellent example of how everything comes together. Known in the corporate offices as "The Newspaper," the report consists of a series of dashboards with data and visualizations that show all the leading business indicators and developments from the previous day. It shows daily sales by department and channel (physical stores, e-commerce) plus average receipts, margins, inventory levels, Net Promoter Score (NPS), supply chain updates, and much more. Like a real newspaper, the report relies on information from hundreds of sources and must be produced within strict service level agreements (SLAs). After stores close, we have seven hours to gather, process, and assimilate this data and deliver it to executives before their workday begins the next morning.

Various structured and unstructured data from point of sale (POS), customer relationship management (CRM), inventory, shipping, HR, and other systems is loaded into our SAP Business Warehouse. We use the data lake to produce 18 different reports that are customizable to different business operations and individuals. The process involves our enterprise resource planning (ERP) and all the other systems previously referenced.

Control-M plays the crucial role of being the overall orchestrator. Just for the file transfers to the data lake, Control-M executes 92 complex workflows that require integrations with 12 separate systems. Control-M's out-of-the-box integrations with Amazon S3, Azure Databricks, Informatica Cloud, and SAP have been integral, as has its connection profiles that allow us to easily build integrations to other environments. We take advantage of the integration with Airflow to orchestrate our data pipelines, enabling our development and operations teams to use the tools they know best, with Control-M handling the orchestration. Control-M is highly scalable and ensures Airflow jobs run reliably in production.

Control-M doesn't only connect all the pieces in our new environment, it continually monitors the workflows running across them to ensure we have no interruptions. We recently created a centralized enterprise monitoring center with integration between Control-M and our ITSM system at the core. As part of that process, we used Control-M to consolidate activities, thereby eliminating more than 200 recurring jobs. Control-M SLA Management proactively identifies potential workflow

execution delays and initiates fixes or notifications. We built a feature that automatically issues a notification via WhatsApp to the appropriate business and operations staff if there is a potential issue with their critical jobs. Our environment is much more complex than it used to be, but we are more responsive and data-driven than ever.

These are some of the successes we've achieved in the first year of our transformation program. There's much more we can do, and now we know Control-M will continue to support us as our systems modernize and our business evolves.

For more information on Control-M, visit <u>bmc.com/controlm</u>.