

 OpsMx +  SYMPHONY

Achieve On Demand Development Velocity

With OpsMx Intelligent Software Delivery



About Symphony

Symphony is a unicorn that offers a highly secure and scalable cloud based messaging and collaboration platform for financial institutions of all sizes, with bots and automation to improve everyday workflows.

The Challenge

Quickly deliver innovation to rapidly expanding clientele without compromising on security

Symphony provides a collaboration platform for financial institutions that are highly regulated and render services to millions of customers. Meeting these rigorous standards means maintaining the utmost level of security and regulatory compliance.

They were looking to deploy a major update to their platform that will enable a multi-tenant system. This will allow Symphony to allocate dedicated resources for each client to achieve maximum performance.

One pain point is that their existing system uses a CI value stream that creates bottlenecks in achieving maximum performance. Their distributed SaaS platform (with an ever-growing number of pipelines and software delivery environments) increased the burden on human resources and increased infrastructure costs. Maintaining compliance standards with an increased scale of operation was getting difficult.

Any security vulnerability introduced during delivery will cripple business they are supporting. To avoid this, Symphony needed a completely new continuous delivery (CD) solution for both infrastructure and software that they could retrofit into their existing platform.

Symphony needed everything delivered within 90 days and chose OpsMx to solve the following challenges.

Symphony took at least one day to onboard new customers.

Continuous Delivery processes were not mature.

Symphony only had 90 days to transform their software delivery process.

Need for an Agile Infrastructure

Symphony applied changes to the production system using manual steps and complex scripts on Terraform. Idling systems were hard to manage and inflated costs. Finally, the process for deploying new infrastructure to onboard new customers needed to be shortened and simplified.

They needed a curated, bespoke product delivered with limited time and resources.

Diverting from Core Expertise

Symphony was considering open-source software to resolve issues, but that would have forced them to allocate key resources to building something from scratch. Another option was building a Blue-Green deployment strategy and a central dashboard with granular control over the pipeline. Unfortunately, the luxury of extra time and resources was not at their disposal.

OpsMx enables our customers to keep delivering value to their customers without having to worry about release and compliance risk.

Need for a Hardened CD Platform with Security Features

Security and complete confidentiality are in our DNA

----- Ravi Varanasi, SVP of Engineering at Symphony.

To attain higher velocity of deployments, Symphony needed to rebuild the process of secure software delivery. Everything from access to authorization, certificates management to audit, and from internal system communication to external integrations needed a flexible framework.

The expectation was to put together a verification check throughout the delivery process that provided deep insight into risks, informing approvals, and maintaining velocity.

Meeting Demands of the Business

Moving changes from development, to test, and finally to production was complex. Tenant Infra deployment was not keeping pace with needs and clients had to wait for their product. With expanding pipelines, SREs were burdened with troubleshooting, and this increased triage time as well. To tackle the problem instantly, they needed a platform that guided the SREs to the problem area rather than wasting their time on troubleshooting the source of the problem.

No compromise on security

SREs are expensive and work satisfaction means a reduction in menial tasks was necessary.

“Isn't solving the issue more fun than finding where the fault is?”

Why Symphony was drawn to OpsMx

OpsMx ISD Platform: The One-stop Solution for Symphony

OpsMx ISD is a modern continuous delivery platform designed to increase speed of delivery safely and securely without human intervention. Symphony chose OpsMx to build their platform of choice because OpsMx has the expertise and proven mettle. With limited time, they trusted OpsMx to complete the transformation.

Symphony needed to set up loops with variable targets, but it wasn't inherently possible because the Spinnaker model is a declarative pipeline workflow. Managing a fleet of target deployments would have been a nightmare without solving this issue with Spinnaker.

The expertise of OpsMx enabled Symphony to overcome this roadblock to create custom stages. They took in a set of targets and invoked pre-configured pipelines for respective targets. Each target received its own delivery pipeline instance and could be rerun independently or rolled back. All targets were treated as one set with "all or nothing" or "independent" tags for determining overall success/failures. In addition, execution of several parallel items enabled continue/stop actions on failure.

The intricate level of customization offered by OpsMx and the extensibility of ISD ensured that the OpsMx platform could be easily retrofitted into Symphony's existing system. An added intelligence layer named Autopilot eradicated the problems that SREs were facing. The platform removed the burden on SREs and front-end support teams, ensuring maximum customer satisfaction.

In depth source code customization of Spinnaker for bespoke requirements.

OpsMx assures a retrofit on any existing platform under the sun.

OpsMx Delivered Innovation with Trust and Reliability

Automated Onboarding of new Tenant

Symphony automated their entire end-to-end CI/CD process using the OpsMx ISD Platform. With the help of target blueprints, they were able to automate pipelines from code commit to production deployments. The blueprints ensure that pipelines are replicated with the click of a button to onboard a new customer. This allowed Symphony to reduce the time to onboard new clients by 98%. It takes just 10 minutes to get the infrastructure and platform ready for the client.

As Symphony continuously increases the number of services provided to customers, these automated pipelines with granular control ensure safety and security.

On-boarding time reduced from

One day to
10 Minutes

Optimization of resource utilization saved capital.

More time for developers to ponder and innovate

Cost Optimization

ISD supports deep integration with Terraform. Symphony used the OpsMx ISD platform to create a new infrastructure deployment solution that automates the creation and destruction of test environments throughout the application lifecycle. This solution is fully integrated with the delivery process, dramatically reducing infrastructure cost.

Policy checks across stages to ensure compliance, without compromising delivery speed.

Seamless and Secured Continuous Delivery

OpsMx created a bespoke security framework for the development, test, and SRE teams. Autopilot, the intelligence layer, relieves the burden that SREs previously had to manage. The human effort to find an issue was time and labor intensive. Errors happen for multiple reasons — from a DB configuration, code error, compliance issue, terraform script or because of a simple dependency. With ISD, the SREs no longer have to spend hours unearthing the source of the issue.

Autopilot also allows Symphony to enforce policies throughout the pipeline. AI algorithms manage compliance checks at every stage of the pipeline. This helps by putting red flags on erroneous codes or configuration, which notifies SREs to act.

While SREs were freed from the daily toil of troubleshooting, teams saw a significant improvement in their deployment velocity. As promised, OpsMx delivered velocity without compromising security.

Deployment improved:

2 per week to
50 per day

Result:

Transformation in 60 Days

OpsMx crossed every hurdle and delivered innovation in a short span of 60 days, completely transforming Symphony's software delivery process.

Automated tenant creation and tenant update delivery times went from days to minutes. This delighted customers, enabling Symphony to innovate faster and deliver at speed with confidence. With an ever increasing number of services for each tenant, Symphony has now streamlined and automated their entire CI/CD pipeline safely and securely.

OpsMx ensured that Symphony's platform is future proof and powered by artificial intelligence to improve efficiency with time.