# Turbocharging a trading platform and trading-up from Red Hat to Morpheus

**MORPHEUS**

A leading EMEA based FinTech Company specializing in optimizing high-speed financial trading, this customer is supporting dozens of exchanges, hundreds of firms, and thousands of end-users with a wide variety of SaaS platforms and software products. With clients in over 40 countries, they are on the cutting edge of algorithmic design and execution of trades to help aggregate trading actions and empower financial professionals to move faster than their competitors... and **in this industry time is money**.

The mission of this company is to power a variety of trading markets and to be an integral part of their client's brokerage operations both in Europe and around the world. Innovation has been a core value for decades and now that genesis is extending into a next-gen artificial intelligence-based trading platform.

## CHALLENGE - MAJOR GAP BETWEEN DEV & OPS

With over 5,000 users on this mission-critical platform, the organization needed effective DevOps to rapidly deliver new features that would satisfy user demand and outpace other providers in this highly competitive market. Recognizing that lack of agility was holding back the business, the leadership put a significant focus on DevOps but while the Dev part of the equation was moving fast, the Ops team had yet to transform.

Unfortunately, centralized IT operations were still utilizing legacy approaches to provisioning and software release. **This meant rolling out new software features could be delayed up to 6 weeks**.

Dev teams had their front end of the process designed to continually integrate new features into builds however merging those branches and putting them into production was painfully slow – requiring dozens of hand-offs between siloed infrastructure teams.

As an example, creating a logical test environment required provisioning 20 different machines then replicating that stack 10 different times. Rolling out that full environment took months which meant shortcuts had to be taken in the test phase, in turn increasing the risk of downtime because test and QA did not fully conform to production specifications.

These challenges also caused cultural problems, creating a rift between app-dev and IT operations teams. The organization recognized that **the only way to succeed in their DevOps initiative was to enable true self-service for development teams**.

> *"By 2023, 90% of enterprises will fail to scale DevOps initiatives if shared SELF-SERVICE PLATFORM approaches are not adopted."*
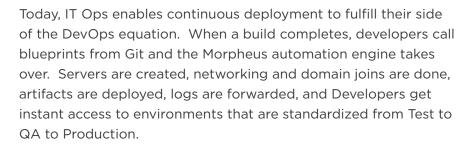
**Gartner**

The team ran a rigorous proposal and PoC process with several vendors, but because of the requirement for DevOps and Infrastructure-as-Code (IaC) they were able to remove first-generation CMPs and other Ops-centric tools from consideration.

Ultimately the decision came down to Morpheus vs the combination of Terraform and Ansible Tower. This pairing can be a challenge as individually, neither can manage the full lifecycle from application to infrastructure.  With Morpheus, this wasn't a problem.  As a full-stack unified operations platform, the unified and application-centric focus of Morpheus dramatically simplified orchestration while improving security.

As an example, for Windows apps, Ansible Tower required workarounds that impacted velocity.  Morpheus on the other hand provided seamless integration Linux and Windows plus unique integration with Ansible eliminated the need to open SSH or WinRM ports, a security bonus that earned points with the InfoSec team.

## TECHNOLOGY STACK

- **Morpheus**
- **VMware vCenter**
- **Microsoft Active Directory**
- **Microsoft DNS**
- **Infoblox IPAM**
- **Chocolatey Package Manager**
- **Octopus Deploy**
- **Git Repository**
- **Splunk Logging**
- **Ansible  (no Tower required)**
- **PowerShell**

Today, IT Ops enables continuous deployment to fulfill their side of the DevOps equation.  When a build completes, developers call blueprints from Git and the Morpheus automation engine takes over.  Servers are created, networking and domain joins are done, artifacts are deployed, logs are forwarded, and Developers get instant access to environments that are standardized from Test to QA to Production.

This workflow is applicable for both VMs and Containers.  Morpheus connected to their existing Docker Swarm deployment but as they start to evaluate Kubernetes, they know they will not need to make material changes to their workflow because Morpheus has already abstracted the underlying dependencies.

## RESULTS - FRICTIONLESS DELIVERY

The provisioning process has been transformed and Ops is now perceived as an agile enabler of business value.  The multi-week roll-out process for application updates now takes just **7 minutes from start to finish**.

Even better, the organization found a platform to bring Dev and Ops together which in turn completely changed the mindset of the organization.  Everything is now immutable from apps to upgrades and even documentation.  If a change is required, they can rapidly 'crush and create' new environments on-demand.

The selection of Morpheus for end-to-end orchestration in place of Red Hat Ansible Tower + CloudForms and HashiCorp Terraform has **saved hundreds of thousands of dollars** in both software cost as well as service and maintenance.

The organization has improved the quality of application deployments.  They are able to constantly refresh their production environment which means they can decrease bugs, rapidly apply security patches, release more quality code, and ultimately provide a better experience for thousands of users.

*"Get business buy-in up front and make sure you get top-down support"* says the Head of Technical Operations.  He also highlights that establishing a cross-functional team was critical to driving the cultural change benefit at the same time they were making a technology shift.

It was also evident that while they received significant benefits from provisioning automation, the benefits were amplified by developer self-service and integration into the continuous delivery pipeline.  The whole operations team highlighted that when you are a software company, having happy developers and a frictionless release process is the fastest path to profitability.

When asked about their relationship with Morpheus, this IT leader was proud to report that *"the Support from Morpheus was amazing… all the way from sales to engineering and delivery.  Our direct access to the development team helped understand the product.  We were all really impressed with the speed and agility of the organization.  It feels like a true partnership, not just a sell and go."*

# Learn more at www.morpheusdata.com

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