SUSE

ALLANGRAY

99.8%	30x
faster business application deployment (from one day to a few minutes)	increased frequency of business application deployments

Allan Gray

Industry and Location
Banking & Financial Services |
South Africa

Products and Services
SUSE Rancher
SUSE Support

Allan Gray accelerates DevOps strategy and cuts time to market with SUSE Rancher

Success
Story

At-a-Glance

Wanting to hasten the delivery of new services, Allan Gray adopted DevOps methodologies, but not without challenges. Financial regulations require detailed accounts of changes in code; they also require clear separation between development teams and sensitive customer data. How could Allan Gray build an effective DevOps strategy while maintaining regulation compliance in addition to limiting system downtime when applying updates? Committed to leading the company's financial services into the digital age, Allan Gray's IT department found a solution in open source technology – Kubernetes clusters and the SUSE Rancher management platform.

Introducing Allan Gray

Founded in 1973, South African firm, Allan Gray has become Africa's largest privately-owned and independent investment management company. Its customers invest through a focused range of unit trusts, retirement products and life insurance investment pools. Allan Gray delivers these service offerings through its two divisions: the retail side serves individuals; and the institutional side serves companies, trusts and foundations. Allan Gray offices can be found throughout South Africa, Namibia and Botswana, supporting a 1,200 person workforce committed to generating long-term wealth for clients.

DevOps and the need for open innovation

In the mid-2010s, Allan Gray understood that in order to stay relevant in the digital age it would need to deliver new and better digital services faster. To bring its vision to life, the company turned to a DevOps and microservices-centric IT model, but several common obstacles stood in its way.

Until that point, the IT department ran a traditional server-based architecture. Feature teams would work on the development side, then send things to the op-

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erations team for production. This worked well for many years until the monolithic nature of legacy processes slowed the company's ability to innovate.

As developer and operations teams began integrating processes, per DevOps standards, Allan Gray began implementing Docker containers to support these new, integrated workflows. Container technology promised to provide a consistent, common environment for project teams to collaborate. They also promised the kind of granularity needed to accelerate new service innovation. For Allan Gray's IT management, choosing open source software to support container management methodology was a given.

"We like open source systems because, in many circumstances, they tend to have better features, reliability and flexibility than propriety solutions," states the IT delivery team lead at Allan Gray.

After deploying early iterations, however, the team suffered periods of costly downtime, accrued during update cycles. When everything was Dockerized but not on Kubernetes, deployments would have to wait for a once-a-month release.

Additionally, when considering container management options, the team required the ability to ensure regulatory compliance. Deploying even a simple change

could be cumbersome, as regulations require a level of traceability, auditability and control. Could a system automate these requirements?

The hunt was on for a solution.

Maximizing DevOps efficiencies with Kubernetes and SUSE Rancher

By the late 2010s, Allan Gray had successfully addressed the shortcomings of its early DevOps systems with open source container management solution, Kubernetes. "Before Kubernetes, we could foresee our DevOps model wouldn't reach the scalability we needed for growth," says the IT delivery team lead.

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With teams now responsible for their own applications in production, Kubernetes ensures security policy enforcement. "Kubernetes allows us to enact, at scale, a set of controls necessary for financial services regulation," the IT delivery team lead explains.

Additionally, Kubernetes supports the company's microservices architecture. The IT department learned microservices are great, but only if some process and infrastructure concerns were resolved: like having a well-oiled deployment process. A well-oiled monitoring process would also be critical in ensuring systems don't get out of hand, due to the increase in moving parts. "Kubernetes allows us to oil that machine a little bit better," says the IT delivery team lead.

Kubernetes also serves another distinct purpose, where teams need some form of continuous integration and deployment. Allan Gray needed a place to put applications for testing, and the Kubernetes cluster is where it spawns these short-lived test environments, as needed. These are destroyed when the testing is finished.

As comprehensive a solution as it was, however, Allan Gray soon learned that the value Kubernetes' brings doesn't reside in the distribution layer but in the manage-

ment layer. So, the team started looking for a unified management plane to bring greater control and visibility to the growing Kubernetes estate.

"The first Kubernetes distribution we attempted was used in both development and production," says the IT delivery team lead. "But the main problem that emerged over time was availability and redundancy. Whenever we needed to do server or software updates, we required downtime on all our systems — including the systems not on the cluster because they depended on services in the cluster."

When compared to alternatives, SUSE Rancher stood out. It could be run with no service interruption whatsoever. And it didn't stop there.

A single pane of glass

SUSE Rancher is a unified management platform for simplified Kubernetes cluster orchestration, infrastructure operations and granular security controls. 100% open source, SUSE Rancher provides a single pane of glass through which an entire Kubernetes ecosystem can easily be viewed and managed. For Allan Gray, SUSE Rancher means zero downtime, faster time to market and automated regulatory controls.

![SUSE logo]

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"SUSE Rancher doesn't require downtime for system updates or deployments," says the IT delivery team lead. "What this has done for Allan Gray is increase system stability and improve employee morale — no more all-nighters to make sure everything works. Plus, teams can iterate faster; they don't have to wait a month to get a change implemented. Now, there are 20 deployments happening each day."

Facilitating this new, microservices-centric architecture, SUSE Rancher has also driven the ability to scale at speed. The team notes: "We now have the ability to click a button and double our scale. It now takes us a few minutes to load new applications whereas before it took at least a day. That's 99.8% faster!"

Another benefit to the company, teams developing business functionality are now less concerned with infrastructure, which doesn't make the business money. They can now deploy things into production and client-servicing functionality with greater confidence and reliability.

Because of SUSE Rancher's ability to support high availability and roles-based access controls (RBAC) for thousands of clusters and nodes, teams can also deliver services faster while remaining compliant.

"It allows us to give teams the tools to administrate and own their own applications while still keeping a significant barrier in place to mitigate regulatory concerns," says the IT delivery team lead about how Kubernetes and SUSE Rancher have simplified processes and enabled regulatory compliance through all DevOps workflows.

SUSE Support has also been instrumental at helping Allan Gray navigate the unknown on its voyage of transformation. The team states, "SUSE Rancher Support is the best out of all third party vendors that the DevOps team works with. We see fantastic turnaround times, and the people on the phone actually have

technical knowledge — they're not your standard call center agents. This all gives us confidence that when issues come up, they will always get resolved quickly."

Growing adoption

Illustrating the success of the implementation, Allan Gray has expanded the use case for its new environment. The Kubernetes and SUSE Rancher solution was meant to be the platform on which the retail side of the business was built. It worked so well, the institutional side of the business has begun to adopt the solution, as well.

Today, about 10% of IT systems across the company run on a Kubernetes cluster, managed by SUSE Rancher. Kubernetes has also helped the company attract new talent at a faster pace. "Hiring people who are familiar with our legacy systems is growing increasingly difficult — it takes longer to fill empty headcount," says the IT delivery team lead. "Advertising positions with skill sets for open source technology has allowed us to attract a healthier stream of candidates."

What's next for Allan Gray?

Armed with the tools for faster innovation, Allan Gray is a paragon of DevOps efficiency and productivity. As it continues to migrate legacy systems to its modern infrastructure, Allan Gray plans to move its containerized Kubernetes environments to the cloud beginning in 2022. Fortunately for the company, SUSE's commitment to open source philosophy enables Allan Gray to select its hyperscaler of choice, whether it be AKS, GKE or EKS — all of which have full lifecycle management with SUSE Rancher.

Benefits

- 99.8% faster business application deployment (from one week to two minutes).
- 20 new deployments launched each day versus previous cadence of once per month.
- Healthier stream of new hire candidates.
- 0 downtime for applying updates.
- Improved morale among IT staff.

Find out how SUSE can help you become an innovation hero!

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