



Absa

Industry and Location
Banking & Financial Services | South Africa

Products and Services
SUSE Rancher
K3s

75%
reduction in
overhead costs

80%
reduction in
management time

80%
reduction in
outages

Absa: Driving Scale and
Innovation in African Banking

Success Story

At-a-Glance

Absa's focus on pushing the boundaries of digital banking has enabled them to create the banking landscape of the future. The third largest OpenShift user in the world, Absa considered alternative technologies when the time came to renew their licenses in 2017. Discovering that SUSE Rancher could not only provide increased agility but also greater efficiency in every respect, the company now uses SUSE Rancher as the default application for all of its banking applications.

Introducing Absa

Absa Group Limited (Absa) was founded 30 years ago in 1991. The Group, which offers an integrated set of products and services across personal and business banking, corporate and investment banking, wealth and investment management and insurance, has since risen to become the second-largest bank in the African continent. A commitment to finding innovative local solutions to uniquely local challenges has fueled the rapid growth of Absa.

While a major player in the African banking industry, Absa has international offices in London and New York City and employs more than 38,000 staff working in 14 different countries.

The Journey to Containers

Absa's mission is to push the boundaries in digital banking and continually innovate to create the banking landscape of the future.



Naturally then, technical innovation is at the forefront of its strategy. The technology team at Absa has long been aware of the benefits of Kubernetes, which it deployed in 2016. At that time, SUSE Rancher's Kubernetes platform was still evolving, so Absa became a user of OpenShift.

In late 2018, with renewal on the horizon, Absa decided to review its options. The organization's growth meant that, while OpenShift had served the business well, it had its limitations. It had become difficult to manage, and costs had started to climb. Consequently, the team decided to diversify and started exploring the market for solutions that would free the team from the complexities and scaling issues that come with a mega-cluster methodology.

After reviewing several options, the team realized support for multi-cluster, multi-cloud and hybrid deployments was critical. Facing high costs and licensing complexities with some options, SUSE Rancher was the optimal solution—from a cost, usability and, most importantly, an innovation point of view. Absa doesn't just innovate for its benefit, but also for the African banking industry at large, so it needed a model that could galvanize the wider banking community.

“At Absa, we strive to develop services that make a real difference to the lives of our customers and the African banking industry as a whole. Being able to innovate at speed and scale is critical for us.”

Zak Anderson
Head of Bison Kubernetes Service
Absa

A significant reason for selecting SUSE Rancher, therefore, was its open source nature, which has allowed teams to work together at the engineering level to gear solutions specifically for finance. Absa wanted to shape the technology that could benefit the entire region—partnering with SUSE Rancher enables that.

After a two-month proof of concept (PoC) in 2019 and a weeklong architectural workshop and training completed in the same quarter, Absa signed a contract with SUSE Rancher Labs in September. Within three months, Absa had its first application running in production on SUSE Rancher.

What Were the Challenges Absa Wanted to Solve?

Driving scale: the move to multi-cluster computing

As a business committed to customer innovation, Absa knew it must become more agile and that its technology infrastructure must scale to hasten development velocity. If the company were to get new services to market quickly, the technology team knew scaling its legacy, monocluster architecture

would be a struggle, and would get more expensive as projects proliferated.

The team needed an efficient way to achieve real scale without accruing serious costs. The best way to get there would be to create a multi-cluster, microservices-based environment running in SUSE Rancher. Here, applications could be separated and managed in isolation but still side-by-side within a central management platform.

The beauty of this approach is twofold. Firstly, Absa’s Kubernetes team can have as many clusters as they need and scale them rapidly without amassing additional costs. SUSE Rancher’s per-node licensing model means that scale doesn’t have to be a financial consideration. This has freed the Absa Cloud team and legion of developers to innovate and experiment.

Secondly, new applications can be developed as standalone cloud-native microservices that can run in their own clusters, in a choice of environments and in any cloud. This means applications are now completely portable and can scale in an instant. They can also be managed and

“Working in collaboration with SUSE Rancher, we had our first application in production within two months of signing the contract. We have now migrated all our applications to the platform.”

Zak Anderson
Head of Bison Kubernetes Service
Absa

updated away from the infrastructure core, improving stability.

Absa Vehicle Asset Financing (AVAF), which thousands of African car buyers use every year, was the first application to migrate to SUSE Rancher. Absa has now migrated the entire application estate, and SUSE Rancher is now an important deployment platform for all Absa’s banking applications.

Achieving efficiencies and reducing costs

The team realized it needed a platform that would automate several basic processes so that developers would spend less time on administration and more time on application innovation. By removing this administrative layer, SUSE Rancher brings developers closer to the architecture itself and deeper into the cluster’s performance. Access control is automated, and rules-based security policies mean less time configuring and more time developing.

The mission to reduce overhead was also high on the priority list and was achieved with SUSE Rancher. Some licensing models are overly complex; some insist on licens-



ing per core, which results in significant costs at scale. SUSE Rancher’s one-node licensing structure decouples cost considerations from architectural discussions and reduces cost concerns. Users are licensed per node on-prem or in the cloud—no matter what how complex the infrastructure, it’s a simple one-node license.

SUSE Rancher has not only proved more cost effective than alternatives, but it is also reducing day-to-day management overhead. Its open source nature also allows ongoing flexibility and provides a platform for long-term growth. Anderson estimates

“Working with an experienced partner like SUSE Rancher, we enjoy a better security posture and remove the challenges inherent in managing multi-cluster environments.”

Zak Anderson
Head of Bison Kubernetes Service
Absa

overall management costs have been reduced by 75% in SUSE Rancher.

Boosting security and resilience

Resiliency in Africa is a complex issue and one that Absa has been working closely on to solve; bringing maximum uptime and making sure all applications are fully resilient. The biggest problem stems from the lack of interconnection between regions and, more importantly, a lack of consistent compliance standards across the wider industry. Working with SUSE Rancher to enhance security and take away the complexity of multi-cluster management has been critical.

What's Next for Absa?

The team has already migrated its application estate to SUSE Rancher. Absa's on-premises footprint will also be extended into the cloud, using the same best practice and multi-cluster management techniques. This will not only bring seamless patching and upgrades but, importantly, application portability.

Absa's fully resilient, self-healing platform, built in-house and supported by SUSE Rancher Labs, has been the catalyst for the bank's rapidly increasing infrastructure

transformation. SUSE Rancher's licensing simplicity means the company no longer needs to worry about “on-premises versus cloud,” and has allowed it to continue to scale without incurring any additional costs.

The company has always wanted to reduce its maintenance costs and is now looking at how they manage systems on-premises and in the public cloud, with the ability to port workloads between the data center, the cloud and the edge. Using K3s—a lightweight Kubernetes distribution for the edge—Absa is now exploring how it can replace costly and outdated systems across its network of branches with local processing capabilities.

Timeline

- 2017: Old infrastructure renewal cycle prompts market review
- Late 2018: PoCs with several vendors
- 2019: Relationship begins with SUSE Rancher Labs
- 2020: Absa now has 130 clusters running under 12 management servers
- End 2020: finished migrating entire container estate to Kubernetes and SUSE Rancher

“Creating open source solutions has always been a focus, so we love that SUSE Rancher is 100% open. Absa is active in developing open source solutions for the banking industry. We are also a CNCF contributor with the K8GB Solution built in-house. By working with the team at SUSE Rancher, we can easily gear solutions toward solving the issues facing our sector.”

Zak Anderson
Head of Bison Kubernetes Service
Absa

Benefits

- 75% reduction in overhead costs in SUSE Rancher compared to other vendors
- Management time reduced by 80%
- 80% improvement in stability
- Multi-cluster, multi-cloud capabilities not available elsewhere
- Fully resilient, self-healing platform that can tolerate multiple infrastructure failures
- Multi-application catalog and ease of use; provisioning with seamless effort
- A comprehensive Platform-as-a-Service capable of running code securely within SUSE Rancher’s central framework
- Open source made easy

“The simplicity of SUSE Rancher’s licensing meant we didn’t need to worry about cloud versus on-prem deployment and could continue to scale and transform our infrastructure without additional or unexpected costs.”

Zak Anderson
Head of Bison Kubernetes Service
Absa

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

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