dimension data

ING DIRECT becomes Australia's first cloud enabled bank

Challenge

- Find a way to update its online banking platform without interrupting services.
- Increase the pace of service innovation, and give itself the ability to quickly develop, test, deploy and rollout new online services.

Solution

- A Zero Touch system for the entire bank in order to eliminate downtime caused by physical provisioning and back-ups.
- Microsoft, Cisco and NetApp technologies were used to build an automated compute platform in a private cloud.

Result

- ING DIRECT can now test and update banking applications in the cloud without any downtime.
- Customers enjoy online banking continuity, with services that are continually updated.
- ING DIRECT can scale infrastructure up and down as needed, increasing agility and reducing costs.
- Disaster recovery with 24/7 monitoring.
- ING DIRECT has simplified complex IT processes and reduced the number of platforms, dramatically decreasing the cost of deploying and managing IT.

"We're the **first bank** in Australia to adopt fully **cloud computing** and the **benefits have been very substantial**."

Simon Andrews,
Chief Operating Officer,
ING DIRECT

ING DIRECT

Challenge

All-online bank, ING DIRECT, needed to bring innovation to its clients—faster

ING DIRECT is a challenger bank in Australia. As a wholly digital business, it relies on technology to provide its 1.5 million customers with a seamless banking experience. When the bank needed to bring new products to market, however, there was no choice but to schedule service outages – an unwelcome prospect for a wholly online bank. ING DIRECT turned to Dimension Data to help it find a better way.

Introducing Zero Touch

The solution was simple, but had never been done before. ING DIRECT developed the concept of 'Zero Touch': a high-performance, flexible, automated private cloud platform for the entire bank. The beauty of the Zero Touch concept lay in minimising human interaction. It would enable ING DIRECT to meet its customers' online needs by exponentially speeding its release of new products to market.

To make Zero Touch a practical reality, ING DIRECT decided to virtualise and clone all its banking applications. This would require a single, integrated private cloud with automated IT provisioning and always-on infrastructure.

ING DIRECT consulted Dimension Data, which had already helped the bank to virtualise and clone its banking environment for testing purposes with its 'Bank in a Box' platform. "This time, we weren't moving parts of the bank to the cloud; we were moving the whole bank to the cloud," recalls Simon Andrews, Chief Operating Officer of ING DIRECT. "This was not a small scale operation."

Solution

Implementing a single, integrated private cloud

The solution required a mix of technologies from Cisco, NetApp and Microsoft, and ING DIRECT chose Dimension Data to bring all of these parties to the table. This, in turn, created a need for a robust management and orchestration solution that could work seamlessly with each vendor's technologies in a private cloud.

Dimension Data worked closely with ING DIRECT to propose the ultimate technology solution, which was designed and built using Cisco, NetApp and Microsoft reference architectures.

"The key building blocks include Cisco UCS for high-density compute, Cisco Nexus and ASA for network and security, NetApp for modular, dynamic storage and F5 for application delivery," explains Dimension Data Solutions Architect, Chris Waddington. "We used Microsoft Hyper-V and System Center for the virtualization, management and orchestration layer."

The Zero Touch system was deployed in a private cloud using existing ING DIRECT data centres. This private cloud now hosts all of the bank's customer applications, alongside a replica testing environment that provides lifecycle management for cloud components and business services.

Result

Higher availability and performance

ING DIRECT opted for active/active architecture, making Zero Touch a highly available, resilient system designed for 99.99% availability. This is a massive tick in the box for ING DIRECT, as a wholly online bank.

Real-time synchronous replication ensures that ING DIRECT data is hosted in multiple places at once. If the bank experiences a failure in one location, there is immediate and seamless switchover to another.

In addition, constant application monitoring and automated remediation ensures the bank's services perform at peak, so its customers enjoy optimal performance at all times.

Secure, seamless updates

Gone are the scheduled outages. ING DIRECT can now update applications while its customers are still banking online. Once the replicated version is updated, the next wave of customers is automatically connected to the newer version, resulting in zero customer downtime.

Where it once took days to plan and perform data centre disaster recovery tests, ING DIRECT can now switch or failover the entire banking environment using Microsoft automation and orchestration. Immediate disaster recovery gives the bank maximum security and helps maintain 24/7 up-time.

In addition, a new 'garbage collector' technology, which verifies whether or not resources can be removed, helps mitigate risk.

Reducing costs and unleashing innovation

The Zero Touch transformation project enabled ING DIRECT to significantly reduce the number of IT platforms; reducing overheads in the data centre, lowering capital lifecycle costs and consolidating in-house technical skills.

Through orchestration, automation and standardisation ING DIRECT has been able to simplify complex IT processes. This has dramatically decreased the cost of deploying, operating and managing infrastructure and workloads.

With the automated lifecycle management and self-services optimisations made available with the introduction of the Zero Touch private cloud, the ING DIRECT IT team are more free to focus on strategic planning and business innovation.

Better business agility

Now that ING DIRECT operates in a private cloud, it can scale infrastructure up and down as needed, improving flexibility and cost-efficiency. Real-time monitoring helps the bank spot trends and plan for future demand.

The bank can also quickly set up virtual machines to test new releases, allowing them to rapidly approve new versions of banking applications. This fast and responsive workflow lets them quickly react to market changes and customer demand.

Rapid change and release management means the ING DIRECT IT team can develop, test and release new workloads far more quickly than before. Ultimately, this means ING DIRECT customers now enjoy service continuity, rapid product innovation and ongoing quality enhancement.

Services overview

- Microsoft System Center provides management and orchestration.
- Microsoft SQL Server hosts core banking operations.
- Cisco Unified Computing System enables high-density computing.
- NetApp provides modular, dynamic storage.
- Microsoft Hyper-V enables server virtualisation.
- Windows Server 2012 provides a standard operating environment for applications.
- Redhat Linux provides the cloud-based operating system.