ING DIRECT accelerates innovation with one-click provisioning copies of the bank

ING DIRECT

Executive Summary
Dimension Data worked with ING DIRECT Australia to develop and deliver an integrated solution that enables in-house developers to provision new copies of the entire bank’s business and infrastructure applications in minutes, speeding up the time it takes to test new ideas and take them to market.

Client Overview
ING DIRECT is the world’s leading direct savings bank and is wholly owned by the global ING Group. Launching in 1999, it pioneered branchless banking in Australia, reinventing the way Australians bank. It went on to revolutionise the mortgage market with straightforward home loans, growing to become the country’s fifth largest mortgage lender. It now has more than 1.5 million customers with A$26 billion in deposits and A$38 billion in mortgages. The bank’s award-winning team of 950 people is proud to continue this history of innovation, with an in-house IT team of 150 employees managing the entire bank’s software and application development.

Business Challenge
With a large project backlog, the development and test infrastructure at ING DIRECT Australia could not meet the bank’s appetite for innovation. The bank’s in-house team of 49 developers and 18 testers needed a faster way to create new copies of the bank so they could accelerate time to market for new products and services.

“We’re a very innovative bank,” says Ben Issa, Head of IT Strategy, ING DIRECT Australia. “People were coming to our team asking us to test the impact of their ideas on our complex banking environment. We could only test so many projects at once, so we had long lead times. As a strategic priority, we needed to deliver innovation faster.”

With provisioning a single copy of the bank for testing taking eight people three months, ING DIRECT wanted to fully automate end-to-end provisioning, making staff more productive and focusing on the things that matter. “Our team is lean and efficient and very engaged, but our delivery model severely limited how many concurrent projects and changes we could manage,” says Andrew Henderson, CIO, ING DIRECT Australia. “We asked ourselves: How can we speed things up in a smart way?”

The ING DIRECT team had a vision: to provide a copy of the bank to anyone, at any time, for any purpose. This includes the full set of the bank’s applications, services, configurations and 5.5 terabytes of data. “What we were looking for was a Bank in a Box, an instant environment that reproduced our own in all its complexity,” says Henderson. “We recognised that getting this right would be an important part of transforming IT to a strategic enabler.”

results:
• Eliminated the time associated with environment provisioning from 12 weeks to 10 minutes.
• Improved developer productivity with self-service provisioning replacing a process that previously took eight people three months.
• Streamlined requirements, development, test and deployment phases of delivery into one integrated end-to-end solution enabling ING DIRECT to deliver new projects faster.
• Significantly reduced the cost to provision new copies of the bank.
• Leveraged the solution to free ING DIRECT developers to focus more on differentiating the bank with an efficient and accessible platform called DIRECTLabs.
• Established a cloud-enabled operating model, laying the foundation for more efficient cloud-based business processes in future.

industry:
Financial Services

country:
Australia

business challenge:
Develop, test and deploy banking applications more quickly and efficiently.

solution:
Worked closely with ING DIRECT and vendors to prove and integrate a new delivery architecture featuring Cisco hardware, NetApp storage and Microsoft software.

services:
Integrated hardware, software, professional services and managed services across all three vendors and client.

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• Leveraged the solution to free ING DIRECT developers to focus more on differentiating the bank with an efficient and accessible platform called DIRECTLabs.
• Established a cloud-enabled operating model, laying the foundation for more efficient cloud-based business processes in future.
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Andrew Henderson, CIO, ING DIRECT Australia

Solution Delivered
After thoroughly evaluating vendor offerings, ING DIRECT developed a vision for Bank in a Box, a fully integrated solution that would enable rapid provisioning of complete environments, accelerating time to market for new ideas.

Developed collaboratively with ING DIRECT and vendors Cisco, NetApp and Microsoft, the Dimension Data solution features data centre infrastructure built on Cisco Unified Computing System (UCS), Cisco Nexus switching and NetApp storage with Windows Server 2008 R2 Hyper-V virtualisation technology. It is fully integrated with the tool suite used by developers and testers at ING DIRECT, including Microsoft Visual Studio with Team Foundation Server and Virtual Lab Management, allowing them to provision environments easily as part of their workflow. Behind the scenes, Microsoft System Center orchestrates the provisioning processes for them.

“Cisco’s server infrastructure helps us break down data centre silos and establish a single compute platform that’s completely integrated with those of other vendors,” says Issa. “NetApp technologies help us offload the storage seamlessly behind the scenes without overloading our infrastructure, saving a huge amount of network bandwidth, storage space and processing power. For one environment that’s a saving – when you’re deploying many concurrently, it’s critical.

“The Microsoft technologies work together, making it very easy and efficient for our developers to interact with the other solution components,” Issa adds. “This means a huge boost to our productivity.”

“IT’s a unique combination of technologies, resulting in a highly automated and elastic infrastructure that enables rapid provisioning of 5.5 terabytes of data. To integrate them successfully, the extraordinary commitment we had from the vendors was instrumental,” says Chafic Abdallah, Solution Architect, Microsoft Solutions, Dimension Data. “With this combination of different components, ING DIRECT can now abstract the bank applications and services from the powerful storage and compute that underpins them, and manage the provisioning process very easily.”

How We Delivered
Over a period of three months, the ING DIRECT team consulted with Dimension Data as they carefully and rigorously identified their business requirements for Bank in a Box. They talked to different vendors to pinpoint the best solution across hardware, software and services.

“It became clear early on that no single company would be able to deliver what we needed,” comments Henderson. “Having worked with Dimension Data for over eight years, we knew they understood what we were trying to do and the architectural approach we wanted to take, so we involved them in our selection process and shared our thinking in a series of workshops.”

The solution was groundbreaking. “Our idea for the solution was unique, unifying technology from across the market to give us the capability to innovate and differentiate faster and better,” Issa says. “As far as we know, it was a world first.”

Having identified the Bank in a Box components, ING DIRECT needed to be sure the idea would work before investing in the solution. Dimension Data proposed testing it in a real-world environment to establish a viable business case. ING DIRECT agreed, deciding that the best approach was to work exclusively with Dimension Data to deliver a pilot. Working closely with Cisco, NetApp and Microsoft, who provided extensive hardware, software and technical expertise, Dimension Data used its lab in The Rocks, Sydney to show the solution in operation.

Henderson was impressed at the way the vendors rose to the challenge and collaborated to prove the solution. “We didn’t run this as a traditional IT project – we gave everyone space to get us the proof we needed,” he says. “The way they collaborated to deliver a workable solution was very impressive.”

“We couldn’t find any reference or case studies to support where we wanted to go – it hadn’t been done before,” Issa says. “But the vendors gave us confidence. When we sat down with them we were surprised at how responsive they were. Each brought their passion and ideas, fed off each other’s enthusiasm and innovation. The solution was a combination of all those ideas.”

The pilot was successful. “When we showcased it to our executive team they were amazed to see how this technology came together to reduce a process that used to take months down to minutes,” enthuses Henderson. “They saw straight away that it would dramatically reduce development times so we can get new products and services to market faster.”

Once the pilot was signed off and the business case submitted, ING DIRECT commissioned Dimension Data to deliver the entire solution. This included end-to-end systems integration of hardware, software, professional services and managed services across all three vendors.
“We helped ING DIRECT to identify the solution and because we’re vendor agnostic, our perspective is very objective,” says Abdallah. “We also identified all the use cases so that the activities that sit behind them could be automated by Microsoft management tools from the development interface in Visual Studio.”

Guided by a clear vision and objectives, Dimension Data managed the deployment according to internationally recognised project management methodologies, including PMBOK® and PRINCE2. Weekly collaborative meetings between the Dimension Data and the ING DIRECT teams kept everything on track, with vendors providing technical assistance as required.

“The people at ING DIRECT have a very forward-looking approach,” says Abdallah. “We work with them as a trusted adviser. Our architects are embedded in their business to help them get where they want to go and we’re not short of opinions, ideas and strategies. The Bank in a Box project was a great opportunity for us to show how committed we are to helping them realise their vision for their business.”

“Dimension Data helped us pull together the different technologies and vendors to identify the solution and prove it would work,” Issa says. “They did a great job understanding our requirements and the strategic approach we wanted to take and our vision of an architectural model.”

Value Derived
The solution enabled ING DIRECT to reduce the time to provision test environments from three months to ten minutes. This means that the bank can get new products to market in a fraction of the time it used to take, giving them a significant advantage over their competitors.

“The solution enables us to streamline processes that previously took eight people three months with a very simple self-service model,” says Henderson. “Our staff can now provision copies of the bank in minutes, not weeks, so we can test new ideas very rapidly. It’s given us a competitive edge.”

“Now we can provide a copy of the bank to anyone in the bank at any time – in 10 minutes,” says Issa. “At the click of a button, a developer can get all the data they need, all the servers, applications, configurations, testing and everything that goes with it, completely verified, ready to rock and roll, completely off the shelf. Then they can run any test they like. It’s amazing.”

By leveraging existing Microsoft investments, the solution was also very cost effective, reducing the cost of provisioning significantly compared to the previous model, and requiring little training since developers can interact with it using the Microsoft products they already use.

“We’re using this solution in so many scenarios and we’re seeing new use cases all the time,” adds Issa. “For example, we can give a customer service representative access to all our customer-facing applications for training purposes. Or give a developer a full version of the bank at induction. And when we have customer or operational issues, it’s much easier to study and solve them. In fact, everything we do is faster – our capability now supports our appetite for transformation and change and delivering faster for our customers.”

Now that the solution is operating in Australia, ING DIRECT is preparing to deploy it globally. “In 2012 at least three of our global entities will look at rolling it out – it’s great kudos for the team, spearheading innovation across the group,” says Henderson.

The solution has also freed the development team at ING DIRECT to focus more on differentiating the bank with an efficient and accessible platform for testing new ideas.

“We can now redirect our skilled people and our cost base toward innovation,” states Henderson. “We’ve said to our people: if you’ve got a good idea, go for your life – test it. Now the only thing holding us back is how fast we can come up with the ideas.”

ING DIRECT has also laid the foundation for the bank’s continued IT transformation by establishing a cloud-enabled operating model, paving the way for more efficient cloud-based business processes in future.

“A huge benefit is that we’ve cloud enabled ourselves in terms of our operating model and our IT strategy,” says Henderson. “It’s not just technology – wrapped around the solution is a whole set of new, more efficient work processes.”

“We’ve delivered a platform that will let us be very quickly cloud-ready. It’s virtualised, and agility is built into the DNA of the architecture,” says Issa. “With more agile customer-facing systems we can direct funds to differentiating our services and innovating, rather than operations. So we can improve the customer experience – and focus on where we want to take our business next.”