Rabobank Nederland chooses HPE Networking and cuts TCO in half

Objective
Refresh and simplify the Rabobank branch office network serving 600 bank locations with minimal impact on network availability, and in a way that lowers the bank’s total cost of ownership for the network.

Approach
Engaged HPE TS Consulting to create an HPE Networking open-standards-based access layer solution that is interoperable with Rabobank’s existing Cisco MPLS core infrastructure.

IT Matters
- Upgraded Rabobank’s branch office network design to support a multi-vendor infrastructure compatible with Rabobank’s existing core infrastructure.
- Helped Rabobank achieve a future-proof network infrastructure—including interoperability—through open standards.
- Enabled Rabobank’s IT team to use existing tools to centrally manage the branch office network.
- Prepared Rabobank to implement network virtualization at the branch office level.

Business Matters
- Created an infrastructure that provides more network services at the branch level to support the use of cloud-based applications, and to ensure a high level of security.
- Completed network migration of 600 offices in six months, with minimal downtime.
- Lowered total cost of ownership by using open-standards-based HPE technology.
- Reduced overall network power consumption and carbon footprint.

Goal: Refresh the branch office network; lower TCO

Rabobank is a Netherlands-based cooperative bank with over 10 million customers and 50,000 employees. HPE Technology Services Consulting worked with Rabobank to implement a network solution that cut Rabobank’s TCO in half.

Rabobank is one of the three largest banks in the Netherlands. With more branch office locations and ATMs than any of its competitors, the bank is able to fulfill its mission to be “Close to the Customer.” Three years ago, the bank decided to update the Cisco network that provides LAN and WiFi, building automation, security solutions, and PCI solutions support for payment devices to its distributed branch offices. The bank wanted the network migration to be completed within half a year with minimal impact on network availability. It wanted to be able to provide more services to its branch offices. And, in the end, it wanted a significantly lower total cost of ownership for the network.
“HPE enabled us to extend the security zones from the data center into the branch offices using our existing Cisco MPLS core infrastructure. Using just one switch, they were able to deliver MPLS CPE functionality in a single box.”

— Jim Habernickel, Manager IS CD Distributed Networks, Rabobank Nederland

Bringing interoperability and new skills to a closed system

In designing the new branch office network, Rabobank faced two challenges. First, the bank’s current network design required it to use only Cisco hardware. Secondly, the bank’s network engineers were trained and certified for a Cisco infrastructure and had no specific knowledge of an Hewlett Packard Enterprise (HPE) network.

A common concern among all businesses is the ability to introduce new vendor hardware into an existing network. Rabobank wanted its network core to remain with Cisco and to build the access layer with HPE. To address these concerns, HPE Technology Services (TS) Consulting first assumed all responsibility for delivering the solution Rabobank was looking for. It then conducted extensive stress testing, development and, eventually, installation of the HPE 5800 Top of Rack Switch Series capable of interoperating within the Cisco MPLS core. Successful interoperability enabled Rabobank to simplify its infrastructure by using a single HPE 5800 series switch to enable end-to-end connectivity. It could now progress to the HPE "branch-in-a-box" design, unlocking considerably lower TCO overall.

In short, HPE TS Consulting reduced risk for customers who are taking the very delicate step of changing vendors and moving out of their technology and technical comfort zone.

“We were very impressed with how responsive the HPE TS Consulting team was, and how capable they were of delivering an enterprise-level solution to our interoperability concern,” says Jim Habernickel, Rabobank’s manager for IS CD Distributed Networks. “Thanks to the support we got from the Consulting Services team, we were able to achieve 100% interoperability with the existing Cisco core infrastructure.”

Lower CapEx, OpEx

Rabobank’s decision to include HPE Networking as its second vendor paid off. First, because the new infrastructure eliminated the need for separate branch routers and switches, Rabobank was able to lower its capital expenses. Secondly, with its systems engineers now managing a less complex, easier-to-maintain network made up of fewer components, Rabobank saves on operating expenses as well—while increasing customer satisfaction.

Within Rabobank’s six-month time frame, the access layer at all 600 branch locations was replaced (at the rate of about four offices per evening) with very little impact on network connectivity. The HPE Networking branch solution now provides Rabobank with a stable infrastructure capable of delivering more bandwidth, virtually zero downtime, and security solutions able to defeat even the most sophisticated intrusion attempts.
“The big bonus,” Habernickel says, “was that with the HPE solution we saw a reduction of more than 50% in total cost of ownership of our branch office network. In these times, savings like that are very important for a bank.”

Rabobank can continue to save money by leveraging its new network’s agility. Previously, for example, the access layer at the bank branches was used mainly for office automation—to connect clients, printers, and other equipment.

“We see a shift from simply connecting office equipment to connecting appliances, including everything from security cameras to entrance gates,” Habernickel says. “We’re doing a project right now with IP-connected toilets. We connect a toilet to the HPE network so we can monitor usage and the level of detergents inside the tank so that it can be refilled as needed. This is just another example for us of how HPE’s agile, open-source-based network gives us the flexibility to save money by working smarter.”

More branch functionality demands more bandwidth

Part of Rabobank’s motivation to upgrade the network is the changing face of retail banking. In the past, bank staff used applications loaded on their desktop computers, and customers were content to stand in line with nothing else to do. Today, many of the operations of a bank branch are managed using cloud-based applications, while customers expect to be able to access the Internet on their digital device or read digital signage as they await service. Guest WiFi, BYOD support, SaaS, IP telephony, video conferencing, security cameras, digital signage, and kiosks have become standard features in most enterprise retail banking environments. Rabobank now has the robust network solution it needs to meet these new demands for service.

Less power use means greater sustainability

Rabobank also wanted better efficiency. With its roots in the food and agriculture sector, Rabobank is committed to sustainable development. Experience has taught Rabobank that “caring for people, the climate and the environment often goes hand-in-hand with the creation of new income opportunities.” It is for this reason that Rabobank included lower power consumption among its top goals for the project.

“What we’ve seen on the environmental side,” Habernickel says, “is that the power consumption of the HPE network is a lot less than it was with the incumbent vendor. We feel strongly about social responsibility and sustainability, so being able to operate more efficiently from an energy standpoint is a big plus for us.”

Next step: A strong partnership grows stronger

With its HPE TS Consulting solution in place, Rabobank is now ready to move to the next phase: implementing network virtualization at the branch offices, which will allow it to quickly deliver more flexible solutions to the market. Rabobank will also migrate its local offices and headquarters to HPE 5500HI and 5900 Switch Series, introduce HPE into its data centers, and further investigate HPE’s SDN and WiFi capabilities.

Habernickel says that “throughout the entire process, from selection to implementation to testing, HPE’s TS Consulting team has been ready to help us whenever we need them. In terms of both its products and its product teams, HPE has proven itself to be a very solid partner.”

Customer at a glance

About Rabobank
With nearly two million members, Rabobank is one of the largest cooperatives in the Netherlands. Measured by Tier 1 capital, the Rabobank Group is one of the world’s largest financial institutions. The bank’s cooperative identity dates back to the late 19th century, when a group of farmers founded the first agricultural loan banks. With its agrarian origins, the food and agriculture sector is Rabobank’s natural environment. In the Netherlands, Rabobank is by far the largest food and agriculture bank, and aims to become the leading such bank in the world.

Hardware
• HPE 5800 Switch Series
• HPE 5120 EI Switch Series
• HPE 5920 Switch Series
• HPE 5500 EI Switch Series

HPE services
• Technology Services Consulting