Starting out as a humble textile shop, New City Commercial Corporation (NCCC) Group has now grown into a retail giant with close to 60 branches mainly in Mindanao, the Philippines. Because of the unreliable network connectivity, employees at the stores often struggled to use the centralized systems in its headquarters. To improve the uptime without increasing its current operating expenses, NCCC Group turned to VMware SD-WAN™ by VeloCloud®. With VMware, not only can employees get their work done more efficiently but customers can also use their loyalty card while shopping, staying true to NCCC Group’s vision to provide the best value for consumers.

Unreliable connectivity slowing down work efficiency
Best known for its supermarkets and malls, NCCC Group is headquartered in Davao City in Mindanao, the second largest island in the Philippines. The mountainous topography, the spread-out islands and limited infrastructure investment have contributed to the unreliability of telecommunications services in the area, which made it extremely challenging for the company’s branch stores to access the ERP system located at headquarters.
To compound the issue, the stores subscribed to one of three telecommunications service providers in the region. Since the virtual private network (VPN) from one telco could not interconnect with the other, it became a burden to manage the different networks.

Based on NCCC Group’s monitoring, one provider offered an average wide area network (WAN) uptime of 92% while the other delivered 97%. With an uptime of 92%, it meant the connectivity was down for almost an hour every day during operations, and employees at the branches were not able to fulfil sales orders, pay suppliers or check the inventory. Given that four in five of the stores were with this particular telco, it led to considerable frustration in the field.

“When connectivity was affected, we had a lot of negative feedback that went up to the C-level,” said Irvin Rhey Miclat, manager of Information Systems division, NCCC Group, with a laugh.

Moreover, the IT team had little to no visibility of the different networks and it relied on the users informing them that the circuit was down at a particular branch, so troubleshooting often became delayed and reactive.

Cloud-delivered SD-WAN for increased uptime
NCCC Group already had a subscription to the premium Internet protocol virtual private network (IP VPN) with the telco that had less reliable uptime. To improve the situation, one solution would be to get an IP VPN with the other provider, but the costs were much higher. In addition, the CIO had challenged the IT team to increase the uptime to 100% without a significant increase to the operating expenses.

NCCC Group, which has been using VMware vSphere since 2013, was particularly impressed with how quick the deployment of VMware SD-WAN was during the proof of concept (POC). It was online within 10 minutes while another vendor took half a day.

“VMware SD-WAN was the fastest to deploy, showing the technical maturity of the solution’s ability to deliver,” said Miclat.

“It gives me the confidence that even if our technical team is not so knowledgeable, it’d still be easy for them to get it up and running.”

The team also measured latency on each site during the POC and found that VMware SD-WAN Dynamic Multipath Optimization™ far outshone its closest competitor. With automatic link monitoring and routing, the VMware solution delivered “two-digit” latency at one particular branch, while the competitor’s solution was “still in three digits”.

In the end, NCCC Group decided to forgo the current IP VPN and leverage VMware SD-WAN along with two Internet subscriptions from each of the two telco providers.

Delighting employees and customers with stable connectivity
Using the VMware SD-WAN Orchestrator, NCCC Group’s IT team now has complete network visibility through a centralized and single pane of glass. Instead of managing the network from each telco separately, it can now monitor in real time the performance of all circuits across all connections for every site in a single dashboard.

“You really have visibility of the network and uptime. If you have problems with a branch, you can drill down and troubleshoot which user is eating up the bandwidth. This has enabled us to go from being reactive to proactive in troubleshooting issues.”

IRVIN RHEY MICLAT,
MANAGER OF INFORMATION SYSTEMS DIVISION,
NCCC GROUP
NCCC Group counts on VMware SD-WAN to boost connectivity with retail branches

Previously, the opening of a NCCC Group retail location is dependent on the network infrastructure being in place before the store could be opened. But with VMware SD-WAN, deployment is now quick and greatly simplified using the VMware SD-WAN Edge. A 4G LTE instance could be set up, connected to the VMware SD-WAN Orchestrator and configuration would be completed “in less than a minute”. With 4G LTE as an option, NCCC Group can open stores even in remote locations.

Moreover, small branches also benefit from the intrinsic security features of the SD-WAN solution, which optimizes and secures local Internet breakouts, so that Internet traffic no longer needs to be filtered through the on-premise firewall at the head office, thus saving bandwidth between interconnecting branches.

Now that the stores enjoy redundant links, the WAN uptime has improved from an average 94.5% to 98.36%, with the amount of downtime dropping from an hour to 12 minutes a day. Miclat adds that the team is trying to achieve 99.5% uptime by sourcing for other telcos or acquiring wireless LTE for branches that do not have redundant links yet.

For NCCC Group, these improvements came about without increasing its operating expenses. In fact, the VMware SD-WAN deployment is 25% less than what it would have paid for an IP VPN with the more expensive telco which would not have redundant links.

“We did not increase our opex but managed to increase our uptime. Our ‘savings’ come from the uptime,” said Miclat.

And the increased uptime is already having a positive impact on the business. Ensuring that all retail stores remain connected to the headquarters at all times means each branch can focus on its operations.

“It’s a domino effect. The more efficient your link is, the more efficient the store becomes and, technically, that will result in more sales,” he added.

Moreover, customers find that they can now regularly use their loyalty points when shopping at NCCC Group’s supermarkets or malls, instead of dreading the connectivity issues each time they flashed their card in the past.

Next steps
After NCCC Group subscribed to VMware SD-WAN, it upgraded its VMware vSphere to the Enterprise Plus version, as part of the enhancements it was making to its infrastructure.

Miclat has his sights set on Workspace ONE, a digital workspace platform that simply and securely delivers and manages any app on any device.

“I was really amazed by its capabilities after attending a technical presentation,” he said. “Its features will make it easier for us to manage devices and enhance security compliance.”

NCCC Group is relying on #VMware technology to keep its retail stores always connected to headquarters for a better customer experience.