Zebra Technologies Rapidly Delivers Digital Workspaces Post-Acquisition with VMware Horizon Air

Founded in 1969, Zebra Technologies Corporation started out as a leader in barcode printers and readers, providing companies with real-time manufacturing and logistics. In 2013, Zebra added to their portfolio of tracking and visibility technology with the Internet of Things (IoT) platform, Zatar. In 2014, Zebra acquired the enterprise business unit of Motorola Solutions, Inc., and now more than 7,000 employees in more than 110 offices around the world support the development and sales of Zebra software and hardware solutions.

Zebra holds more than 4,200 asset management technology patents and employs more than 1,700 engineers. That commitment to innovation has landed Zebra on Fast Company’s Most Innovative Companies of 2016. Today, Zebra’s primary mission is helping its global customer base, including more than 95 percent of Fortune 500 companies, harness real-world data for actionable business intelligence.

The Challenge

Zebra Technologies needed to provide a digital workspace that would allow both existing and newly acquired employees to access the company network from anywhere. IT was exploring a hybrid-cloud approach for desktops to provide that flexibility to remote developers outside of headquarters in Lincolnshire, Illin. IT had been testing dinCloud for their Desktop-as-a-Service (Daas) solution for about a year. However, end users complained about the product’s performance. For instance, when users moved their mouse, it dragged across the screen due to keyboard mapping issues that impacted response time.

Meanwhile, Zebra was merging the business units and employees they acquired from Motorola, as well as the legacy technology they were still paying Motorola to use. IT was tasked to quickly move thousands of newly acquired employees onto the Zebra virtual desktop infrastructure (VDI) while gaining access to the Motorola infrastructure (complicated by the sensitivity and presence of government-serving business units). IT had no time to trial multiple solutions. They needed everything to just work, and fast.

“They didn’t come asking for one or two; they came asking for 50 or 100 virtual desktops at a time,” said Kelly Jones, Cloud Consultant to CIO at Zebra Technologies. “This was not a vetted project by IT; we were busy on another project, provisioning Cloud out to the business. This was an emergency, kind of like a 911 call, saying ‘Help! We’re stuck.’”

VMware Horizon Air enables IT to quickly deliver a high-performance desktop with a great end-user experience and user-friendly features like single sign-on.

BUSINESS BENEFITS

• Created business continuity post-acquisition by quickly moving employees onto cloud-hosted solutions and off of budget-draining legacy technology.
• Exceeded end-user expectations on VDI performance.
• Set a foundation for IT-as-a-Service, which saves IT operational costs and strengthens agility.
The Solution

Despite past performance issues, the company knew that virtual desktops were the most cost-effective solution for end-users’ long-term needs. A significant portion of Zebra’s employees are developers who often need access to multiple desktop environments in order to test and write code for the devices and solutions in Zebra’s expanding technology portfolio. Cloud-hosted virtual desktop solutions are easier to test for development and would give IT the organizational agility and flexibility they needed to easily manage infrastructures post acquisition.

Zebra’s IT organization tested an instance of VMware Horizon® Air™ in the vCloud® Air™ data center out of Dallas, and to the surprise of IT, the new cloud-based VDI solution just worked. “We expected our end users to ask us to bring it back on premises because we thought if dinCloud’s not working, why would VMware work,” said Jones. “We didn’t expect them to say, ‘This works great!’ That was an unexpected surprise. We were skeptical ourselves. The fact that it won us over in the process is a testament to the fact that the technology worked well.”

After the proof of concept, Zebra purchased hundreds of Horizon Air cloud-hosted virtual desktops and started moving end users off of dinCloud. Horizon Air proved to offer high-level desktop performance, particularly when it came to the display protocol. Because response time was a priority for Zebra’s end users, IT valued Horizon Air’s responsive, adaptive, bitmap-streaming capabilities. The PCoIP (PC over IP) remote display protocol and the Horizon Client provides real-time delivery of rich desktop experiences, making this a great solution for end-users.

“The display protocol is one of the best out there, and that performance was the main driver for our purchase of Horizon Air,” said Jones. “I used the Horizon DaaS platform before it was acquired, and the fact that it was familiar to me and that VMware was backing it now just made it an even more enticing product offering.”

Horizon Air also provided a better end-user experience from anywhere, with productivity-enhancing features like single sign-on (SSO), and with Horizon Air, Zebra’s IT team could deploy desktops in hours—if not minutes. “The performance was great, and the ease of deployment was really what sold Zebra on Horizon Air,” said Scott Myers, Manager of Cloud Services at Zebra Technologies. “It is incredibly easy to spin up a couple hundred desktops quickly. VDI became a huge success for us to get people onto Zebra’s network right through their basic Internet port.”

Business Results & Benefits

Zebra’s entire VMware rollout, also including vCloud Air and VMware vSphere®, helped IT serve the company’s most pressing need—speed. With VMware technology, IT quickly delivered cloud-hosted solutions and moved Motorola employees off of legacy technology that was costing Zebra more than 98% of their resources to use per day.

“Being able to have this work quickly and on demand was phenomenal,” said Myers. “It was a pleasant surprise when we were able to just turn these desktops on and hand them over. Meeting the business demands right there and then without them having to wait was an immediate value, and that allowed our IT team to maintain exposure as being a solution to bottom-line business needs.”

That simplicity and reliability also contributed to the overwhelmingly positive response from end users. “We were able to quickly respond to our company’s needs for mass deployments of desktops, but it’s the end users that drove the deployment,” said Jones. “They said they loved it and were excited at what a better experience Horizon Air was. So we gave them more.”

Cloud-hosted virtual desktops and applications, along with VMware vRealize® Suite, will also help Zebra’s IT organization drive IT-as-a-Service at the right time and at the right cost. As a fully managed enterprise service, VMware manages the backend infrastructure, freeing up IT resources from desktop administration tasks for transformation and innovation.
Looking Ahead

The initial surge of virtual desktops for developers was just the start. The Zebra IT team is now moving forward with Horizon Air as their primary virtual desktop solution and continuing to transition engineers and other lines of business off of legacy technology. “We have hundreds of virtual desktops right now, and when we migrate off of dinCloud, we’ll deliver hundreds more,” said Jones. “We’re looking to have more than 1,000 total desktops on Horizon Air this calendar year.”

Soon, IT will enable end users to self-provision virtual desktops and apps directly from a Service Catalogue. ServiceNow, integrated with VMware vRealize Automation™, will route such requests through an automated workflow, further simplifying Horizon Air deployments. “It’s going to be really cool to see how fast virtual desktops catch on,” said Myers. “I’m confident that requests for virtual desktops will spike since it’s so easy to deploy, which will be neat to see.”

Zebra’s IT organization is also currently in the planning stages to deploy the VMware AirWatch® Blue Management Suite to manage and secure 5,000 Android mobile devices. Horizon Air and AirWatch will enable the utmost flexibility and productivity by giving users access to any app on any device. “A lot can happen with data on a mobile device, and having AirWatch on our devices will be a huge boost to security,” said Myers. “We have lines of business actively looking at using AirWatch now to strengthen the mobile security of our corporate data.”