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JetBlue Soars to New Heights with Nutanix Enterprise Cloud

Nutanix Enables JetBlue to Obtain Higher Availability, Management Simplicity, and Incremental Scalability for Mission-Critical Citrix XenApp and Desktop Deployments

challenge

JetBlue carries more than 40 million customers to over 100 cities in the United States, the Caribbean, and Latin America each year, with an average of 1,000 daily flights. “There are a lot of things that make our company unique,” noted Dan Feliz, General Manager of IT Infrastructure at JetBlue. “We don’t see ourselves as just another airline — we’re a ‘customer experience’ company. Our goal is to be the preferred airline for all of our customers.”

After running into a few outages with the legacy on-prem HPE servers, JetBlue decided to outsource its data center using another solution. JetBlue’s goal was to focus internal IT efforts on elevating the customer experience, instead of concentrating on daily infrastructure management. But that was not the ultimate outcome of the outsourcing project, as the previous solutions failed to keep pace with the company’s rapid growth. JetBlue often ran into delays with new application rollouts and simple scalability requirements, and deploying additional capacity still required tremendous planning.

solution

Feliz was first introduced to Nutanix at a Citrix Synergy conference when JetBlue was looking for better infrastructure for its VDI deployment. “The overriding responsibility of the IT organization at JetBlue is to support every reasonable business requirement of our crewmembers to enable growth and a great customer experience,” he noted. “To be frank, the Nutanix solution looked too good to be true on both of these counts. So we spoke to our Citrix account team, and they agreed that it was an excellent choice for our VDI deployment.”

Choosing Nutanix

JetBlue purchased the Nutanix Enterprise Cloud solution to accommodate all of its current XenDesktop and XenApp users. Since the ROI was much higher than the company’s previous solutions, the IT team received immediate approval to purchase additional Nutanix blocks for growth. “Nutanix sets the bar for what an account and service team should be,” acknowledged Feliz. “The excellent relationship with the Nutanix professionals, coupled with the rapid scalability offered by the Nutanix Enterprise platform, resulted in our choosing Nutanix for our mission-critical applications.”

Deploying Nutanix and Citrix XenDesktop

The Nutanix and Citrix XenDesktop deployment went very quickly, noted Armando Muniz, JetBlue’s Manager of IT System Engineering. The entire process was seamless, and JetBlue quickly expanded the virtual desktop deployment from 60 users to 250 desktops within three months.

The performance and productivity benefits were evident as well. Desktop users could simply launch the receiver from their mobile devices and securely connect back to VDI running on Nutanix, and once home, could easily switch their sessions back. “The original VDI use case was just for our IT personnel, then we added our developers, IT support team, and several of our business partners,” noted Muniz. “Once everyone saw the value of the virtual desktops on Nutanix, they all wanted to use it. It’s nice to be on the receiving-end of so many kudos.”

Using Nutanix AHV and Citrix XenApp for Enterprise Workloads

Starting from its initial use in a single data center, Nutanix quickly became the default platform for JetBlue's mission-critical applications. All tier-0 and tier-1 applications, including the airline's reservation systems and ticket counter applications, are now running on Nutanix. "We also decided to try AHV — we didn't see any reason why we should continue to spend money on licensing the previous existing product since AHV could do everything we need it to do," explained Feliz.

With the help of Nutanix Consulting Services, JetBlue quickly developed the design for the Nutanix expansion, and are now well on their way to run Citrix XenApp 7.15 on the Nutanix AHV cluster. JetBlue also deployed the Citrix XenDesktop Cloud Service on Nutanix AHV, allowing them to keep their applications and databases in-house while offloading management to the Citrix Cloud plane.

"It took us less than a week to become comfortable with AHV," added Muniz. "AHV is a simple solution with everything we need displayed in one console, and we love the one-click non-disruptive upgrades. We also don't miss the nighttime upgrades or the inefficient silos of a separate NAS."

results

A Fast and Successful Deployment

JetBlue enlisted the help of Nutanix Consulting Services for the Citrix XenApp project. The Nutanix consultants were responsible for the design and deployment, reducing project risk by using Nutanix best practices from the start. "The consultants were very efficient — it only took 20 minutes to stand up the first cluster.

By relying on their expertise, we were able to start deploying VMs an hour later without any problems," said Muniz. "A few months later, when we added another block, we just racked it, plugged it in, and with just one click it was added to the environment. When you deploy additional capacity the legacy way, it can take months. With the Nutanix platform, we can turn new IT projects around much faster because we have greater control of our infrastructure. That really makes our constituents very happy."

Operational and Planning Simplicity

JetBlue found Nutanix not only simple to deploy, but also simple to manage. The fact that they could eliminate multiple management panes helped them streamline ongoing management immensely.

"We needed three different admins to manage our previous environment — one that understood EMC to provision storage, a separate admin for VMware, and another for networking — all working in silos," noted Muniz. "With Nutanix, we have eliminated these silos and now have a unified view into all our infrastructure and IT operations. Those admins are now free to work on more strategic projects, to the benefit of our entire company."

In addition, the proactive reporting capabilities of Prism allow JetBlue to predict the growing needs of the IT environment well in advance. From determining when they will run out of memory or capacity, JetBlue is able to mitigate risk without needing to overprovision infrastructure in advance.

Pay as You Go Scalability and Easier Budgeting

"Nutanix is great for me as an IT manager, because it reduces the amount of line items we have to maintain," said Feliz. "In addition, the one-stop-shop architecture enables me to accurately calculate the costs of any new projects. But more importantly, the incremental scalability is a huge plus. We don't have to buy a big array upfront at a significant cost, and then start populating it slowly over time. If we need more capacity with Nutanix, we can add it gradually as we need it. Nutanix gives us much more control and visibility into our IT spend, our finance team greatly appreciates."

Built-In Redundancy for Critical Workloads

All of JetBlue's IT systems must be available 24x7x365, including its mission-critical flight operations, maintenance applications, and systems operations center. If certain key systems go down, flights could face delays or cancellations. "We built in several layers of redundancy, so if anything ever happens we'll have the ability to quickly move to a completely separate DR environment," explained Feliz. "Everything that's critical to the operation of our airline is now running on Citrix and Nutanix. That's the faith we have in the Nutanix Consulting Services team and the Enterprise Cloud platform. They help keep our airline moving."

An Excellent Support Team

"The entire Nutanix team is very well trained, and not just on the Nutanix products, they also provide expertise on a lot of other companies' solutions as well. Whenever I work with Nutanix support, I always get the answers I need quickly and come away with a better understanding of our entire environment," said Muniz.

Obtaining a Higher ROI

"The ROI from our Nutanix project was very positive," noted Feliz. "When you can displace a lot of separate software and hardware components with an integrated solution where you get everything in one place, it produces tremendous savings. And it's not just the initial cost of the infrastructure and software, Nutanix also lowered the amount of ongoing support and resources needed to keep everything running. This allows our company to spend more on making our customers happy."

next steps

All of JetBlue's IT projects are now being designed to use Nutanix, including the company's new interactive signage rollout that will offer travelers more robust information at many airports including gate assignments, arrivals and departures, standby lists and weather conditions. "If you're traveling on JetBlue this summer, all of the information that's displayed in the terminals will be running on Nutanix," concluded Feliz. "We're also looking forward to the next version of Nutanix so we can start using the micro-segmentation capabilities. There's a lot of excitement – from our IT team to our senior leaders – around what Nutanix is helping us with."

company

JetBlue is the sixth-largest airline in the United States.

industry

Transportation

business need

Existing infrastructure was complex and did not always provide the agility needed to keep pace with fast company growth. JetBlue needed a solution that was highly available, simpler to manage, and enable faster rollout of applications.

solution

- Nutanix Enterprise Cloud
 - Acropolis, including AHV virtualization
 - Prism management
- Nutanix Consulting Services
- Citrix XenDesktop and XenApp

benefits

- Successfully deployed Citrix based VDI and hosted shared applications, resulting in higher availability and a better user experience
- Simplified infrastructure management with a unified management plane and one-click operations
- Reduced the time to add capacity from months to hours
- Obtained high ROI and eliminated additional virtualization costs
- Gained built-in redundancy for critical workloads

