

Migration to Nutanix Speeds
Application Performance,
Simplifies Ongoing Management,
and Delivers an Excellent ROI



International Speedway Corporation Shifts Up to Nutanix

CHALLENGE

People come to the races to have a great time. The fan experience is the culmination of hundreds of elements coming together. When everything works as it should, fans don't even think about them. However, if a single piece of the experience is off, it can be detrimental. Imagine if a dad stands in a long food line, only to discover the item his kids want is out of stock, or if while purchasing tickets for a race, the ticketing website is down- any of these would result in a disappointing experience.

Technology is the foundation of many of the services ISC delivers to fans. They had been relying on an aging FlexPod infrastructure, composed of NetApp storage systems and Cisco UCS B-series servers. "The FlexPod solution performed well for several years, but we had a lot of challenges from an operational standpoint," said David Luke, director of IT engineering at ISC. "Our IT team members were spending all of their time troubleshooting issues and upgrading all of the different components in that environment."

When it came time to refresh the infrastructure, Luke looked for a solution that would be easier to maintain. ISC had files and application data spread across multiple storage systems, and they wanted to use the leasing cycle refresh time as an opportunity to consolidate. They had unstructured file data on NetApp NAS, on an Apple Filing Protocol AFP based storage platform and on standalone Microsoft file servers which made file services management complex and unwieldy. "We never had a patching event that went flawlessly on NetApp and UCS," he admitted. "We had to relearn all of the procedures with each upgrade, and we were always afraid of breaking something during the process. There were a lot of interdependencies with the FlexPod architecture and NetApp backup software."

Running the POC

ISC started looking for a better storage, compute, networking, and hypervisor platform in 2016. ISC's operational and financial goals for the infrastructure refresh included reducing (or eliminating) all VMware, Red Hat, Microsoft, and Oracle licensing costs; reducing the amount of on-prem IT infrastructure; utilizing public cloud resources whenever possible; and reducing the operational effort to keep systems running.

"We ran a full proof of concept on three vendors' solutions, one being Nutanix," Luke said. "All of our DBAs and application owners had to be on board with the decision, since whatever we chose had to run our mission-critical applications. For us, it's not just an infrastructure solution, it's a business solution."

After successfully validating ISC's tier 1-applications on the Nutanix platform during the POC, ISC made the decision to move to Nutanix due to its high performance and manageability. ISC then performed an ROI analysis on three of the proposed solutions and Nutanix emerged the clear winner.

"By moving to Nutanix, all of our applications and database servers experienced an instant octane boost."

- David Luke, Director of IT Engineering,
International Speedway Corporation



SOLUTION

ISC engaged the help of Nutanix technical experts including Nutanix Consulting Services for design and deployment. “We came from a very traditional, segregated compute and storage platform so hyper convergence was a new technology for us,” explained Luke.

ISC deployed Nutanix Enterprise Cloud OS software running on the Nutanix NX-series at its two corporate data centers and 11 remote track offices in 2017. The Nutanix solutions now power all production and DR workloads, including their business critical applications based on Oracle and Microsoft SQL Server databases, business systems such as PeopleSoft HR and financials, and their custom core business application for ticketing called FanTracker.

ISC is also consolidating their unstructured file data with Nutanix Acropolis File Services (AFS). All of ISC’s rich racing multimedia content, including all of the photos and videos from the different races, is on AFS. Nutanix Consulting services deployed Nutanix and migrated 40TB of data from NetApp multi-protocol NAS systems, 50TB of active storage, and 60TB of media files, ranging from creative PDFs and illustrator files to ISC’s digital asset management system.

RESULTS

The migration to Nutanix Enterprise Cloud OS has led to several improvements and gains in operational efficiency for ISC. ISC has been able to speed up application performance, consolidate unstructured data on different storage systems to get a simple file serving solution with AFS, manage all datacenter operations efficiently from Prism which provides a unified management plane, and simplify their stack by adopting AHV.

An Easy Migration to AFS

AFS gives ISC the ability to easily serve files and build in more redundancy, and at the same time, it provides the features that they were used to with NetApp in their previous deployment. They do not have to deal with NetApp’s management tools anymore to manage their file data, which is a challenge due to the inherent complexity. “Adding new shares and seeing how much space each share is using with AFS is very easy,” noted Luke. “You just go to the file services tab, and boom! All of your stuff is there, there’s a histogram of what you’ve consumed, and you can easily see the capacity usage runway.” All of ISC’s rich racing content, including all of the photos and videos from the different races, is now running on Nutanix and AFS. All production file services now rely on Nutanix AFS and the team is able to spend more time on project delivery rather than managing, upgrading and troubleshooting multiple file services environments.

Operational Simplicity

“The number one benefit of Nutanix is its operational simplicity,” said Luke. “With Prism, we can see all of the elements of each individual cluster in one display, and there’s a link to get to where we need to go. Plus, the Nutanix interface is HTML-based. We had so many challenges with the Cisco and NetApp management tools. If you don’t have the right version of Java or Adobe Flash, you can forget about administering your environment. We haven’t run into that issue at all with Prism since it’s browser-agnostic.”

Centralized Performance Monitoring

Performance monitoring on the NetApp platform was very manual, according to Luke. "NetApp has an independent reporting engine, but the alerts would come from four different management planes. As a result, it was very difficult to see where the problems were. With Prism, everything is funneled through one reporting mechanism. This makes troubleshooting any issues very simple." The One-Click Performance optimizer with AFS provides useful insights and recommendations on scaling the solution, and ISC is looking forward to adopting these recommendations in their deployment.

Increased Performance

ISC's IT team observed significant application performance improvements during the POC. "Our nightly Oracle processes ran 50-90% faster on Nutanix," Luke said. "By moving to Nutanix, every one of our applications and database servers experienced an instant octane boost."

Choice of Hypervisors

ISC were using VMware vSphere across the board. They are now using Nutanix's native AHV virtualization solution, included as part of the Enterprise Cloud OS, at the company's Daytona Florida data center, its Concord, North Carolina disaster recovery site, and at 100% of its track locations. "AHV is very simple to use since it's integrated right into Prism," explained Luke. "Our goal is to move 75% of our workloads to AHV by the end of 2018, and eventually reach 100%."

IT Innovation Provides a Better Visitor Experience

"One of our key corporate goals is to consistently operate efficiently and effectively to maximize shareholder value," Luke explained. "Even though our shareholders and visitors can't see the Nutanix technology behind our IT systems and services, it gives us the freedom to invent a better experience to all of our internal end users and the millions of annual track visitors."

WHATS NEXT

ISC is now running all its enterprise applications on Nutanix, with the exception of its video surveillance system. "We're getting ready to upgrade our video surveillance systems for the tracks and our Daytona Speedway locations, and we still need to move more than 600TB of data from an older NetApp E-series system. Nutanix is currently the front runner for that project. We're also looking at increasing the Nutanix footprint in our Daytona data center to accommodate the virtual machines that are still running on FlexPod. The Nutanix platform performs so well that we are now able to accomplish other IT projects that often got overshadowed by operational issues in the past. Moving to Nutanix was one of the smartest IT decisions we have ever made," concluded Luke.



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COMPANY

International Speedway Corporation (ISC) is a leading promoter of motorsports-themed entertainment activities in the United States. It owns and/or operates 13 of the nation's premier sports entertainment facilities, including approximately 761,000 grandstand seats and 560 suites.

INDUSTRY

Sports, Entertainment

BUSINESS NEEDS

Aging FlexPod architecture was difficult to manage

SOLUTION

- › Nutanix Enterprise Cloud Acropolis, including AHV virtualization, Nutanix Acropolis File Services (AFS) Prism Central management
- › Nutanix Migration Services

BENEFITS

- › Increased availability and performance of tier-1 applications
- › Achieved 50-90% faster completion times on Oracle database processes
- › Simplified operations for server and storage including file, giving IT freedom to focus on new initiatives
- › Obtained a high ROI

Nutanix makes infrastructure invisible, elevating IT to focus on the applications and services that power their business. The Nutanix enterprise cloud platform leverages web-scale engineering and consumer-grade design to natively converge compute, virtualization and storage into a resilient, software-defined solution with rich machine intelligence. The result is predictable performance, cloud-like infrastructure consumption, robust security, and seamless application mobility for a broad range of enterprise applications. Learn more at www.nutanix.com or follow us on [Twitter@nutanix](#).

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