

Apstra is a slam dunk for data center automation at 2K



Video games create joy, challenges, and shared experiences among players, and 2K publishes some of the world's most popular family-friendly titles, including NBA 2K, WWE 2K, LEGO 2K Drive, BioShock, Sid Meier's Civilization and Mafia.

To continue to deliver a satisfying gaming experience across the U.S., 2K is opening a new data center in Las Vegas and using Juniper Apstra to automate the design, validation, deployment, and ongoing infrastructure operations.

OVERVIEW

Company	2K
Industry	Media and Entertainment
Products Used	MX Series, EX Series, ACX Series, QFX Series, Juniper Apstra
Region	Americas

CUSTOMER SUCCESS AT-A-GLANCE

3X

Faster to build the data center fabric using Apstra based on proof-of-concept tests

Simplify

Data center network design with validated, consistent, and repeatable templates

Automate

Operations to reduce human error and improve application reliability

Empower

Network operations team to troubleshoot and resolve problems with fewer escalations

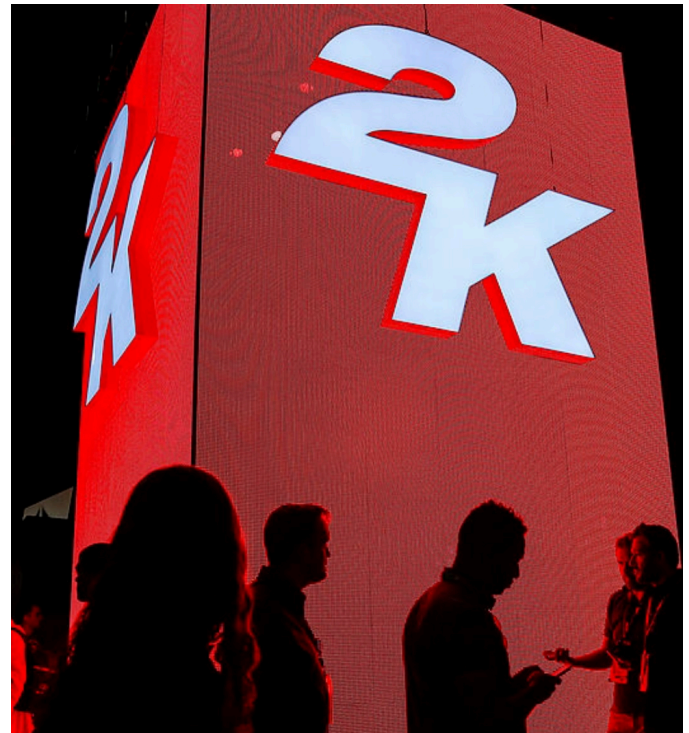
CHALLENGE

Enable gamers to build, connect, and dream big

NBA 2K is one of the most popular games in the U.S., with nearly 2 million daily players. WWE 2K is back and better than ever with more entertaining superstars and signature moves. The brand-new LEGO 2K Drive is massive open-world LEGO® driving adventure through Bricklandia. Take-Two Interactive, 2K's parent company attributed a 62% increase in revenue to NBA 2K22 and NBA 2K23 titles alone.

To continue delivering an excellent gaming experience to a growing audience, 2K is opening a new data center to host its games and authentication services. 2K needed a data center switching and orchestration solution that would not only manage the new location but also its other data centers that are part of its hybrid cloud architecture.

2K ran extensive tests to compare the top solutions for data center network automation, including its incumbent vendor and Juniper Apstra intent-based networking.



"I really liked that Apstra is multivendor," says Tomas Caslavsky, Director of Networks and Platforms at 2K.

 SOLUTION

Multivendor data center fabric automation

Juniper Apstra allows the 2K network team to automate and validate the design, deployment, and operation of the data center fabric. Validated templates and zero-touch provisioning reduce deployment times for the Juniper switches in the new data center as well as the incumbent vendor's switches in its other U.S. data center.

"Apstra is a better way to operate and manage the fabric," says Caslavsky. "Apstra does the configuration and continuously validates that we are using the golden configuration."

Predictive insights and advanced telemetry help avert outages. The network team can quickly pinpoint and resolve issues with Apstra's single source of truth, powerful analytics, and root-cause identification capabilities. The risk of human error is diminished with change controls and fast, all-network rollback.

2K uses Juniper Networks QFX 5210 switches for the spine and Juniper QFX5120 switches for leaf nodes in the new data center. 2K also uses Juniper EX4100 and EX4400 for management and out-of-band service functions. Juniper Junos OS supports advanced networking, including EVPN-VXLAN to connect its data center locations using a virtual Layer 2 bridge over the Layer 3 network to provide segmentation like a VLAN but without the scaling limits.

2K uses Juniper MX10003 routers and Juniper MX240 routers for its edge network to connect data centers, cloud on-ramps, and offices. It leverages the Junos OS BGP FlowSpec capability to block DDoS attacks quickly.

 OUTCOME


Shift to a service delivery mindset

Based on the proof-of-concept testing, Caslavsky anticipates that the network team will build the new data center fabric three times faster than the previous fabrics. "Our goal is move to automation so our DevOps teams can self-provision network services," says Caslavsky. "We can shift the mindset from configuring network devices to building and automating services. With Apstra, we can build a service quickly and easily."

Moving to an infrastructure-as-a-service model will bring speed and agility as 2K scales its infrastructure to deliver an excellent experience to gamers while streamlining DevOps.

"We can improve the experience for our DevOps stakeholders," he says. "Instead of asking people to open tickets in an iterative process, we can automate infrastructure delivery."

Caslavsky also views Apstra as a way to streamline the IT workload. "The visualization with Apstra will allow our NOC team to do more troubleshooting and resolve a problem without escalation," he says. "That will allow the network engineering team to focus on higher value work."



"Apstra is a better way to operate and manage our data center fabric. We can stop thinking about configuring ports and VLANs and instead think about delivering services to our DevOps stakeholders."

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