SESAME WORKSHOP

Sesame Workshop, the educational nonprofit behind Sesame Street, is on a mission to help kids grow smarter, stronger and kinder. With an audience of 56 million children, Sesame Workshop needed a cloud solution that could support their global digital presence.

BUSINESS

Sesame Workshop programs deliver crucial lessons about health, emotional well-being, respect and understanding to children in over 150 countries.

CHALLENGES

The organization's traditional IT infrastructure design was limiting their ability to grow with their international audience.

SOLUTION

Fanatical Support® for AWS and Hybrid Cloud

OUTCOME

A flexible and scalable hybrid cloud that provides agility across mobile and over-the-top (OTT) platforms like Roku and Apple TV — plus the freedom to focus their IT and digital media engineering resources on their core mission.

rackspace®

Sesame Workshop

Sesame Street began with a simple yet revolutionary idea: teaching children through television. Almost 50 years later, their educational programming reaches over 56 million children monthly, in over 150 countries. Their approach goes far beyond ABCs and 123s, teaching children crucial lessons about health, emotional well-being, respect and understanding.

Sesame Workshop, the educational nonprofit behind Sesame Street, relies on a wide range of distribution channels, including streaming video and interactive media and technology, to bring their lessons into homes around the world. Their programs have had a dramatically positive impact on kids' lives, particularly in vulnerable communities.

To date, Sesame Workshop has made unique education materials available through over 16 million "outreach kits" and has hosted events featuring Sesame Street characters that have reached hundreds of thousands of people. Through their sophisticated use of media and entertainment, Sesame Workshop aims to help kids become smarter, stronger and kinder.

Setting the Stage for Growth

In 2011, Sesame Workshop was active in the digital space through its YouTube channels and website, but their IT infrastructure and operations were limiting their ability to grow.

At the time, they had two physical data centers that served two separate functions. One handled operational functions, such as the organization's accounting and finance systems, email, file management, and print services. The other was for everything digital.

This approach was challenging to maintain, especially with Sesame Workshop's lean staff. And it was limiting growth. To expand their international engagement, and ultimately reach more children, Sesame Workshop needed to make a change.

"Rackspace reaches out and helps us think of things we haven't considered. That's good for our team, and it's a valuable part of our relationship."

SHADRACH KISTEN :: SENIOR VP OF IT AND DIGITAL MEDIA ENGINEERING, SESAME WORKSHOP

The Journey Begins

The path to greater efficiency began with an extensive RFP process. Sesame Workshop was searching for a managed services provider with proven experience in building out and maintaining flexible, scalable and global digital hosting platforms.

"High availability, scalability, security, seamless integration, hybrid flexibility and at the same time cost control were all key factors in choosing a platform and partner," said Shadrach Kisten, senior VP of information technology and digital media engineering at Sesame Workshop. "And we needed to be able to work with subject matter experts to expedite this strategy."

In the end, Sesame Workshop chose Rackspace. "Rackspace gave us those abilities, along with Fanatical Support, their labs team and the ability to be agile with the cost," said Kisten.

"That's the beauty of working with Rackspace. You guys are cloud-agnostic. It's good to know we can reach out to Rackspace as a trusted partner to help us."

SHADRACH KISTEN :: SENIOR VP OF IT AND DIGITAL MEDIA ENGINEERING, SESAME WORKSHOP

Because the Sesame Workshop team was new to the cloud, they leaned on guidance from Rackspace subject matter experts from the start. Team members spent time working with the Rackspace DevOps experts, project manager and architect, learning best practices for the industry and the media landscape.

"That information was important to us because uptime, resilience, performance and the ability to scale are important to us," explained Kisten. "We needed a lot of architectural guidance in terms of the database, high availability, redundancy, access and security. It was invaluable."

The initial planning, build-out and implementation were driven by the Rackspace team. This helped keep the project moving forward. Sesame Workshop gradually took ownership, with steady guidance from Rackspace as they moved into building products and properties.

A Gradual Path to the Cloud

The first stage of Sesame Workshop's infrastructure transformation involved moving from a managed services environment to a hybrid cloud solution.

"This is where Rackspace Fanatical Support was invaluable to us," Kisten explained. "We can now connect to our internal infrastructure and have workflow automation in place. This enables us to have a continuous workflow of curation, programming content seamlessly for publishing to our web properties hosted on Rackspace. The hybrid infrastructure fits well into our strategy of an integrated, connected infrastructure."

When Sesame Workshop was ready to connect to the AWS public cloud to grow their digital presence, the Rackspace Fanatical Support for AWS team helped them create a public-private hybrid cloud. This gave them the flexibility they needed to expand into multiple platforms across the mobile and OTT space, as well as reach kids in countries like India, Bangladesh, Colombia, Mexico, Afghanistan and Brazil. But it also allowed Sesame Workshop to take advantage of continuous delivery, integration and automation with AWS web services and technologies.

A key automation initiative involved their video asset management system. Sesame Workshop's content must be distributed globally after being localized for various languages and formats. Rackspace architected an automated system that connects their online video

rackspace

platform, CDN and relational database service, while maintaining connectivity to their internal system.

"It goes back to the robustness and what we created from the inception, and the direction the Rackspace team provided to our team," Kisten said. "With Rackspace's managed services, and their Aviator service level for AWS, we can leverage AWS' EC2 for compute, S3 storage, RDS databases, VPC, Lambda, Auto Scaling, ELB, Route 53, Cloud Front, Identity, dev tools for continuous development and integration, etc., to build an infrastructure platform that is sustainable and scalable for our digital properties.

"That's important to us because every time we need to build another property, we don't have to go and re-architect the entire solution. It's more a question of, 'How do we adjust?' 'How do we scale?' That, to me, was key to successful growth," Kisten added.

Measuring Engagement

With their hybrid cloud established, Sesame Workshop's engineers, DevOps engineers, front-end engineers and QA lead can focus on analytics and other technologies that help key stakeholders measure how children are engaging with content.

"With integrated and connected systems, we can now measure how long children watch a video, when they pause it or rewind it, or how often they re-watch it, and we can learn what they like and what's influencing them," Kisten explained. "Is it Big Bird? Cookie Monster? Elmo? With our connected video asset management system and metadata tagging — which starts from the minute an asset is recorded in the studio — we can get those answers, and use that data to improve the impact value of our content."

Next Steps

After such a successful transition, Sesame Workshop is ready to take the next step into the cloud. They're in the process of migrating their mail system and moving part of their data center to Microsoft® Azure®.

"Moving to the cloud requires a mind shift for your internal teams," said Kisten. "But for us, it's not difficult, because they see that it worked. It worked with Rackspace and it worked with AWS. It makes my job much easier, because the proof is there. They know it's going to work for Azure as we're adopting the same methodologies and approaches we used with our Rackspace/AWS integration."

And if they need Azure guidance and support, Rackspace Fanatical Support for Azure is there to help. "That's the beauty of working with Rackspace," added Kisten. "You guys are cloud-agnostic. It's good to know we can reach out to Rackspace as a trusted partner to help us."

Trusted Partner

The IT team at Sesame Workshop appreciates the relationship they have built with the Rackspace team, as well as the close connection the two teams maintain.

"Rackspace is proactive about staying connected with us," Kisten explained. "Sometimes we're so immersed in operations, but Rackspace reaches out and helps us think of things we haven't considered. That's good for our team, and it's a valuable part of our relationship. I know it's not a short-term relationship, but a long-term one."

And even when the teams aren't actively collaborating, Fanatical Support and performance monitoring from Rackspace are helping to ensure Sesame Workshop maintains 99.99% uptime.

"It gives us peace of mind," Kisten said. "No matter what time you go to bed, you know someone at Rackspace is watching everything for us. That's Fanatical Support.

"My team is at peace, because we know we have Rackspace as an extension of our staff," Kisten added. "Our engineers no longer need to worry about EIGRP, OSPF, BGP, IDS, firewalls, LAN, memory or IOPS, security controls or all the complex services required to maintain a scalable infrastructure. They get to focus on our mission: growing our digital properties to give kids all around the world the tools they need to be smarter, stronger and kinder."

rackspace®

ABOUT RACKSPACE

Rackspace, the #1 managed cloud company, helps businesses tap the power of cloud computing without the complexity and cost of managing it on their own. Rackspace engineers deliver specialized expertise, easy-to-use tools, and Fanatical Support® for leading technologies developed by AWS, Google, Microsoft, OpenStack, VMware and others. The company serves customers in 150 countries, including more than half of the FORTUNE 100. Rackspace is a leader in the 2017 Gartner Magic Quadrant for Public Cloud Infrastructure Managed Service Providers, Worldwide, and has been honored by Fortune, Forbes and others as one of the best companies to work for.

Learn more at www.rackspace.com or call us at **1-800-961-2888**.

AWS-CCS-Sesame_Street-8477

NOVEMBER 8, 2017

rackspace