DigitalFilm Tree is a full-service post-production facility for television and film, bringing cloud-based workflows to the entertainment industry.

CHALLENGES
DigitalFilm Tree needed scalable cloud solutions to manage data storage and keep bandwidth costs under control.

RACKSPACE® SOLUTION
Rackspace Public Cloud, Rackspace Performance Cloud Servers, OpenStack®

BUSINESS OUTCOME
DigitalFilm Tree can stream more video to more users in less time than was possible with previous generation Cloud Servers, providing them a sustainable and profitable business model based on dynamic scaling, enabling them to abandon the frantic search for cheaper bandwidth and focus on core business.

DigitalFilm Tree Looking to Shape The Future of the Entertainment Industry
Post-production facility uses Rackspace and OpenStack to stream video, host software, and make shared content more open and flexible.

DigitalFilm Tree is a full-service post-production facility that does finishing and editorial work for television and film. A major player in the entertainment industry, their roster of clients includes virtually all major television networks and Hollywood film studios. The company provides what they describe as an end-to-end service: they are involved from the production phase when the material is shot, through the creative editorial process, and into the finishing process where the content is prepared for theatrical and broadcast delivery.

At each stage, DigitalFilm Tree’s operations require a constant flow of video review and approval, often involving exchanges between filmmakers in far-flung locations and their collaborators back at the studio. The more quickly and efficiently video can be shared, the better for the creative process, and for the bottom lines of everyone involved. Facilitating such sharing is just one of the many reasons that DigitalFilm Tree increasingly relies on Rackspace and OpenStack. The company, which also provides IT and consulting services, is committed to a cloud-based workflow and convinced that Hollywood, with its tight timelines and demanding bandwidth requirements, must embrace the cloud to remain viable in the future.

REDUCING THE COST OF DATA STORAGE AND BANDWIDTH

As a thriving post-production facility, DigitalFilm Tree may, at any time, be working on any number of TV series or feature films, each of which produces a steady stream of content needing review and approval. Given that a single television show generates an average of 36 terabytes of content in a day of filming, it’s easy to understand why data management has been a key issue for the company as it has grown. As early as five years ago, DigitalFilm Tree turned to the cloud as a way to avoid the constantly increasing need for bandwidth and local storage, which was becoming prohibitively expensive.

They began focusing on scalable cloud solutions or "storage on demand" that could be increased and decreased over the course of a production, which reduced their need for bandwidth and helped them focus on their core business. Today the company partners with Rackspace and OpenStack to power a cloud workflow that relies on a mix of private and public clouds for storage, sharing, and hosting proprietary software like Critique.

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Guillame Aubuchon
CTO, DigitalFilm Tree
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Guillaume Aubuchon
CTO, DigitalFilm Tree

their video review application, which they host on a private OpenStack for internal use, and on Rackspace as a public cloud offering.

Guillaume Aubuchon, CTO of DigitalFilm Tree, says that Rackspace and OpenStack have not only facilitated the creative process but also helped DigitalFilm Tree save money, in part by using available bandwidth in a more efficient way. With the cloud workflow, camera content is uploaded to the cloud and then anyone who needs to access it. The content needs to be moved only once, Aubuchon points out, and “every part of the process subsequently can happen as part of a virtual desktop interface to that content.”

According to Aubuchon, OpenStack has supplanted the need for costly infrastructure solutions. Rapidly spinning up fiber on location, for example, to meet bandwidth demands, affords DigitalFilm Tree the possibility of “dynamic scaling” that is highly cost-effective. He says they’ve also derived savings from Rackspace’s Performance Cloud Servers which, by his estimates, “perform up to ten times better than previous generation Cloud Servers,” allowing them to stream video to far more users in less time and at lower cost. “Rackspace Performance Cloud Servers are delivering us not only a performance advantage but also a cost advantage,” says Aubuchon. “We’ve been able to achieve a price per gigabyte cost that we haven’t seen before.”

THE OPENSTACK PLATFORM FOR HOLLYWOOD

Utterly committed to its current cloud-based business model, DigitalFilm Tree now aims to bring that model to its clients and to increase the OpenStack network, so the platform can be used to build a standard for sharing and collaboration in the media and entertainment industry. They have become evangelists for OpenStack workflows within the industry, providing IT and consulting services to help studios set up their own instances of OpenStack, getting started with private clouds that can then be hybridized to public clouds when the studios are ready to share content with the outside world.

Aubuchon believes that these efforts are especially crucial for the Hollywood studios, if they are to remain competitive with cloud-based content providers like Amazon and Netflix. Studios have been wary of the cloud, and of open source platforms like OpenStack, due to concerns about keeping content secure; however DigitalFilm Tree’s efforts and their own acceptance of OpenStack has helped bring about what Aubuchon describes as a “regime shift,” with more and more studios embracing the cloud and the expanded business model made possible by putting more and more content on the cloud. The studios will always need private clouds, hosted internally, for content they want to keep within their own walls, but OpenStack gives them a way to easily migrate that content to a platform that gives them access to the rest of the world, once they are ready to share.

Aubuchon believes that OpenStack can help solve one of the entertainment industry’s principle roadblocks, which is a lack of industry standards that facilitate easy collaboration and communication. When content is produced, he explains, it often needs to pass through a number of different clouds, from the post-production facility, to the visual-effects vendor, to, eventually, the distributors, like Hulu and Netflix and Amazon, which are clouds themselves.

According to Aubuchon, everyone involved in this chain has a vested interest in moving the content from cloud to cloud as quickly and easily as possible, yet none of the separate clouds are really meant to share content with each other. “We’re trying to bridge that gap with OpenStack”, he says. “We realized OpenStack was a way to build a standard in the industry,” he continues, “where we could all run our own services and have our applications, but using a unified platform. OpenStack was definitely the answer we had been looking for.”

RACKSPACE AS A PARTNER FOR THE FUTURE

In Aubuchon’s view, Rackspace has been a natural fit to help DigitalFilm Tree expand its business, and stay at the forefront of the industry. At present, DigitalFilm Tree relies on Rackspace to host all of its public-facing software and includes both Rackspace and OpenStack in its plans for future growth. “Rackspace is not only a key part of our software model, it’s a key part of our business model,” says Aubuchon. He praises the company for fostering an open and agile experience, for understanding the needs of the entertainment industry, and for helping DigitalFilm Tree pursue its larger goal to promote industry standards based on OpenStack.

Aubuchon is proud that DigitalFilm Tree is at the forefront of the industry, promoting the cloud-based solutions that he believes are crucial to the future of Hollywood as we know it, and he’s happy to share the credit with Rackspace and OpenStack. “We like to live in the future,” he says, and “Rackspace has really allowed us to live in that future and live in a place that feels like it’s the shift that our industry needs to change, and it’s really the future of our industry as a whole.”