

M+E

JOURNAL

It's Showtime!

Innovation explodes across every workflow as technology emerges from the pandemic.



Where are you in this accelerated evolution?

DIVERSITY & INCLUSION

In the office, behind the camera, and on the screen, diversity is crucial

SECURITY

Remote productions create new security concerns, with assets under siege

SMART CONTENT

Artificial intelligence and machine learning are being applied in new, exciting ways

NEW WORKFLOWS

The cloud is delivering on its promise, powering the future of productions

21.01



HOW THE CLOUD IS FUELING VIRTUALIZED PRODUCTIONS

Partnerships, interoperability will be vital to today's evolving virtual production and multi-cloud ecosystem

By Lisa Gerber, Director, Business Development, Media, Entertainment, PacketFabric

ABSTRACT: It's well established that content production is moving to the cloud and content distribution is already fully there. Here we discuss how to approach the specific networking needs of virtual production, studio IP, and challenges and opportunities of using multiple cloud networking architectures. Further, we'll explore best practices for employee empowerment, education, equal pay and honoring our own origin as a female-founded company.

In the wake of unique challenges posed by the pandemic, virtual production is meeting demands of original content production. Exciting and aptly timed capabilities like virtual reality scouting and new camera-to-cloud technologies offer a solution to companies and artists working remotely and in disparate locations, often without the benefit of live interaction or traditional sets.

In spite of its clear advantages, virtual production also creates a need to manage more data, move larger files, and stay aligned through more complex workflows.

Whether for episodic or feature film content, streaming or live events, the boom in cloud services is well equipped to customize and adapt as production requirements evolve for everything from story development to distribution. It's been expressed that often the public internet itself — the way to actually reach the cloud — falls short.

In our white paper "Connectivity, the Cloud and the Creative Process," creative freelancers and other media and entertainment professionals identify their needs for connectivity. The research found that to ease adoption of any new technology, and specifically new modes of cloud connectivity, tools and services must be:

- Easy to use, quick to provision
- Secure
- Fast and jitter free
- Scalable, with the ability to transfer large files
- Able to mitigate egress fees

Since publishing the paper in December, PacketFabric has added an additional service to its API-driven portal, one which not only meets the above needs, but also adds to one which is somewhat newly realized: the need to work seamlessly between cloud providers for a full multi-cloud based production pipeline, from idea to distribution.

The PacketFabric Cloud Router is the company's first foray into layer three as the Network-as-a-Service (NaaS) climbs up the chain in the open systems interconnection (OSI) model. The Cloud Router can provide seamless connectivity between different phases of production which are currently siloed from one another in terms of personnel, workflows and infrastructure.

Simply put, it allows routing between cloud service providers, dramatically reduces egress costs and the need for cumbersome VPNs, and revolutionizes a historically fragmented industry. It is accessible and easily provisioned through the company's self-service portal or standards-based API.

As the industry insider organization, MovieLabs' shared in its follow up to the 2030 vision paper, "Software Defined Workflows," the future of cloud production will require more automation and interoperability between historically siloed phases and workflows. A disruptive form of connectivity is therefore required to be nimble and cloud agnostic to route between previously fragmented steps and processes.

As with any connector, partnerships and interoperability will be vital to this evolving virtual production and multi cloud ecosystem. PacketFabric positions itself in the industry accordingly.

The very nature of a middle-mile service like PacketFabric is integration. Private backbone, cloud connectivity, or point to point connections are a means to an end. They're a vital piece of a larger solution, especially when the use case and end result require secure, easy transfer or access.

These larger solutions often take the form of strategic partnerships. PacketFabric is connecting continents with its partner Colt, to expand its services into Europe. It also partners with system integrators across verticals to furnish solutions for users for whom security, project timelines and ease of use are non-negotiable. Cloud

AS NETWORK-AS-A-SERVICE (NaaS) continues on its path towards automation, robust partnerships and interoperability, one can expect it to be connecting media and entertainment, uniting companies and people, well into the future.

storage and CDNs can join forces with PacketFabric to ensure safe and fast access to their respective services, and the NaaS also works directly with customers, giving companies who previously struggled with the public internet, an on-demand portal with their own secure and scalable connectivity. A visual effects rendering use case, wherein a company is connected to their chosen cloud provider for a period of a few weeks, can be spun down and re-provisioned instantly.

A company revolutionizing the way network connectivity is consumed, PacketFabric also has its eye on the future of diversity and an inclusive company culture.

The company's employees have worked remotely since its founding in 2015. Its diverse workforce collaborates virtually from all over the world, ensuring that it is never without someone available for customer or partner support. This global mindset has bolstered the company from the beginning.

To quote PacketFabric CEO Dave Ward: "One of our chief focuses is shaping and implementing breakthrough best practices for employee empowerment, education, and equal pay. In so doing, PacketFabric honors its spirit both as a technology disruptor and its origin as a female-founded company."

As the NaaS continues on its path towards automation, robust partnerships and interoperability, one can expect it to be connecting media and entertainment, uniting companies and people, well into the future. ▣



Lisa Gerber is the director of business development for media and entertainment at PacketFabric. In her role at PacketFabric, she identifies private connectivity use cases for M&E as the industry evolves to embrace new tools and processes for an increasingly decentralized workforce. Her specialty lies in bringing together different types of creative innovators, from visual effects artists to network engineers, and in strategizing groundbreaking and substantive models for success.
lisa.gerber@packetfabric.com @packetfabric