

Accelerating content production with cloud-based rendering on AWS

Turn months into weeks—and days into hours—with cloud-based content production on AWS



Push the limits of content creation

Shrink the gap between creation and completion

Whether you deliver programs for streaming platforms, 3D assets for animations, or visual effects (VFX) shots for feature films, the demand for content today drives even less-forgiving deadlines. Turnaround times are tight. Changes are inevitable. And you can never compromise quality. The only thing in between the final iteration of your creative and the delivery of the scene? The slowly crawling progress bar of a huge render that might take all day or all week.

Break through rendering bottlenecks

Studios often have on-premises render farms that combine the computing power of hundreds or thousands of computing nodes to process their rendering jobs and break through the bottlenecks tying up artists' workstations. But render farms can take days, weeks, or even months for companies to build and deploy, requiring time and expertise to configure their complex infrastructure.

What's more, on-premises render farms often have fixed capacity, which limits the number of projects they can run concurrently. When render farms run out of capacity, studios often have to delay projects and risk missing delivery commitments.

Start simply, deliver quickly

Moving rendering to the cloud—even a portion of it—can help your studio break through rendering bottlenecks and realize even more productivity advantages. It gives you the scale to add or remove computing power to grow along with your projects. It also alleviates major investments in on-premises infrastructure and keeps your artists creating instead of waiting. Even better? Adding cloud rendering is likely less complicated than you think.

With award-winning technology and an expansive team of industry experts, Amazon Web Services for Media & Entertainment (AWS for M&E) helps creators focus on delivering high-quality content by scaling as high as needed to deliver on time while eliminating the overhead—and minimizing the administration—of managing a physical infrastructure.





Discover **four ways** to accelerate content production

Instantly tapping into massive rendering capacity is only one way using the cloud can help studios accelerate content production. Solutions and services from AWS and AWS Partners offer studios the power to tackle content production bottlenecks.

1. Collaborate globally

Studios can tap into a global creative workforce that connects to their cloud-based projects, enabling seamless collaboration across locations and time zones with virtual workstations for remote artists.

2. Build rapidly

Launching and scaling production environments in the cloud lets studios bypass upfront infrastructure costs and constraints, expand compute power elastically to match needs and crunch periods, and pay only for the resources they use.

3. Create efficiently

In the cloud, artists wield workstation-grade performance that's powered by high-speed networking and GPU acceleration. Renders, simulations, color grading, and other image processing happen behind the scenes—artists no longer have to wait for the progress bar to complete.

4. Innovate creatively

AWS simplifies complex pipelines, removes technical obstacles, and automates workflows throughout the process, allowing technical teams to focus on innovating their studio's differentiators.

Create more, deliver faster

Whether you're navigating the proliferation of streaming programs, observing the rise of short-form content, changing viewer behavior, or making a move toward data-driven advertising, AWS understands the dynamics and economics of content creation for M&E companies. To help meet these challenges, AWS aligns M&E services and capabilities for content production to help customers transform the industry and user journey.

AWS Deadline Cloud

Improve the efficiency of your rendering pipelines and take on more projects using purpose-built management and pipeline tools that set up, deploy, and scale rendering projects in minutes. Scale thousands of compute instances up and down as needed.

[Read more →](#)

Amazon Elastic Compute Cloud (Amazon EC2)

Match the needs of your rendering workloads precisely by choosing from more than 750 compute instance types and the latest processor, storage, networking, operating system, and purchase model. Use Amazon EC2 Spot Instances to take advantage of unused Amazon EC2 capacity, available at up to a 90 percent discount compared to on-demand prices.

[Read more →](#)

Amazon FSx

Simplify file storage for data in your render farm. As a fully managed service, Amazon FSx increases performance and lowers your total cost of ownership.

[Read more →](#)

Edit in the Cloud on AWS

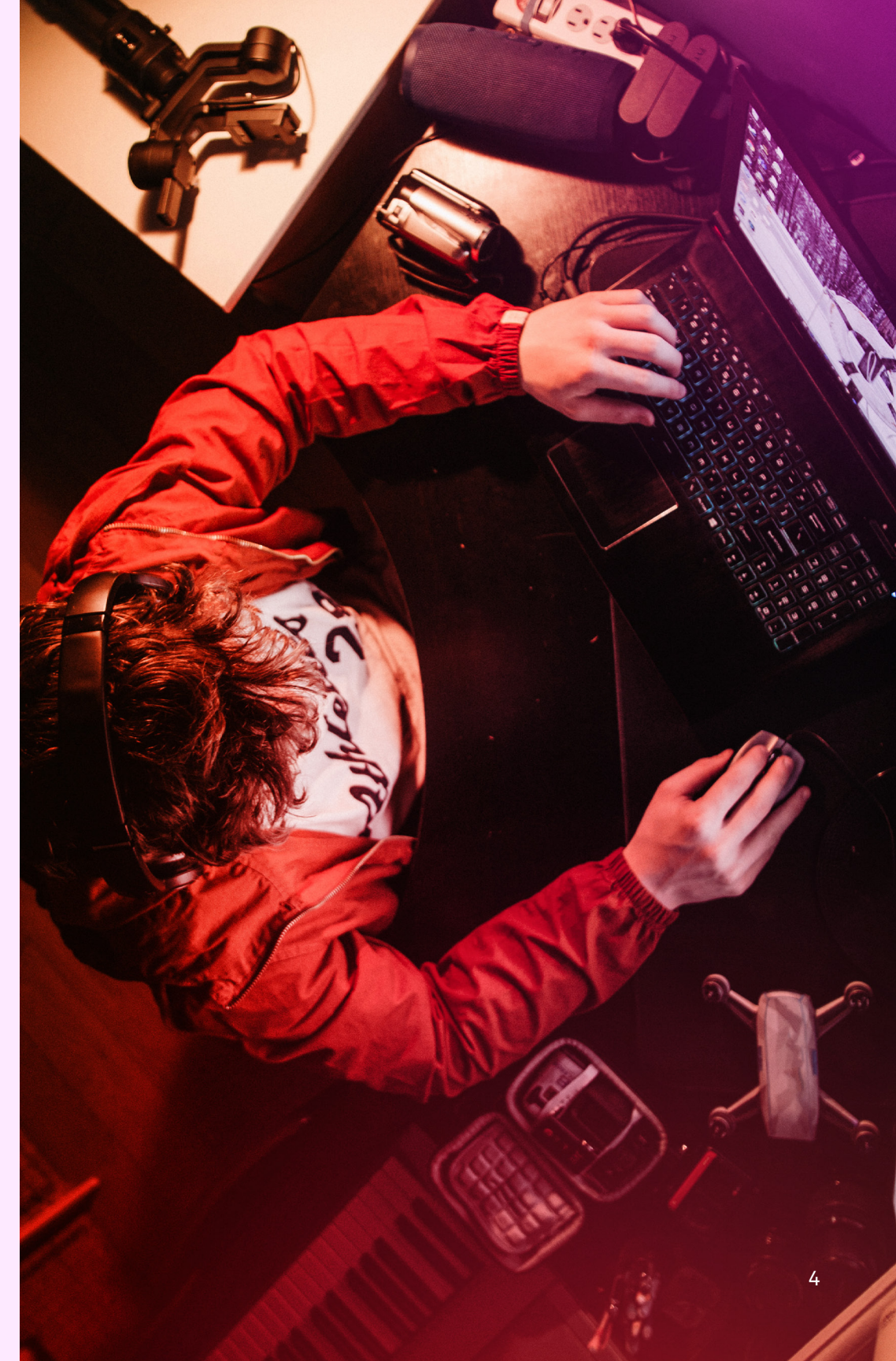
Collaborate with your team in a virtual video editing environment on AWS. Load your preferred postproduction applications and plugins, upload your media, and immediately begin working on your project. All you need is a computer with a high-speed internet connection.

[Read more →](#)

AWS Color in the Cloud

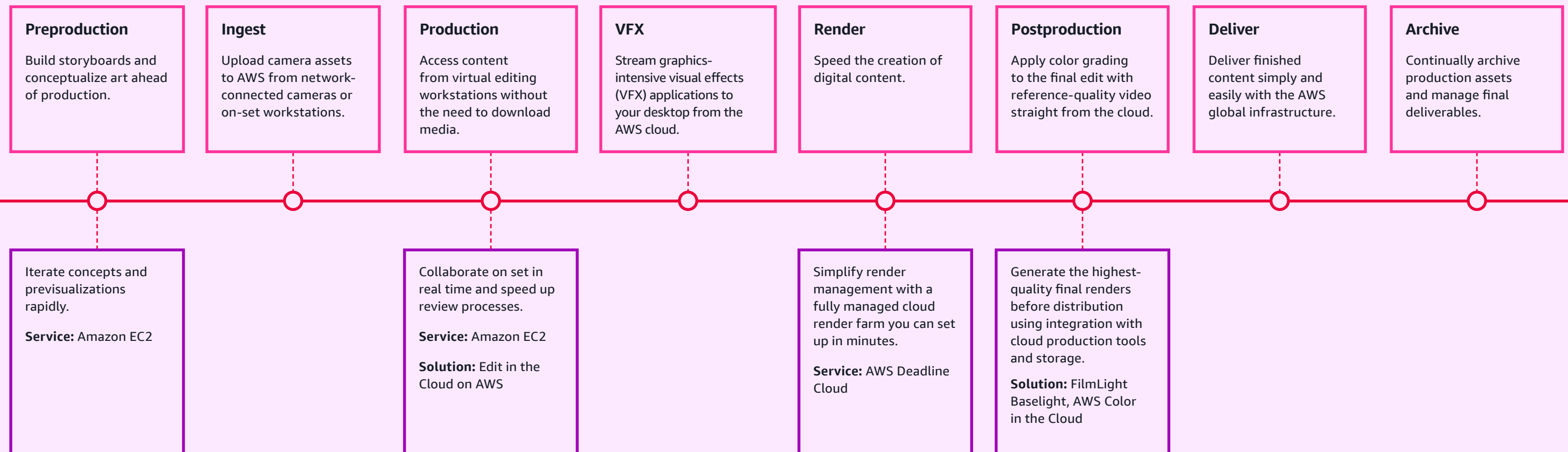
Achieve the highest possible quality—even in the final stages of your project—with speed, ease, and flexibility. In partnership with FilmLight, the Baselight color grading and finishing system lets AWS users access creative finishing by connecting Amazon EC2 instances to an on-premises professional grading monitor.

[Read more →](#)



Streamline production workflows

Take a holistic approach to content production and maximize the value of virtual workstations and rendering in the cloud throughout your entire production workflow.



Reimagine how to create content that viewers expect

Cloud-based content production helps you scale globally, collaborate remotely, and accelerate productivity.

Learn how to improve production quality and efficiency while reducing costs with [AWS for Media & Entertainment Content Production](#).

Get a [personalized consultation](#) to explore your options for growing your Media & Entertainment business.



Case studies

[The Crown](#) completed more than 600 VFX shots in eight months with a team of 10 artists on AWS for season four. The team was up and running in less than one month.

“In creative industries, it can be tough to quantify things like productivity and artist satisfaction, but the numbers speak for themselves. Our team was able to complete an incredible amount of work this season, despite the challenges, and I definitely noticed a jump in happy faces. Working on AWS allows artists to create in a way that’s familiar and close to an on-premises experience, which helps the tech fade away and allow them to focus on creating.”

Ben Turner, VFX Supervisor, *The Crown*

Wētā FX outgrew its data center and scaled to AWS to power the rendering of computer-generated simulations and complex digital visual effects during the production of [Avatar 2: The Way of Water](#), which features more than three hours of content and 3,000 VFX shots.

“The difference when we went to the cloud was truly palpable. We would not have finished but for the support we got from AWS.”

Jon Landau, Producer, *Avatar 2: The Way of Water*