

5G and the edge for real-time streaming

Verizon 5G Edge with AWS Wavelength helps transform today's streaming video experiences

Addressing the insatiable demand for streaming media entertainment

Media companies face growing demand from consumers for fresh content while competing with independent social media creators for relevance.

4K 8K



Consumers expect high-quality and timely content across multiple devices, consuming high-definition media on big-screen televisions, phones, tablets and virtual reality headsets.

Traditional production of real-time streaming content for news, entertainment and sports is expensive and rigid.

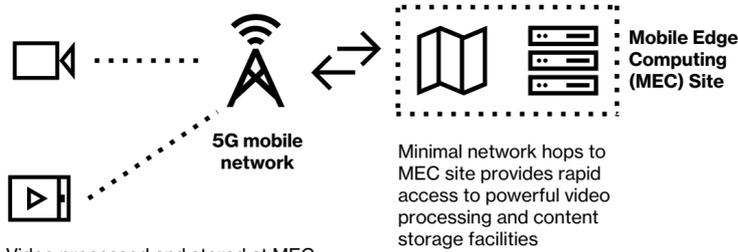


Onsite video capture and production equipment at event venues takes up significant footprint and is costly.



5G and the mobile edge bring increased flexibility, lower upfront costs, and can streamline the video production pipeline.

High-resolution video can be transmitted quickly over high-capacity mobile networks like Verizon 5G Ultra Wideband



Video processed and stored at MEC site can be distributed and transmitted to mobile devices for near-instant viewing

Minimal network hops to MEC site provides rapid access to powerful video processing and content storage facilities

5G and edge transforms real-time streaming

Ultra-low latency: Close proximity of edge computing to the mobile user provides the lowest possible latency between devices capturing or viewing video and computing resources.

Ultra-high bandwidth: Data transfer between the edge computing resource and video capture or playback devices reduces potential constraints in the backhaul or core network.

Powerful computing: AWS Wavelength provides access to powerful Amazon EC2 instances equipped with GPUs for fast processing of video streams.

Scalability: AWS cloud services can be scaled up or down as needed based on customer workloads. Pay-as-you-go pricing provides added financial flexibility.

Reliability: Reduced number of network hops between cameras or viewing devices and computing resources helps ensure a reliable connection with reduced variability.



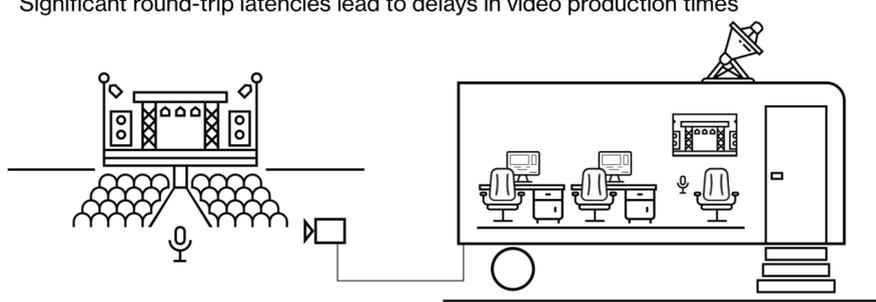
Agile remote video production example

5G and mobile edge untether video capture and production equipment at events and concerts, providing agility, minimizing onsite equipment footprint and lowering production costs.

This reduces the time from video capture to media distribution, allowing media teams to cover more events in less time and with lower capital outlay. It also unlocks innovation and brings new media income streams for content companies.

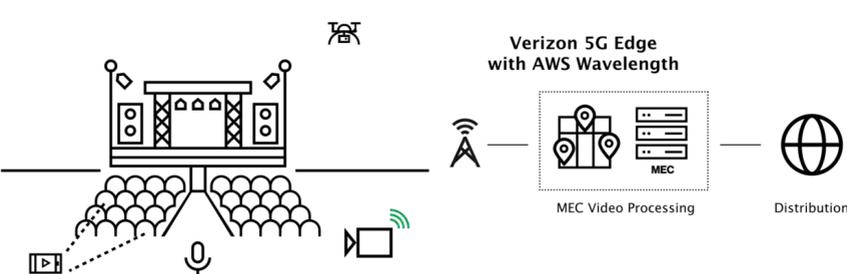
Without 5G and edge computing:

- Expensive onsite truck rental and microwave or satellite connections
- Costly on-premises computing and production equipment
- Multi-day planning, setup and staging
- Limited mobility of video capture equipment
- Significant round-trip latencies lead to delays in video production times



With 5G and edge computing:

- Edge-powered video productions reduces onsite footprint and costs
- Pre-staged media and assets on edge computing nodes allow for dynamic content insertion
- 5G enables richer event coverage by supporting ingestion from flexible sources: cameras, mobile phones and drones
- Using 5G for video upload at edge sites allows live editing and instant feed switching, reducing production times



Real-time streaming using Verizon 5G Edge with AWS Wavelength

Explore how high-performance and reliable mobile technologies coupled with strategically-located edge computing resources can bring innovative streaming solutions to enterprises and consumers everywhere.



AWS Wavelength is located with Verizon's 5G mobile core, providing the lowest latency and most reliable access to cloud computing for video processing and storage.



Verizon 5G Edge is protected from direct internet access and relies on secure mobile identity management, providing increased security.



Streaming apps can use Verizon Edge Discovery Service (EDS) in real-time to find the closest AWS Wavelength instance.



Developers can use familiar AWS console, APIs and AWS services for development, with access to GPU-enabled EC2 instances for intensive image processing needed for real-time streaming.



Full-access to rich computing resources enables intelligent real-time immersive and transcoding of real-time immersive videos.



Edge-based applications can continue to process data even if upstream network connections are down, improving network resiliency and media stream availability.

Get started.

Verizon 5G Edge with AWS Wavelength delivers real-time streaming with a smaller onsite footprint, a lower starting cost, pay-as-you-go pricing, and comes with a large ecosystem of developer and professional services support.

Learn more

verizon.com/5gedgeawsavelength

