

BROADCASTERS RELY ON WAN SOLUTIONS FOR REMOTE PRODUCTION

As broadcasters continue the transition to all IP networks, WAN orchestration and cloud management become integral components for reliable operations and superior performance.

The explosive growth of uncompressed video streams, whether from remote production, or contribution and distribution, continues to push bandwidth requirements across broadcast and media networks. Uncompressed video bit rates now exceed 12 Gbps for 4K streams and will rise to 48 Gbps when 8K streams become common. The growing need to distribute these impressively large uncompressed video streams across WANs, with a guarantee of no interruption, is not an easy task. Fortunately, Juniper solutions can assure and secure the delivery of these streams.

Juniper is a leader in broadcast routing, remote production distribution, and WAN orchestration. Juniper Networks® MX Series Universal Routing Platforms are the key to digital transformation for service providers, cloud operators, and enterprises. As a leader in cloud networking with automated WAN solutions, Juniper provides the best user and operator experiences. We call it Experience First Networking.

MX Series Routers and Paragon Pathfinder for Broadcasters

Multinational broadcasters use MX Series routers for reliable, high-performance WAN transport and delivery. These WANs must deliver scalable capacity and uncompromising reliability. Huge volumes of ultra-HD video must be transported, and unforeseen outages must not impact viewer or studio experiences. This is the reason broadcasters also choose the additional reliability and automation features offered by Juniper® Paragon Pathfinder (formerly NorthStar Controller) and Juniper Paragon Insights.

Using an SDN controller such as Paragon Pathfinder is critical to orchestrate the requirements of SMPTE ST 2022-7 Seamless Protection with the transport network. An SDN controller automates the complex job of guaranteed video delivery, enabling greater scalability and efficiency.

Juniper Paragon Insights for Intelligent Reporting and Analysis

Paragon Insights provides operational intelligence across all network domains. The cloud-native solution gathers data from open-source data collection formats including OpenConfig, and it uses advanced algorithms and ML technology to determine any issues and perform proactive corrective actions.

With a focus on health monitoring and network analytics, Paragon Insights provides an aggregated and abstracted view of network health with highly customized policies and playbooks—all presented through a functional drag-and-drop Web interface. It's perfect for broadcast workflows that must guarantee that video streams are always available.

Use Case



Bringing It All Together

When it comes to broadcast and media, content truly is king. Juniper Networks makes sure your content reaches its destination completely and securely. Juniper automation solutions proactively report on and solve your toughest network issues.

Whatever media experience you are providing, from wherever you are in the world, Juniper enables you to build agile networks with the right architecture, automation, and assurance for client to cloud experiences.

Next Steps

To find out more about Juniper's broadcast solutions for wide area networks, and specifically how SMPTE ST 2022-7 can be easily implemented to guarantee your streams never go offline, read "[Building Highly Reliable Media Transports in Broadcast Networks.](#)"

To learn more about Juniper Networks MX Series Universal Routing Platforms, go to the MX Series page at www.juniper.net/us/en/products/routers/mx-series.html.

Stay up-to-date with Juniper solutions for media and entertainment by visiting www.juniper.net/us/en/solutions/media-and-entertainment.html.

About Juniper Networks

At Juniper Networks, we are dedicated to dramatically simplifying network operations and driving superior experiences for end users. Our solutions deliver industry-leading insight, automation, security and AI to drive real business results. We believe that powering connections will bring us closer together while empowering us all to solve the world's greatest challenges of well-being, sustainability and equality.



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