

Cisco IP Fabric for Media

Ready to scale your production network for rich media experiences?

Cisco® IP Fabric for Media enables content providers and broadcasters to migrate from legacy SDI to a flexible and scalable IP-based infrastructure to meet the evolving demand for more content and rich media experiences, including more camera feeds, higher resolutions with 4K and 8K video, and virtual reality capabilities.

Optimized for media workflows, Cisco IP Fabric for Media is based on Cisco Nexus® 9000 Series Switches, with DCNM (Data Center Network Manager) acting as a Software-Defined Networking (SDN) network controller.

Features and functionality

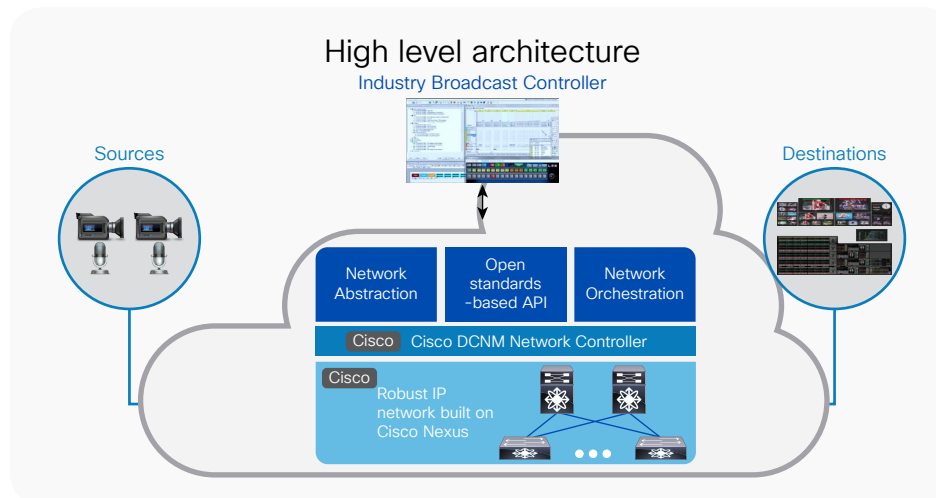
Cisco IP Fabric for Media supports:

- SDI- to IP-based infrastructure migration by carrying SDI over IP using industry-standard SMPTE 2110, 2022-6, 2022-7 designs, while providing the same level of quality and robustness that SDI is offering today.
- Bidirectional high-performance 1/10/25/40/50/100-Gbps interfaces to meet an exponential growth in bandwidth and multi-signal requirements.
- One common non-blocking IP Infrastructure for video, audio, and metadata signals.
- Deployment flexibility to operate with and without Cisco DCNM Network Controller depending on use case and deployment location

Benefits

- Economies of scale with COTS (Commercial off-the-shelf) IP-based infrastructure for media environments
- Future-proof your infrastructure with high bandwidth and high density networking
- Secure network with end-point access control
- Preserve existing media operations and workflow
- Increase operational flexibility with unified IP fabric for live broadcast and file-based media workflows
- Faster deployment, less risks with open standards-based interfaces and preintegrated solutions with extensive choice of ecosystem vendors
- Extensible environments that support interstudio, outdoor broadcast, remote, and distributed production in the same network architecture
- Lower total cost of ownership with simplified data center networking and cabling management

- SDN Orchestration APIs at Cisco DCNM Network Controller layer and IP switching layer for integration with broadcast production systems.
- Non-blocking video, audio, and metadata signals on the same IP infrastructure.
- Orchestration APIs between the IP network and broadcast production systems with the Cisco DCNM Network Controller. It automatically optimizes and prioritizes network traffic to guarantee Quality of Service (QoS) for uncompressed live video.
- Live broadcast and file-based workflows in one common IP-based software-defined architecture.
- QoS for revenue-critical live broadcast services in IP network environments with non-blocking fabric.
- Ability to meet stringent broadcast video quality requirements with low latency, jitter, and packet loss; high availability; precision timing; and synchronization support.
- High level of network visibility for diagnostics, monitoring, and management of IP networks.
- Authorization and policy management for security assurance against unauthorized access.
- Ready for SMPTE 2110 to optimize audio and video processing at destination end-points.



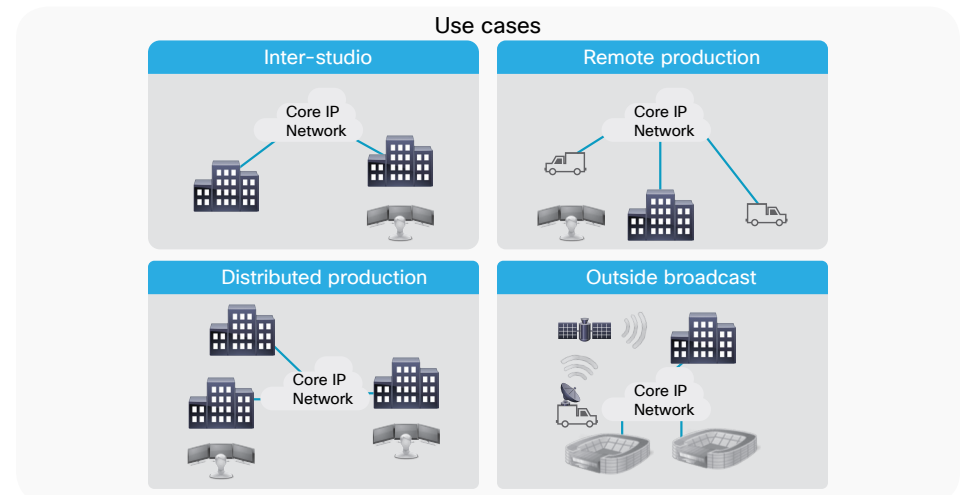
Cisco expertise: IP networking for professional media

Cisco has the combination of IP and media networking expertise to deliver a robust and scalable IP-based media production network with full functionality, manageability, and quality of service that SDI has traditionally delivered. Cisco IP Fabric for Media applies Cisco network infrastructure and powerful APIs to deliver essential IP-based broadcast production capabilities that meet a broadcaster's goals and requirements.

Cisco is a primary contributor to multiple standard bodies in the industry and is committed to open standards to make sure that Cisco IP Fabric for Media supports a wide range of production applications from the top vendors in the broadcast industry.

To provide a simplified upgrade path for companies seeking to replace legacy equipment in a controlled, phased manner, Cisco IP Fabric for Media is pre-integrated and bundled into multiple ecosystem partner solutions.

Cisco has invested billions of dollars in technological innovations, including SDN and end-to-end security capacities to lead the industry and protect our customers' investments. Together, we shape the future of content and consumer media experiences.



Next steps

For more information, visit our website at <https://www.cisco.com/go/media>.