CANAL+ Digitizes Live Studio Production with IP Transformation

Executive Summary

Customer Name: CANAL+

Industry: Media and Broadcast
Content and media providers need to meet growing demand for more content and richer media experiences, including more camera feeds, higher resolutions such as 4K video, and virtual reality experiences. CANAL+ Group, the leading provider of premium content and themed networks in France, is transforming its media production infrastructure to an IP foundation to gain the scale, flexibility, and reliability that existing SDI cannot provide. Together with Cisco, CANAL+ is pioneering the digitization of live studio production with IP.

“IP transformation is strategically important to CANAL+, and represents a major innovation for live production in Europe.” Cisco’s roadmap, architecture flexibility, and support of broadcast vendors, ensured production workflow continuity.”

— Ralph Atlan
CTO, CANAL+ Edition

**Result**
CANAL+ prepares for the future with a new foundation for its media production. Benefits include:

- Flexible scaling to support more live studio production and 4K resolutions
- Ability to offer new programs more quickly to customers and affiliates
- Deployment in four months to rapidly bring broadcast studios on-air

**Business Challenge and Results Summary**
CANAL+ Group was embarking on a strategic initiative to lead the industry in offering audiences enriching TV experiences with the production of more live events, such as sports and concerts. As part of that initiative, it built a new production center, called CANAL Factory, to house its two media production studios. The opportunity was ripe to consider a new technology architecture that would become a foundation for future innovation and differentiation.

CANAL+ has a long partnership history with Cisco, and has standardized on Cisco IP networking in the enterprise. As a result, CANAL+ has experience with Cisco® IP technology and implementation and the confidence that IP technology was mature enough to support live production. However, CANAL+ produces over 170 shows per month, and it needed to ensure that its current operations would work as seamlessly across an IP fabric as it currently does across its SDI infrastructure. Helping to ensure comprehensive, reliable broadcast operations was of equal importance as the benefits of IP, such as flexible scaling, simplified routing, and lower TCO. In addition, the specific space requirements in the new facility did not lend themselves to a full data center architecture typical of most IP infrastructure approaches.
The Cisco IP Fabric for Media solution offered CANAL+ the reliability to run live production over IP, scaling to support 12 Tbps with no packet loss. At the same time, it offered the transparency of the IP fabric to existing media operations, helping to ensure there was no change to existing workflow and studio operations.

A key attribute of the solution design was the integration and support from broadcast ecosystem partners. Critically important to CANAL+ was the integration and validation with Grass Valley, so that existing operations of Grass Valley systems would work seamlessly across the Cisco IP infrastructure. Cisco Advanced Services were involved early in the project, integrating and validating the architecture and providing the visibility into the network that gave confidence in the solution’s non-blocking IP core.

An important element of Cisco’s approach to integrate broadcast controllers with the IP network is the open API from the Cisco Data Center Network Manager, which enables the translation of broadcast policy into network flows on the Cisco IP Fabric. For the continuity of broadcast operations, the Data Center Network Manager provides visibility and control across the entire network flow from source to destination.

Cisco offered CANAL+ a practical roadmap for its IP transformation, able to support multiple use cases from studio to remote production as well as 4K compliance from a future-ready platform. The IP Fabric for Media solution offered deployment flexibility with a modular chassis architecture to fit into CANAL+ Groups environmental constraints. Scaling can be achieved equally with a modular chassis approach as a data center architecture for a truly flexible foundation for growth.

- Components: Cisco Nexus 9000 Switches, Cisco Data Center Network Manager, Advanced Services
- Partners: Grass Valley, Videlio