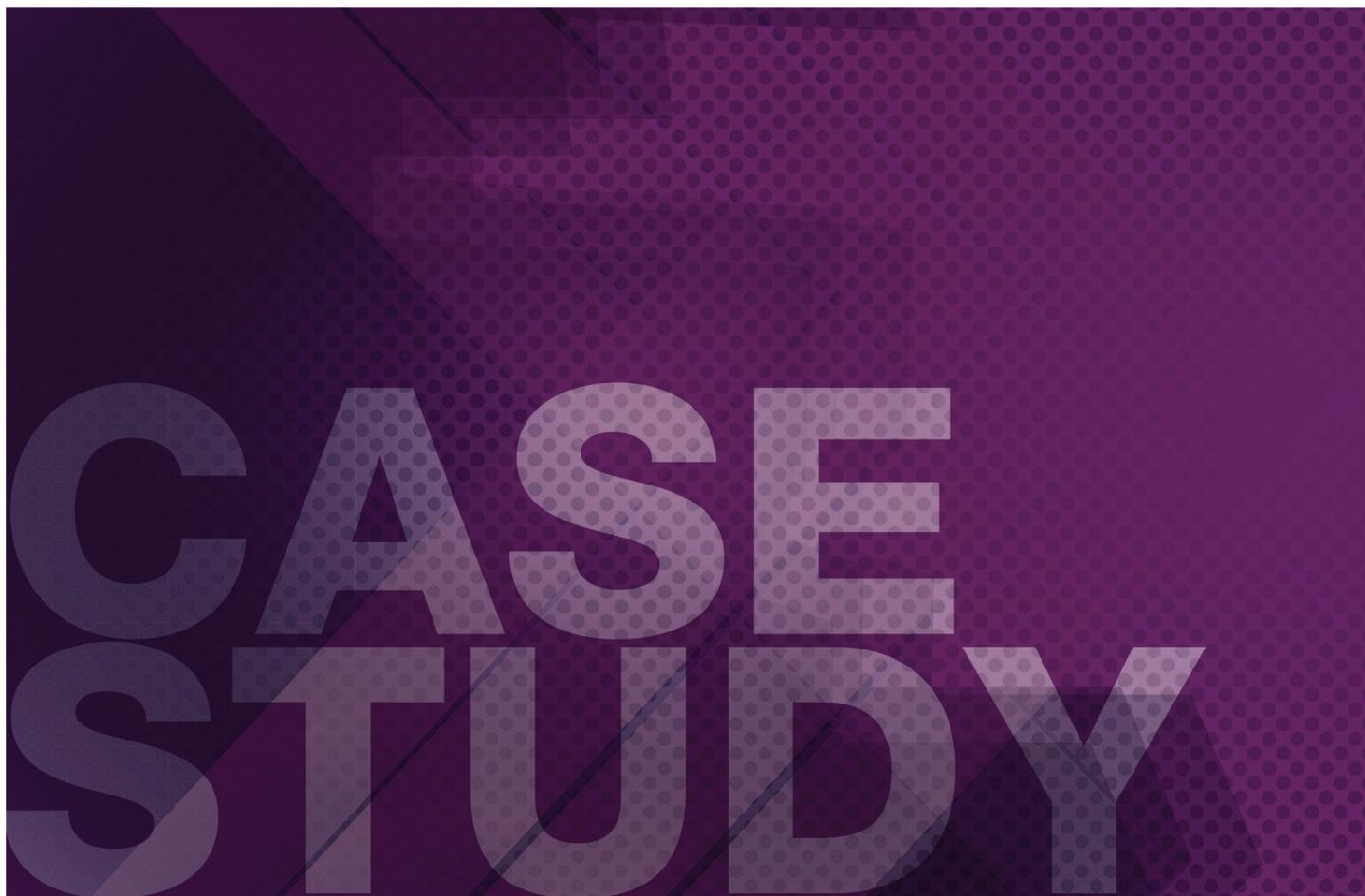




NEP The Netherlands Migration to IP



CUSTOMER

NEP The Netherlands

SOLUTION

Sirius 850
Kahuna
IQ



Grass Valley's roadmap to provide IP connectivity on the Kahuna mainframe (available now) matched their IP aspirations.

Executive Summary

NEP The Netherlands, part of the NEP worldwide network, is one of Europe's leading providers of innovative video technology and broadcast IT solutions. It comprises a portfolio of products and services focusing on the production, distribution, management and exploitation of content through television and digital media. Its capabilities include operating multiple production studios, a fleet of OB vehicles, post production facilities, operating a media asset management platform, content delivery and OTT services and its own dark fiber telecommunications network and data centers.

It is a highly innovative IP-aware organization, having already successfully introduced a cloud-based post production platform; NEP The Netherlands introduced a comparable concept for multicam live productions in October 2015 and for that reason transformed its operation to IP, cloud-based production. Due to investment in a national dark fiber infrastructure, and several data centers over the last ten years, NEP has almost infinite bandwidth and can therefore work without any compression or delay.

The studio location and all essential parts of Cloud Production are connected via IP network connections. All connections use NEP's own unique dark fiber network to connect to its data center(s). The entire infrastructure is monitored by NEP's software monitoring tool, GrandCentral, and supported by a 24/7 service operations center. By using this scalable IP technology and capacity, NEP the Netherlands can process HD 1080i, 1080p and UHD, as well as future formats such as high frame rate and high dynamic range.

This meant it needed to invest in a hybrid IP SDI solution today with a plan on how to reduce the amount of SDI in the future as IP becomes more practical.

NEP The Netherlands conducted intensive research with all the major suppliers within the media industry and in June 2015 selected Grass Valley to provide the core routing and switching requirements.

Its main objectives were:

- To provide a 'game-changing', highly competitive commercial offering by reducing on-location and in-studio equipment requirements and allowing its centralized resources around its own data center to be quickly re-allocated between different geographically dispersed studio and OB truck locations. Significant savings would be offered to clients by scheduling by the hour only the equipment that is really needed for a specific program. Additional savings would include avoiding the high transport costs, set up and personnel costs associated with fully equipped studios and trucks.
- To fulfill their responsibility as market leader to promote sustainable broadcasting by offering 'greener' services.

Challenges

NEP The Netherlands identified various challenges in the marketplace which gave them valuable reasons for starting Cloud Production. Changes in viewers behavior due to OTT platforms such as Netflix; lower budgets of public broadcasters; fast changing schedules of broadcasters including change of set, venue and change of formats; environmental issues; quality improvements (HDR, 4K UHD) and the requirement for the improvement in the quality and uptime of service needed for IT equipment in OB vehicles on remote locations is proving difficult.

The company's Cloud Production platform centralizes resources so that they can be shared more efficiently, sustainably and across multiple productions and locations every day — enabling the production crew to focus on the quality of the productions. Because of this centralized approach, significantly fewer crew members are needed on location, which also greatly reduces travel and accommodation costs.



“We were looking for future-proof, open standards-based IP interfacing with minimal technical or business risk and found it in Grass Valley’s IP Edge.”

Peter Bruggink, CTO, NEP The Netherlands

In addition, NEP’s Cloud Production offers the flexibility to allow directors to work in close proximity of the recording location or remotely in a centralized gallery setup. All of this contributes to a more sustainable environment in which large trucks and crew vans are no longer needed; there is complete control over the production processes — just as there is with traditional productions, and depending on the type of production, the director has the option of working remotely or on-site, while the technical infrastructure in the datacenter is shared among productions.

Already IP-competent within its existing facilities, NEP The Netherlands planned to grow its Cloud Production Platform into a full IP platform as soon as technically, operationally and financially possible. However, the commercial imperative of launching sooner to accommodate the market and clients’ needs dictated that the core router and switching technology had to be HD-SDI initially.

NEP The Netherlands sought a long term partnership with a vendor that could fulfill both its day one needs and facilitate its migration to its IP future vision.

Grass Valley was the only company that could fulfill these requirements.

The Grass Valley Solution

NEP The Netherlands invested in Sirius 850 routers, Kahuna production switchers with modular control panels and IQ modular infrastructure to deliver both its day one requirements and enable its migration to full IP routing in the future.

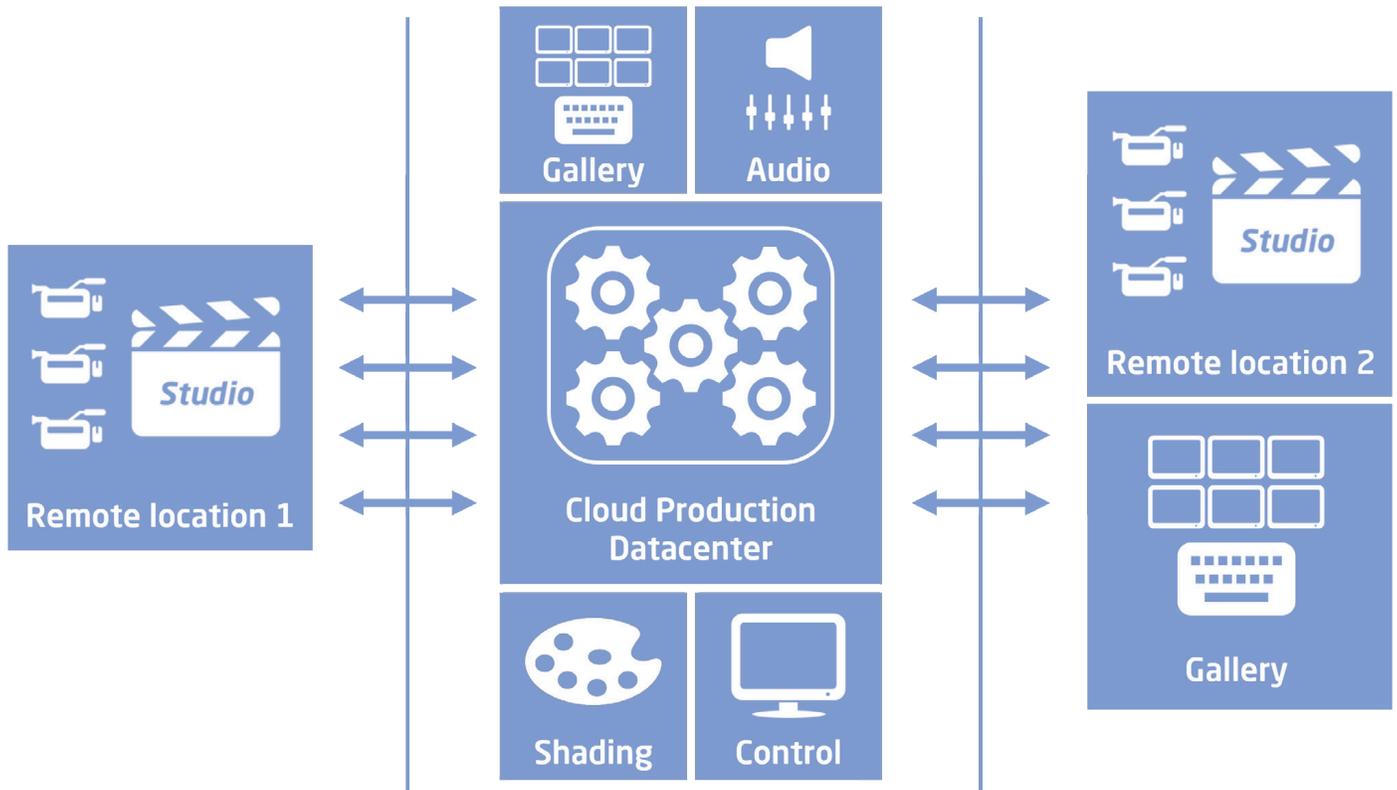
Today the Sirius 850 router and Kahuna production switchers are installed and operational. In the coming months IQMIX IP/SDI conversion modules will be deployed ensuring all HD-SDI sources on the Sirius 850 router are available on their IP router. Similarly all IP sources are also available on the Sirius 850 router which is achieved via Grass Valley’s IP Edge. DS Link cables have reduced the cabling between the Sirius router and IP switch by a factor of eight; a huge cost and complexity saving to the organization.

This approach to migrating to an IP world drastically reduces the deployment risk and is unique to Grass Valley technology.

In addition to the IP migration benefits, the Sirius 850 router offered, in NEP The Netherlands opinion, “the most innovative, feature rich HD-SDI router available” because of its comprehensive AHP processing and looping inputs and outputs used for the IP migration.

Once Grass Valley had been selected as the provider for the core routing infrastructure, NEP The Netherlands turned its attention to the production switcher requirements for their new galleries.

Following detailed evaluations of all vendor offerings, NEP The Netherlands chose to invest in two Kahuna modular control surfaces sharing the resources of a single Kahuna 9600 mainframe. The unique Kahuna MakeME technology allows the company to continually reallocate the M/E power of the mainframe to where it is most needed on a production by production basis. Similarly, the unique control modules allow each control service to be reconfigured to fulfil the requirements of each production. Also, Grass Valley’s roadmap to provide IP connectivity via IP Edge on the Kahuna mainframe (available now) matched its IP aspirations.



Summary

As a strong IP based media organization, NEP The Netherlands researched all other competitor products with its current and future technical, operational and financial aspirations in mind during the summer of 2015. It was Grass Valley's technology today, its vision to migrate to IP in the future and its collaborative partnership approach that gave NEP The Netherlands the confidence to invest in the solution chosen.

Acknowledgments

NEP Netherlands www.nepworldwide.com

Grass Valley www.grassvalley.com/ip/