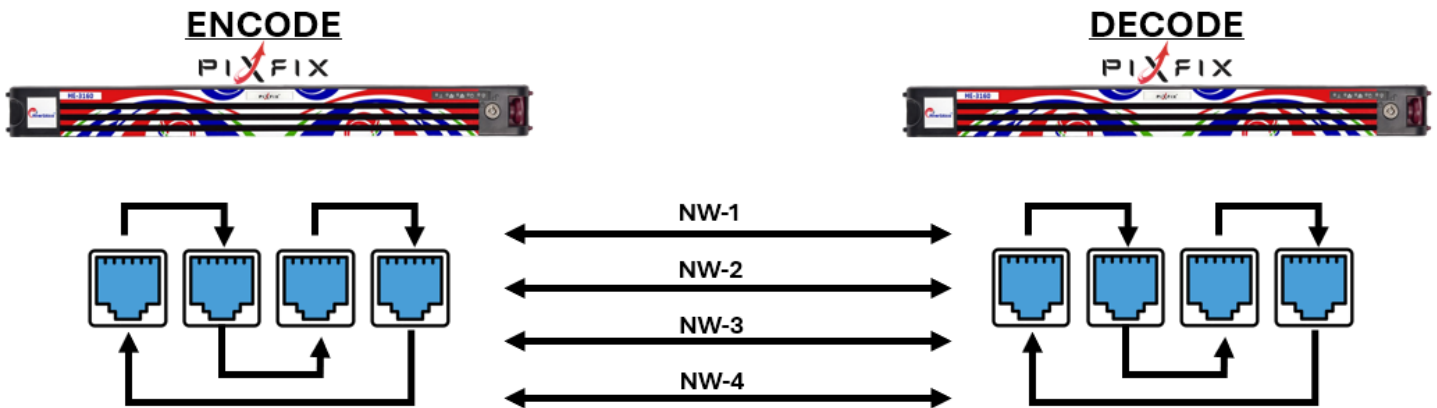


Whitepaper

PIXFLEX™-Hb architecture – Underlying Engine of PIXFIX™ line of products Reliability and Redundancy – It's all about Networking



Need and Challenges for Network redundancy in the IP Video transmission environment.

The modern-day need for non-stop IP video delivery requires an enterprise video processing appliance to maintain more than one network connection. This connection and associated redundancy ensure quick backup paths to the internet or network. If an enterprise video workflow lacks this, restoring a “downed network,” taking more time, may cause a severe disruption to non-stop services. In workflows ranging from broadcast to surveillance, and with IP transmission replacing satellite, the risk of video delivery setbacks rises during network failures. Network outages and video disruptions cause significant customer ire and revenue loss. An enterprise video processing and delivery appliance must be designed for this need. It should complement external networking equipment to ensure non-stop video delivery.

Technical Architecture and Workflow

A purpose-built enterprise Video Processing and Delivery appliance makes use of available network connections to ensure the video delivery can be one with as little downtime as possible. With multiple network infrastructure availability as separate connections to the appliance, the appliance ensures that the delivery of the video is made possible for video delivery at all times.

RiverSilica's PIXFIX™ video processing appliances, with its underlying PIXFLEX™-Hb architecture gives the ability to flexibly pre-program the choice of switching between multiple networks at both Source and Destination for the required workflow performance of Encoding and Decoding. Between managing the resolution flexibilities and with smart detection of loss of network, and a cyclical switch feature across four independent networks in a single appliance, the redundancy can be made available several notches higher. This gives the end customer a much-required safety against network disconnections and, in the process, adheres to the uptime SLAs.

Advantages

With the transition rapidly happening from Satellite transmission to IP transmission in the Video Delivery market, the infrastructure appliances need to be built with architectures and HW capability to match the legacy system and to make use of the optimal cost in like-for-like comparisons. With RiverSilica's PIXFLEX™-Hb architecture, more and more redundancy bells and whistles can be added between functionality and transmission for non-stop readiness and cost optimized approach.