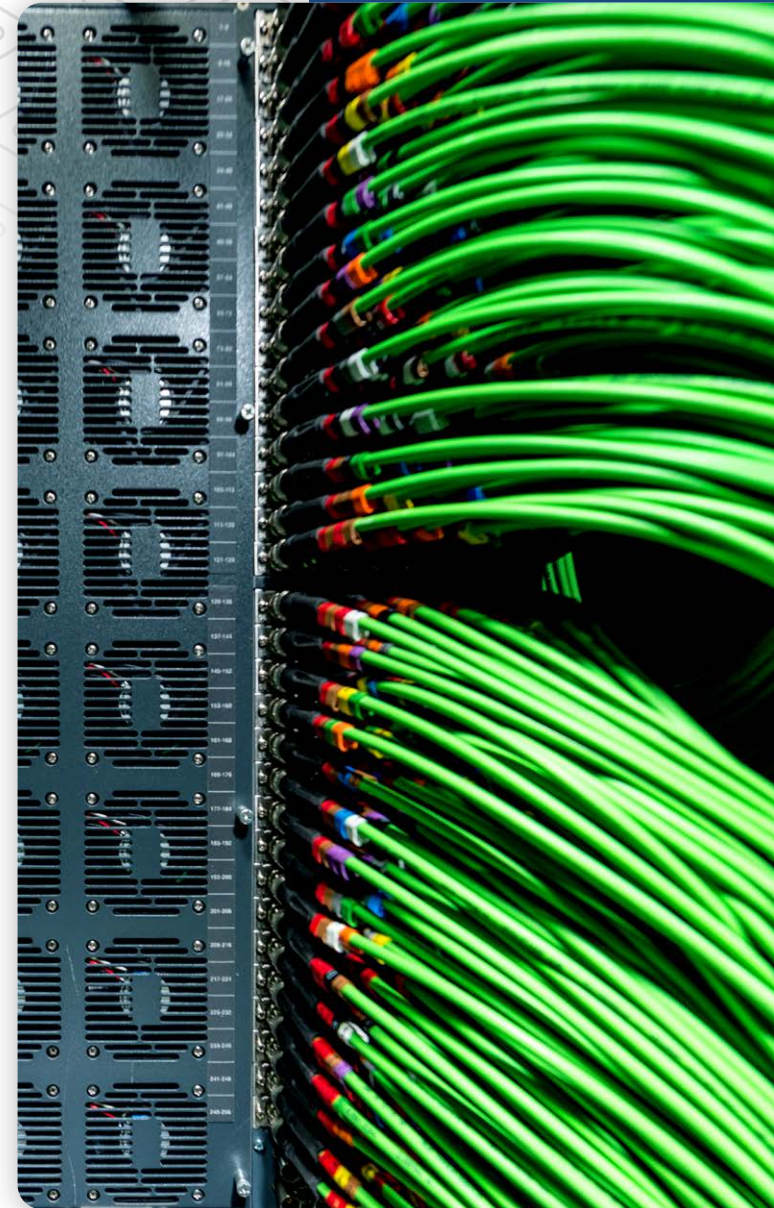



Perspectives on Live Production:

# Multiple Paths to IP



Snapshots of Global Innovation





The demands of live production have always been immediate and intense. As video gets bigger, budgets get smaller, and remote production increasingly becomes the norm, migrating to agile IP technology can help you keep pace.

From outside broadcast trucks to connected campuses, forward-thinking media companies are moving toward IP to pursue business-driving new ventures that they would have had to say no to just a few years ago.

**And many of them are  
doing it with Imagine.**





“SNP puts Imagine ahead of the game. Once the rest of the industry has caught up with IP registration, the SNP will completely change system design.”

Nicola dell’Asta  
Director, Chromaline

## Use Case: IP-ready UHD HDR production truck

Italian outside broadcast provider Videe works with Europe’s leading production companies to produce entertainment programming and cover major sporting events such as the FIFA World Cup.

With their flagship OBX, Videe was looking to build a flexible, future-proof 4K HDR production truck supporting up to 30 cameras and providing a uniquely comfortable workspace that would allow their crews to deliver the best possible production.

Innovative systems integrator Chromaline chose [Selenio™ Network Processor \(SNP\)](#) to help meet the rigorous technical requirements while maximizing space. In a single rack unit, the SNP can support up to eight SMPTE ST 2110-based, uncompressed UHD signals.

Today, OBX is primarily an SDI operation, but with core equipment that is ST 2110-ready, this pioneering and distinctly stylish truck is ready for simple migration to IP production in the future.

[Take a virtual tour of OBX today >>](#)

### Videe is using SNP to:



Simplify operations by supporting multiple processing functions via a 1RU device



Help achieve a comfortable mobile operating space leading to greater productivity



Future-proof their flagship truck for standards-based IP production



Perform up / down-conversion between HD and UHD



Enable operators to leverage familiar control surfaces



“Capacity between venues is no longer an issue, giving us much better utilization of the fiber capacity and allowing us to do much, much more.”

**Zack Bacon**  
Chief Broadcast Engineer, 12th Man Productions

## Use Case: IP-based live sports production for seven venues

12th Man Productions is the sports broadcast and post facility for Texas A&M University. They provide broadcasts for ESPN and in-stadium productions across seven campus venues that host more than 100 events each year.

In 2014, A&M’s football stadium, Kyle Field, was rebuilt as a central video facility with fiber providing point-to-point connectivity to the other venues. To increase flexibility and resilience, 12th Man recently migrated to a networked approach to connect the venues.

Legacy HD-SDI elements are integrated into the IP connectivity via [Selenio™ Network Processors \(SNP\)](#), which support 32 channels of HD processing and serve as gateways to and from the SMPTE ST 2110 world.

12th Man plans to add SNP gateways until the majority of their infrastructure is IP native, at which point the versatile devices can be redeployed for other tasks, such as HDR-aware multiviewers or UHD/HDR conversion.

[Learn More >>](#)

Texas A&M is using SNP to:



Take a first step toward full IP production



Double the signal capacity between venues on the same amount of fiber



Eliminate much of the processing and distribution equipment from the signal chain



Add 32 channels of HD processing anywhere needed — without running out of rack space



Save time previously spent reconfiguring core infrastructure based on sports seasons

# NC STATE

# DELTA

*“The Imagine ST 2110 IP network moves us from a highly constrained system to complete flexibility today, and even more important, it secures our installation for the future.”*

**Tony Pearson**

Senior Associate Director,  
Video Communications Services, DELTA team at NC State

## Use Case: IP-live production for distance learning courses

North Carolina State University supports almost 50,000 online and distance learning students around the world, and several of their online programs are rated in the top 10 by U.S. News and World Report.

NC State DELTA (Distance Education and Learning Technology Applications) team transformed its production capabilities with a networked video infrastructure, using SMPTE ST 2110 for live technical support to nine classrooms over fiber runs of 10km.

Delta uses [Selenio™ Network Processors \(SNP\)](#) to convert between SDI digital video and ST 2110 IP connectivity. Providing 32 individual signals from each location, the SNPs provide DELTA with ample capacity to easily reach other media-supported areas and additional classrooms.

The DELTA team has implemented a system that is transparent to end users, enabling faculty to focus on teaching — knowing that everything works seamlessly behind the scenes.

[Learn more from the DELTA team >>](#)

NC State DELTA is using SNP to:



Provide live technical support of distance learning college courses supporting almost 50,000 students



Deliver high-quality educational media in an efficient and service-oriented environment



Benefit from IP connectivity while maintaining valuable SDI assets



Provide rapid resolution to nine classrooms over fiber runs of 10 kilometers



Produce the video and the audio resources any class needs and instantly reconfigure for the next one



# NORTH POINT MINISTRIES

*“Utilizing the same dark fiber connection, we have more than doubled our capacity and can provide a significantly higher level of flexibility in transporting signals between multiple campuses.”*

**Jeremy Lommori**

Senior Engineer, NPM Productions

## Use Case: Shared worship across IP-linked church campus

Atlanta’s North Point Ministries has grown from a single church to eight campuses across the city and developed a global network of more than 150 partner churches.

To create a shared, immersive experience for their large community of worshippers, the ministry’s production team linked multiple houses of worship across metro Atlanta using high-speed IP connectivity.

Five [Selenio™ Network Processors \(SNP\)](#) provide video and audio processing, timing synchronization, uncompressed UHD capability and an interface between SDI and SMPTE ST 2110 standards-based IP.

North Point Ministries has been able to double the capacity of their existing fiber, ensuring that all the immediacy of the worship productions is seamlessly shared among all church campuses and relayed to partner churches and online.

[Learn More >>](#)

## North Point Ministries is using SNP to:



Augment their vibrant stage designs and immersive production techniques with UHD HDR capabilities



Allow dispersed staff to work together and ministers to lead services from any campus



Double the capacity of their existing fiber



Enable operators to easily route any signal from any location to another



Bring communities together across linked campuses for a shared worship experience



“Imagine’s SNP is a key building block in our architecture. It offers the perfect performance capabilities for the live market in a compact, powerful and agile device.”

**Timo Koch**

Director of Operations of Euro Media Group (EMG)

## Use case: Scalable, modular IP live production architecture

Euro Media Group (EMG) is Europe’s leading provider of broadcast facilities and services for major international events, including live shows, entertainment programming, and sports such as Tour de France and Formula One.

EMG has taken a unique approach to implementing IP technology across its organization with the development of diPloy, which allows their team to quickly create scalable live production architectures from preconfigured IP modules.

Central to the design of the platform is the [Selenio™ Network Processor \(SNP\)](#). In some modules, SNP works as a gateway to bridge legacy SDI equipment to diPloy’s SMPTE ST 2110 network. In other modules, it works as a processor, adjusting visual parameters of camera signals or performing HDR conversions.

The diPloy platform was developed for use in major 2020 international sporting events, now slated for summer 2021, and will form the basis of upgrades to EMG’s fleet of outside broadcast trucks and fixed production facilities.

[Go behind the scenes with Euro Media Group >>](#)

Euro Media Group is using SNP to:



Create powerful, scalable live production architectures from preconfigured IP modules



Build facilities for the biggest productions with much reduced engineering time



Provide audio & video processing, timing, frame sync, and SDR/HDR and SDI/IP conversion



Make a managed transition to IP, while respecting their investment in legacy SDI equipment



Deliver all the processing they require, with the agility that the diPloy concept demands

## What can Selenio Network Processor do for me?

Simple answer:  
Just about anything.

But for starters, the SNP can ...

- manage all your traditional processing and synchronization
- deliver single-stream, uncompressed UHD
- perform HDR adaptation and conversion
- provide an ultra low-latency SDI/IP production multiviewer
- and bridge your SDI equipment to an ST 2110 network



“Modular, but without those pesky hardware modules!”

Want to take a look under the hood of this multi-tasking 1RU powerhouse?

[Join Imagine's John Mailhot for a two-minute video tour >>](#)



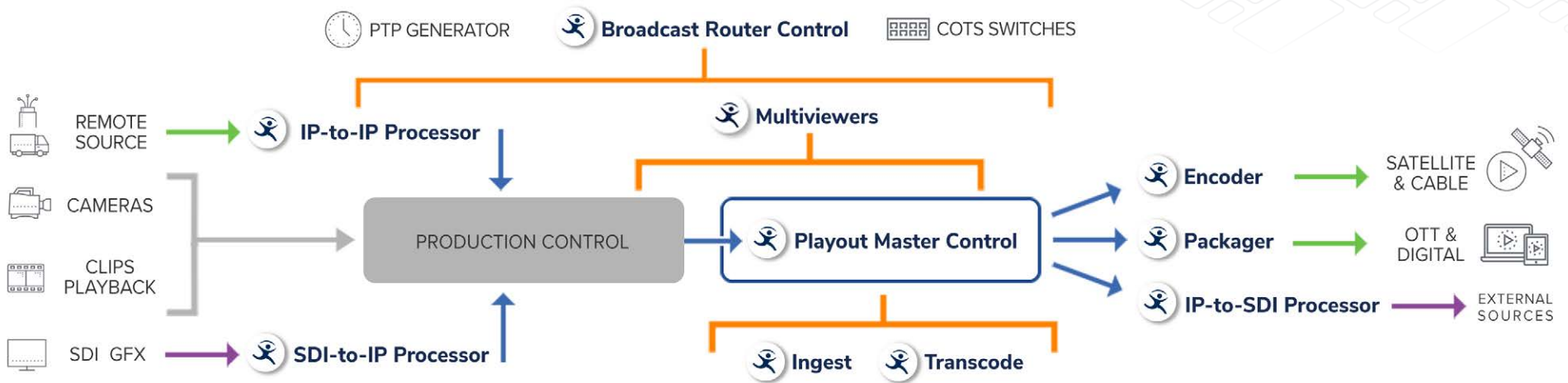


# IP Infrastructure

Mature. Proven. Driving Success.

At Imagine, we're ready whenever you are.

Our in-house IP experts and field-tested, standards-based solutions can help you maximize the life of your SDI investments and transition to IP at whatever pace works with your business.



Thinking about your path to IP? Let's build your plan together >>



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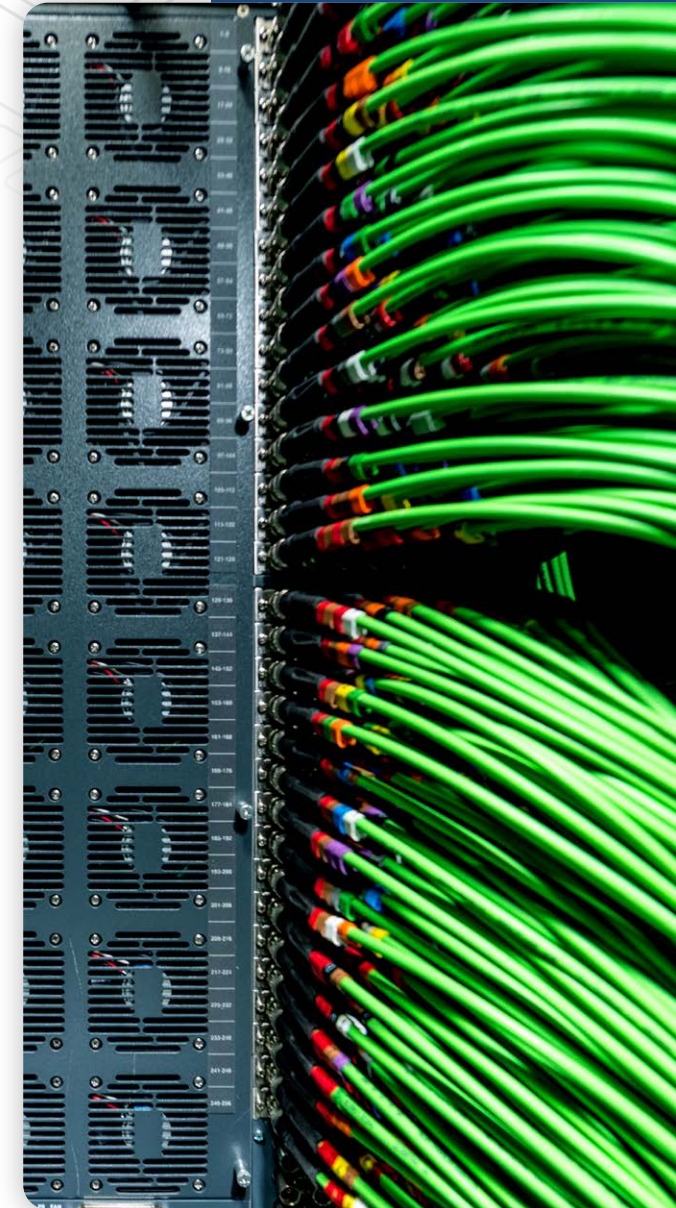
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