

# Core IP Infrastructure & Processing

## Starring: VirtU and MuoN Products

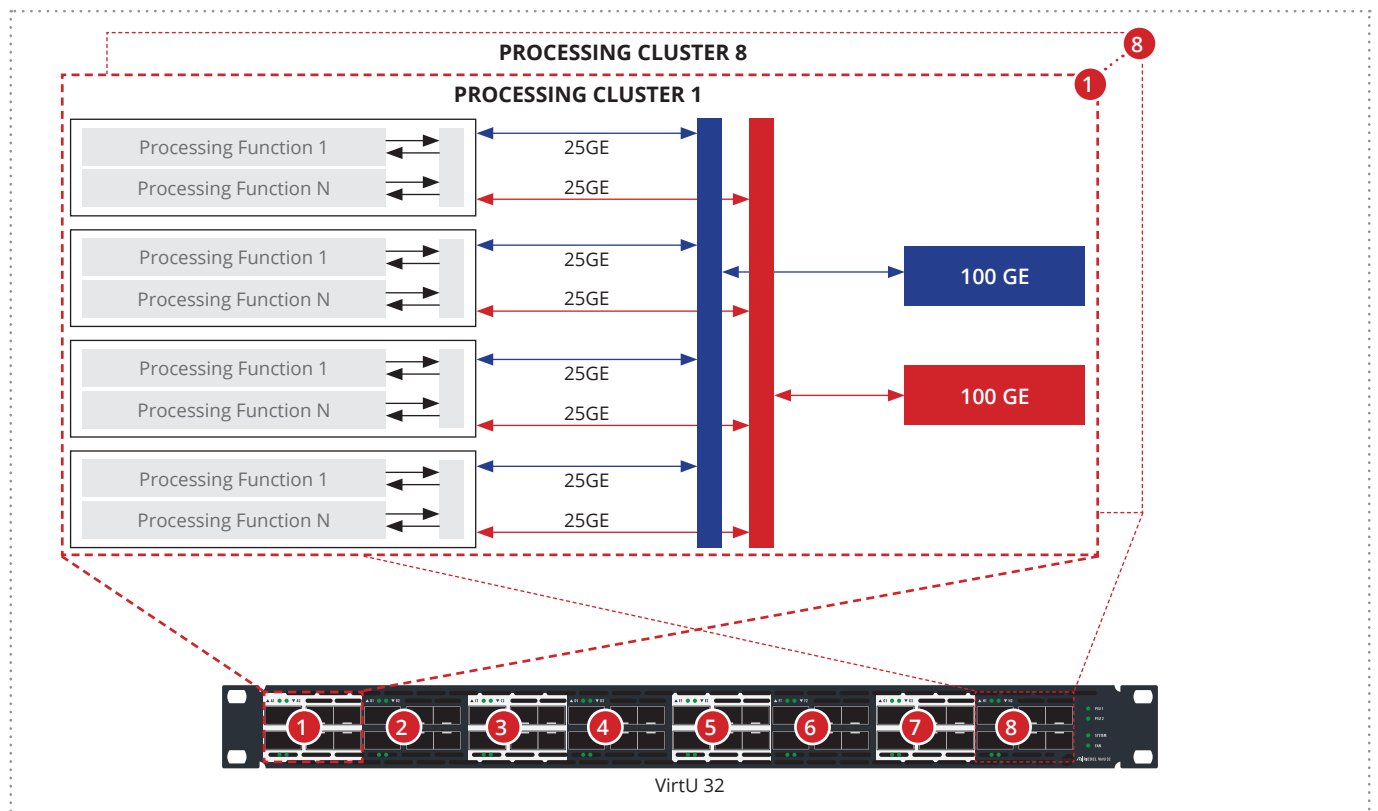
Dealing with a wide range of signal types, formats, frame rates, timing, color space and resolutions can be a challenge for any TV production. The VirtU 32 all-IP core infrastructure and processing platform from Riedel provides an extremely dense array of software-defined MuoN SFP IP processors in just 1RU. Designed to address signal processing and SDI to IP conversion for mission-critical and HD up-to UHD IP production environments, the platform allows users to build their key advanced processing power modularly, as their needs grow!

## Key Benefits:

- Virtualized services at your core infrastructure
- Software-defined SFP; any process, any time
- Mission critical platform with very small failure blocks Highest density
- Solutions video format conversion, audio routing interoperability, clean switching and color adaptation
- Enables easy remote production
- Easy control via NMOS, Ember+ and RESTful

## VirtU 32 Applications:

The VirtU is a core processing element of your system. It is designed with 8 processing clusters, each one equipped with 4 MuoN software-defined SFPs. The four modules can access any media flows from redundant aggregation links. The MuoN SFPs can be used as gateway with SDI I/Os or as pure IP to IP processing devices. They can run at either 10GE or 25GE host rate, determining the transceiver rate at either 40GE or 100GE.



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## Up/Down/Cross Conversion

The Riedel MuoN SFP ST2110 IP up/down/cross-converter Apps enable high quality conversion to and from any HD/3G/UHD content. The product can be used for in-coming feed signal normalization or to provide down converted version of UHD signals to easy monitoring inside the facility. The UDC provides pristine image quality scaling and de-interlacing using multi-tap fine filtering engine.



## Encode and Decode

Signal compression is a key enabler to exchange feeds between remote sites through low bandwidth connectivity. The JPEG-2000 or JPEG-XS encode/decode Apps can be installed in the MuoN SFP to provide an extremely dense and cost-effective solution. While providing SDI I/Os with encoding or decoding, the processor also allows for re-encapsulation into ST2110. This solution is perfect for IPTV monitoring systems, signal contribution or remote production applications.



## Multiviewing

The Riedel MuoN SFP multiviewers can provide up to 16 PiPs over one screen, and due to its small form-factor, 1RU suffices to produce a 512x32 multiviewer system. The product offers a selection of layouts with high quality video rendering, tallies and labels, meeting the adequate feature set for production type applications. Tallies, signal assignment and layouts are easily integrated via NMOS, Ember+ or RESTful API. Plus, this solution resolves customer's concerns about space and power inside restricted areas.



## Audio Routing

In typical IP systems, devices from different vendors implement different audio mapping strategies. This interoperability issue can be easily fixed by the MuoN SFP IP 2048 square audio router. The audio router can receive and send up to 64x ST2110-30/31 audio flows each one with up to 32x audio channels. The pluggable device provides the full flexibility of re-mapping your audio channels to establish proper adaptation to your destination device.