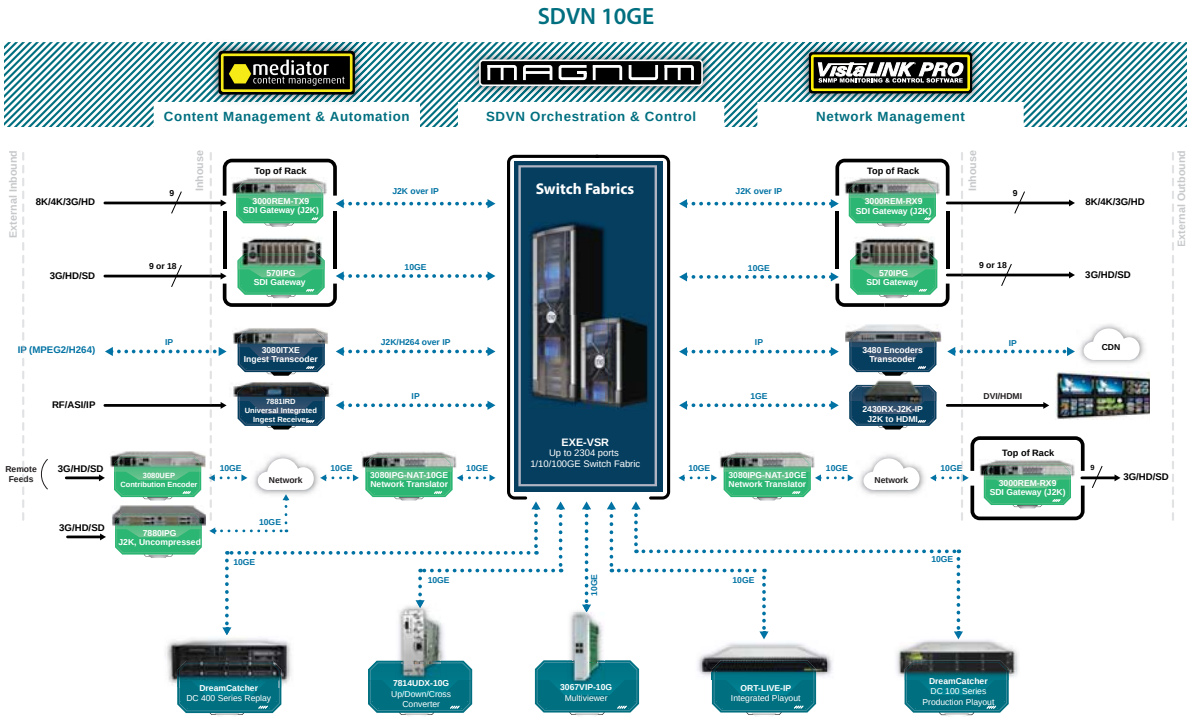
EXE-VSR

46Tb/s EXE Video Service Routing Platform

The EXE-VSR, with 46Tb/s of switching capacity in 40RU, revolutionizes the facility router. With 2304 10GbE ports, the EXE provides unmatched flexibility and scalability for video transport over IP. Using SMPTE-2022-6, the EXE non-blocking switch fabric supports up to 13,800 uncompress HD-SDI signals. When compression technology (JPEG-2000, H.264, or MPEG-2) is utilized, the number of video stream can reach the millions. With the combination of Evertz SDVN and the EXE as the core, facilities become more agile to handle new HD/SD services, new delivery platforms and new video formats (i.e. Ultra HD 4K and 8K).



Designed for High Capacity Switching

The EXE-VSR supports 46Tb/s of switching capacity. By implementing an independent data path, the EXE-VSR supports 10Gb/s, 60Gb/s, 100Gb/s and 120Gb/s interface speeds that can carry uncompressed 3G/HD/SD using SMPTE-2022-6 and compressed video (using JPEG-2000, H.264, or MPEG-2). In addition, the EXE-VSR supports multiple timing planes which provides independent SMPTE compliant switching for different digital video signal formats.

Extensive Redundant Crosspoint Protection

The EXE-VSR utilizes Evertz industry leading SDI routing architecture for redundancy. The EXE-VSR supports manual or automatic re-routing of individual signals with quality verification prior to switching to the redundant path.

I/O Flexibility

The inspired modular approach of the EXE-VSR's design provides excellent in-service expansion capabilities. Using line card that have blocks of thirty-six 10 GbE ports, the EXE-VSR can scale from a six 10GbE port packet switch to a 2304 10GbE port switch. The EXE-VSR support varying types of port interfaces including 10GbE SFPs and MTPs.

Scalability

The versatility of the EXE-VSR to support uncompressed (3G/HD/SD) and compress video signals (JPEG-2000, H.264, or MPEG-2) provides unmatched stability. In 40RU, the EXE-VSR is capable of supporting 13,800 uncompressed HD/SD signals over 10 million TS streams (using MPEG-2).

Top of the Rack Integration

By using Evertz portfolio of IP Gateway modules for "top of the rack", the EXE-VSR can be easily integrated into any facility. The range of IP media gateway products include: ASI to IP encapsulators/de-capsulators, HD/SD to IP encapsulators/de-capsulators, ASI/IP multiplexors, 10GbE multiviewers, and remote hybrid interfacing.

EXE-VSR28

EXE-VSR40

EXE-VSR40

The Complete Solution Provider

Simple Maintenance
The advanced design of the EXE-VSR ensures that all active components, including line cards, crosspoint modules, frame controllers, cooling fans and power supplies, are accessible from the front of the frame and can be hot swapped at any time for maintenance.

Comprehensive Control
The EXE-VSR provides comprehensive connectivity to suit the most demanding installations. The internal frame controllers provide complete connectivity to any number of remote control panels and 3rd party control devices such as automation systems via Ethernet ports. Using MAGNUM, as the SDVN orchestration and control system, the EXE-VSR makes system installations with advanced tie-lines, automated pathfinding, and advanced control surfaces easy to implement and manage.

Independent Monitoring
EXE-VSR provides extensive signal monitoring of the line cards, power supply voltages, interior temperatures and fan speeds. All monitored data is available through SNMP for facility-wide monitoring systems such as Evertz VistaLINK PRO.

Outstanding Redundant Protection
The EXE-VSR uses the successful EQX (Evertz 3G/HD/SDI Enterprise Router) as the ultimate design in terms of system availability. The EXE-VSR architecture contains redundant protection for all of the critical system elements. The architecture provides redundant cross-point configurations, redundant frame controllers, external redundant load sharing power supplies, redundant easy access cooling fans and a dedicated monitoring bus that is independent of the system cross-points. In the event of a failure, manual or automatic re-routing of signals on an output-by-output Path-by-Path basis is fully supported by the system software.

Using the EXE-VSR monitoring capabilities, output quality can be verified prior to switching to redundant signal paths.