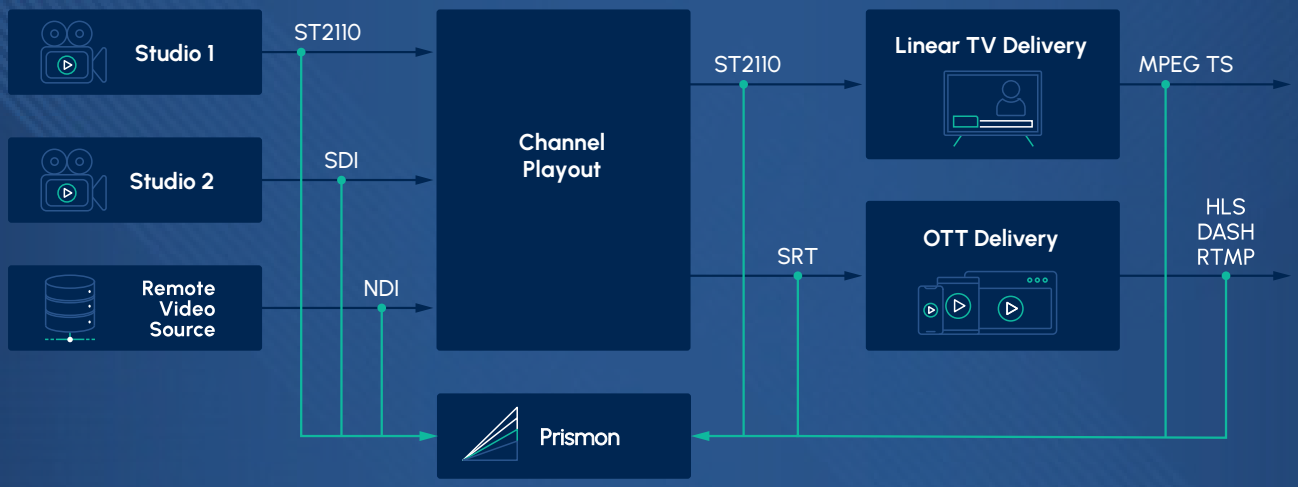
Prismon

imagine COMMUNICATIONS

Software-defined Multiviewer and Monitoring for SDI, Hybrid, and IP/Cloud-based Workflows

Prismon is an innovative and versatile software-based solution for multiviewing and monitoring audio, video and ancillary data content. It has been designed to support current and legacy media formats and transport standards, from traditional SDI to modern IP-based broadcast and OTT/streaming environments. In addition, the software-defined nature of the platform means it can be seamlessly updated as technology evolves, without the need to purchase additional hardware. Prismon operates purely on COTS (consumer off-the-shelf) hardware and the Linux operating system for maximum flexibility.



Key Facts

- 100% software-defined: future-proof, deployable on any platform.
- Convergent multiviewing: mix SDI, uncompressed and compressed IP, bridging modern and legacy systems.
- Unlimited scalability: efficient resource sharing through lossless low-latency proxy video network.
- Ease-of-use: workflow optimized operator UI - layout creation, management and deployment from a single pane of glass.
- In-depth monitoring: Probing and alerting on transmission, protocol and content layer.
- Video quality measurements: ensure highest possible quality of experience.
- Sophisticated integrations: Modern APIs, already integrated in major broadcast controller, automation and orchestration systems.

Prismon Multiviewer

Prismon provides production and playout operators and technicians with a powerful and highly configurable UHD multiviewer – including high quality image processing and low latency operation. As well as the obvious video, audio, UMD and tally information, multiviewer screens can be enriched with technical metadata such as bitrate measurements, codec information or status indicators as well as displaying ancillary data such as subtitles, teletext or SCTE35/104 markers. This allows operators to aggregate all relevant information on a single pane of glass and relieves video engineers and operators from multitasking and context switching, increasing overall operational efficiency. Additional widgets like counters, clocks and logos further improve situational awareness. Users can also create and manage personalized multiviewer configurations according to 'rooms and scenarios' and recall these easily through a web-based UI or an API call.

Multiviewer videos can be outputted through local graphic cards or via compressed or uncompressed IP flows, simplifying distributed monitoring and enabling remote production scenarios.

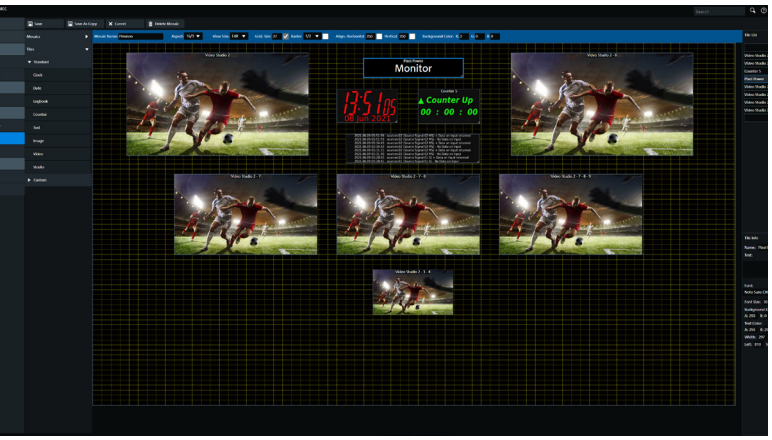
Prismon Monitoring

Prismon enables automated probing of signal health and the sophisticated measurements needed in broadcast, streaming delivery and MCR environments. Various measurements are continuously performed to check the signal health on transmission, protocol and content layer. Any deviation detected from service-defined thresholds can be indicated on the multiviewer screen and in the UI, will be kept in historic logging data and can be reported northbound through SNMP or MQTT. The wide range of protocols and codecs supported helps harmonize monitoring which improves consistency and overall efficiency.

Video quality measurements are indispensable for broadcast and media service providers, but they can also be complex, expensive and time-consuming. Prismon simplifies objective video quality measurement both in the lab and in live network environments with its unique liveQM technology. LiveQM supports several parallel reference-based measurements using quasi-standard video quality metrics such as PSNR and SSIM. These measurements can be used to benchmark video encoders, monitor and assure video quality and/or analyze and optimize video production and transmission. Prismon also allows latency and lip sync measurements.

Comprehensive System Administration

Prismon is configured and administered centrally via a web-based GUI. The GUI is intuitive and easy to use, since its layout resembles the monitoring workflow from input to output. Access is over a local or remote network connection using a standard web browser. Following successful authorization, users can be given different levels of access and corresponding administrative abilities. The additional Multiviewer Control Center (MCC) web-based UI offers a more operator-centric workflow around creating, managing and activating multiviewer layouts, with the ability to re-configure layouts on multiple screens with one single button click. A RESTful API is available for remote control and automation. In addition, Prismon provides all monitoring and configuration values via MQTT.



Prismon also includes a wide range of cybersecurity features such as a built-in firewall, encrypted inter-device communications and sophisticated authentication methods to protect the system against external threats. Combined with regular security patches and a modern underlying Linux OS, Prismon offers robust protection against threats and is safe to use in public cloud environments.

Future-proof Investment

Prismon is a fully software-defined solution; all of the important functionality and intelligence is implemented in software. This modular software framework means that any future functionality, file formats and transport standards can be unlocked via software licenses rather than requiring additional investment in hardware. Combined with the use of COTS (consumer off-the-shelf) hardware, we feel that this approach gives our customers a high-degree of future-proofing and also makes the upgrade and migration process much easier and smoother.

As a software-defined solution, Prismon application software is practically agnostic to the underlying computing platform. This provides a clear migration path from hardware-based to cloud-based platforms while keeping the same functional capabilities and preserving any existing software licenses. Prismon is available for VMware, KVM and other major hypervisors on request. Provision is in the format of OVF images, ensuring maximum portability and compatibility as well as ease of deployment.

Prismon also offers a great deal of flexibility thanks to its licensing model which is based on a common license server that centrally tracks and dynamically grants available individual 'floating' licences (according to operational need) from a pool shared across the complete ensemble of Prismon instances. This approach helps media service providers optimize their CAPEX spend.