

The image features a central white rectangular box containing the VSN logo and the text 'INNOVATION & MEDIA SOLUTIONS'. The logo consists of the letters 'VSN' in a bold, black, sans-serif font. Below it, the text 'INNOVATION & MEDIA SOLUTIONS' is written in a smaller, blue, sans-serif font. Surrounding this central box are several smaller, semi-transparent screenshots of various software interfaces, including news management systems, video production tools, and distribution platforms. The background is dark blue with faint, glowing circular patterns.

VSN

INNOVATION & MEDIA SOLUTIONS

MEDIA & BUSINESS PROCESS MANAGEMENT

NEWS & LIVE PRODUCTION

MCR AUTOMATION & DISTRIBUTION

News Playout | Journalist Tools | Automation | Media Asset Management | Transcoding & Render | IP Contribution | Video Servers | Web TV Integration
Graphics | Monitoring & Legal Compliance | Ingest | Web News | Teleprompter | IP Distribution | Scheduling | Storage | Archive | Cloud Ready MAM

NEWS & LIVE PRODUCTION

Studio Automation

Live Logger

Journalist Tools

IP Contribution

MEDIA & BUSINESS PROCESS MANAGEMENT

PAM

MAM

BPM

Cloud Ready

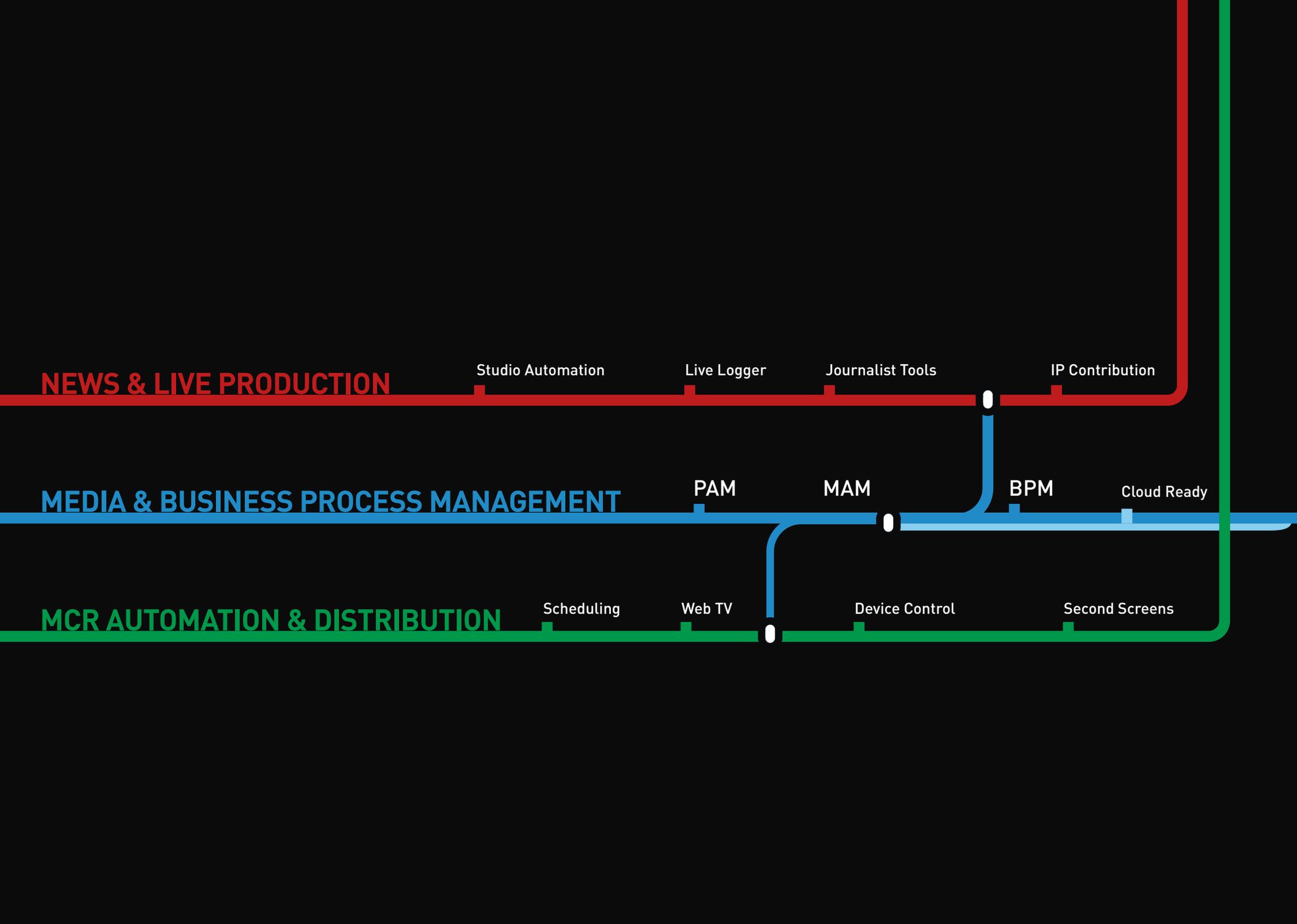
MCR AUTOMATION & DISTRIBUTION

Scheduling

Web TV

Device Control

Second Screens



4

VSN

8

Technological Benefits

10

Media & Business Process Management

20

News & Live Production

26

MCR Automation & Distribution

33

Services

VSN

INNOVATION & MEDIA SOLUTIONS

VSN is a high technology company specialized in providing advanced solutions for the broadcast and media sector. It offers solutions that solve audiovisual content creation, distribution and management needs for TV channels, public institutions, IPTV, universities, content distributors, news agencies and private enterprises.

With more than 20 years of experience, more than 1000 clients trust in VSN's solutions to manage the most important parts of their daily operations.

4

Thanks to VSN's software tools, audiovisual companies can achieve full control of their activities, increase productivity, detect bottlenecks, automate processes and improve the integration between different

systems and departments. In a nutshell, optimize the business processes to reduce costs and increase productivity.

VSN offers real value to its clients, helping them to maximize their assets' profitability at an enterprise level.

With offices in Barcelona (HQ), Dubai, Montevideo, Miami, Hong Kong, a center of technological excellence in Alicante, and a widespread network of Partners, VSN offers worldwide coverage, always close to its clients. VSN's solutions solve the complete workflow of an audiovisual company, improving its efficiency and walking hand in hand with them in their journey towards the Media & Entertainment sector's new business models.



WHY VSN?

To Industrialize and Share is VSN's proposal for the audiovisual sector, we work to provide our clients with the necessary tools to achieve SUCCESS, face today's challenges and be ready for those of tomorrow. Our goal is to listen and understand our CLIENTS, in order to offer them the most EFFICIENT, EFFECTIVE and HIGH-QUALITY end to end solutions.

MODULAR AND SCALABLE SOLUTIONS

All VSN solutions are scalable in both software and hardware, designed to adapt to our clients' changing needs and to grow as they grow. This scalability allows for thinking big from the start and being sure that, independently of the initial size of the system, it will be possible to add new modules easily and increase its capabilities whenever necessary at a more than reasonable cost.

END TO END

Integrating IT broadcast systems with the different technical areas is not an easy task. In VSN, with more than 20 years of experience, we do our best everyday to understand our clients' business. That is why we are pioneers in offering a complete fully integrated single vendor **IT solution suite**, which enables us to offer the maximum guarantees for integrating the different departments' workflows.

BORN TO INNOVATE

We strive to be leaders in creation, development and manufacture of the most advanced IT technology for the MEDIA and BROADCAST sectors. We bring technology closer to our clients in order to INDUSTRIALIZE their business and SHARE their creations, improving their media workflows and walking hand in hand with them towards the new Media and Entertainment business models.

KNOW HOW AND CLOSENESS

In VSN we learn from each and every client and work to share with them the knowledge we have acquired during our two decades in the broadcast sector. Our pre-sales team, with its deep technological expertise, has the mission to guide at all times, identify needs and propose the best possible solution, with the highest level of involvement in your project.

THE TEAM'S COMMITMENT

VSN's team and its partners all around the world share their experience in technological innovation with enthusiasm, always thinking of the future. With the commitment of ensuring the RELIABILITY of the turnkey solutions provided and the maximum quality of their PROFESSIONAL SERVICES.

EXCELLENCE IN SUPPORT

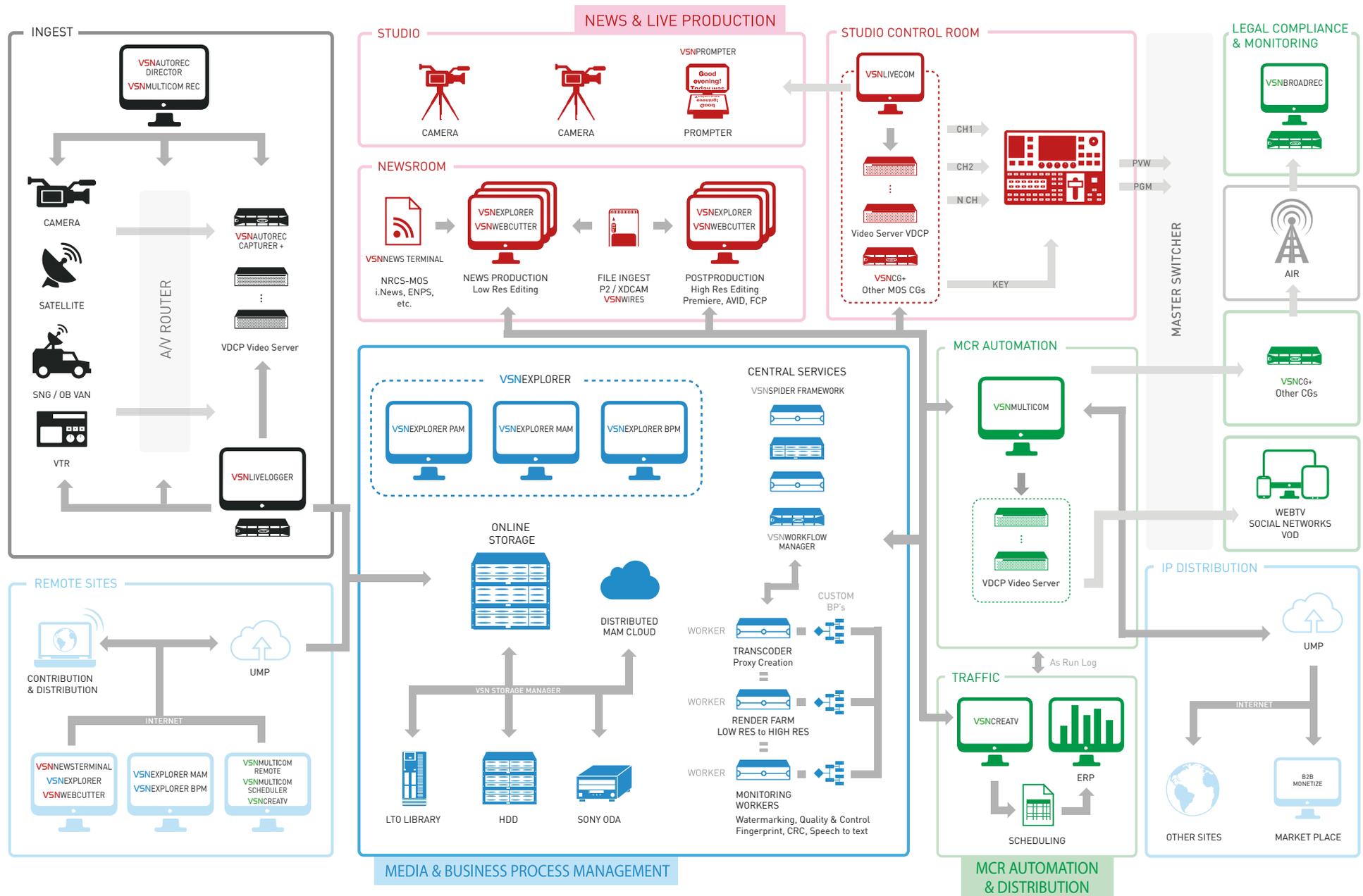
Broadcast systems are critical and it is essential to be ready in case of failure. In VSN we are aware of this reality and offer comprehensive high-level support packages. Our support engineers are experts of the first degree, always available and totally involved in solving any problem that may arise in the best possible manner.

INVESTMENT PROTECTION

VSN's open architecture makes it possible to take the maximum advantage of the existing technology in an installation. With the help of the engineering and development team, it is possible to make the most of the hardware and software infrastructure present in a facility, reducing costs and avoiding to change systems with which the client feels comfortable.

END-TO-END WORKFLOW

6



VSN's SUITE OF SOLUTIONS

BEYOND FILE BASED WORKFLOWS

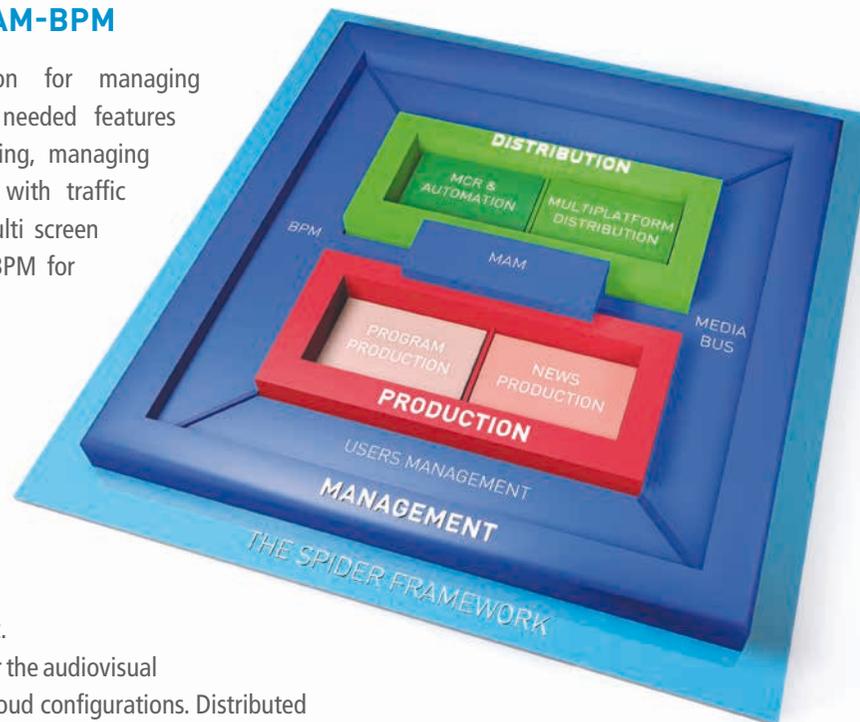
VSN's portfolio consists in a complete suite of solutions covering the main areas of audiovisual content PRODUCTION, MANAGEMENT and DISTRIBUTION. A full end-to-end solution, covering news and live production, media asset management and MCR and studio automation for live broadcasting and second screen distribution. A modular, scalable and easy-to-integrate platform, ready to work in cloud environments, that adapts to your needs and guarantees return on investment.

MEDIA AND BUSINESS PROCESS MANAGEMENT SOLUTION: MAM-PAM-BPM

Web-based state-of-the-art solution for managing multimedia content. With all the needed features for ingest, quality control, cataloguing, managing projects in most NLEs, integrating with traffic systems, playout automation and multi screen distribution. It includes a powerful BPM for process and workflow management.

CLOUD READY

VSN's innovative technology is always one step ahead of the market. Since 2007, we offer cloud solutions for the audiovisual sector in Hybrid, Private and Public Cloud configurations. Distributed storage management and file exchange with the UMP encrypted protocol makes it possible to offer MAM services in the cloud, enabling the ultimate collaborative workflows with a SaaS model.



NEWS AND LIVE PRODUCTION SOLUTION

This solution allows for deploying a complete automation workflow for production and broadcasting of news and sports in a uniform and organized environment. It includes rundowns planning and creation, resources management, text processing, video sources ingesting, live logging, cataloguing and archiving, sending to broadcast, playout, second screens and social networks publishing and WebTV integration, as well as remote collaborative edition for correspondents.

MCR AUTOMATION AND PUBLISHING SOLUTION

VSN's MCR automation solution has been designed to comply with even the most advanced requirements. With configurations ranging from single channel stations to huge multi-channel playout centers, it provides total reliability and robustness for 24/7 broadcasting. The suite of solutions also includes a scheduling module and advanced WebTV management.

VSN'S TECHNOLOGY, PROFITABLE TECHNOLOGY

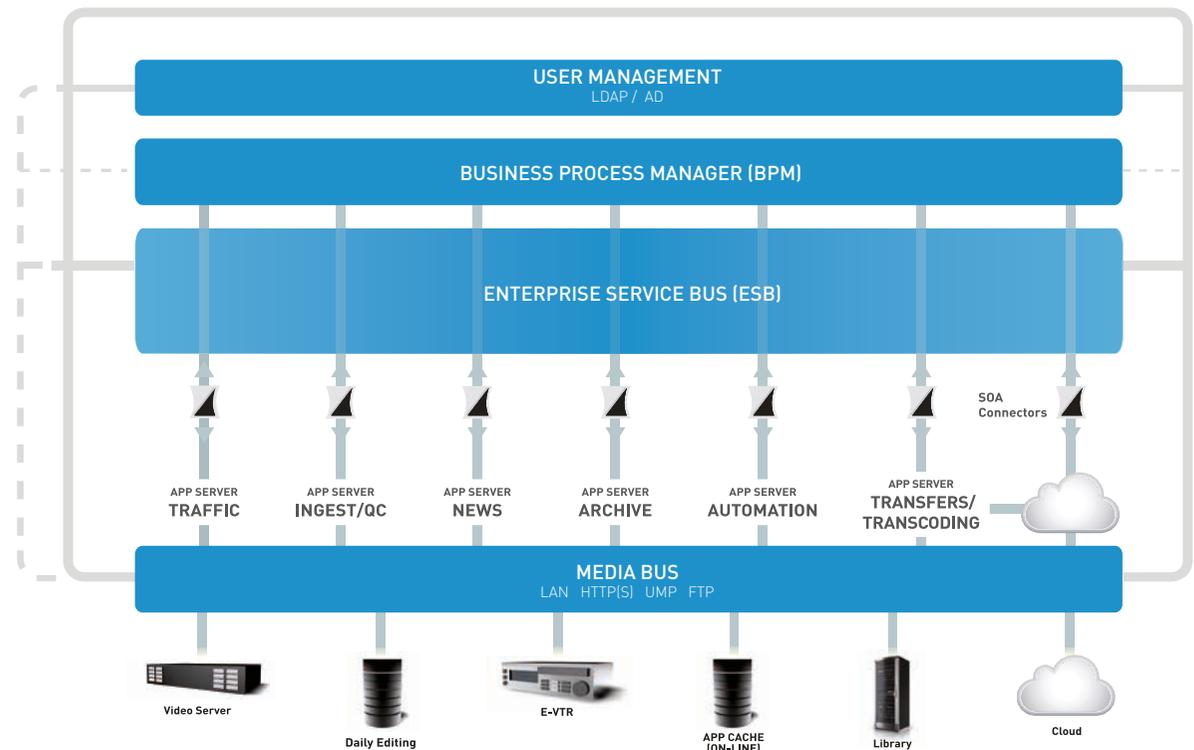
THE VALUE OF THE VSN SPIDER PLATFORM

The broadcast sector is constantly changing and, therefore, any technology developed to serve it must be as open and flexible as possible. Choosing a hardwired solution makes integration with third party solutions and workflow change very hard, a risk that no one can afford these days. VSN SPIDER is VSN's implementation of a service-oriented architecture platform, following FIMS recommendations. FIMS is an organization that integrates producers and broadcasters in order to standardize the technology and help the sector to move away from closed solutions.

8 VSN SPIDER is structured by a set of logic layers. The lower layer is the MEDIA BUS (VSN STORAGE MANAGER), in charge of locating media across the different storages of the system and normalizing it to fit the requirements of the target applications or systems. In the second layer we can find the ESB (Enterprise Service Bus). Here is where the different SOA connectors are, as well as the software responsible for their management (VSN WORKFLOW MANAGER). This service-oriented architecture enormously simplifies integration with third-parties systems and allows to automate many repetitive processes. The third layer (optional) is the one that manages business processes (BPM), in charge of the automation and orchestration of the different media workflows present in the system. Finally, the fourth layer is the user management layer that enables rights management and integration with the enterprise's domain server.



OPEN, DISTRIBUTED, SCALABLE SOA ARCHITECTURE



OPEN TECHNOLOGY

VSN's solutions use standard IT infrastructure both in hardware and software (SQL, Oracle, Solr, etc.) and provides SDKs, APIs or its application interfaces to allow third parties to integrate with them.

INTEGRATION WITH THIRD PARTY APPLICATIONS

VSN integrates with third parties applications through SOA, REST, XML, HOT FOLDERS, MOS and Active-X. VSN supports control of the majority of devices with standard protocol: VDCP, Chyron, RS-422, TCP-IP and through native APIs with certain manufacturer. It integrates with storages such as SAN, NAS, AVID ISIS-Interplay, Isilon, Omneon Media Grid, DDN, etc., as well as with HSM's such as SGL's HSM, XenData and FPD and with the majority of non-linear editors: FCP, Edius, AVID, Vegas Video and Adobe Premiere.

MULTIPLATFORM AND MULTISCREEN

Most of VSN's applications UIs are HTML5 web interfaces, which makes accessing them from any web browser on every available OS possible (Windows, MAC, Linux). There is also a web-based video pre-editor, VSNWEBCUTTER, that enables video editing using proxy versions that can be later edited in advanced editors on a local workstation. It also integrates with WebTV systems, connected TV, smartphones, etc.

MANAGEMENT AND MONITORING

A complete toolset is available to manage the whole VSN SPIDER platform, including user rights and permissions, workflow creation, custom metadata groups and production orders. With the use of the web-based VSNWORKFLOW VIEWER it is possible to carry out detailed tracking of all the processes currently running in the platform. Providing users with the possibility of tracking, retrying or cancelling a process and receiving automatic notifications.

SUPPORTED FORMATS (SD-HD)

VSN natively supports most of the formats currently used in the industry; among others, MXF, MOV, AVI in DV-DVCPRO 25/50/100, MPEG-2, H.264, ProRes, AVCIntra, Avid DNxHD and proxy versions in Windows Media, Smooth Streaming, Flash and MPEG4.

UNIFIED USER MANAGEMENT

VSN's platform includes a sophisticated user manager system to protect its assets and business processes. Rights can be set at User, Group, Area, Business and individual Asset level, as well as assign rights for running certain workflows or actions. It integrates with existing LDAP or Corporate Domain.

CLOUD READY

VSN's platform has been designed to work on a cloud environment, and supports LAN and Private or Public and/or Hybrid (Proxy versions and metadata in the cloud and high resolution in local storages) configurations. The system can work with a distributed architecture for MAM, News, and Traffic Distribution. High resolution files exchange is made possible thanks to UMP (Universal Multi Protocol), patented by VSN, that is between 10 and 100 times faster than FTP, and features advanced encryption and bandwidth management.

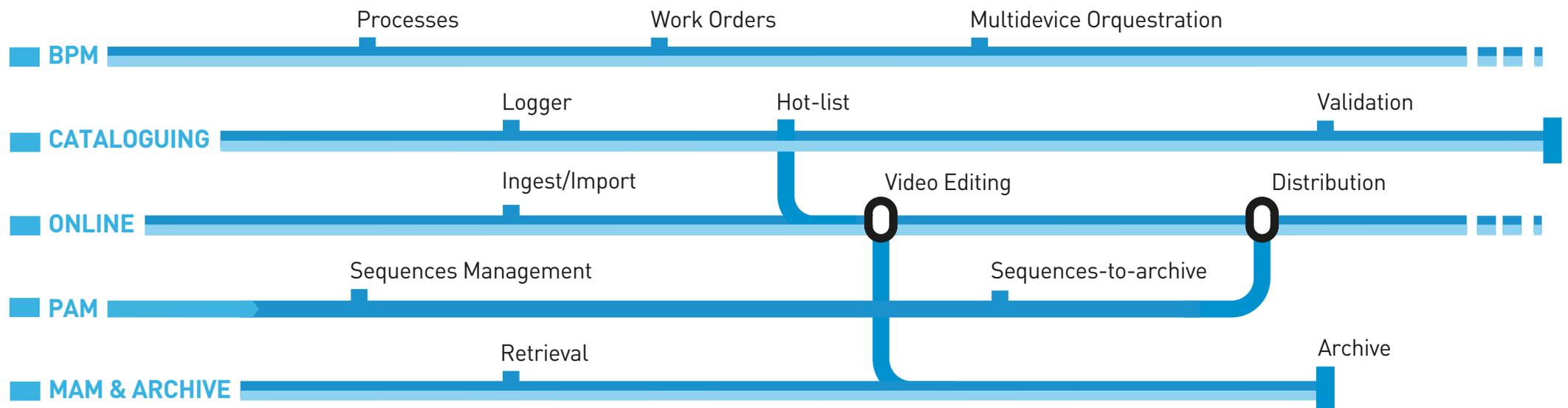
INTELLIGENT STORAGE MANAGEMENT

VSN STORAGE MANAGER (Media Bus) manages the different content storages (Online, Nearline, Videoservers, Cloud, etc.) and gathers all specific information from each one of their catalogues; such as the type of the media file and the required metadata. It makes media movement transparent for the user, takes care of the needed re-encapsulation and transcoding flows, associates the required metadata and applies redundancy and expiry policies.





MEDIA & BUSINESS PROCESS MANAGEMENT



MEDIA & BUSINESS PROCESS MANAGEMENT

The broadcast sector is changing at a very high speed. The market demands more high quality original contents, in less time and available on more platforms. In order to achieve this, firms must manage huge amounts of video files, with different formats and aimed at different platforms. This increasing complexity makes it more necessary than ever to correctly manage media in an audiovisual company, as well as to fully automate repetitive tasks in order to increase efficiency and avoid human errors.

VS NEXPLORER turns technology into an ally, allowing the creative industry to concentrate on what it does better: create.



VS NEXPLORER

VS NEXPLORER

State-of-the-art solution for managing multimedia contents

The VS NEXPLORER family is formed by VS NEXPLORER PAM, focused on production and post-production environments, VS NEXPLORER MAM, that offers all the necessary tools for the complete management of the media lifecycle, such as advanced cataloguing tools, and, for the most demanding clients, VS NEXPLORER BPM, which adds an orchestration layer which enables the user to define business processes in a simple way, dramatically increasing the system's potential and flexibility. All of this using the latest technologies, with an open, flexible and scalable architecture, guaranteeing maximum freedom and autonomy to the client.

- Web-based interface that simplifies file distribution to different storage technologies and to the cloud.
- Metadata can be customized by the user in an easy and intuitive way.
- Advanced BPM with BPMN 2.0 (Business Process Modelling Notation) workflow generator.
- Drag&Drop directly to the timeline of the most popular NLEs.
- PAM (Production Asset Management) module available.
- It manages areas with different asset types for multi-company or multi-department configurations.
- Parallel and collaborative work to streamline production and reduce costs.
- Internal messaging services. Real-time process tracking and monitoring.
- Advanced search and cataloguing tools.
- Low resolution web editor, advanced hotlist management and EDL export.
- Watermarking, QA, transcoding and second-screen distribution.
- Multiple metadata layers for a single asset (stratta logging).
- Intelligent storage management: Online, NearLine, Cloud, etc.

ADVANTAGES

OPEN ARCHITECTURE

The media asset management system is the heart of every installation, and that's why it's very important for it to be based on open technology that allows it to integrate with existing hardware and software, and with whichever may appear in the future. VSNEXPLORER is built on the VSNSPIDER architecture, a service oriented (SOA) software platform which greatly simplifies integration with third parties solutions.

SCALABLE

When selecting a MAM solution it is necessary to make sure that it can grow as the business grows. Otherwise there is a risk that it may have to be replaced after a short time. VSNEXPLORER is totally scalable, both in hardware and software, ensuring that, even if you start with the most basic configuration, the system will grow as you grow.

MULTI SITE AND MULTI PLATFORM

VSNEXPLORER's interface is 100% web-based, making it a de facto multi-platform system: it can be accessed from any browser, whether on Windows or Mac. Moreover, it allows the user to work remotely on the system.

CLOUD READY

The combination of its web-based interface and VSN's transfer acceleration protocol (UMP), enables the full system (MAM in Cloud) or part of it (Hybrid Cloud) to be installed in platforms such as Windows Azure, Amazon or in a private cloud.

CUSTOM DATA MODELS

The system is extremely versatile regarding the definition of metadata models. It supports standard metadata sets (EBU, SMPTE) as well as fully custom ones, defined by the client to serve his needs. Thanks to this, the potential of the system is huge, as it allows for classifying any kind of multimedia content (DAM). Area classification as well as the possibility of defining different metadata layers for each type of asset makes the system, once customized, seem tailor made.

MAXIMUM SEARCH FEATURES

For a broadcasting company it is essential to be able to locate all its media assets in a fast and easy way. For this reason, VSNEXPLORER includes a powerful indexing engine, similar to the one used by Google, simple and advanced search tools, and the possibility of saving searches and grouping results. All of this fully customizable.

ASSET-RELATED LOGIC

In VSNEXPLORER, media is not only a file, it's an asset with metadata and different representations (thumbnails, low resolution versions, related documents, etc.). Moreover, each asset has its own associated logic, allowing the user to run automated workflows directly from them.

SECURITY

VSNEXPLORER includes a complete user rights management system which can be fully integrated with the system's domain (AD, LDAP). Also, since media is the most valued asset for every broadcast company, every access to the system is done through HTTPS advanced security protocols and media transfers are encrypted (AES-256) and Ultra-Accelerated thanks to the VSN's patented UMP protocol.



VSNEXPLOER PAM

VSNEXPLOER PAM increases efficiency of production environments with tools that manage and track media all along the creative process. Workflow automation allows for movement, transcoding and media publishing tasks, among others, to be run in the background, allowing users to concentrate in what they do better: create contents.

NLE INTEGRATION

VSNEXPLOER PAM integrates with most NLEs in the market, such as Adobe Premiere, Final Cut Pro 7, FCP X and Avid Media Composer. It allows for the import and export of sequences from these NLEs and dragging-and-dropping them straight to the timeline. It supports production environments with different NLEs, something which makes collaborative work more efficient.

SEQUENCES AND PROJECT MANAGEMENT

PAM functionalities are closely tied to sequence management. When registering a sequence in VSNEXPLOER PAM, its related metadata is associated to a "sequence asset". From this moment, the system controls all the associated media in the database, something that allows for an intelligent management of the production storage.

ONLINE STORAGE PURGING

When there's a need to free space in the shared storage, VSNEXPLOER PAM allows the user to locate all files that are not associated with any sequence (orphan files) for their deletion or archiving. Also, when users finish working on a sequence, it's possible to delete all associated media at once. When doing this, the system will make sure that clips that are associated to other sequences don't get deleted.

ARCHIVING OF FULL SEQUENCES

With VSNEXPLOER PAM it's possible to archive a complete sequence (LTO or ODA). This is, to send the "sequence asset" and all its associated media to the archive system of choice for later recovery, freeing much needed space in the online storage. As opposed to other systems, only media that has not yet been archived will be archived, considerably reducing the writing time and avoiding unwanted duplication of media.



COLLABORATIVE WORK

The system is designed to boost collaborative work. Different users can access a single sequence from different workstations, allowing to move forward in the production process without wasting time. The system also includes a Social Tools module, which enables a team to track all changes done, add comments and interact in chats and forums in real time, all of this in VSNEXPLOER's interface.

LOW RESOLUTION WORKFLOW

The adaptive proxy (Smooth Streaming) generation module makes low resolution workflows possible and allows users to preview online, nearline and offline material. Users can, amongst other things, create hotlists, rough edit with VSNWEBCUTTER web based editor, export EDLs and consolidate in high resolution in the background.

VSNEXPLOER MAM

VSNEXPLOER MAM offers all the tools necessary to manage the media of a company or a group of companies. Once the production process has finished, a series of management processes start with the objective of monetizing the new contents. From this moment on, automating repetitive media management processes becomes crucial (transcoding, send-to-playout, quality control, etc.).

PROXY GENERATION

A low resolution workflow is essential in a MAM system. Once content is ingested in the system, whether from a file or an SDI line, VSNEXPLOER MAM generates a proxy version with different bitrates. From that moment, independently of where the user is, it will be possible to search, preview media, generate hotlists, export EDLs and web based frame accurate editing. All of this, without having to access the high resolution files.

ADVANCED PLAYER

The low resolution player automatically selects the quality that best adapts to the available link speed, allows for frame accurate marking of segments, supports up to 8 audio channels and allows the user to preview subtitles and Closed Captions.

ADVANCED METADATA STRUCTURES

VSNEXPLOER MAM enables the user to create complex custom metadata structures, aimed at solving the needs of the most demanding clients. A hierarchy of metadata areas and classes with inheritable properties allow the user to design a totally versatile system, ready for multi-department companies, and even to serve multiple companies at the same time.

SEGMENT AND LAYER CATALOGING

Segment cataloging allows for fast and easy access to relevant parts of a media file without having to visualize the full piece. This is specially useful for creating sport event highlights, press conferences, etc. VSNEXPLOER also supports layer cataloguing (strata logging), making it possible to assign different thematic metadata layers (technical, documentation, marketing, etc.) to the same asset.

THESAURUS MANAGEMENT

The correct integration and management of a thesaurus is essential for the documentalist's work. It allows the user to create a list of standard terms with the objective of achieving terminological coherence when cataloging contents, making sure that they can be easily located and avoiding ambiguities.

DEEP ARCHIVE

VSNEXPLOER MAM integrates with the most used HSMs (SGL, Xendata, Front Porch, Active Circle). It allows for partial recovery by marking (TC in, TC out) on the proxy version, and returning only the high resolution of the selected segment to the online storage.

INTEGRATIONS

The VSNSPIDER architecture, on which VSNEXPLOER MAM is built, is designed to simplify the integration of new systems, thanks to its service oriented architecture, based on SOA connectors. It integrates all VSN modules as well as as QC tools, watermarking, advanced transcoding and traffic systems, automation and production systems, etc.



VSNEXPLOERER BPM

Business Process Management (BPM) allows companies not only to meet but to exceed their expectations and those of their clients. Not only to react to, but anticipate to changes that may arise in the market, and all of that with an important reduction of costs.

Thanks to the software tools included in the VSNEXPLOERER BPM module , audiovisual companies achieve total control and visibility of their processes, increasing productivity of their employees, helping to detect and eliminate bottlenecks, orchestrating and automating processes and improving the integration of different systems and departments. In a few words, these tools provide simplicity and efficiency, aligning operations with the business itself.

Business process optimization to reduce costs and improve productivity

VSN's business process management software, VSNEXPLOERER BPM, offers real and tangible value, helping businesses to profit more from their assets in less time. It enables the implementation of automated BPs (Business Processes) to fit the specific needs of each business and it integrates with existing systems. This brings flexibility and helps eliminate inefficiencies and easily modify workflows when needed. Its use frees employees from tedious and repetitive tasks and minimizes the necessary training to implement new processes, improving the performance and quality of the whole operation.

- It manages the entire workflow of all business processes in a company.
- It changes the way the client interacts with customers and suppliers.
- It optimizes operations and dramatically reduces the time to market for new services and products.
- Total freedom for customers to change their processes at any time.
- Orchestration and automation of different processes, avoiding errors and reducing costs.
- Real-time tracking of workflow status.
- Bottleneck detection.
- VSN and third-party applications management.
- User task assignment and management of priorities.
- Separate forms for each manual process in VSNEXPLOERER.
- Supported by VSN's Professional Services.

VISIBILITY OF WORKFLOWS AND ACTIONS

VSNEXPLOERER BPM's workflows viewer shows all processes in a graphical way. This makes it possible to know what actions are being executed in each of the BPs at any time and to detect inefficiencies or errors in the workflow.

TASK ASSIGNMENT

System users can see at any time which tasks are waiting to be performed. Tasks are assigned to users or groups of users and these users can select the task to perform from the list. With this feature a user can know at all times what pending tasks he/she has, and track the workload of various departments and balance it. In addition, this function makes making changes in the different workflows possible, without having to train the entire team, since their tasks are automatically assigned.

CUSTOMIZABLE BY THE CLIENT

The greatest advantage of managing business processes using a BPM engine is the flexibility it provides for optimizing a company's processes. To take full advantage of this it is necessary for the system administrator to have complete freedom to modify workflows, without relying on third parties to do so. This is why VSN has selected an open source engine that follows industry standards (BPMN 2.0) and that guarantees the client's independence and its compatibility with other editors.

BPM PROFESSIONAL SERVICES

Even though clients are free to manage VSNEXPLOERER BPM by themselves, the system implementation can be complex for someone without previous experience. For this reason, the client can count at any time with the assistance of our professional services and take advantage of our experience in designing and implementing BPM systems for the broadcast industry.

EXAMPLES OF BUSINESS PROCESS MODELLING

In this section, some common broadcast business processes are shown to serve as examples of possible uses of VSNEXPLOERER BPM.

QUALITY CONTROL AND SUBTITLE INSERTION BP

This process starts with the reception of media in a watch folder. When new media arrives, the systems assigns a unique ID to it and renames the files automatically. Then, an operator manually enters certain metadata and, depending on the input, launches one or several subprocesses (subtitle, QC, etc.).

INGEST, QUALITY CONTROL AND ARCHIVING BP

From an existing asset we launch the ingest process selecting the source and then run the Q&C process. In case the media can't be validated, it can be discarded or sent to a transcoder. If, on the contrary, the media passes the validation process, it is registered to the MAM and the playout automation system in order for it to be broadcasted.

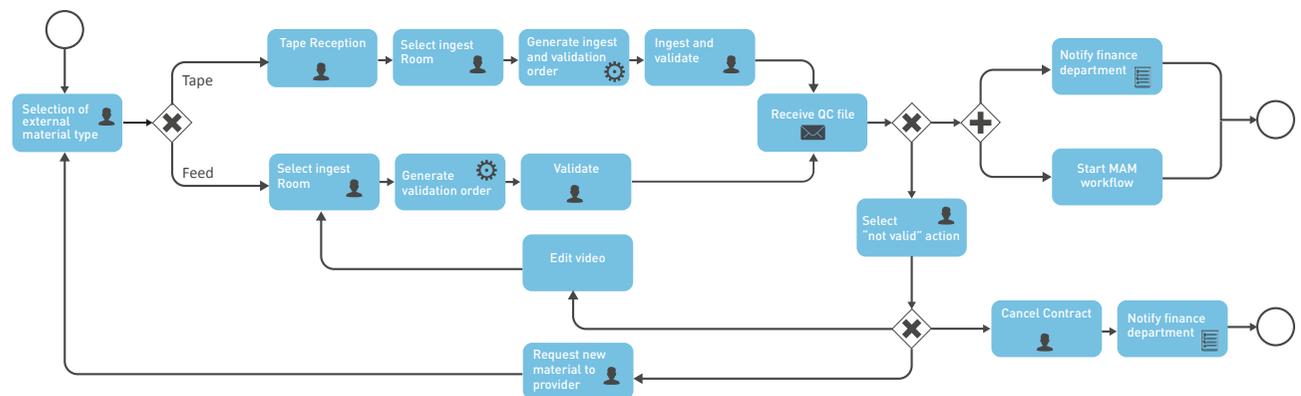
SEND TO PLOUT BP

From a rundown, this process takes care of searching for the material by means of its ID in the system's different locations and storages. If it finds the relevant media, it registers it automatically in the MAM, and then copies it to the playout video servers. If it does not find it, it sends a warning message indicating the unavailability of the material, in order for the client to search for it and ingest it in the system.

16

INGEST, VALIDATION AND ARCHIVING BP

This BP shows the orchestration of a media acquisition workflow started by the traffic system. Different ingest orders are generated depending on if the media is received by tape or as a feed. In the first case an ingest room is selected and in the second one the line to ingest from. Then, the operators receive a work order indicating them to proceed with the recording and validation of the media (with automatic or manual QC). In case of it not being validated, the process returns the material to the provider, and notifies the financial department in order for them to cancel the contract and sends an automatic email to the provider indicating the non-acceptance of the media. If, on the other hand, the whole process is correct, the media is registered in the MAM and is archived in the LTO library, launching a different archiving BP.



REDUNDANT PLAYOUT CHANNEL DIAGRAM



| FUNCTIONALITY | VSNE Explorer PAM | VSNE Explorer MAM | VSNE Explorer BPM |
|--------------------------------------|-------------------|----------------------|-------------------|
| Web interface | ✓ | ✓ | ✓ |
| Asset classes | 1 | 10 | 1 |
| Multi-department and multi-company | ✗ | Optional | Optional |
| Sequence management | ✓ | ✗ | N/A |
| Online purging | ✓ | ✗ | N/A |
| Project parking | Optional | ✗ | N/A |
| Adaptative proxy | Optional | ✓ | ✓ |
| Hotlists | Optional | ✓ | Optional |
| Segment cataloguing | Optional | ✓ | N/A |
| Web-based rough-cut editor | Optional | ✓ | N/A |
| Deep archiving | Optional | LTO, ODA, HDD, Cloud | N/A |
| Transfer acceleration | Optional | ✓ | Optional |
| Cataloguing by layers | 1 layer | Unlimited layers | N/A |
| Thesaurus | ✗ | ✓ | N/A |
| Social Tools | ✓ | ✓ | ✓ |
| BPs design tool | ✗ | ✗ | ✓ |
| BP automation and orchestration | ✗ | ✗ | ✓ |
| Work Orders | ✗ | ✗ | ✓ |
| Task assignment to users and groups | ✗ | ✗ | ✓ |
| Real-time workflow status monitoring | ✗ | ✗ | ✓ |
| Task priority management | ✓ | ✓ | ✓ |

CLOUD READY MAM

The use of cloud services is growing in all sectors, and the broadcast one is no exception. As the capacity of Internet links increases, the performance of cloud platforms improves and costs go down, it starts to make more sense to take advantage of the scalability, flexibility and affordability that cloud platforms provide. To move part or all of the operation to the cloud makes it possible to reduce or entirely eliminate capital costs, keep operational costs under control, eliminate the need to maintain and periodically renew the IT infrastructure and profit from the scalability of the cloud to be immune to production peaks, among many other things.

VSNEXPLOER offers all its features in pay per use in the cloud with all the benefits described before as well as with the possibility of using its powerful business process manager (VSNEXPLOER BPM) and taking advantage of the transfer acceleration protocol UMP. This makes VSNEXPLOER in the cloud the most advanced system in the market in terms of performance and system flexibility.

- State-of-the-art MAM, fully prepared for the cloud.
- Pay per use model. Known and stable monthly costs.
- No hardware nor software maintenance costs.
- Drastic time-to-market reduction.
- Simple access management, without complex VPNs or firewall management.
- Integration with NRCS for remote delegation contributions.
- Integrated with Azure and Amazon SaaS platforms.
- Advanced transcoding features in the cloud.
- SOA platform that can integrate with third-party technology.

UMP: TRANSFER ACCELERATOR PROTOCOL

Broadcast quality video files are very heavy and its transport through traditional protocols like TCP on the Internet is slow and tedious. This is even more severe in the case of large, high-latency networks. To address this problem, VSN has developed the UMP transfer protocol, designed specifically for transporting large files safely, ensuring their integrity.

Potential applications of a secure acceleration protocol such as UMP are vast. Its use can result in substantial savings in time and resources in any context in which the movement of large quantities of data through the internet is needed.

UMP FEATURES

- Transfer speed up to 100 times faster than FTP.
- File format independent.
- Maximum safety. Encrypted transfers (AES-256).
- File integrity check at reception.
- Possibility of resuming transfers in case the connection is lost.
- Compatible with firewalls and NAT.
- Total control of the available bandwidth.

HYBRID CLOUD

VSNEXPLOERER'S MAM and BPM modules are ready to be configured and distributed in hybrid form. This allows for a smart use of the cloud to complement the on-site installation. For example, you can keep high resolution content at different locations and store metadata and proxy versions in the cloud. This way, users can search for contents, preview them in low resolution, perform cut editing and retrieve the high resolution from the different sites wherever they are.

AUDIOVISUAL CONTENTS MARKETPLACE

Accelerated content delivery is essential to create a marketplace for audiovisual content. VSNEXPLOERER MAM can be integrated with a content marketplace web portal. Thanks to its high transfer speed, advanced encryption and the ability to transcode formats on demand by customers, it is possible to apply the marketplace business model (such as iTunes) to broadcast content.

IPTV COMPANY

Management of the process of material reception, transcoding, automated quality control, encryption and publishing in the CDN and the CMS. The entire process should be automatic and manageable by content providers. VSNEXPLOERER MAM cloud provides all necessary functionalities to manage all of the media of an IPTV channel. It provides interfaces for contributions from various partners and automates transcoding and publishing, among other functionalities.

CONTENTS DISTRIBUTION

VSNEXPLOERER MAM, combined with the speed and safety of UMP transfers, is the perfect tool to create a content delivery system. It is possible to assign permissions to individual users and limit access to certain content, they can preview, make partial downloads, select the download format, etc. Alternatively, it is possible to define sending groups and their required format: the system is responsible for transcoding the file and sending the download link to each of the group members.

CLOUD ARCHIVE

VSNEXPLOERER MAM can also work as Cloud archive solution. Ready to meet occasional needs or to function as a permanent archive. Storing materials in the cloud ensures maximum protection and eliminates the need for migrating to new systems, creating backups, on site physical space, etc.

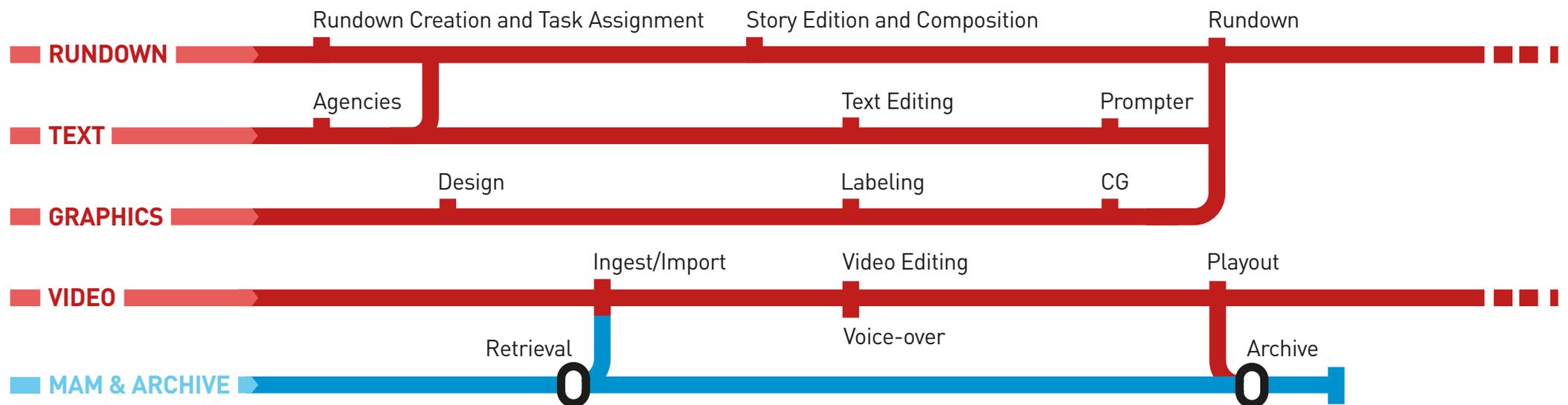
ENTERPRISE CONTENT MANAGEMENT

Video is becoming essential for businesses. Used for promotional material, educational training or for many others uses. The proper management of these materials is essential to avoid duplication and inefficiencies, specially in the case of large corporations. In many cases, the amount of material does not justify the investment and maintenance of an in-house system, so opting for a MAM system in the cloud is the most suitable solution.





NEWS & LIVE PRODUCTION



NEWS & LIVE PRODUCTION

The need for producing quality content fast is critical in news and live production environments. These specific needs make it essential to own a system that simplifies operation and gives directors, journalists and producers the security that technology will be on their side when on air.

VSN's solutions allow for deploying a complete system covering the full workflow for news and live production, streamlining production and automating news and live broadcasting. They cover all the necessary steps in an easy and uniform environment, including planning and rundown creation; resources management, text processing, video ingest, live logging, cataloguing and archiving; sending materials to playout, second screens and social networks; as well as remote collaborative editing for correspondents.



ADVANTAGES

- It covers all the necessary steps: from planning, assignment of available resources, rundown creation, integrated production (text, video, audio and graphics), to automating playout and synchronizing the CG and prompter.
- Single journalist desktop application, with an intuitive and simple interface.
- ActiveX MOS plugin for integration with 3rd party NRCS systems (Avid I.News, ENPS, etc.).
- Web pre-editor: search and preview media, add marks, export EDLs and send to broadcast.
- Live logging tool for sports and live events.
- Newswires reception module for external news agencies text and video.
- Web client for correspondents and accelerated transfers for contributions and news distribution.
- Automated video ingest from external lines, files, VTRs, XDCAM and P2 cards, etc.
- Module for news web-publishing.
- It integrates with most NLEs in the market (Premiere, Avid, FCP, Vegas or Edius). It includes a powerful PAM system for shared editing.
- VSNLIVECOM MOS compatible studio playout automation system for integration with third-party video servers. Several levels of redundancy.
- Multiplatform: (Mac OS X, Windows XP/7) and multi-language (Unicode).
- Perfect integration with VSN's PAM, MAM, Archive and Web TV solutions.

INGEST

VSNAUTOREC, VSN's ingest solution, guarantees reliable content ingest from any available source: video router lines (External Feeds), VTR's or files. The correct functioning of the content ingest system is crucial to be the first in delivering the news.

- Manual or programmed live feed recording.
- It allows to edit while ingesting, in low and high resolution.
- File ingest through Hot Folders and normalization into the working format.
- Content import from XDCAM and P2 tapes.
- News agency feeds reception (Reuters, AP, etc.).

JOURNALIST TOOLS

VSN's news solution is NRCS independent. The client can choose between VSNNEWS TERMINAL or any other MOS-compatible third party application (Avid iNews, AP ENPS and others).

- News planning with resources allocation.
- Text, video and graphics on a single interface.
- Direct access to NLE project from the NRCS.
- NRCS and playout rundown synchronization.
- ActiveX MOS plugin for third party NRCS (Avid iNEWS, AP ENPS, etc.)

EDITING

VSNEXPLOER makes both high and low resolution editing workflows possible, adapting easily to different ways of working: the journalists can take care of all the work (text, voice-over and editing) or they can leave the final editing to craft editors.

- Edit-while-ingest, in high and low resolution.
- Seamless integration with the majority of NLEs present in the market (Premiere, FCP, Media Composer, Edius, Sony Vegas, etc.).
- Drag-and-drop directly to the timeline from VSNEXPLOER PAM.
- Complete workflow in low resolution: rough cut editing, EDL export and hi-res consolidation in the background.
- Low resolution rough cut web editor included. Online collaborative editing.

CONTENTS MANAGEMENT

VSN's Live and News Production solution is built around VSNEXPLOER PAM, with tools aimed at collaborative production, locating content and at the management of sequences and projects.

- Preview media while it is being ingested.
- Access online and archived content from a single interface.
- Mark and segment cataloging and hotlist generation.
- Pre-indexed fast and powerful searches.

ADVANCED ADMINISTRATION

VSN's news solution has been in the market for over 15 years and more than 400 TV channels rely on it every day. It has evolved with its clients adding features to fit their requirements. Administration tools are essential for controlling news and programs production centers which involve a high number of users:

- Complete administration of programs with dynamic assignment of users and user groups.
- Rights management per role, user or user group, with editing, rundown creation and editing as well as web publishing capabilities.
- Tools for managing the validation of text, video and linguistics with color coded visual semaphores in the rundown.
- Advanced deletion tools, that allow for deleting rundowns by date, eliminating the associated content, NLE projects and High Resolution files while keeping the low resolution proxies, text, etc.

MULTI-SITE WORKFLOW AND NEWS CONTRIBUTION

VSNEXPLOER gives the user the freedom to write, edit and manage all media, from any place, at any time thanks to its web based interface and the integration of the UMP transfer acceleration protocol.

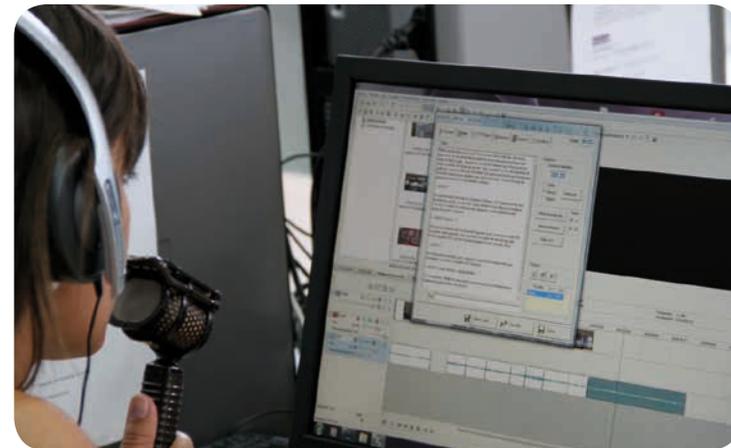
- Web access to VSNEXPLOER and low resolution adaptative proxy.
- Web client for remote correspondent access.
- Secure transfer acceleration protocol, up to 20 times faster than FTP (UMP).

VSNNEWS TERMINAL

VSNNEWS TERMINAL is VSN's journalist tool. It is designed to guarantee an agile and safe workflow for news and live production environments. In one single app, journalists and directors have all the necessary features to help them be the first in broadcasting news. The ease of use of VSNNEWS TERMINAL makes journalists' work easier and increases their productivity.

In VSNNEWS TERMINAL the head of news production creates the rundown and assigns the different pieces to the journalists. These then can edit the prompter text, search and add the associated clips and record the voice over in their favourite editor, until the piece is ready for broadcasting or for being sent to second screens and social networks.

- Creating daily rundowns is easy and fast with the use multiple templates associated to the different programs. The director creates the pieces, assigns journalists, resources, cameras, vehicles and locations, as well as the desired length of texts and videos.
- Planning: complete program administration with user rights management. The software has a privilege based user hierarchy to manage the access and the manipulation of rundowns and audiovisual content from the journalist terminals.
- The journalists ingest media in their workstation, prepare the text for the voice over and prompter and the system estimates the length of the piece. The journalist can open the video editor from the NRCS, or can rough-cut edit with VSNWEBCUTTER, accessing all the available content available in the shared server and/or recovering archived clips from VSNEXPLORER MAM.



VSNNEWS TERMINAL

- The journalist can also insert graphics by using templates or the Active-X of the chosen MOS compatible CG.
- The linguist validates texts, and the producer the audiovisual content which can be previewed in any terminal in low resolution, allowing for hierarchical validation management.
- The rundown has 4 counters that allow the user to know each program's remaining time, calculated by adding the length of the prompter texts and the finished videos.
- The system allows for making any change in the order of the news, even while on air, up to 5 seconds before the end of the video that is being broadcasted. All changes are reflected simultaneously in all the terminals.

VSNWIRES

VSNEXPLORER integrates a newswire reception module, VSNWIRES, that allows the journalists to receive all the text and video agency feeds in real time, in an orderly fashion, classified by category and to start working with them immediately.

- All agency feeds in a single user interface. It includes notifications and alerts.
- Organizes contents by agency and category.
- Visual alarms that activate when a news piece arrives.
- Compatible with the main agencies, such as Reuters, EFE, APTN, Atlas, etc.
- It includes an advanced text search engine and low resolution preview.

VSNLIVELOGGER

VSNLIVELOGGER is a software module for fast cataloguing of media in sport and other live events. It allows the operator to quickly add timecode referenced metadata to a video file while it is being ingested. It is ideal for sports production. Through metadata templates with the names of the players of each team and the most typical actions, catalogers identify the best plays, which can be sent to be broadcasted immediately as well as to be archived.

The software has been designed with the purpose of achieving the most agile operation possible in a live environment. The interface is fully customizable, providing the user with maximum versatility and ease of use.

- Associate metadata to a TC in live events.
- Add marks and subclips with the best plays.
- Speed and comfort for cataloguing by using touch screens.
- Template configurator for sports events, debates and government meetings.
- Video server control for VDCP ingest and play-out

VSNAUTOREC

Fully tested reliability for the recording of live and VTR feeds

VSNAUTOREC DIRECTOR is the common ingest application for all of VSN's solutions. It allows to set programmed and manually recordings, control video routers, VTRs and ingest video servers. Recordings from news agencies or other sources can be scheduled by entering the exact date and time and adding them to the list of automated recordings.

VSNAUTOREC TERMINAL allows journalists to digitize recordings from their PCs, access shared resources and to control VTRs remotely.

- Creation of a low-resolution version while ingesting.
- It controls most video servers through VDCP.
- Full management of frame accurate TCs.
- Controls most video routers in the market.
- Sophisticated audio-follow-video or independent channel management.

VSNAUTOREC CAPTURER+ is a SDI SD-HD ingest server dedicated to capture video in all standard formats. The system can be configured for multi-channel ingest in a modular and scalable way. It supports edit-while-ingest for selected video formats.



VSNLIVELOGGER

VSNLIVECOM

VSNLIVECOM is a studio playout system based on VSNMULTICOM's engine, VSN's MCR automation solution with over 20 years of presence in the market. It controls up to 16 video server channels (4 in A/B/C/D rundown, 4 auxiliary channels, and their redundancies). It is MOS compatible and is integrated with VSN's journalists tool, VSNNEWS, as well as with third party NRCS systems, such as Avid iNews or ENPS, among others.

VSNLIVECOM has been designed searching for maximum simplicity, reliability, flexibility and high availability. Its revolutionary client-server architecture allows for different clients to connect to the same playout engine. These clients can control different channels and have different graphical interface configurations.

- It manages multiple rundowns simultaneously, controlling up to 4 channels (A/B/C/D) in list mode and allowing for manual event management which can be chained in a different order to the original playlist, enter loop mode, etc.
- It handles up to 8 auxiliary videosever channels. These channels can be used for playing out different contents to those in the rundown, for example for studio video walls. VSNLIVECOM includes trim, loop, slow motion and other functions to further increase the potential of these auxiliary playlists.
- Dynamic configuration: VSNLIVECOM allows for the configuration of the system to change without affecting the operation. Devices can be stopped without having to interrupt playout. It's possible to customize the operation views, for each studio and user and keep the settings for future sessions.



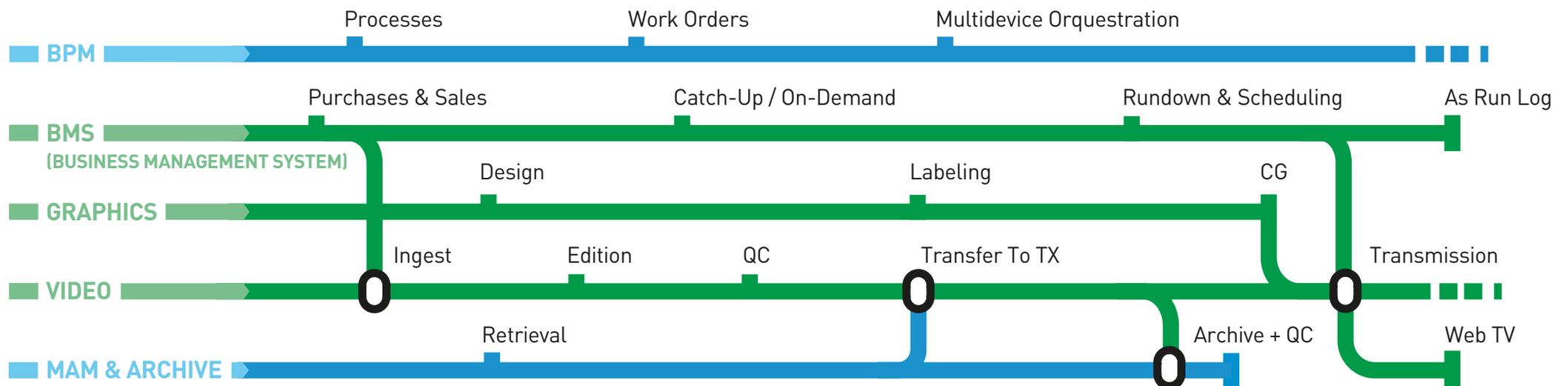
VSNLIVECOM

HIGHLIGHTS

- A/B/C/D rundown for news and live program broadcasting.
- Simple playlists for auxiliary channels, for videowalls or plasma TVs.
- Fast rundown and media search features.
- Manual control.
- Independent management of favourite clip lists.
- Compatible with third-party video servers (VDCP).
- Redundant list and network video server configurations available.
- Integrated with jog-shuttle.
- Back-to-back mode.
- Blocking of sequences between clips.
- Totally customizable user interface.
- Possibility of jumping to an event and back to the original order.
- Countdown, selected event timing and total time counters.
- Integration with NRCS via MOS (Avid iNews, ENPS, etc.).



MCR AUTOMATION & DISTRIBUTION



MCR AUTOMATION & DISTRIBUTION

MCR automation is one of the most critical parts of a TV channel. When choosing a solution, it's necessary to make sure it is reliable, solid, capable of controlling all necessary devices and that able to fit properly in the general workflow.

VSNMULTICOM, which has been in the market for over 20 years and has earned hundreds of references around the world, guarantees 24/7 seamless broadcasting in single channel environments and big playout centers alike. The wide range of devices that it controls, as well as its capacity to integrate with many other hardware and software modules, make it a powerful and open system ready for every possible situation.



ADVANTAGES

- Totally reliable playout automation software for 24/7 broadcasting.
- Multi Channel or single channel architecture with various redundancy levels. No single point of failure.
- Wide range of controlled devices and systems. All the main manufacturers in the market (video servers, routers and mixers, graphic and subtitle systems, tones, GPI, etc.).
- Bidirectional integration with multiple traffic systems for importing playlists and generating the as-run-log.
- Management of content acquisition, editing and quality control.
- Several shortcuts for quick operation. Graphic interface designed to avoid mistakes and make the operator's job easier.
- BMS for live event programming, catch-up and VoD.
- Complete solution for regional connections and disconnections or unique advertising pattern insertion.
- Optional scheduling module (VSNCREATV) with production and advertising contract management capabilities.
- Integration with MAM and PAM systems for automatic copying of contents to the playout video servers.
- Advanced log management. Registers all manual or automatic events occurring in the system, as well as all communications with all controlled devices.

SCHEDULING

VSNCREATV web based scheduling module, is fully integrated with VSNMULTICOM. It covers all scheduling needs of the advertising, production and broadcasting departments. It allows the user to, among many other things, create weekly and daily program schedules, export the EPG, and track the number of times each content has been broadcasted.

PLAYOUT AUTOMATION

VSNMULTICOM is the core of VSN's MCR automation solution. With over 20 years of existence, it's integrated with the majority of baseband devices, such as video routers and mixers. It controls any VDCP video server and most of the CGs in the market. It offers many different redundancy options adapting to every client's needs however demanding they might be.

CONTENT MANAGEMENT

VSNMULTICOM and VSNCREATV enable advanced content management workflows that greatly accelerate and simplify MCR operation. When loading a playlist all content that is not present in the video server is automatically requested to the MAM system. The system also checks which of the video server contents are not registered in the MAM system.

VIDEOSERVERS

VSNMULTICOM integrates via VDCP with the majority of videosever manufacturers in the market, such as DVS, Harmonic, Seachange, Harris, Avid, Grass Valley, among others.

WEBTV INTEGRATION

VSNMULTICOM fully automates workflows for sending and managing contents for webTV. It's possible to select which contents can or can't be broadcasted online and the system then takes care of stopping the encoder and launching and alternative playlist. It also takes care of eliminating commercial blocks when publishing the content and provides an EPG optimized for web publishing.

DEVICE CONTROL

Unlimited number of controlled devices. Constant notifying of the state of the connection with the devices, allowing for a quick intervention of the operator in the event of any problems arising.

ADVANCED OPERATION

For the same event, VSNMULTICOM enables the control of devices and actions associated to three different levels: main sources such as broadcast video servers, auxiliary sources such as graphic generators, and secondary sources such as ingest video servers, GPI beacons, VOD, secondary router commuting, etc.

ADVANCED GRAPHIC INTEGRATIONS

Complete integration with several advanced graphic systems, taking advantage of all their functionalities: selecting templates and sending the input data directly from VSNMULTICOM. Some examples are the integrations with ORAD 3DPlay with several levels of communication and with Vizrt's Trio and MultiChannel through its REST API.

TV CHANNELS SYNCHRONIZATION

Possibility of having different slave channels synchronized with one or two main channels. For example, to have an international channel and a regional channel totally synchronized with a national channel thanks to advanced playlist management and per channel disconnection control.



Playout channel synchronization with VSNMULTICOM

VSNMULTICOM PLAY

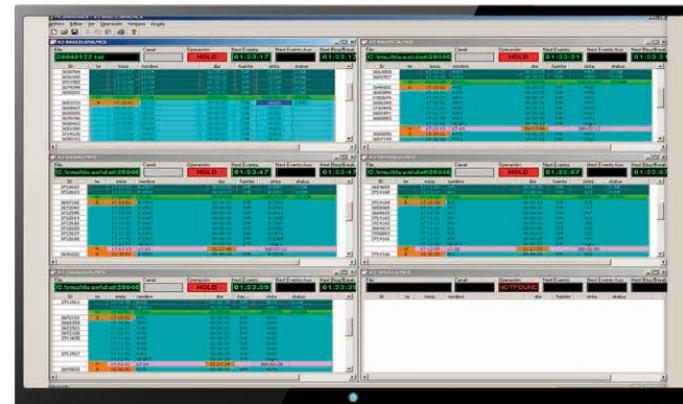
The most complete and reliable MCR automation solution. Starting with a single channel compact configuration, VSNMULTICOM is fully scalable and can easily manage even the largest multichannel systems. Robust and versatile, it fulfills the most demanding operational requirements.

- The most advanced combination of auxiliary and secondary events for sophisticated operation.
- Video servers control through VDCP or native API: DVS, Harmonic, EVS, GrassValley, Harris, Seachange, Omneon, etc.
- Complete integration with advanced graphic systems: VSNCG+, Brainstorm, Chyron, Vizrt, Orad, Miranda and others.
- Complete integration with video routers and mixers: Evertz, Miranda, Snell, Ross, Sony, Grass Valley, Pesa and others.
- Several keyboard shortcuts, procedures, and a dedicated graphic interface designed to avoid human errors and simplifying the operator's work.
- Integrated tools for all necessary tasks: playout, ingest, transferring to disk, trimming, quality control, etc.
- Its possible to make any changes in the playout chain without stopping the operation.
- Several redundancy levels available (1+1, n+1, etc.). Redundancy at storage, videosever channels, device and playlist levels.
- Exclusive VSNMULTICOM "Virtual Matrix" technology which reduces the number of hardware equipment associated to each broadcast chain, and allows for hot swaps in every step.
- HOTBREAK Operation: a keyboard shortcut to immediately switch to live events allowing to return to the same point of the original playlist at which it was stopped.
- No limit in main, auxiliary and secondary device control.

VSNMULTICOM REMOTE

Module for monitoring and controlling VSNMULTICOM channels in real time from a remote workstation, showing its state, possible errors and alarms. It avoids the risks of operating directly on the server application.

- It allows several levels of control: from total control, with basically the same functionalities as VSNMULTICOM PLAY, to simple monitoring.
- It allows for multi channel management and visualization in a single interface.



VSNMULTICOM REC

VSNMULTICOM's ingest application. It coordinates all stations that take part in planned ingest of the broadcast playlists and of specific recording lists. Through its user interface, the operator can interact in real time with the ingest list and control all devices, directly or through the Device Server.

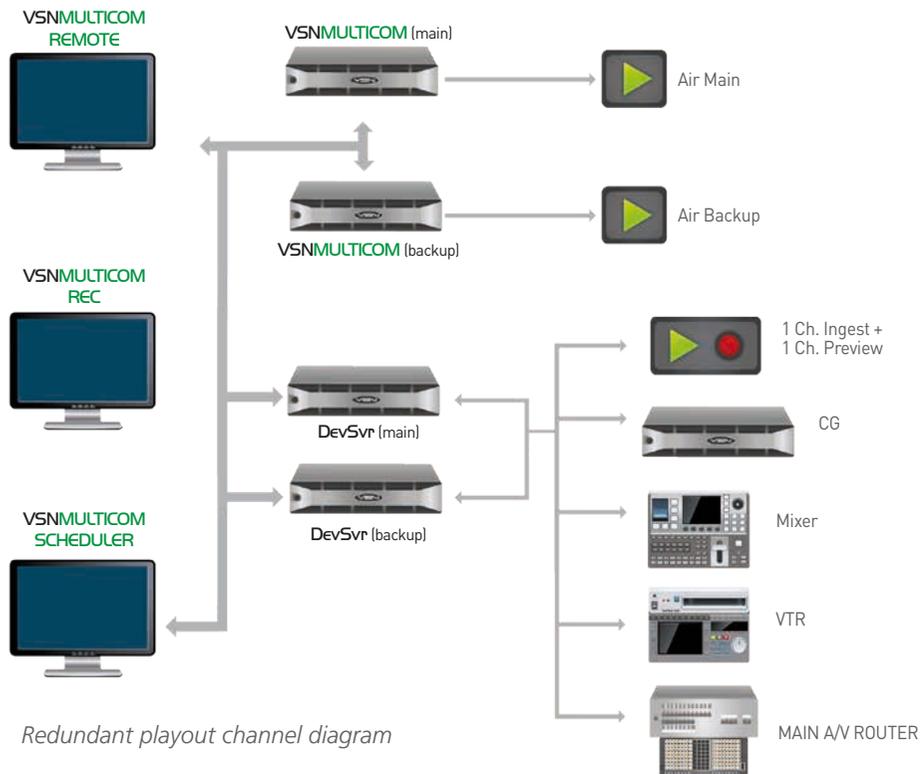
- It manages all manual and scheduled recordings. It allows for ingesting with multiple target destinations simultaneously.
- It includes a trimming module for preview and subclip generation, as well as the content validation functionalities needed before sending content to playout.

VSNMULTICOM SCHEDULER

This application creates or imports playlists coming from external traffic systems. It allows for making last minute adjustments of the playlist before the actual broadcasting starts. It emulates all the different functionalities of VSNMULTICOM PLAY regarding device control and can access the content of the catalogue. This is the best way to compose the playlist that will be loaded in VSNMULTICOM PLAY manually or automatically. If a traffic system is not available, it is possible to prepare all playlists from this application.

DEVICE SERVER ENGINE

The function of this server is to control external devices. It contains all the drivers with their protocols and native communication systems. It frees VSNMULTICOM PLAY, VSNMULTICOM REC and other applications from the task of controlling devices. It supports redundant configuration modes to avoid a single point of failure.



Redundant playlist channel diagram

VSNWEBTV

VSNWEBTV is a set of automation tools that help TV channels launch their own online channel, optimizing technical and human resources in the most intelligent way possible in a reliable and secure environment, reducing the need to hire new staff to get the job done.

The main advantages of this tool are:

- Publishing of news to the web and social networks directly from VSNNEWS. A single journalist can edit the text, select the picture and category for the web. Then the system publishes a news piece to the website, the system automatically transcodes the video into the required web and second screen formats.
- The streaming of a channel's broadcasted signal through the web faces rights ownership issues. To solve this, on the VSNMULTICOM playlist the operator can select which contents can be shown on the web, VSNMULTICOM then controls the livestreaming encoder and stops the transcoding when the event has no rights, launching an alternative playlist and indicating when normal broadcasting will resume.
- Catch-Up VOD automation. This makes fast publishing contents for on-demand playback on the web simple. VSNMULTICOM controls the encoder and eliminates commercial brakes, publishing the content without interruptions. As soon as the program is finished, it becomes available on the web.
- Content publishing in social networks such as Facebook, Twitter and Youtube is also automated with VSNEXPLORER MAM: any content available in the system can be published from a single interface.

WEBTV PLATFORM SERVICE

The service is integrated with webTV platforms using the main CDNs in the market, such as Level 3 and Akamai.

It helps to monetize contents online thanks to the native AdServer system, from which it is possible to insert advertising in different formats: rolls, dynamic and static overlays, tickers, picture in picture, watermarks and screen icons, etc. And all of this, again, fully automated.

VSNCREATV

VSNCREATV is a software module for planning and managing TV programming. It allows to manage the workflows of advertising, production and broadcast departments regarding broadcast planning (from general simulations for all the season, to programming and schedules for a particular week).

With VSNCREATV it's possible to generate the weekly grid and the daily playlists. It allows for exporting all the necessary information regarding the number of times an external content and publicity pieces have been shown and export the data for third party invoicing systems. It also generates programming guides for the press and the EPG TV guide. It integrates with invoicing, playout automation and archive systems.

VSNCREATV is a key part for improving the efficiency of a TV channel, may it be commercial, thematic, news oriented or generalist. The system helps optimize human resources and enhances collaborative work between different departments in a transparent and simple way, eliminating repetitive tasks and avoiding human errors.

With VSNCREATV, your channel will be able to:

- Plan advertising campaigns and manage advertising disconnections for different channels and geographic areas.
- Control in-house and external productions.
- Create weekly schedules and daily broadcast rundowns.
- Provide information to the media, web and electronic programming guides (EPG) for TDT, cable or satellite.
- Register the number of times a given content has been broadcasted and generate reports integrated with external accounting systems.



VSNCREATV

VSNCREATV advantages:

- Web-based system for a fast and simple implementation of a channel or multi channel system.
- Powerful user rights system.
- Enables real collaborative work between management and technical departments. The user views can be customized depending on the programmed task.
- Allows for adding the necessary metadata to the contents at any time.
- Simple integration with VSNEXPLORER MAM and other third party MAM solutions (Ardendo, Tedral, Harris, Avid, etc.), for content management as well as for automation.
- Total bidirectional integration with VSNMULTICOM and VSNSPIDER that allows for automated media movement workflows based in user rights and admission rules. The integration with the MAM system allows for the synchronization of the metadata associated to productions, such as length and segmentation.
- Export the number of passes of a given content for external invoicing systems. Advertisement playlists can be imported from external apps.
- Possibility of fast last minute modifications in case of unforeseen changes in programming.
- Consolidation of real broadcast data (As-Run-Log) for comparison with the original scheduled playlists.

VSNBROADREC

VSNBROADREC is a highly reliable multi-channel ingest server system that allows for continuous uninterrupted recording of video or audio sources. It can perform continuous (24/7) or scheduled recordings from any source: analog or SDI (SD-HD signals), Transport Stream, etc. Depending on the source signal it can reach up to 15 CH per server in 2U.

User defined recording quality which ranges from 256Kbps to 25Mbps in various output formats. Servers also capture the EPG and Close Captions of TV channels, allowing to perform searches on this metadata. It has indexing, cataloging, archiving and web publishing functionalities. The user application is web based and allows for accessing contents from anywhere with an Internet browser. Also, it allows for thumbnail based navigation for easy location of relevant segments. It includes a player to view the contents, export segments and add metadata.

Contents generated by VSNBROADREC can be used for re-broadcasting, internal use, internet publishing, Video on Demand (VOD), DVD recording and archiving.

TV LEGAL COMPLIANCE

Smart and cost effective tool for TV channel legal compliance recording. It records all broadcasted contents to internal hard drives 24x7. The system works autonomously and can keep contents for as long as the national laws require, deleting the content once this threshold is reached. For internal use, program segments can be exported to DVD directly from the application. It also serves as proof for advertising auditing purposes, among many other uses.

AUTOMATIC CONTENT RECOGNITION (ACR)

VSNBROADREC integrates with different automatic content recognition technologies and with VSNEXPLORER MAM-BPM to offer innovative automatic content recognition solutions.

- Thanks to Audio Finger Print and Water Marking technologies it is possible to build a detection platform for monitoring TV contents in real time, with applications for the auditing of advertising, copyrights and electoral processes.
- ASR (Automatic Speech Recognition) enables word detection and transcription of audio content and to use this information for locating relevant content or segments. Perfect for TV and Radio auditing.

Broadcast uses:

- TV legal compliance.
- TV and radio channels monitoring.
- Publicity auditing.

Government uses:

- Media authority.
- Electoral campaigns auditing.
- Recording of court sessions.
- Recording of parliamentary sessions and Web publishing.



VSNBROADREC

SERVICES

GLOBAL ENGINEERING SOLUTIONS FOR BROADCAST-IT SYSTEMS

Custom configuration for every client

VSN has wide experience in implementing the most demanding and complex systems for the Broadcast and Corporate sectors. VSN relies on a powerful engineering team, as well as on a professional partner network of Broadcast and IT integrations. Teamwork and enthusiasm for technology guarantees the best results and deployment times as well as the most efficient use of economic and human resources.

Implementations done without affecting the existing operation, integration of existing systems, from ingest to multi-screen distribution, WebTV, etc. Nothing is impossible for our engineers.

The "open philosophy" of our solutions and our knowledge of third party complementary products, enable us to find the right configuration for each client's desired workflow.

PROFESSIONAL SERVICES

We add value to our products

TRAINING

The training of your human team, the best asset for the future of your company.

In VSN we believe in the value of people and their importance inside a team, and that's why we provide continuous training to guarantee the future of every project.

With VSN's training service, you can choose the training modules that best suit your needs.

CONSULTANCY

Modern solutions offer open and customizable architectures, and the chance to define business rules, workflows and integrate with existing systems. This requires the strict definition of all parameters, data models and communication interfaces of each system.

VSN's Professional Services team is available to customize standard tools and turn them into efficient and profitable systems tailored to each client's needs.

In VSN we can advise you on the best practices for the implementation of your project. Be it regarding a particular aspect you may want to improve, or the complete solution. Our team and network of partners adapt the configuration of the system to fit the needs of each project, guaranteeing the integration with third party solutions and equipment. Moreover, in many cases, we develop specific software to improve workflows, following the customer's requirements.

Our team of project engineers guarantees the implementation of even the most complex systems, meeting and even exceeding expectations in terms of functionality, time and budget, including integrations with third party systems.

VSN specialists also guarantee that the technology is up and running in the shortest period of time possible, training users and system administrators in the most efficient manner and assisting during the launch of the system if necessary.



POST-SALE SUPPORT

VSN is conscious of the need of offering support and technical maintenance of hardware and software for all our solutions and systems, in order to keep the system in good working order.

VSN's support gives your company the updates, advice, maintenance and necessary services to solve any problem in the shortest time possible.

Thanks to this fast, efficient and experienced technical support, you will save money, time and problems. VSN's support personnel can solve any incident, making the right choices in the minimum possible time, helping you keep your business going.

34

Choose the option that best suits your needs: **VSNBASIC**, **VSNPRO12** or **VSNPRO24**.



| | VSNBASIC | VSNPRO12 | VSNPRO24 |
|-------------------------------------------------------------------------------------------------------|----------|----------|----------|
| TIMETABLES | | | |
| Support 7 days/week x 24 hours (365 days). | ✗ | ✗ | ✓ |
| Support 7 days/week x 12 hours (365 days). | ✗ | ✓ | ✓ |
| Support 5 days/week x 8 hours (office hours) | ✓ | ✓ | ✓ |
| Preferent attention | ✗ | ✓ | ✓ |
| 1-hour response. | ✗ | ✓ | ✓ |
| SOFTWARE UPDATES | | | |
| Free updates | ✓ | ✓ | ✓ |
| 50% discount on new versions (upgrades) | ✓ | ✓ | ✓ |
| Total access to documents | ✓ | ✓ | ✓ |
| TECHNICAL SUPPORT | | | |
| Telephone support, email and chat | ✓ | ✓ | ✓ |
| Remote access | ✓ | ✓ | ✓ |
| Different international timetables | ✓ | ✓ | ✓ |
| Access to all documents and FAQs | ✓ | ✓ | ✓ |
| WARRANTY & RMA SERVICES | | | |
| Priority when in need of repair | ✗ | ✓ | ✓ |
| Replacement of defective parts and materials in warranty | ✓ | ✓ | ✓ |
| Sending of material in advance | ✗ | ✓ | ✓ |
| Equipment on loan while repairing (if the situation requires it) | ✓ | ✓ | ✓ |
| Special discounts for the renewing of the system | ✓ | ✓ | ✓ |
| ON SITE MAINTENANCE (provided by the local distributor) | | | |
| On site support assistance (depending on local distributor availability) | ✓ | ✓ | ✓ |
| VSN's engineer assistance (optional and after quote) | ✓ | ✓ | ✓ |
| PREVENTIVE MAINTENANCE | | | |
| Security and incident prevention | ✗ | ✓ | ✓ |
| Correction and study of methodologies and workflows | ✗ | ✓ | ✓ |
| Reports on the system's state every six months (optional) | ✗ | ✓ | ✓ |
| HARDWARE WARRANTY EXTENSION | | | |
| Ensure the perfect state of your VSN system extending the warranty periods for an additional 2 years. | | | |

MORE THAN
1000
CLIENTS

A HISTORY OF SUCCESS

MORE THAN
100
COUNTRIES

For more than 20 years, **VSN** has provided solutions to more than 1000 clients all around the world, creating value for different companies in the Media & Entertainment sector.



VSN HEADQUARTERS EUROPE & AFRICA

Parc Audiovisual de Catalunya
Ctra. BV-1274 Km.1,
08225, Terrassa, Barcelona (Spain)
Tel. (+34) 93 734 99 70
sales@vsn-tv.com

VSN ASIA PACIFIC (APAC)

Room 2, Units 401 - 403
Level 4, Cyberport 1, No. 100,
Cyberport Road (Hong Kong)
Tel. (+852) 3618 5812
apac@vsn-tv.com

VSN LATINOAMERICA (LATAM)

Ruta 8 Km.17500,
91600, Montevideo (Uruguay)
Tel. (+1) 305 677 9820
latam@vsn-tv.com

VSN MIDDLE EAST

Dubai Media City - Bussines Center 3
Al Thuraya 2 Tower, 8th floor, Office 1
500717, Dubai (United Arab Emirates)
Tel. (+011) 971 4 4280689
mideast@vsn-tv.com

VSN NORTH AMERICA

5201 Blue Lagoon Drive,
33126, Miami, Florida
(United States of America)
Tel. (+1) 305 331 4889
usa@vsn-tv.com



Copyright © VSN Video Stream Networks S.L. 2014. All Rights Reserved.

All the registered and non-registered trademarks and company names contained in this brochure are property of their respective owners. No part of this document can be reproduced or translated without previous consent from VSN Video Stream Networks S.L. The information contained in this document has been provided by VSN Video Stream Networks S.L. and has been examined before printing.