

INNOVATION & MEDIA SOLUTIONS

Product Information

VSNCrea

Index

2

00	-	Introduction	pág. 4
01	-	What can a traffic and scheduling system provide you with?	pág. 6
02	-	VSNCrea: the best ally for planning and scheduling your programming	pág. 8
		02.1 _ How does VSNCrea work?	pág. 9
		02.2 The modules of the system	pág. 12
		02.3 _ Advantages of VSNCrea	pág. 15
		02.4 _ Key Features	pág. 19
03	-	Use Cases and Applications	pág. 21
04	_	References	pág. 23



OO _ Introduction

Today, companies serving the Media & Entertainment industry, such as TV channels, radio stations, non-linear channels (OTT, VoD, WebTV, Streaming, etc.) and in general, any business or organization that works with media files on a daily basis, **share the same goal:**

11

To deliver their content to a specific and defined audience in the shortest possible time, so that they can consume it whenever they want on their platform of choice.

"

The industry transformation of the distribution and the production processes in recent years has had a great impact on content scheduling and programming. New realities such as multi-device and cross-platform distribution and consumption, together with the fragmentation of audiences, the demand for immediacy in content consumption and the increased importance of remote working in all professional spheres, including Bbroadcast and Media, have greatly increased the complexity of these tasks. Now it is necessary to have access to new and much more efficient scheduling tools, that are able to take into account all the aspects that might be involved in addressing these varying media consumption behaviours (amongst others, the management of broadcasting rights and the

control of all investment in content and advertising, as well as the ROI obtained from them).

Likewise, the sale and planning of cross-platform advertising slots has also created consumer delivery complexity due to the multiple variables that have to be considered, such as specific broadcasting rules applied by advertisers, the various platforms and vailable time-slots and of course, variable pricing options taking into consideration aspects such as the rating of the programs. Hence, some key functionalities like workflow automation and setting up automatic rules for smarter time slot planning beginning to take centre stage in traffic and scheduling solutions.

OO _ Introduction

With all these factors considered, professionals such as scheduling operators, content editors and individuals responsible for advertising and content sponsorship, play an increasingly important role in Media & Entertainment companies, while traffic and content scheduling systems have become an indispensable component of media companies of all kinds. They are being used primarily to avoid any manual, redundant or tedious tasks that may slow down the work of operators and reduce their productivity, as well as to help with some difficult processes like planning and managing daily rundowns for multiple channels and platforms while exploiting their advertising profitability.

Traffic and scheduling systems allow companies to extract the maximum added value of their available resources, boosting collaborative work between departments and users, supported by essential automation and workflow orchestration. Likewise, the process transaction time of all operators working with it decreases, thanks to the tools that allow them to have a holistic view of all the available content and media files. In summary, the management of resources becomes much more efficient, so as to better address the demands of the content consumer.

•• What can a Traffic & Scheduling system provide you with?

Whether it is used by a single department, a non-linear broadcast platform (OTT, VoD, Web TV, etc.), a large television network, a radio station or a private corporation, the main benefit that a system for traffic and scheduling provides is a complete view of all the scheduled and broadcasted content in real time, as well as the expected revenue derived from advertising associated with this content.

These systems allow companies to save costs and speed up tasks such as advertising placement & management, content rights' management, programming scheduling and a global view of all the content and advertisements already broadcasted or published, just to mention a few.

When choosing a management system such as

this, it is very important to consider the type of software solution being acquired. Certain aspects become essential, such as a **simple and intuitive interface design** that allows users to have a quick and clear view of their content catalog, programming grids and available time slots..

Other features that are worth highlighting are the flexibility and ability to customize the workspace, with custom metadata and new features and integrations that can be added via API and plugins.

Also, the **ease of scheduling content** both daily and long term; smart advertising planning

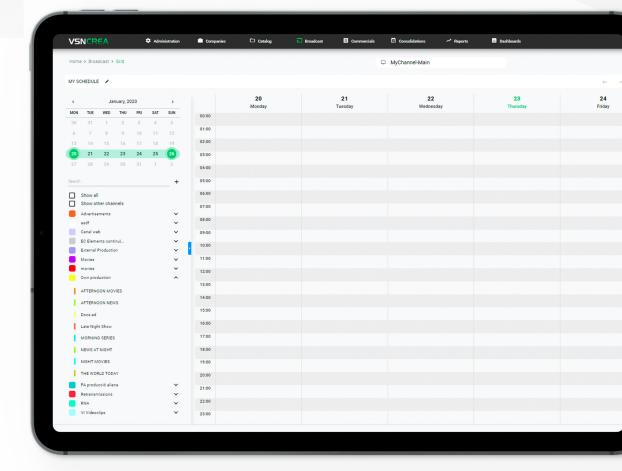
features which allow users to forecast the expected costs and revenues; or the possibility to adapt the platform to the specific requirements needed in each individual market (i.e.: advertising regulations). Amongst many others, these are some indispensable requirements worth evaluating in order to decide whether the system fits the needs of a media company.

With technology progressing at an ever-increasing rate, other factors now need to be closely evaluated, such as remote operation over WAN, which requires 100% web-based development, the system's ability to run in cloud environments, its availability under pay-per-use models (SaaS), integration with Media Asset Management systems (MAM), playouts and

• What can a Traffic & Scheduling system provide you with?

non-linear platforms, are also key aspects which need to be considered when it comes to ensuring a smooth, cohesive and uninterrupted workflow.

As in any distribution chain, media companies need a holistic view of their entire operation and an integrated management of their inventory, tasks and resources to avoid redundant processes and inconsistencies that can undermine their efficiency.



• VSNCrea: The best ally for Planning & Scheduling your programming

VSNCrea is the latest web-based version of the VSN's traffic and scheduling system. It is 100% compatible with cloud environments and it is also available as SaaS to allow for a more flexible and multiregion use.

With this system you can manage the catalog of productions (for programs, TV series, live broadcasts, advertising, promos, etc.) and smartly schedule these contents. You can also monetize your content and advertising creating analytical reports and dashboards, as well as manage the rights of all your productions based on customised sets of rules. Likewise, the system enables advanced integration with all kinds of proprietary and third-party systems (MAM systems, play-out automation, EPGs, billing software, etc.) to offer the most seamless workflow possible between systems, all centralized in a single platform.

02.1 How does VSNCrea work?

Customize your systems:

VSNCrea can be customized to suit the specific needs of any company from the very start. Among other parameters, companies can configure the channels, user permissions and profiles; add new functionalities via plugin; integrate the system with third-party software via API; and even set custom metadata to adapt the content catalog to their specific needs.

Register and manage your contracts:

Whether for an acquired production (program, TV series, film, etc.) or for an advertising campaign, users can register all their contracts under the Commercials and Acquisitions sections of VSNCrea. This way, their contracts' management and organization can be centralized under a single place, making it easy for the company to locate and check them whenever needed.

More specifically, under the Commercials section users can organize and plan the sale of all their available advertising slots, as well as set smart automatic rules for the campaigns' broadcast. For example, they can set automatic rules to prevent two advertisements of the same product category

from being broadcast consecutively (eg: ads of two different car brands) or to prevent a certain type of advertising from being broadcast in a specific time slot (eg: products not suitable during children's hours). Users can also set different prices for advertisements depending on the broadcast time slot (eg: prime time) and control the total obtained revenue from advertising.

Concerning the Acquisitions section, companies can automatically plan the broadcast of all their acquired content from this specific area, according to the agreed broadcasting rights (dates, broadcast windows, number of runs, etc.).

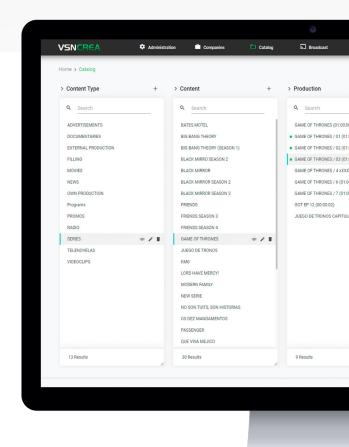
02.1 How does VSNCrea work?

Register and search for content:

Through the Catalog, users can access all the available company's content (both own and acquired productions) from any web browser and device. These contents will appear hierarchically ordered to facilitate their search and browsing.

In the Catalog it is also possible to review the information about all content and modify it, including, for example, customized metadata. The changes made to the metadata are automatically synchronized with all the areas and software solutions with which **VSNCrea** is integrated (content management systems or MAM, non-linear platforms, etc.).

In those cases where there exists an integration with **VSNExplorer MAM**, the bidirectionality of all changes is guaranteed. This means that if a new segment or any kind of change is made on the metadata of a specific content in VSNCrea, it will automatically reflect and save that information in the corresponding asset in VSNExplorer MAM at the same time. Likewise, this integration allows previewing in low resolution all the company's content from the Catalog itself, which greatly facilitates the selection of productions to be scheduled.



02.1 How does VSNCrea work?

Schedule your programming:

VSNCrea allows planning, scheduling and broadcasting programming both through linear channels (traditional television) and non-linear channels (OTT, VoD, WebTV, etc.), as well as through other social media and video platforms (YouTube, VIMEO, Dailymotion, etc.).

In the specific case of linear programming, it is possible to design and schedule daily, weekly, monthly or long-term programming lists under the Broadcast section. It also allows to import all advertising campaigns and purchased content that have been previously registered into the system through the Commercials and Acquisitions areas. In all cases, both the broadcasting rights and the automatic rules that have been set before (for example, changing pricing options and time slots for broadcast depending on the type of advertisement) will always be taken into account when scheduling content.

The linear programming works by predefining blocks of content in the rundown that can be preloaded with media. Thus, it is possible to know if the media has been received and loaded in each block at a glance, in order to ensure that it is ready to be broadcasted. Additionally, users can also schedule their programming sequentially to save time and resources.

Afterwards, the rundown or playlist can be sent to any playout system automatically, while the information for other areas outside the TV channel is also generated.

An example of this could be the EPG (Electronic Program Guide) for digital terrestrial television (DTT), which allows users to check the schedules, synopses and other relevant information about the channel's programming and can be generated with a single click.

For non-linear channels or platforms, content scheduling is carried out from the Non-linear section,

where the long-term publishing and unpublishing of content can be done automatically, always depending on the agreed broadcasting rights.

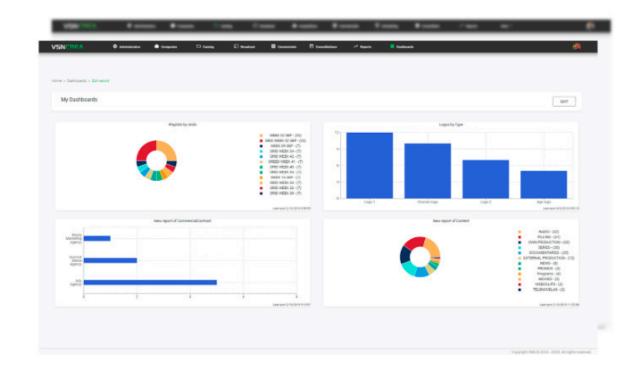
It should be noted that it is also possible to combine linear scheduling with the automatic publishing of content on non-linear platforms. To do this, users can indicate directly from the linear playlist which specific content should be automatically live broadcasted on IP streaming platforms (WebTV, Youtube or Facebook Live, etc.), as well as which items from the playlist should be available in Catch-up mode later, so that they are uploaded to VoD platforms or social media channels right after they have been broadcasted through the linear channel.

02.1 How does VSNCrea work?

Analysis of performance and monetization:

As the final step or phase in broadcast scheduling, VSNCrea's Analytics section is optimal for studying in detail the performance and Return on Investment (ROI) or monetization of all content and advertising, including graphics and auxiliary events.

Through reports, graphs and dashboards generated by default or customized, companies have access to the data offered by VSNCrea and all the integrated systems capable of providing analytical information (i.e.: broadcast automation systems), in order to analyze the broadcast performance and confirm which advertising invoices must be issued. These reports can also be exported in other formats (PDF, Word, Excel, XML, etc.).



02.2 System modules



Catalog

VSNCrea is made up of several modules that logically group all the tools of the system by work area or specialty.

In this section, users can manage and organize all the content in a hierarchical way, according to their inherent permissions. The VSNCrea catalog is key to controlling the available content (be they programs, series, advertisements, etc.), including the possibility to segment content. It also allows to add many types of metadata that can be automatically synchronized with a MAM system or even preview the content scheduled for delivery, playlists and all videos already uploaded to social media or non linear platforms. Furthermore, all the information about the content that is being published in non-linear platforms is also available through the catalog.



Acquisitions

This module controls all the purchased media. Once content has been acquired, after a simple process, the acquired contents will be available so that they can be scheduled, always taking into account the broadcasting rights that have been stipulated and agreed upon at the time of purchase.

02.2 System modules



Broadcast

It is one of the most relevant modules of the system, from where content scheduling is carried out daily, weekly or on a long-term basis. For scheduling either a few hours or a whole month, users use virtual blocks that can be predefined and populated with content in advance, making it easier to plan and edit the broadcast programming at any time. It also allows to schedule graphics and jingles associated with media and even to schedule two different playlists in parallel, in order to later select the most appropriate one to broadcast.

Once the programming calendar has been prepared, it is possible to send all the media to the broadcast automation system, export the playIsit via API, generate the Electronic Program Guide (EPG) for the digital terrestrial television (DTT) or even decide which particular contents should also be published automatically to any non-linear platform (social media, WebTV or OTT) with one click.



Non-linear

This is the specific area where content scheduling for various non-linear channels (OTT, VoD, WebTV) and video platforms (YouTube, VIMEO, Dailymotion, etc.) can be carried out simultaneously, including different and specific information for each channel. It can be done manually, scheduling content by content, or sequentially and in an automatic way, allowing the system to publish and unpublish content according to broadcasting rights. Furthermore, all the information about the published content (number of viewers, publication date, geoblocking, playlists, etc.) can be checked through the Catalog itself, where it will be displayed as external metadata. Content can also be filtered by the platform where it is published through the Catalog.

EDIT

02.2 System modules



Commercials

The commercials area allows users to prepare and plan advertising and sponsorship campaigns, stipulating for each of them the related advertisements, graphics and/ or auxiliary events, the number of runs, the time slots in which they should be scheduled, repetition rules, pricing based on time slots, as well as the profitability and economic viability of each one of the advertising runs.



Analytics

The analytics area allows users to create advanced reports, graphs and dashboards that can be quickly and easily customized. The system is able to intelligently cross-reference data and information and summarize the most relevant results in the form of a table and / or graph. In addition, all these reports can be subsequently exported in different digital formats, such as Word, Excel or PDF.



VSNCrea has been specifically designed to be able to operate in cloud environments, both public (Microsoft Azure, AWS, GCP, etc.) as well as private. In addition, it can be acquired under a pay-per-use or SaaS business model. Therefore, the client only needs a web browser to start using the system instantly, as soon as it is installed. However, VSNCrea can also be deployed in a local or "on-premise" environment to allow the software to run in isolation on the client's servers.

The familiarization and training period necessary to get the most out of the system is very short thanks to its modern and intuitive interface, that can also be adapted and personalized for the different user profiles of each company and for the specific tasks of each department.



Maximum security and control

This component of the software allows you to strictly control all the contents of any company or channel, the number of times they have been broadcasted, advertising contracts and acquisition contracts of content, along with its distributors, and the cost-benefit analysis of each of them, among many other aspects. In practice, having quick and direct access to all these allows companies to avoid errors caused by the lack of information or misinterpretation of the data.

Similarly, VSNCrea also allows you to have absolute control of all your own, third-party and outsourced productions, as well as to allocate costs per chapter or for full production, as established by the system administrator.



Total synchronization for faster response times

In VSNCrea, it is possible to make last minute changes in the broadcast programming, guaranteeing that all the departments and systems involved are aware of the changes made and reflect them correctly in their operation.

Any changes made to the information contained in the system (contents, contracts, rundowns, etc.) are immediately communicated to all the departments involved, including the playlists that are modified accordingly. This is possible thanks to the constant synchronization of VSNCrea with the

rest of the technology systems that connect the various inter-related departments.

In addition, by reading the As-RunLog, VSNCrea is able to identify and faithfully report the contents that have been broadcasted by the automation system, as well as the total amount that must be invoiced for the inserted ads. This allows the software to cross-reference this data with all the information contained in the system and generate analytical reports that summarize them accurately. The system is capable of interpreting numerous

As-RunLog formats, which enables VSNCrea to integrate with a multitude of automation systems.



VSNCrea has been developed to be easily customized - so that it can adapt to the different needs and use-cases of each client. Either by customizing the existing metadata of any area or by creating new metadata, VSNCrea ensures that this information will be captured and analyzed at all times by its Business Intelligence module.

Also, thanks to the availability of a comprehensive and well documented API, it is possible to easily integrate the Crea system with any third-party solutions.



Smart advertising planning

The new VSNCrea module for advertising planning makes easy to manage advertising campaigns in an optimal and smart way. More specifically, it allows users to define time slots (i.e.: children's viewing time) to have greater control over the content that is broadcasted. It also allows to determine rules for prime-time broadcasting and managing different price ranges for advertising based on the time slot and channel.

These key elements help users to set automatic rules and adjustments to avoid the repetition of a specific commercial or even forbid the

broadcasting of a certain type of advertising in specific time slots, such as children's viewing time. In essence, users are free to automate the advertising planning of their linear or non-linear channel however they want to.



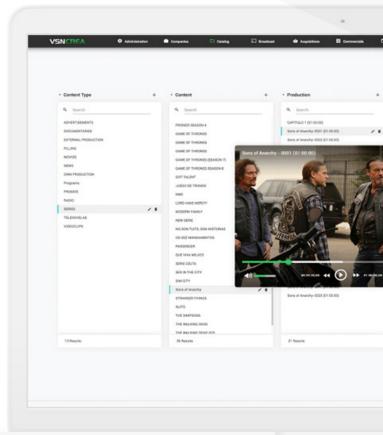
Advanced integration with all VSN solutions

"Bidirectionality" between VSNCrea and the complete suite of VSN solutions guarantees that all changes made on the traffic and scheduling system will be automatically replicated in all VSN systems integrated with VSNCrea. This way, users can stay up to date about all the changes taking place in the programming and contents at all times.

One remarkable integration with VSNCrea is the one with VSNExplorer MAM system, which allows users to make changes on contents' metadata and/or segments of the assets stored in the MAM directly from the VSNCrea Catalog interface. This means that users do not need to specifically access the

MAM system separately to make those changes - which in the end saves a lot of time.

In addition, other notable advantages of this synchronization are the possibility of ordering the MAM system to upload content to different platforms (eg. Youtube) from VSNCrea and/or previewing an entire programming grid, as well as previewing and editing all the content stored in the MAM system directly from VSNCrea. For example, a user who would like to view and edit a fragment or segment of a video clip that has already been added to a playlist, could easily do so directly from the traffic and scheduling system.



02.4 Advanced Functionalities

The automation of programming and advertising planning in any linear or non-linear channel brings numerous advantages to operators, especially when traffic and scheduling systems are integrated with Master Control Room solutions, Content Management systems or with solutions for commercial billing that replicate and automatically reflect all changes produced on the playlist and initial schedule.

Some of the main advanced features of VSNCrea that allow to maximize its potential are:

- True Multi-tenant architecture that allows a single instance of software to serve multiple clients or organizations, resulting in cost savings.
- Powerful system for managing user permissions according to their specific profile, functions and defined roles. Customizable permission hierarchy for each client and department.
- Unlimited collaborative work between technical and management departments. Multiple users can work simultaneously.
- Fully customizable and expandable metadata.

02.4 Advanced Functionalities

- Creation of customized analytical reports and graphs with the Analytics module.
- Time slot control for advertising broadcasting/ delivery, including automatic rules and adjustments for price change or for the prohibition of certain types of advertising.
- Full integration with VSN's solution portfolio, such as with the Master Control Room (MCR) automation, VSNMulticom, VSNONETV or with the VSNExplorer MAM platform for content management.
- Easy and seamless integration with third-party solutions for content management or playout and MCR automation via API.

- Preview of all content stored in the MAM system from the Crea interface itself. The system is also able to automatically reflect all changes made to content and media files from both systems, thanks to its tight integration with the VSNExplorer MAM platform.
- Automatic collection of content and broadcasting data (As Run Log), in order to compare them with the original planned playlists.
- Ability to integrate with current ERP management systems (SAP, COVI, etc.) for advertising billing.

Ability to plan a parallel playlist and select the most appropriate programming grid just before broadcast starts, essentially allowing last-minute decisions on programming.

03 Use cases & Applications

Whether it is used for a single department of a company, a digital channel or for a large television network, VSNCrea allows users to be synchronized in their daily tasks.

Departments such as advertising, finance or content & programming are some of the main beneficiaries that can see their efficiency and productivity increased exponentially thanks to VSNCrea.

Some of the use cases and applications of VSNCrea are listed below:

Advertising Department

- Availability of time slots for advertising.
- Campaign definition by advertiser.
- Advertising assignment to the playlists.
- Reconciliation and accountability of the broadcasted advertising.
- Description of technical details.
- Supervision of advertising runs.
- Automated analytical reports for customers.

Programming Department

- Management of purchase orders or content acquisitions.
- Management of content rights.
- Content planning based on smart automatic rules.
- Synopsis and technical details' description.
- Control of all the costs associated with content purchases.
- Analytical reports for the reconciliation and verification of programming.

03 Use cases & Applications

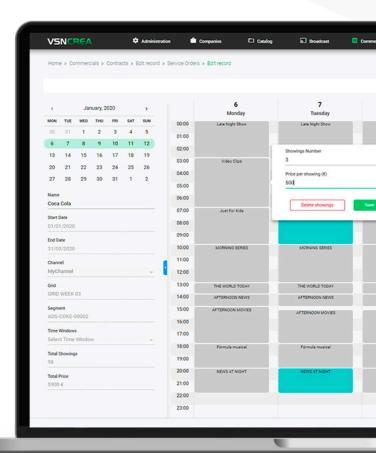
Some of the use cases and applications of VSNCrea are listed below:

Department of Broadcasting

- Support of multi-channel and opt-out (regional variation).
- Definition of templates and broadcasting criteria.
- Design of daily, weekly or long-term playlists and grids.
- Display of content gaps and overlays.
- Creation and export of secondary actions and auxiliary events.
- Information for media, Internet, OTT and EPG for DTT.

Department of Finance

- Financial management of all the programming costs per day, week, month, etc.
- Management of rundowns and advertising profitability.
- Check and modification of the cost assignment in the weekly planning.
- Synchronization with third-party billing systems.
- Integration with accounting and financial systems (SAP).



04 References

For more than 30 years, VSN has installed solutions and projects worldwide in more than 100 countries, helping different companies within the Broadcast, Media and Entertainment industry to transform their business and achieve their most ambitious goals.





VSN HEADQUARTERS

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

Copyright © VSN Video Stream Networks S.L. 2021 · All Rights Reserved.

All the registered and non-registered trademarks and company names contained in this manual 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. All functionalities described might change without notice and due to third-party systems.

www.vsn-tv.com