

# RADIO TELEVISION VOJVODINA



Radio-Television Vojvodina is a regional public service broadcaster based in Novi Sad, the economic center of the Vojvodina region of Serbia. RTV produces and broadcasts regional programming on two channels, RTV1 and RTV2, and three radio frequencies, all of which broadcast 24 hours a day. Programming is produced and broadcast in 10 languages, each with their own editorial team and includes Serbian and nine languages of the minority communities living in Vojvodina: Hungarian, Slovak, Romanian, Rusyn, Ukrainian, Romany, Croatian, Macedonian and Bunjevac.

RTV launched a web portal in 2017 and since then has delivered the latest breaking news, news videos and current top stories from Vojvodina and around the world covering politics, society, culture and entertainment.

Today, Radio-Television Vojvodina has over 1200 employees and several hundred freelancers who constantly work together to produce high-quality programming on all channels 24/7.





## THE CHALLENGE

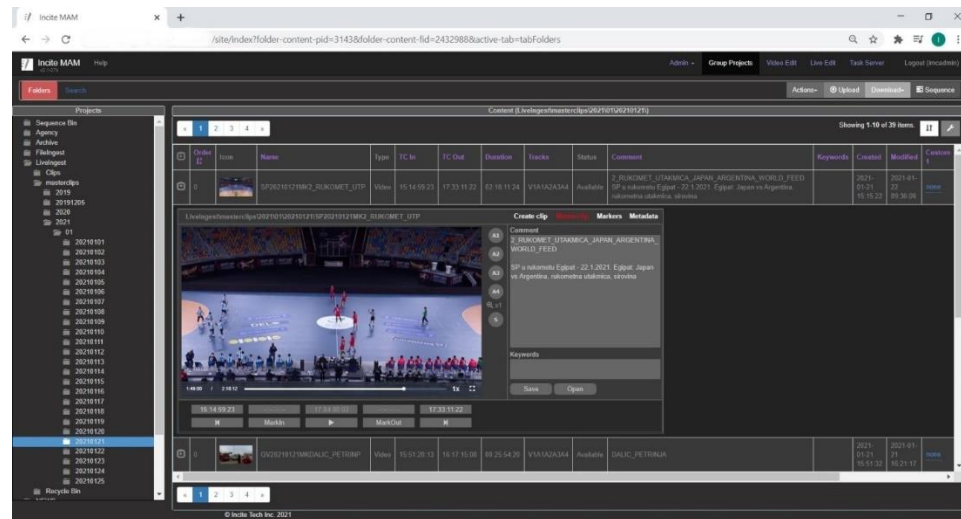
RTV sought a Media Asset Management system that was tightly integrated with a scalable state-of-the-art LTO archiving system. They needed an advanced MAM to handle ingest, metadata, logging, search, view, edit, and transcoding of media assets. RTV wanted a total system that included an archive with a scalable robotic LTO library. It was vital that the LTO archive provided secure long-term storage of RTV's assets. The archive had to be cost-effective and seamlessly integrated with the MAM.

In 2022, RTV issued a tender for the MAM and archive system. The archive system had to meet the following requirements. It needed to include an expandable LTO library with a capacity of at least 660 TB when using LTO-8 cartridges and a high-performance archive server with an SSD cache.

Another key requirement was support. It was very important to RTV that the MAM and archive systems were well supported by the manufacturers and by a local support partner.



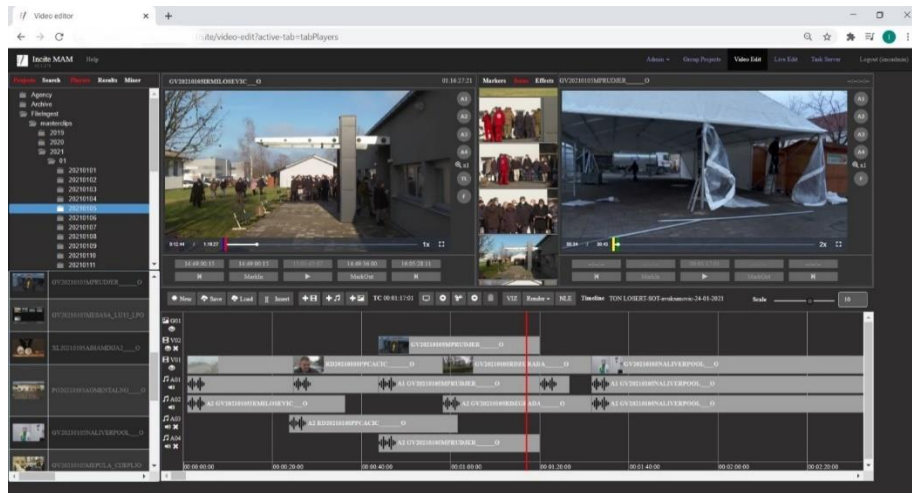
## THE SOLUTION



### Incite's Project View which includes media preview

Incite MAM is an advanced tool to handle ingest, metadata, logging, search, view, edit, and transcoding of media assets on anything from a single system to a networked environment. It was developed from the ground up as an open architecture to meet the needs of broadcasters and video content producers.

The core idea behind Incite MAM is to allow content producers to spend less time on locating material and to focus on their production. This means that journalists, producers and editors can start selecting material for the editing session with unparalleled ease.



### Incite Web Timeline Editor

- The Incite MAM functions as a master in the production system and controls the media flow, project definition, and all metadata throughout the entire production.
- With its web interface, users can search, browse, retrieve, and perform actions allowed by their profile even without accessing the storage directly.
- Incite MAM has an integrated player window that allows operators to preview any content.
- Incite MAM has a built-in full Web Editor which allows you to fully edit your story for news, sport, or social media.
- Web live stream edit
- Production asset management systems (PAM)
- Enables publishing to multiple platforms in various formats from within the browser
- It uses an SQL database to keep track of information about media files, associations between media files (multiple resolutions of the same media), metadata, user management, and project organization.

- It organizes media assets in the archive
- Content retrieval is made easy through the Incite Disk Archive management. It enables users and operators to archive, retrieve and see the status of projects in the archive.
- It has an open architecture that delivers integration with industry-standard video servers, disk storage, and LTO vendors.

The XenData system included a high-performance X60-S Archive Appliance and a Qualstar Q80 LTO-9 library. The Appliance runs XenData Archive Series software on a Windows Server 2022 operating system and the system delivered strong functionality including:



- LTO cartridge replication, automatically creating one or more replica cartridges for strong data protection.
- End to end logical block protection. This verifies every block of data written to LTO using a checksum. It ensures the integrity of every file written to the archive.
- Writing to LTO using the industry standard LTFS format. This allows cartridge interchange between systems from different manufacturers and avoids an expensive migration if RTV ever decides to move to an archive from a different supplier.
- File version control, allowing recovery of accidentally over-written or deleted files. It provides strong protection against ransomware for RTV.
- SSD RAID Cache for enhanced performance.
- Industry standard security based on Microsoft Active Directory which made it easy to install the archive system into an existing Windows domain.
- Easy migration to later generations of LTO.

The installed system had a capacity of just less than 1 PB when using 18 TB LTO-9 cartridges. Because the LTO library may be expanded by adding physical expansion modules, the system can be easily scaled to 9.9 PB.



## THE FUTURE

Now that the initial MAM and archive system has been successfully installed, RTV plans on growing its use within the organization. It will be employed within the RTV News departments, and its use will be expanded within RTV's Production departments. This will involve increasing the capacity of the LTO archive by adding a physical expansion unit to the LTO library.



## ABOUT



Based in Geneva, IMC Technologies specializes in the creation of production applications for television and radio broadcasting and post-production. These include sports ingest and playback, editing, asset management, transcoding and disc/cloud/LTO archive management, all based on an open IT approach. IMC also provides a wide range of supporting services including consultancy and project design, workflow analysis, project management, custom and generic software development, systems integration, training, technical support and maintenance. More information is available at <https://www.incite-tech.com/>.



XenData is a global provider of professional data storage solutions optimized for video and other applications with high volumes of large files. It offers cutting edge hybrid cloud solutions and highly scalable on-premises active archive systems. XenData has customers in over 90 countries, including government organizations, global media companies and other large corporations. For more information, visit: <https://www.xendata.com/>.



ProVideo's primary business activity is System integration and sale of a wide range of professional video, broadcast, multimedia A/V products, IP and satellite technologies for transmission and provides full system integration. Since its foundation, the company has been able to record growth each year and establish a strong foothold in domestic and foreign markets, gaining new clients every month. For more information, visit: <https://provideo.rs/>.