

## Etere Contributes to Diffuse the Russian History

The Major Russian Library Goes Digital and Choose Etere to Deliver its Contents, this ambitious project consists in the creation of the bigger Russian Digital Library.



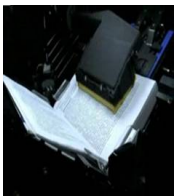
Logo of Major Russian Library



Major Russian Library



Major Russian Library



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The National Library of Russia in Saint Petersburg, founded in 1795, is one of the largest libraries not only in Russia but also in the world. Its Russian stocks comprise more than six and a half million documents containing the Russian history of the last three centuries.

"In Russia, some time ago a unique library system, unlike any other in the world, had been built, however, after many years of lack of funding, the system went into decline. The global project aims to rebuild the library system in the country with a modern foundation, that's because we have decided to create a Presidential Library that must become the IT link for the whole Russian library network. The library will be named as the first President of Russia, Boris Nikolaevich Eltsin, and it will become the centre of accumulation, conservation and diffusion of the historic-cultural heritage of Russia", explains the project responsible.

Etere proudly announces its participation in this, one of the most ambitious and transcendental Cultural Projects, the creation of the bigger Russian Digital Library meant to host a vast variety of media materials, such as manuscripts, publications, pictures, audiovisual clips, cinematographic videos, etc. The National Library of Russia relies on Etere the management of all the aforementioned assets, which will be stored on a highly redundant and fault-tolerant "Central Storage" because the importance of their nature, making them available to the world through the implementation of both Multimedia Lecture Halls and Virtual Reading Rooms.

Since Etere has been commissioned to be a key part of this project, we have worked hard as usual, to accurately fit each specific system requirement with a custom-designed solution for carrying out the entire processes regarding Media Assets Management. The referred solution has been developed to be open, scalable and flexible in order to encompass the future growth of the global project, thus, based on the architecture of Etere, the system has been implemented modularly, being mainly composed by the following functions:

- Ingestion of Multimedia content and its subsequent transcoding,
- Automatic key frame generation supporting the insertion of metadata,
- Storage of the whole material collection, enabling its protection against any kind of failure,
- Reliable Media Management between devices, used either for storage, edition or playout.
- Web Access for remote either asset checking or asset edition,
- Playout of stored (and live) media on both local and remote devices.

Media acquisition is on charge of Etere Recording, which carries out the ingestion of all the material intended to be stored on the system, thus guarantying a fully reliable quality of contents on the archive.

- Contents are ingested using SDI connectors from either live or tape recorder; the video format used is the High Definition "HD DVCPROHD100 MXF op1a".
- A transcoding system will generate a frame accurate browsing copy (a low resolution version) in "mp4/wmv" format, used to avoid unnecessary file transfer.
- Printing back on tapes using either SD or HD output ports is allowed.
- A complete and accurate media indexing is performed through Etere MAM, the application used for indexing information relative to the ingested asset which supports several metadata types (all user-defined). Due to the use of fully customized Etere Workflows, once the media has been ingested, access restriction policies are assigned, and automatically three copies of the video are created in the devices listed below, avoiding in this way any possibility of losing material:



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- A Central storage which supports up to 2000 hours of high resolution video.
  - Low Resolution storage with up to 12000 hours of low resolution video.
  - A Tape Library which allows at least 10000 hours of high resolution video.
- The key element of the entire media administration is Etere HSM, which act as an Enterprise Tape Library Manager ensuring the preservation of multimedia assets, and jointly with Etere Media Manager carry out the data movement within the system:
- Usage of modern tape drives technology such as LTO4 and AIT3.
  - Incremental tape writing, defragmentation, offline management is allowed by the system.
  - Allowance of multiple content copies.
  - Mixed mode configurations supported (i.e.: multiple libraries, tapes, drives, caches).
  - Immediate access to the main Video Server and short time to access Disk archives, Tape Libraries and Video Tape Libraries.
  - Cache space will be automatically deleted according to the expiration date of the video.
- Some asset operations such as video status checking, playlists presentation, or asset edition, have been enabled to be performed remotely by using Etere Web, a consistent web service enabled to offer a supervised management of assets, allowing (among many other things) trusted users, to search for an asset, download it, add relevant metadata to it, and upload it to the server.
- Once all the recorded material has been prepared, its subsequent playout will be performed by Etere Automation, which will broadcast all the selected material on all receptors installed along the show complex.
- The broadcasting system is equipped with specific sources connected to various Video Servers which are fully controlled by Etere Automation.
  - The Show Complex includes four rooms provided with more than 300 video lamps to display, with high precision the HD signal sent by automation.
  - Feeds from live can also be recorded, allowing the possibility of enrich them with metadata; recoding must be done in 2 different servers at the same time, thus, allowing a redundant recording system.