

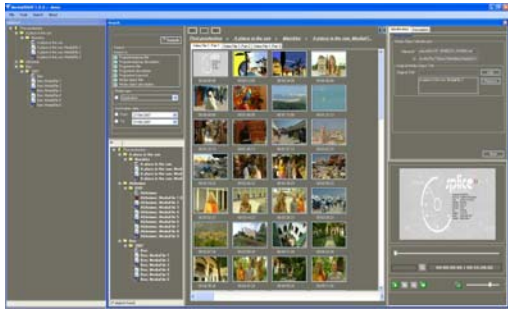


# COMSOF

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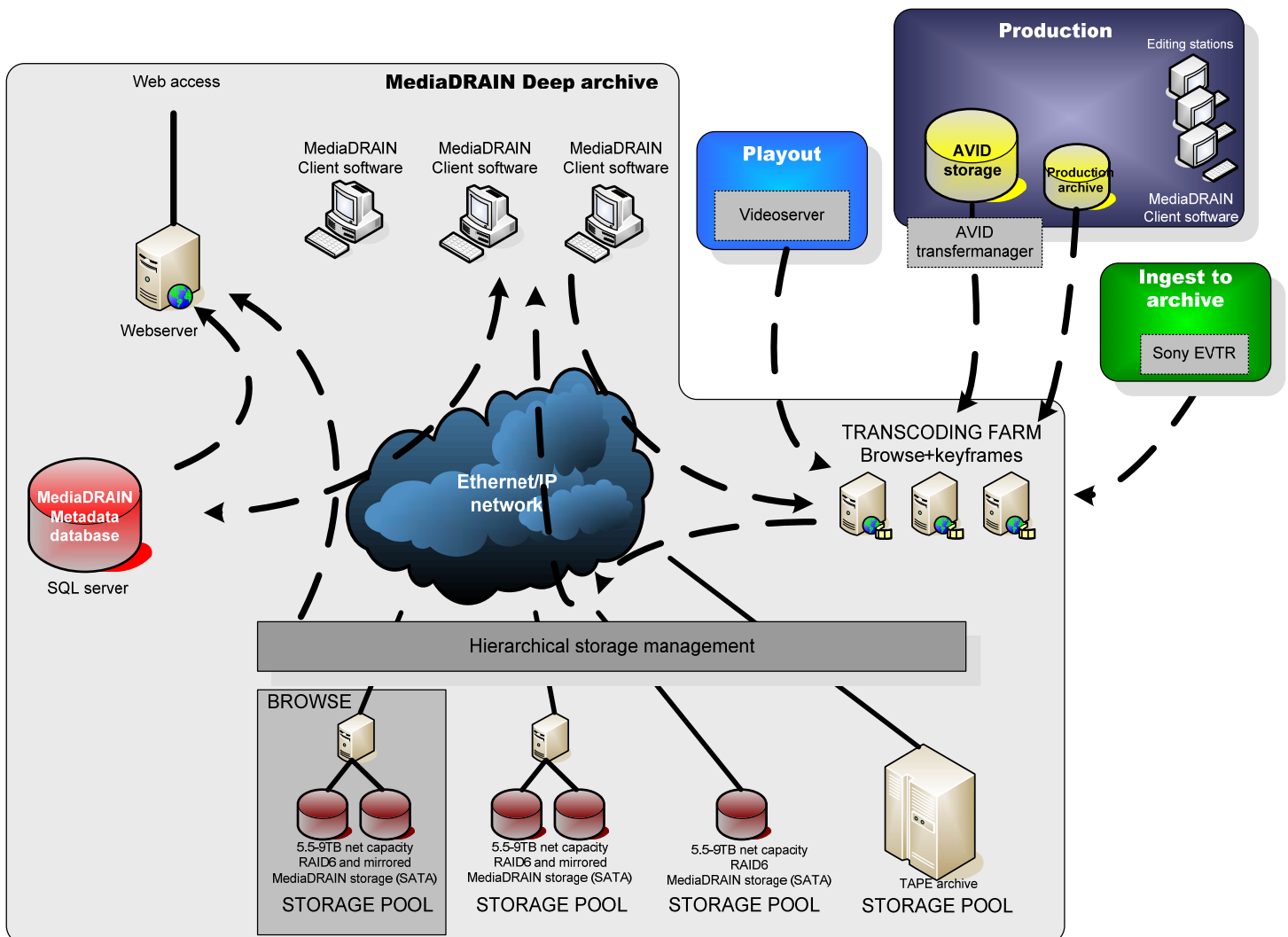
## MediaDRAIN: You name it, we archive it !



MediaDRAIN has been developed from scratch as a long-term, open and cost-effective multimedia archiving solution. All kinds of files -multimedia, graphic or office files- can be archived together with metadata describing those files. MediaDRAIN is envisioned as a fast and handy management tool for a deep file-based multimedia archive. MediaDRAIN was built from the start with scalability, robustness and future extensibility as its main drivers.

The figure below shows the general MediaDRAIN architecture. As a deep archive management solution, it interfaces with existing (post)production and playout environments. The basic goal of MediaDRAIN is to store files in an archive and to make it possible to retrieve them again unchanged. No transcoding or format

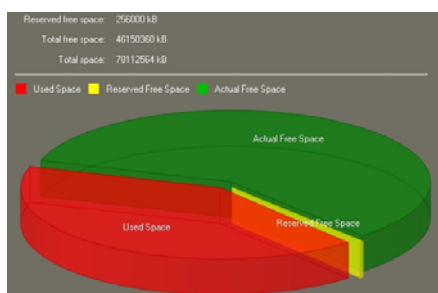
change is involved. The file types don't matter. For video files, MediaDRAIN generates a low resolution browse format and keyframes based on a scene detection algorithm. Known formats include DV25, DV50, IMX MPEG2. Along the files, metadata based on the EBU P/META [1] model can be stored and used for retrieval.



## Architecture

The four core components in the MediaDRAIN architecture are the *metadata database*, the *storage pools*, the *MediaDRAIN client software* and the *transcoding farm*.

The **metadata database** contains all information and metadata of all assets in the archive and is based on Microsoft SQL server 2005. The **storage pools** are standalone storage entities which can be built out of MediaDRAIN SATA storage or external storage solutions (e.g. tape robots). These pools are controlled by the MediaDRAIN hierarchical storage management or by external storage management middleware.



The **MediaDRAIN client** is a windows client GUI which gives easy and fast access to the archive and metadata.

The **transcoding farm** consists out of servers which create the browse format and keyframes of video material which is ingested in the archive. The browse format is an MPEG2 1Mb/s video stream with a 256kb/s audio stream.

## Key strengths

By using **open standards** for metadata[1] and filenames/directory structure (based on unique UMIDs), the archive is future proof and may be accessible also without support of Comsof or Videohouse after ending an agreement. This is crucial for the owner of the material who will be able to always access his content.

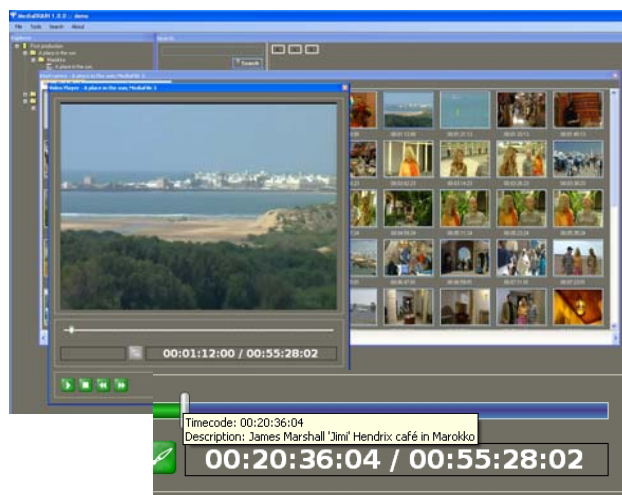
By focusing on the key domain of deep archiving, a **cost effective** solution could be developed

## Partner

**VIDEOHOUSE**  
TELEVISION FACILITIES  
<http://www.videohouse.be>

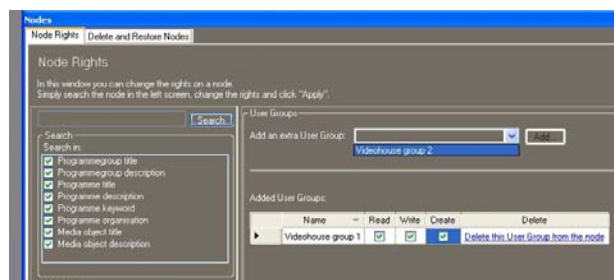
## References

[1] [http://www.ebu.ch/en/technical/metadata/specifications/notes\\_on\\_tech3295.php](http://www.ebu.ch/en/technical/metadata/specifications/notes_on_tech3295.php)



with only the basic functionality needed for management of such an archive. Besides this, cost effective building blocks as Linux and SATA disk drives are used.

A global **security** layer is based on the UNIX security of the storage pools, while a second fine-grained security layer is implemented in the MediaDRAIN software. This combines high security protection with fine-grained per object and per user access.



## Future innovations

Based on the flexible and open architecture, future development will add web based access and an agent based automatic metadata retrieval framework. One of the key issues of archiving is the input of metadata. (3<sup>rd</sup> party) "Agents" can add metadata based on speech or image recognition while traversing the archive.