DMAM – Data & Workflow

KEY FEATURES

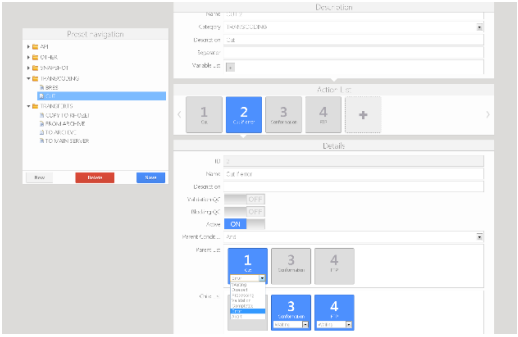
- **Configurable system : adapts to Archive, QC, Logging and Production Workflows**
- **Handles all formats: video, pictures, photos, doc, pdf…Data platform based on SOA Architecture and connected to IP Databus**
- **Configurable Workflows by the user: add or edit your workflows yourself!**
- **Including job assign management based on login credentials**
- **Web-based Client for indexing and browsing and also for automatic workflow triggering**
- **Bin management: export several logs or make a multi-selection with IN and OUT points**
- **Native NLE Interfaces with sQEdit (S.A.M.) and Adobe Premiere**
- **API available to connect to 3rd party systems**
- **Connected to Sphere Service Manager and Media File Mover, MBT's back office tools, for external delivery**

Sphere

Digital Asset Management

Sphere is a modular software solution for Digital Media Asset Management (DMAM). With Sphere you can manage all kind of media: video, audio, photo, subtitles, document and text.

Integrated into the heart of your information system, Sphere ensures an optimal organization of your media. You fully leverage your digital and audiovisual heritage. Structured in modules, this solution adapts to any kind of strategy to manage all your digital assets.



Adapted to all kind of Workflows

Sphere can be configured and adapted to simple and complex workflows. These workflows can be triggered manually or automatically depending on the needs expressed by the customer. New devices and new workflows can be added easily through an intuitive dedicated client which makes the system "future proof".

MBT has developed in the past years a powerful and reliable platform to manage automatic workflows including transcoding facilities, automatic graphic insertions and publishing abilities to various platforms for video and audio.

Central role in your architecture

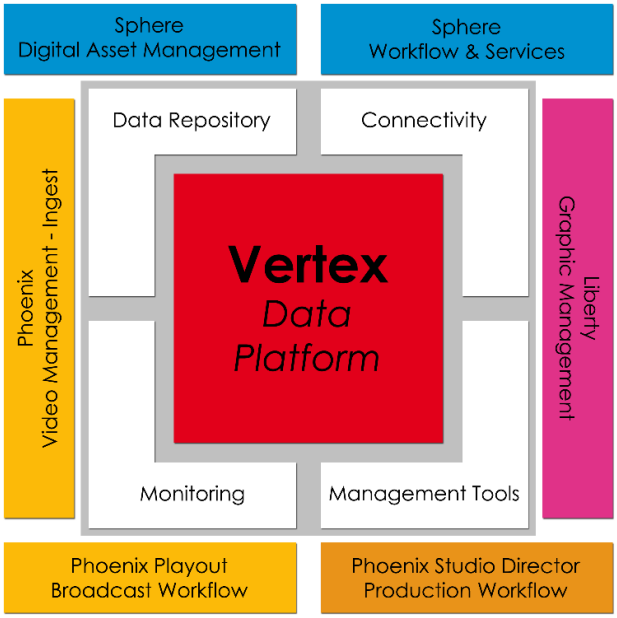
This platform will distribute all media and other associated elements to different kinds of platforms like playout, VOD/OTT, post production, live production, news, etc. Within the context of this content centric approach, the DMAM system plays the central role in the architecture of any audio-visual company.

Sphere thus responds to the latest demands on the market where new distribution methods are taking over, allowing content providers to target their services to new and multiple platforms, territories and eventually, individuals or households.

VERTEX DATA PLATFORM

Sphere Digital Media Asset Management system is connected to MBT's IP Data platform, Vertex. Vertex is the core system of MBT's software. The Vertex Data Platform manages data and the metadata of the media and integrates services to manage the automatic identification of the media on the storage units.

Based on a SOA architecture, the Vertex Data Platform allows all systems to manage information and content from every location where the media are stored.



The Vertex Data platform is based on an IP data bus, developed by MBT, which is a software architecture model where a shared communication channel facilitates connections and communication between software modules. This makes software buses conceptually similar to the bus term used in computer hardware for interconnecting pathways.

The MBT data bus uses a set of software servers that centralizes all information that can provide the independent sub-systems with data.

This technology allows for all the benefits of an open collaborative system.

Data and data flows are managed by the Vertex Digital Objects (DOM) server. This server uses MS-SQL Server as database for data archiving. This architecture allows to build a scalable solution around the customer's operational and functional areas. The data bus allows to build this solution step by step.

The structure uses inheritance and delegation concepts to define the data and to optimize the access and the scalability. Each "Media" has his own list of object elements that is related to physical files. These media can be put into assets. The cataloguing and classification of assets allows to navigate easily between media, for example using a tree view.

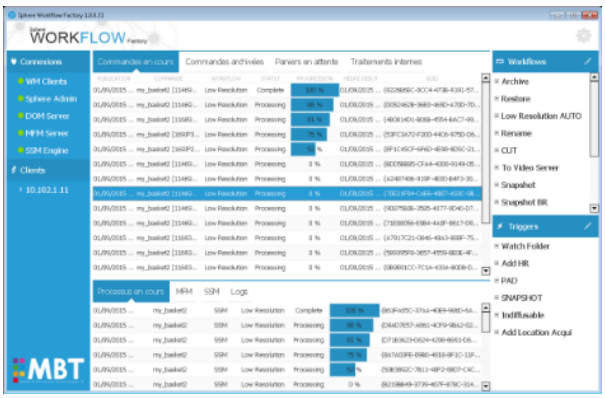
The concept of Digital Object allows to manage all kind of media used in the broadcast industry like Video, Audio, Pictures and Documents (subtitles, descriptors, web pages, pdf, Word…) etc….

The Vertex Data Platform is composed of several object servers (big data oriented) in order to organize and manage a wide range of services so digital objects can be accessed in real time even if millions of media are stored, using a big data full search engine (ElasticSearch).

WORKFLOW MANAGEMENT

The Workflow engine can be seen as a backbone connected to functional clients that are designed to work with media. This backbone has incoming resources on the input side. On the output side, it delivers the media that are ready to be published or to be broadcasted.

The workflow engine manages all the needed jobs between the input and the output phase to transform, create, transcode, remux, transfer and treat media.



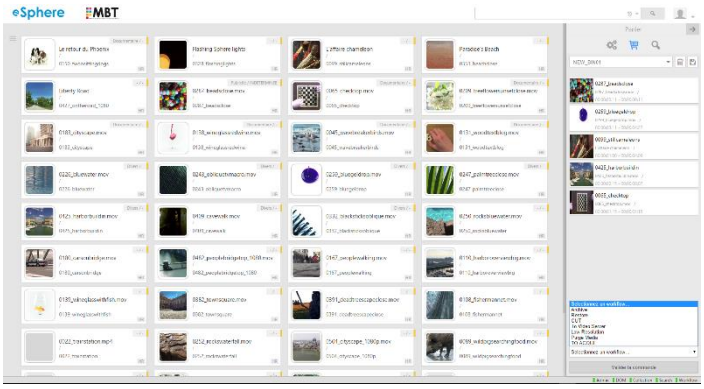
Advanced workflows, even specific ones, can be managed by the workflow engines where Sphere orchestrates all the active workflows.

ERGONOMIC USER INTERFACES

SPHERE proposes a Desktop and a Web user interface, both very user-friendly. The interface is fully configurable in every language. It is possible for the operator to create a dictionary in every language and to modify the warning/error messages himself.

eSphere is used for indexing, referencing, browsing, search, select and export medias. In the case of several media, the operator creates a basket, searches for the media, inserts them into the basket and then uses the export function. It is also possible to select parts of a media with their In- and out-points and to export them.

Based on a powerful workflow engine, the Sphere Workflow factory, it is also possible to trigger workflows directly from this web client, for example to trigger workflows for one or several media (bin management).



The Sphere Desktop Client offers a complete toolbox to work with media (quality control, job assignment, post-production and branding). The "to do list" tab on the interface of the Sphere Desktop Client for example, displays the list of tasks to be treated (QC, Branding). These tasks can be assigned manually or automatically to the different operators based on their user rights.

Once enriched and branded, one click is enough to send the media On Air or to publish them on different platforms.

It is therefore very easy to organize for example a VOD or Catch-up TV workflow with Sphere (video files recovery, conformation and sending to the related website).

Sphere relies on powerful workflow engines that can be easily managed and configured using the GUI. This client offers the possibility to trigger both linear- and non-linear workflows like post-ingest tasks, transcode, QC and external delivery workflows.

BIG DATA ORIENTED SEARCH ENGINE

Sphere proposes a powerful search engine based on ElasticSearch that allows to search for specific items within millions of media. But like the whole product suite of Sphere, even the search is modular because not every organisation has to manage such a large amount of media. Therefore Sphere also offers other search modes like multi-criteria (multiple field searches) and full search.

The Sphere search engine can be used to search all kinds of documents. It provides scalable search, has near real-time search, and supports multitenancy.

The Full search is connected to the full-search server which exploits all configured fields of the system containing words and references. Multiple Field Search is also possible by configuring fields for searching, according to the rights of a group or a person. The fields and the labels can be defined using a list of fields available in the Sphere Administration Tool.

ElasticSearch is distributed, which means that indices can be divided into shards and each shard can have zero or more replicas. Each node hosts one or more shards, and acts as a coordinator to delegate operations to the correct shard(s). Rebalancing and routing are done automatically.

Other frequently used search features are the collection Key Word search allowing to find any markers with keywords in the database and advanced search where different conditions are used to find the proper results. The search area is composed of configurable tabs. You can therefore have a display by explorer, full search, configured field search, Key-word search, compositing search and advanced search.

TECHNICAL INFORMATION

Features	Description
Data Platform and Databus	Connection to the data platform through the Vertex data bus
SOA and Distributed Architecture	Core system is based on a SOA and distributed architecture
Open System – API available	Exchange by API, WebService (SOAP), XML, MOS, FIMS
Compatible Video Formats	All kind of formats: MXF, QuickTime, Mpeg, 1,2,4, H264, H265, mwv…
Big Data Technology	Big Data technology integrated in the heart of the system
Elastic Search	Powerful, big data oriented, search engine, full monitoring
Monitoring	Dashboard for centralised monitoring of architectures and workflows
Statistics Management	Statistic tracing of completed tasks: volume, duration, averages
Configurable workflow engine	Creation and editing of workflows by the user
Available workflow agents	E-mail Notification Agent, Transcoding Agent, Publishing Agent…
Unlimited number of workflows	Possibility to configure unlimited number of workflows
Transfer Management	Transfer of all jobs using FXP commands, Aspera
Profile & rights management	Management of different user profiles and their associated access rights
Collaborative system	Different kind of users working on the sale subject at the same time
Job & Tasks Management	Assigning manually or automatically tasks to groups, persons or rooms
Bin Management	Preparation of basket with digital items for export to i.e. editing stations
NLE Interfaces	sQEdit (S.A.M.), Adobe Premiere
Device Control	Native API, VDCP, GPI, Corba, Webservices
Load Balancing	Workflow engine and Big Data engine ensures load balancing
Database	SQL Server 2012, Elasticsearch
Unicode System	Multi-lingual user interface thanks to integrated Unicode system
OS Sphere	Windows
Customisable Interface (eSphere)	Customisable Homepage of the Web-client using Admin tools and rights
Supported Browsers (eSphere)	Google Chrome, Internet Explorer, Firefox

improve your workflow

ABOUT MBT

Media & Broadcast Technologies ® (MBT) is a dynamic and innovative software editor for the audio-visual and broadcast industry supplying high-quality solutions for ingest, playout automation, digital media asset management, production (studio) automation, graphic management, and advanced news & sports logging.

MBT provides a high level of customer support with an availability of 365 days a year and is a certified training centre.

For more information> www.mbt.tv

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