A consistent system

MAM comparison

Confidential

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Etere Marketing

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1. INTRODUCTION

1.1. Purpose

The purpose of this competitive analysis is to provide Etere resellers with a snapshot of Media Archive's product features in relation to competitor's product offerings. This report not only serves as a competitive analysis of some of the products available, but as a useful general briefing document.

1.2. Companies

The following companies were included in the competitive analysis:

- ETERE
- Blue Order Solutions
- B4M
- Cinegy
- Dalet Digital Media Systems
- Front Porch
- Harris
- Miranda
- Open Text
- Reply
- TMD
- Vizrt

1.3. Criteria

A number of comparison criteria were included:

- It's suitability to meet both the needs of a broadcast and a non-broadcast client
- The ability to ingest a number of different formats
  - automated feed
  - Sony XDCAM
  - Panasonic P2
  - Cart machine controlling
  - Video server controlling
  - Pc based ingest

- Metadata:
  - Customize of metadata fields
  - Limitations of metadata gathering
  - Flow of metadata through the system
  - Push/Pull Integration with AVID, Final Cut Pro, Adobe Premier
- Proxy Editing
- Availability of Proxy
- Ability to Browse/Edit
- EDL

- Metadata:
  - Rights Management
  - Can a file be flagged and stopped?
  - Rights management solution based on the rights to use content in terms of distribution channels, geo s, languages, times
  - Metadata in each frame
  - Metadata categories
  - Metadata dictionaries
- MOS Interface with News Room Management System
- Playout
- Workflow Modeling
- Price
- Web Client Availability
- Search Capability beyond Boolean
- IT Platform preferences
- Data Moving
  - NFS/NTFS
  - FTP
  - UDP
- HSM integration
  - Single database archive
  - Open tape format
  - Re- partitioning of database
  - Upgrade tape format

The list was simplified as follows:

Top Ten Factors	0/5
1. Integral Ingest Component	
2. Integral Playout Component	
3. Hardware Platform	
4. Search beyond Boolean (Or, And, Not)	
5. Metadata insert	
6. Rights Management	
7. Workflow	
8. Editing Integration	
9. SNMP errors/console	
10. HSM integration	
11. Pricing	
12. Data Moving	

1.4. Format of report

Information for each company/product includes:

- A Corporate Summary
- Product Sheet Information Summary (with screenshots where available)
- A Feature Comparison Chart
- Their Unique Selling Proposition

At the end of the report is an Overall Comparison and Approximate Pricing Comparison Chart based on a fifteen seat costing.

2. INDIVIDUAL SUMMARY

2.1. Etere

http://www.etere.eu

2.1.1. Corporate Information

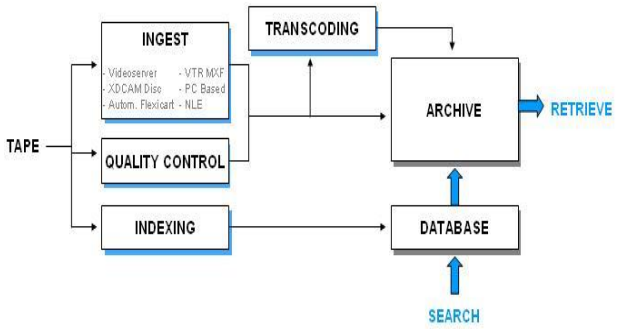
Etere is an international leader in the media market. Etere develops and distributes a wide range of high technology software for broadcasting and media businesses. With more than 20 years of experience, **Etere** provides powerful, flexible, cost effective, high-performance, end-to-end media solutions. **Etere** is the only company worldwide that can offer you a solution to all your media needs in one single package.

Etere is the only solution 100% workflow based for all broadcast and media environments. It's a common framework where there is real-time sharing of all the data among several applications to manage all media business requirements. The workflow approach allows a fully customized design with edge performances.
From its headquarters in Tolentino, Italy, **Etere** guarantees the best after-sales support service on the market with engineers ready to give professional assistance 24 hours a day, 7 days a week. The service includes voice, e-mail, VPN and VoIP with unlimited calls and connection time, and a pro-active system to help diagnose problems before they appear.

2.1.2. Product Sheet Information

ETERE MAM is a highly effective digital content management solution that is designed specifically to streamline the process of ingest, indexing, storage and retrieval of digital assets. A centralized solution for handling digital content and its associated metadata, its effective implementation both increases operational efficiency and maximizes the return on investment of digital media.

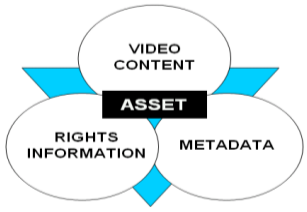
In a media rich archive, **ETERE MAM** simplifies the process of content management by streamlining the digital workflow allowing you to bring media content to the market faster and in multiple formats making sure all new media platforms are served with exceptional, frame accurate content.

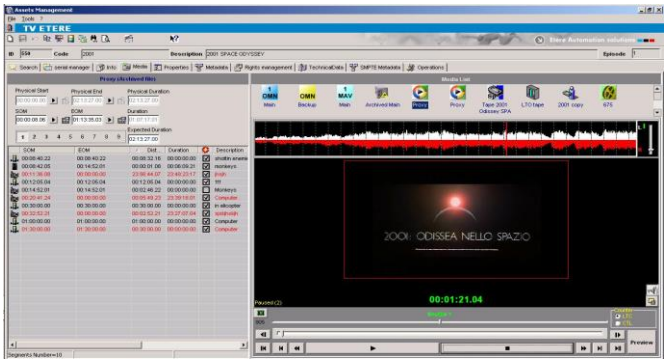


ETERE MAM is an end-to-end software solution created to fully optimize the value of your media content:

- Automated ingest followed by highly effective and fully integrated quality control ensures media content is free of imperfections
- Automatic and manual metadata association including configurable metadata classification and sub-classification to facilitate and speed up content retrieval
- Powerful search function with multiple criteria including query based, full-text based and asset description based searches
- Key frame based basic and advanced storyboard view
- Generation of multi format, multipurpose files in real time for delivery to multiple platforms for optimum content re-use
- Fully integrated with ETERE Browsing to support the streaming of VC-1 codec s
- Comprehensive rights definition with multiple access levels for intellectual property rights management including the ability to watermark digital content to prevent unapproved reproduction
- Newsroom integration for real time access to full media content (MOS compliant)
- Comphrensive data moving management that includes load balancing, multi protocol moving (NFS,CIFS,NTFS,FTP) , and even the inclusion of UDP data moving. It's possible to manage multi volumes devices, link aggregation, and priority queues.
- Fully integrated with ETERE HSM the intelligent hierarchical storage management system that controls the movement of media content between encoders, near line storage, tape libraries and the playout system managing both high and low resolution files
- Capability to federate different sites with an unique cloud style view of all of them.

Comprehensive Asset Management.
ETERE asset management ensures that all data associated to an asset (media, EPG, EDL, secondary events etc) is managed in centralized Asset Forms fully integrated across systems and applications. All media versions that relate to a particular asset are detailed in the asset's media cockpit: video server, tape library, proxy, internet version etc for effective, centralized media management.





ETERE MAM supports advanced metadata association with each media file containing a customizable and fully integrated set of metadata ensuring fully comprehensive media content definition. Metadata can be asset or frame specific and ETERE MAM is also fully SMPTE metadata compliant. The flexibility of ETERE MAM allows all relevant data to constantly be updated even after the original file is created.
Intellectual property rights are also managed from within the asset.

Content Management System. Fully integrated into ETERE MAM, this highly intelligent content management system helps ensure the quality of your media content by identifying:

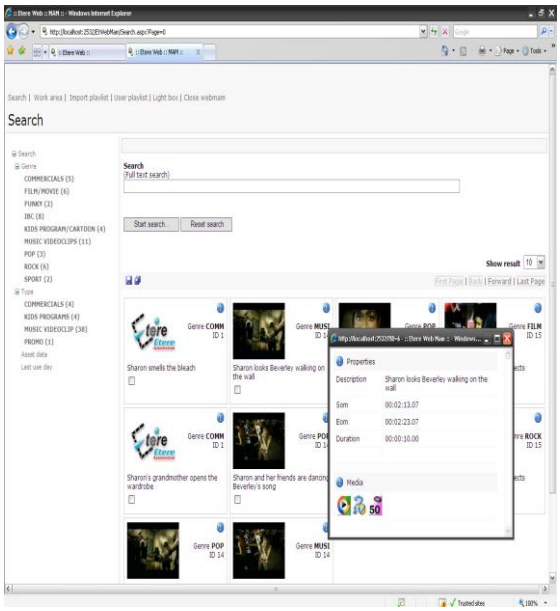
- Irregular audio levels (advanced speech detection)
- Black or freeze video
- Scene changes

ETERE CMS is a responsive and user driven tool that stores processed metadata directly in the database. Multiple processes are supported at any one time dramatically increasing operator efficiency.
Powerful Search for Effective Retrieval. A unique and highly effective content retrieval system supports a multitude of search definitions including the following:

- Full-text: simple, exact phrase, word proximity, logical order and synonymous with…
- Extended: artist, genre, parental rate, expiry date, country of production, agency etc
- Quality control: date, operator, workflow etc
- Media: main, backup, archive, proxy file etc
- Standard: ID, description, program type etc
- Notes: storyline, EPG, commercial note etc
- Station: searches can be run for all or only specific stations

This advanced search capability ensures accurate and fast content retrieval.

Web Accessibility and NLE Integration. Complete access to media content from both central and remote locations using Etere Web for real-time content search, retrieval, browsing and basic manipulation. NLE integration allows media content to be accessible even from inside an editing station.

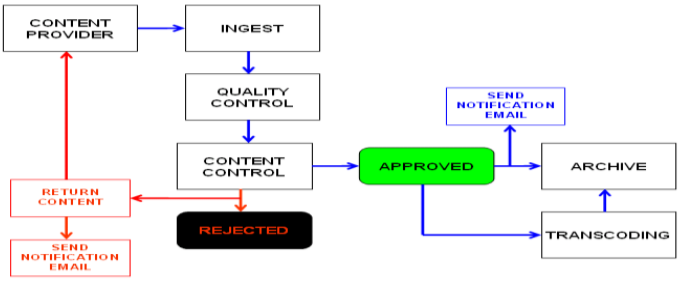


ETERE Web also supports full tracking of all NLE and archive movements. User rights can be defined to allow or prevent access to media content including for example, rights to download, browse, copy, create etc.
Integration. ETERE uses Web Service technology to ensure the seamless integration with external broadcasting systems offering a highly flexible and interoperable solution.

Panels available for deep integration with editing system as Adobe Premiere.

Defined Workflow for Increased Efficiency. ETERE MAM includes a mission critical, integrated workflow application that facilitates systems management by clearly defining each complex step of the broadcasting process.
Rules are configured and processes defined to ensure every step is carried out correctly following the correct authorization and notification procedures.

ETERE MAM is a comprehensive digital asset management solution that will help optimize media content usage and return on investment by ensuring that your media is both fully accessible and easily retrievable and by streamlining the digital content management process, productivity gains are also achieved.



2.1.3. Etere Feature Comparison Chart

Top Ten Factors	0/5	Details
1. Integral Ingest Component	**5**	Etere allows all the range of broadcast devices, including cart machine, video server and pc based systems
2. Integral Playout Component	**5**	Etere supports any kind of device.
3. Hardware Platform	**5**	Totally hardware agnostic.
4. Search beyond Boolean (Or, And, Not)	**5**	Full search including full text and operator based, with synonymous. With Etere you can store the searches you use more. And the search results in a lightbox
5. metadata	**5**	Advanced metadata support with automatic insertion, this include keyword, and a customizable keypad
6. Rights Management	**5**	Full rights management with multiple levels
7. Workflow	**5**	It's the only product 100% workflow enabled where customer can draw it's workflow without any customization
8. Editing Integration	**5**	Complete editing with support of any platform, it includes trascoding support via Workflow
9. SNMP based	**5**	Totally SNMP based, it included a graphical SNMP console without any additional charge.
10. HSM	**5**	The only product that does not require an external HSM, all HSM function are integrated via workflow.
11. Pricing	**5**	
12. Data moving	**5**	Etere provide the most complete data moving system, that includes multi protocol moving, multi device, load balancing and priorities. With the inclusion of UDP protocol is absolutely the most complete.
Other Information: Can support various languages on the same system, depending on your user log in, a user can view the metadata titles in his own language , It' includes a full document management for paperless operation. It's the only product that offer lifetime support including updated and upgrades.		

2.1.4. Etere Unique Selling Proposition

- Etere is the only comprehensive solution from ingest through to archive
- Advanced metadata association for optimized search response
- Integrated quality control to ensure standards are achieved
- Multi-portal browsing of media content for complete access
- Multi format file generation to respond to new revenue opportunities
- Productivity gains through more effective asset management
- All broadcast devices supported

2.2. Blue order

http://www.blueorder.com

2.2.1. Corporate Information

Blue Order provides turnkey Workflow and Media Asset Management (MAM) solutions which help large media and entertainment companies such as broadcasting corporations to collect, index, catalogue, retrieve and distribute rich media content, improving content-related workflows and maximizing the return on content assets. Blue Order headquarters are in Germany and they operate sales and support offices in the United Kingdom and the United States.

Media Archive, Blue Order's Workflow and Media Asset Management (MAM) platform, has become the market leading product, used by more than 3,000 users every day at more than 40 of the world's largest broadcasters, including ProSiebenSat.1 (Germany's largest private broadcaster), ZDF (Germany's largest public TV broadcaster), Swiss Radio, YLE (Finland), RTM (Malaysia), NBC Olympics and many others. Media Archive® scales to hundreds and thousands of users and offers a wide variety of custom configuration options and integration packages, making it the ideal platform for enterprise-scale MAM solutions.

2.2.2. Product Sheet Information

Media Archive - manages your content.

If you are dealing with many different types of media content, such as video, film, sound bites and graphics, there is a good chance that your business is looking for you to become more productive when using this content and to find ways to reuse this content to add revenue to the bottom line.

Media Archive, Blue Order's enterprise media asset management platform, can help you achieve this by automating routine tasks, enabling your team to work collaboratively and opening up new distribution channels to market.

Media Archive helps you find, browse, repurpose and deliver content. Anytime, Anywhere.

By using Media Archive, you can:

- Quickly and accurately find exactly the right content
- integrate into your existing production environment
- establish collaborative and automated workflows
- manage intellectual property rights
- schedule content ingest
- automatically deliver content

Ingest

At ingest, the user selects a video source, previews the video and initiates the recording. The source can be either a live signal or a playback device. When a live signal is being recorded, Media Archive's Multi Channel Scheduler provides control of the video server. When a playback device is used, Media Archive's ingest tools provide tape deck control and a batch-ingest feature. Because Media Archive includes a self-generated unique identifier for each item ingested or imported into the system, naming the resulting media object can be configured as optional. While a video is being recorded, video analysis operations such as cut detection and key frame extraction can take place as a background process.

Import

Media Archive provides import tools for importing pre-existing media files – video clips, waveform audio, bitmap images and graphics files – and/or metadata sets. During import, the type of media contained in the file is recognized automatically, and Media Archive data elements are populated automatically with metadata extracted from the media file and/or XML file. Subsequent processing of the media file – e.g. video analysis or multiple format conversion processes – can be defined by the user. For importing large quantities of pre-existing media files or metadata sets, the Import workflow also has a batch-import feature.

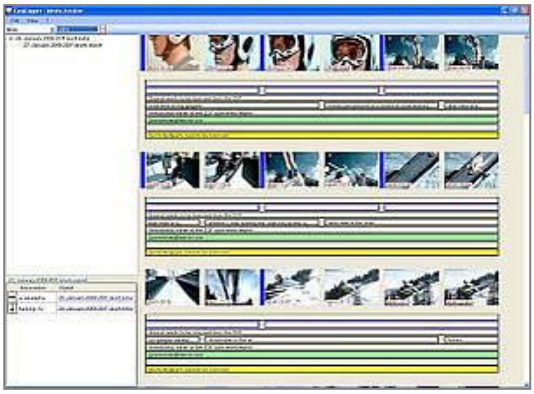
Logging

While ingest is still in progress, the Media Archive Logging Client can be used for real-time annotation of incoming video, setting mark in/out or cue points and entering descriptive data. The mark in/out and cue points can be used to associate the descriptive data with certain time segments within the video stream. The Logging Client provides a unique 'play-while-record' feature: the user can preview the recorded video stream and thus check its quality during the ingest process. Playback can be 'paused' for adding metadata without affecting the rate of ingestion. When 'paused', playback resumes from the point at which it was paused, ready for the user to continue the quality control process. The 'play-while-record' feature of Media Archive greatly enhances production efficiency.

Cataloguing

The Media Archive cataloguing tool is used to add and edit metadata and to edit key frame sets.

Using a web browser, cataloguing metadata elements associated with the media object as a whole can be viewed and edited. Using the cataloguing tool's strata view, metadata elements associated with portions of the media object along the timeline can be viewed and edited.



Retrieval

Using Media Archive retrieval via a web browser, the user can search and retrieve specified media objects or portions thereof. Six search modes are available: full-text search, attribute search, strata search, combined search and custom searches that are user configurable. Custom search forms can be assigned to individual user groups. The full-text search searches across the body of text documents and the header information in media files. Using the attribute search, any combination of attributes associated with the media file can be searched. The strata search allows the user to search for any documented portion of a media file, e.g. a scene in a video.

In all search modes, Boolean operators and wildcards are supported, as well as legal lists (authorized vocabulary) and master data. Search terms can be typed in or selected from a controlled vocabulary (legal list or thesaurus).
The search results are displayed in a configurable hit list, from which items can be selected for detailed viewing and playback. For previewing media objects, four detail views and a playback functions are available: object metadata view, segment list view, key frame view, storyboard view and media file playback. Detail views for metadata can be custom configured and assigned to specific user groups.

Browsing and EDL Creation

Media Archive's browsing tools support audio and video playback in multiple formats including frame-accurate navigation and trick modes. They also support the creation and playback of frame accurate edit decision lists (EDLs) which can be created by simply dragging and dropping segments from the Segment List and Storyboard views. EDLs can be played back, and takes in EDLs can be re-sequenced and trimmed. For each take selected, the first and the last video frames are displayed in the editor's timeline, aiding the user's orientation. Metadata associated with the take will automatically be carried over into the EDL. Users can invoke multiple instances of Media Archive's browsing and EDL creation tools as needed.

Export

Media Archive's export functionality supports the export of essence and metadata associated with selected media objects to user-defined destinations. For metadata export, Media Archive's XML-based AXF metadata exchange format is used. For EDL export, a variety of different EDL formats is supported, included Avid' s ALE and EDL formats and CMX. Blue Order Feature Comparison Chart

Top Ten Factors	0/5	Details
1. Integral Ingest Component	**2**	Media Archive's Multi Channel Scheduler – automatically captures metadata upon Ingest, no cart control or ftp ingest and no control of legacy products
2. Integral Playout Component	**0**	No Play to Air feature – but Media Archive's export functionality supports the export of essence and metadata associated with selected media objects to user-defined destinations. Mentioned MOS functionality – iNews/ENPS, and ranscoding for web publishing functionality.
3. Hardware Platform	**0**	Hardware Agnostic – but mentioned HP
4. Search beyond Boolean (Or, And, Not)	**3**	Six search modes are available: full-text search, attribute search, strata search, combined search and custom searches that are user configurable.
5. Metadata insert	**3**	Using the cataloguing tool's strata view, metadata elements associated with portions of the media object along the timeline can be viewed and edited. No support for keywords or custom metadata.
6. Rights Management	**0**	Rights management can be defined down to the segment or clip level. This can be passed through to the Playout System.
7. Workflow	**0**	No integrated workflow management
8. Editing Integration	**2**	Avid is via middleware, the integration is not complete
9. SNMP Alert messages	**0**	No SNMP messages or console
10. HSM	**0**	No HSM , relay on Third party
11. Pricing	**0**	Pricing based upon concurrent users Minimum 5 users = 9,000 Euros/ License 11-50 concurrent users = 6,000 Euros/License 51-100 concurrent users = 4,500 Euros/License Professional Services =Approximately 40% of total project price. 8 % Support Option 14% - Will allow free new software releases or 8% - will allow free updates to current version
12. Data moving	**0**	Very primitive data moving with only policy, that do not allows clustering of resources and load balancing
Other Information Can support various languages on the same system, depending on your user log in, a user can view the metadata titles in their own language. No downtime for database changes Very stringent database security Notifications can be sent to other users via SMS Auto-complete Metadata choices The system is not designed to be a document manager – but it is possible to store and index text documents.		

2.2.3. Blue Order Unique Selling Proposition

- Strength is in Metadata Creation and Display
- Using the cataloguing tool's strata view, metadata elements associated with portions of the media object along the timeline (strata) can be viewed and edited. For each stratum, the segments bracketed by mark in/out points can be modified, split and merged. If the user has appropriate rights

2.3. B4M

http://www.b4m.com

2.3.1. Corporate Information

Building4Media is the pioneer of professional IT-based (playout) systems, using the Apple platform (also for HD), and they claim to have probably have the biggest IT-based installations in the world. They also claim to support virtually any high-end equipment.

They believe the largest customers in the industry buy their software, because they provide the most advanced features. These include:

- Advanced media asset management (fully integrated with ingest, proxies, playout and archiving)
- Versatile workflow management, editing during ingest, proxies with a delay of just one frame, proxy editing (also in Final Cut Pro)
- The most advanced integration for Apple Final Cut Pro, advanced integration of all editors for video, audio and graphics in one integrated digitized workflow
- Cross-platform support for Mac OS and Windows (and also the full integration between for instance the 'Windows world' of the newsroom and the 'Mac world' of editing)
- Automatic transcoding and delivery for new media (Internet and 3G GSM phones)

In addition to this, their solutions are scalable without limits, future-proof due to open standards and state-of-the-art software technologies, and of course ready for all new developments. All this illustrates that they offer an unrivalled feature set and an unique price/performance, especially on the Apple platform.

Building4Media currently has around 230 TV channels on-air and installations (which range from the largest customers to the smallest), and has offices in The Netherlands (HQ), New York City, Miami, Los Angeles, New Delhi and Mumbai.

Building4Media offers the broadest range of solutions for:

- Production (sport, news, etc.)
- Post-production (with an fully integrated workflow for Apple Final Cut Pro, and virtually any video, audio and graphics editor)
- Master control playout automation (high-end and entry-level)
- New media (Internet/mobile phone transcoding & delivery)

2.3.2. Product Sheet Information

Software products for production and post-production

- FORK Production Suite (including our FORK Editor): our high-end production and postproduction automation includes features like one of the most advanced media asset management systems, any type of ingest, our own cuts-only editor, full integration with Apple Final Cut Pro and other high-end editors, playout, transfer, archiving, etc.

- Remote Studio: our camera-server software for the flexible control of large number of cameras and remote control heads. This product is based on the software we have developed for reality shows like 'Big Brother'.

FORK Production Suite (including our news editor)

The FORK Editor is Building4Media's integrated (news) editing software product for journalists and editors. The FORK Editor is part of the FORK Production Suite, the best-integrated family of TV production software products. The modular structure of the FORK Production gives the best options to tailor to your needs the functionality of our software products and the smoothest grow path for your future growth.

Summary

- Added values: editing with very large numbers of seats, using standard office computers and network, with the shortest possible and best-integrated work process from ingest to on-air and offering the lowest costs for personnel, broadcast equipment, edit sets and computer hardware.
- Functionality: handles 90% of the (news) editing in most TV stations with functionality for cuts only editing, full audio control, voice-overs, and previews of titles and graphics.
- Supported workflows: also two phase editing (the second phase with a craft edit set), collaborative editing (several people work on the same content and on the same timeline – for instance one for TV and one for the Internet), and off line editing (stand alone).
- Supported formats: DV, MPEG-2, DVC Pro, MJPEG and uncompressed (MPEG-2 long GOP in the near future).
- Underlying innovative concepts: client/server architecture, proxy quality of the content and the extensive use of QuickTime technology.
- The FORK Editor offers broadcasters the most powerful solution for (news) editing and at the same time the cheapest! The FORK Editor finally offers integrated editing for a price everybody can afford!

Added values of the FORK Editor

The shortest work process from logging to playout

- On their own computers the journalists (or editors) can handle the whole work process from logging to placing the edited clip in the playlist. This computer will often be his existing office computer.
- The large numbers of seats that are possible, ends the usual high pressure on edit sets at certain moments of the day.
- The central storage of the FORK Editor guarantees a smooth work process from logging to editing and from the FORK Editor to a craft edit set.
- Editing can start while ingest is still in progress, shortening the work process of editing. So your content is ready for playout earlier.
- Clips are directly after ingest available for all users, for instance for browsing, collaborative editing, previewing by the editor-in-chief, Internet broadcasting and archiving.
- No time is lost with the rendering the content.
- There is no transfer of clips from the FORK Editor to the playout system because the content is already on the server.
- The playout of a clip can even start while the end of the clip is still being edited, shortening the work process of editing even further.
- The EDL can be placed straight in the playlist without pre-compiling. In that case compiling is done during playout, shortening again the work process of editing and reducing the need for broadcast equipment because during playout always only one clip is compiled.

Very scalable number of seats

- The number of seats used to be restricted by the cost per seat (for software, computer hardware and broadcast devices). The costs per seat for the FORK Editor are only the costs of the software licenses, because often the system uses the existing office computers and network, and the existing broadcast equipment.
- The number of seats used to be restricted by the enormous amounts of bandwidth required for editing in the broadcast quality, even when Gigabit Ethernet is used. Because we use a second much smaller proxy quality of the content, the FORK Editor can work with large numbers of seats even on a 100Mb Ethernet network.
- So with our FORK Editor the old restrictions of price and bandwidth don't limit you anymore in the number of seats.

Huge efficiencies in broadcast equipment and computer hardware

- The FORK Editor uses the existing broadcast equipment of the playout system.
- The VTR's can be shared in a central VTR pool and are dynamically allocated to users.
- Titles, graphics and mixes can be handled in software without the need for CG' s, mixers, etc. This is limited to the following formats: DV, MJPEG and uncompressed.
- In addition to the FORK Editors only a limited number of craft edit sets is needed

Main functionality of the FORK Editor

- Cuts only editing (in the near future the FORK Editor can support over 200 transitions).
- Full audio control with level and balance per audio track.
- Support for voice-overs on either the computer used for editing or in a separate voice over booth. In the voice over booth a separate FORK Editor is used to show the user his content and the timeline.
- Support for displaying previews of titles and graphics during editing.
- Logging, including the full control of VTR's and DV cameras.
- Support for slomo 's and stills.
- Pre-viewing of the results on the office computer or on a separate video monitor (this requires extra hardware: monitor, routing and decoders).
- The journalist has three options after his editing. The first option is to place the EDL itself directly in the playlist, which is possible thanks to the full integration with FORK playout system. The second option is to pre-compile his content and add the clip it to the playlist. The compiling will be done during playout. The third option is to send the EDL and the clips to a craft edit sets for further editing.
- Collaborative editing is possible due to the client/server concept on which the FORK Editor is based. This means that one user can access his content from any computer connected to the network and he can do his logging on one computer and his editing on another computer without having to write down time codes and having to transfer his content. It also means the several users have access to the same content for editing together on that content, for previewing by the editor-in-chief, for editing the content for the Internet directly after ingest and for archiving directly after ingest.

- Stand alone use of the FORK Editor is supported.
- Compiling is done automatically in the background by the FORK Editor Server.
- For the mixes and titles a mixer and a CG can be used, or a scalable "render farm" with one or more computers with low-cost graphics cards, which render the transitions and titles automatically in the background when needed in real-time.
- The FORK Editor software controls this render farm and distributes the material to be rendered over the available computers.
- The interface of the FORK Editor is a combination of NLE and LE interfaces and combines the best features of existing interfaces to keep the required training of users to the absolute minimum. The integration of the traditional "islands" of the edit sets and the playout system offers huge, huge added values for broadcasters!

FORK Playout

The FORK Playout software modules offer broadcasters the reliability and the support needed for mission critical broadcast automation, the right functionality, the flexibility and the growth path to guarantee the development in the next years, and important efficiencies in personnel, broadcast equipment and computers.

FORK Transcoding Management

The FORK Transcoding management software module integrates existing transcoding products into one integrated work process that is handles automatically and in the background.

Technical information Software

- The FORK Editor consists on four main software modules: the FORK Editor Client, the FORK Production Server, the FORK Proxy Server and the FORK Render Farm Unit.
- The FORK Editor is based on client/server concept and uses central storage of clips and EDL's. The edit sets which were traditionally often "islands" connected by "tapes and pieces of paper", are now fully integrated with each other and with the playout system. This means that a user of the FORK Editor can access his content from all computers (for instance for logging, editing, archiving, etc.) and that the FORK Editor supports collaborative editing (once ingested all the users have access to the same content and even to the same timeline! - for editing the same clip, for previewing by the editor-in-chief, for the Internet, for archiving, etc.)
- News editing on the existing office computers and network is only possible by using a second smaller proxy quality of content for editing. The proxy quality of the content has all the frames, sufficient colour and sufficient size for serious editing. Most file formats are supported for the proxy quality, including MPEG4.
- The FORK Editor is based on QuickTime technology. Using FORK together with other products based on QuickTime has many added values. Examples of such products are: the Omneon video server and Apple's FinalCutPro.

Hardware

- The FORK Editor has specific requirements regarding the video server, in terms of storage of various file types and flexibility in encoding and decoding. These requirements can be met by using certain videos server (for instance Omneon), or by combining a dedicated playout server with a generic production server (basically a large computer) and encoders/decoders.
- Part of the FORK Editor software is a jog and shuttle interface box panel, which gives the user a familiar interface. Of course the FORK Editor software can be used with just the keyboard and the mouse.
- The FORK Proxy Server has two functions in the system: firstly the management and storage of the proxies of the content in the proxy quality and secondly the rendering of transitions and titles and graphics. This second function is full scalable, which means that when rendering takes to long with a larger number of editors, additional FORK Editor Render Units can be added to the system. The licenses for these Render Units are free, because they are already included in the license fee of the FORK Editor Server. And each Render Units just needs a normal computer to run the software. So the incremental costs per Render Unit are extremely low.
- The network consists of a small Gigabit Ethernet network between the FORK Editor Proxy Server and the Omneon video server. For the rest of the network a standard 100Mb Ethernet network is sufficient. For systems with large number of Editor at a certain moment the network must be divided into segments using a network switch.
- Several system diagrams are available for a number of configurations for mid-size and small broadcasters, for just editing and for editing and playout, for different content server and video servers, etc.. At your request we will be happy to send you these system diagrams.
- All Building4Media software is cross-platform and can be used on Windows 98/Me/2000/NT/XP and Mac OS 9/X.

2.3.3. B4M Feature Comparison Chart

Unfortunately, we were unable to speak directly to a representative from B4M, so this data is taken purely from web and product sheet information and has not been verified.

Top Ten Factors	0/5	Details
1. Integral Ingest Component	**3**	When the journalist returns to his TV station with his raw content on tape, he goes to his computer with the FORK Editor software which assigns the closest free VTR to him to enter his tape. When the journalist knows approximate which part of raw content must be ingested, he can enter the rough time codes. FORK controls the VTR, ingests the content requested and generates the proxy quality automatically in the background. The clips are automatically ingested in two qualities: the broadcast quality and the proxy quality. The broadcast quality is stored in the video server, while the proxy quality will often be stored on the second so-called proxy server. Of course, the size of the proxy quality is negligible compared to the broadcast quality. This makes it possible to use the existing office computers and network for editing. No support for legacy video servers. Workflow tuned for news only, few support for program and other parts.
2. Integral Playout Component	**0**	Companion Product -FORK Playout Suite During the editing, the journalist in fact makes an EDL. After editing is completed there three possibilities with his EDL: . Place the EDL itself directly in the playout system for compiling during playout (during playout always only one clip has to be compiled at the same time - this saves a lot of broadcast equipment, compared to pre-compiling directly after editing) . Pre-compile the EDL and place it in the playlist as one clip (this is mainly used to preview the edited content in broadcast quality during editing), or . Send the EDL and the clips to a craft edit set for further editing. No support for legacy video servers. Workflow tuned for news only, few support for program and other parts
3. Hardware Platform	**0**	The best overall functionality is with FORK Playout software and an Apple or Omneon playout server
4. Search beyond Boolean (Or, And, Not)	**0**	Not addressed in any of their online literature
5. Metadata	**0**	Not addressed in any of their online literature
6. Rights Management	**0**	Not addressed in any of their online literature
7. workflow	**0**	Not addressed in any of their online literature
8. Editing Integration	**3**	For edit sets with an open file format (like: Apple Final Cut Pro - which is based on QuickTime) integration on file level is possible (over Ethernet, Gigabit Ethernet or FireWire). For other platforms only using SDI transfer
9. SNMP integration	**0**	No SNMP integration
10 HSM integration	**0**	No HSM integration
11. Pricing	**0**	Not addressed in any of their online literature
12. Data Moving	**0**	Very primitive data moving with only policy, that do not allows clustering of resources and load balancing

2.4. Cinegy

http://www.cinegy.com

2.4.1. Corporate Information

Cinegy focuses on the research and development of media and television software and technologies. Cinegy workflow is the software platform which combines digital asset management, video ingest and software based encoding, broadcast automation and playout, production tools, archive storage & retrieval - all integrated into one seamless database driven production workflow.

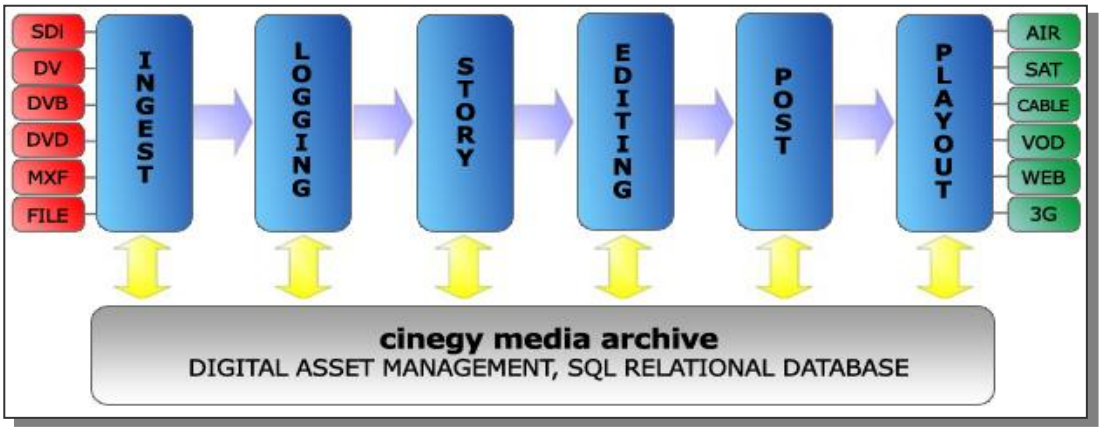
The development of Cinegy workflow began over 10 years ago, as an integrated digital archive, asset management and production environment, based on desktop PC hardware for the front-end and standard IT server equipment on the back-end, all sitting on the existing network infrastructure. This design forms the basis of today's workflow. The work resulted in first pilots during 2001 and first commercial products became available in 2002 branded as Cinegy. The goal was to have the archive not as a mere afterthought, but as a process that starts by accumulating metadata right from the start to create a complete lifecycle as a never-ending process that keeps adding value to the media assets throughout their existence. The Cinegy platform from the start was designed as an enterprise level system that is resolution independent, storage systems agnostic, extremely scalable and absolutely open in terms of architecture. Over time, additional elements such as news integration, broadcast automation and playout have been added to the solution as well.

In order to meet the requirements of the broadcast industry, Cinegy developed new, high-end software MPEG codec s, highly scalable media asset management and collaborative software frameworks, advanced real-time media engines, real-time collaborative metadata handling and communication, heterogeneous production integration (AAF, IMX, DV, MXF, XML etc.) and many more areas.

SQL database driven digital asset management forms the basis, taking collaboration and team workflow way beyond just shared storage. The digital asset management platform abstracts physical storage to virtual storage and in addition provides load balancing, different storage classes, storage migration, HSM integration, garbage collection, and very elaborate user access rights policies.

Cinegy licenses a number of these core technologies to various broadcast and consumer video software and hardware manufacturers that use them in their product offerings, to offer the best-of-breed solutions in the industry.

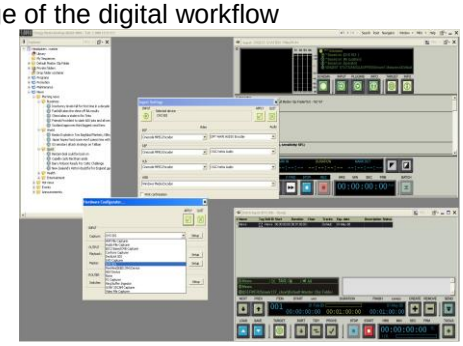
2.4.2. Product Sheet Information



Cinegy Products
Cinegy has a range of software to meet all production needs.

Broadcast & Media: Cinegy seamlessly integrates every stage of the digital workflow

- real-time SD or HD ingest
- logging & storyboarding
- non-linear workflows
- digital asset management
- full control & rights management real-time multi-channel playout
- news integration
- broadcast automation
- 3rd party NLE integration
- enterprise scalability



Post Production: Cinegy can take care of all postproduction needs

- character generation/titling
- effects, filters and transitions
- media Management
- enhanced key frame editing and animation curves
- proFX-effects for compositing
- 3D-effects for outstanding animations
- advanced chroma keying
- different masks glow effects, blur & sharpen, morph & warp
- animation features

Codec Technology: Cinegy has also developed high-end MPEG software codec s

- MPEG2 encoding equal or better than DigiBeta
- broadcast quality
- fastest and best quality multi-processor & cluster capable
- standalone or as SDK for custom integration
- MPEG analysis tool.

Cinegy workflow

Tapeless production is good - digital asset management based, workflow driven production, is even better. Cinegy says that its workflow does all this and more. SD & HD ingest, logging, storyboarding, team collaboration, non-linear workflows, news integration, broadcast automation and real-time playout as well as a wide range of options for third party integration - all based on standard IT hardware and non-proprietary storage.

Cinegy workflow is an open platform consisting of a suite of tools, applications and open APIs that allow you to shift television production into the next gear without being taken hostage by a proprietary solution of a particular vendor. Cinegy software covers every stage of the digital production process.
Cinegy states that its workflow is a solution conceived by media professionals for media professionals that works with any type of media totally redefining the concept of archive, production as well as automation for television, film and other types of media.

2.4.3. Cinegy Feature Comparison Chart

Top Ten Factors	0/5	Details
1. Integral Ingest Component	**2**	HD Ingest. DVB Ingest . Multi-Format Ingest & Proxy Generation . Ingest direct to AVID MXF format . Ingest Clustering . Ingest Metadata . Batch Ingest. Loop Recording Ring buffer . Video Formats & Video Hardware Support 'http://www.cinegy.com/jml/images/stories/pdfs/20080811_ingest_brochure_a4.pdf' No support of legacy servers or cart machines it's a complete proprietary system
2. Integral Playout Component	**3**	Completely software based system for SD or HD playout automation using standard PC server hardware. Next generation of real-time broadcast automation and master control room software. Real-time network service based video playout server operated remotely via TCP/IP - no need for SDI cabling and routing. . Support for all commonly used of video file formats (e.g. DV, HDV, IMX, XDCAM, and any MPEG2 up to 1080i 4:2:2). Full integration with Cinegy's Digital Asset Management, Archive and Workflow solutions. High Availability and fault tolerance by local caching and optional failover slave channels. Live video input support for logo insertion and titles overlays. Secondary events for external device control. Local or completely remote controlled operation. Extremely scalable to hundreds of channels. No database bottleneck problems. As run logging and custom report generation. Closed Caption and Dolby E pass-through. Exceptional Return-on-Investment and Total-Cost-of-Ownership http://www.cinegy.com/jml/images/stories/pdfs/20080811_air_brochure_a4.pdf No support of legacy servers or cart machines it's a complete proprietary system
3. Hardware Platform	**2**	Hardware Agnostic except for video server
4. Search beyond Boolean (Or, And, Not)	**3**	Basic Google Search and Advanced Search
5. Metadata	**4**	Customizable set of metadata
6. Rights Management	**3**	Rights management will stop the file being played out to air, no multilevel rights management
7.Workflow	**3**	Workflow based but without common broadcast features, as archiving trascoding or tape dubbing
8. Editing intregration	**3**	Good integration using proprietary software encoders.
9. SNMP console	**0**	No snmp console and messages
10. Hsm	**0**	No HSM, rely on third party
11. Pricing		15 seats – approx 3000 Euros per connection. Price based upon concurrent connections to the database, minimum installation – 1 seat.
12. Data Moving	**0**	Very primitive data moving that do not allows clustering of resources and load balancing
Other Information Codec Technology: Cinegy has also developed high-end MPEG software codec s. Cinegy offers a complete end-to-end Cinegy solution - Ingest, Logging, Quick Cuts Editing, Craft Editing, Scheduling, Playout and Archiving. This could provide 'green-field' clients, a good tool. But lacks on complete professional playout system		

2.5. Dalet Digital Media Systems

http://www.dalet.com

2.5.1. Corporate Information

Founded in 1990, Dalet Digital Media Systems is a leading developer of software solutions that facilitate the management of audio and video assets for broadcast, entertainment, government, education, corporations and non-profit organizations. Developed for standard IT hardware, Dalet software solutions enable organizations to capture, manage and store digital media. The all-digital solutions greatly enhance productivity through immediate access to and management of valuable media assets.

Traded on the Eurolist C compartment, Euronext Paris Stock Market (ISIN FR0000076176, Reuters DALE.PA), Dalet has offices throughout Europe, the United States and Asia Pacific.

Operating worldwide, Dalet solutions are used in 50 countries by over 1700 customers including ABC, 'ART', 'BBC', 'BFMTV', 'Cadena Ser', 'CBC-Radio Canada', 'Catalunya Radio', 'Deutsche Welle', 'DR', 'EMAP', 'Emmis', 'Entercom', 'ERT Greece', 'ERT Tunisia', 'eTV', 'Fashion Show Media Network', 'MBC', 'Mediaset', 'MediaCorp Singapore', 'National Public Radio', 'Polskie Radio', 'Prime TV', 'Radio France', 'Radio France International', 'Radio Suisse Romande', 'Russia Today', 'RTP Asturias', 'Radio Television Malaysia', 'The Scottish Parliament', 'SKY Television', 'S4C', 'SABC', 'SEBC Korea', 'Universidad Autónoma de Barcelona', 'UBF', 'Voice of America', 'Westdeutscher Rundfunk', 'The Weather Channel', and 'XM Satellite Radio'.

Despite the rapid advances in Information Technologies (IT), video compression and desktop processing power, most digital solutions for television available today are based on dated designs and cumbersome architectures. Scripting, video editing and browse applications use separate databases, user interfaces and administration modules. Maintenance is difficult and expensive. Automation systems do an adequate job handling ingest and playout, but do little to reduce the manual operations in between. Valuable metadata, vital in fully leveraging the benefits of digital production, is lost or simply not captured, requiring expensive and time-consuming manual data entry to compensate. The net result is islands of old-school technology hampered by forced workarounds.

Open platforms based on mission-critical IT and best-of-breed broadcast equipment
Dalet Digital Media Systems offers a comprehensive set of products based on open standards to help broadcasters move to the digital era and implement paperless newsrooms, tapeless production workflows or modern archive systems. Dalet digital media systems take advantage of the latest, high performance, mission critical IT technology to deliver unparalleled interoperability, "log-on anywhere" access and innovative workflow options. All Dalet products are client-server software based applications based on industry standards including Microsoft Advanced Server, Microsoft SQL 32 and 64 bits and XML based messaging. Dalet products leverage IT clustering, networking and storage technologies along with best-of-breed, modern broadcast equipment to ensure 24/7 mission critical operations.

Improved workflows

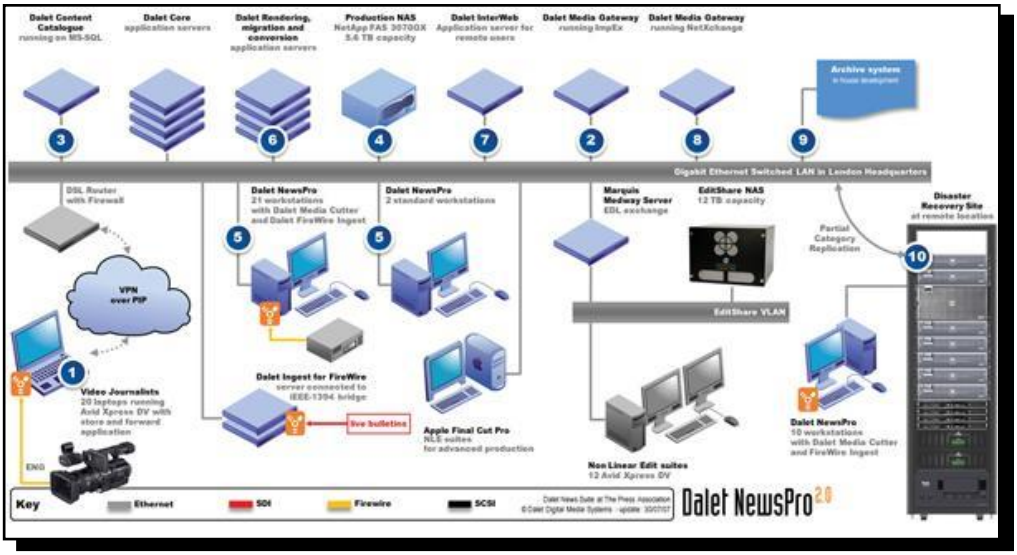
The resulting platforms allow for drastically improved workflows. Source material, work in progress and finished packages are shared and instantly available on the desktop or remotely through a standard web browser. Journalists and editors produce more stories and packages in less time with unique rights managed workflow tools that enhance newsroom collaboration and productivity. Metadata is captured automatically, reducing the burden of manual data entry and accelerating access to online or archived material. Further, Dalet integrated asset management and archive capabilities enable quick access to online, near online and offline libraries allowing broadcasters to replace expensive and cumbersome analogue libraries with fast-access, compact digital ones.

2.5.2. Product Sheet Information

Overview – Dalet News Suite

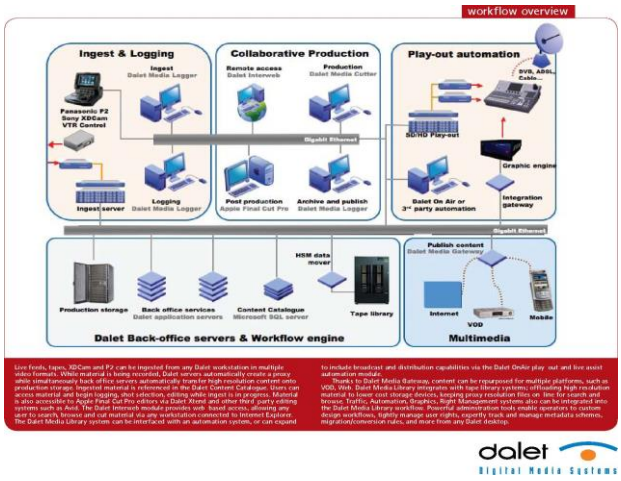
Dalet News Suite is a digital newsroom with integrated media asset management. It offers everything you would expect from a full-featured newsroom computer system and adds flexible media production and playout tools, making video ubiquitous across the newsroom. With Dalet News Suite, the whole news production workflow is integrated. Distributed, multi-channel feed ingest features advanced scheduling, loop record, router control and edit-while-record capabilities. Desktop FireWire transfers, Panasonic P2 and Sony XDCAM support make material coming back from the field a click away.

The easy-to-use logging and shot selection tools take advantage of the Collaborative Clipbin and make content sharing a breeze. Selected shots can be packaged using the integrated voice-over editing tool or sent to third–party non-linear editors such as Apple Final Cut Pro, Adobe Premiere Pro or Avid Xpress. All media migrations—from central production storage, to NLEs to an Omneon Spectrum Media server—are made seamless. Journalists and editors need only focus on content production and story writing. As for play-out, it supports all the news automation your newsroom requires: from back-to-back to A/B/C roll, to secondary event management.



Key benefits
System requirements

- Integrated NCS and NPS;
- From 5 to 100 Windows XP workstations.
- Total tapeless workflow;
- Gigabit TCP/IP network;
- Advanced status and notification;
- Microsoft Advanced Server 2003, SQL 2005;
- Flexible metadata schema;
- NetApp or Exanet network attached storage.
- MOS compliant.
- Omneon Spectrum Media server.



Overview – Dalet Media Library

Dalet Media Library 2.0 offers media-driven organizations a unique approach to managing and fully utilizing their digital media assets. Dalet Media Library combines state of-the-art video server management with exceptional file migration technology, leveraging the power and cost effectiveness of standard IT platforms. An entire broadcast or media organization— research, production, programming, marketing—can easily access digital assets through a user-friendly interface. Productivity and collaboration are raised to a whole new level.

Unlike traditional solutions, Dalet Media Library manages the complete lifecycle of content. From ingest to archiving, Dalet Media Library facilitates access rights, modifications and distribution. Dalet Media Library offers more advanced functionalities than any other system at a lower capital investment cost and a lower cost of ownership. The Dalet media asset management technology enables any number of media relating to a project to be combined into a single media asset including video, audio, graphics, text, templates or automation instructions. Flexible metadata forms allow users to customize information with maximum details. Media Library is further complimented with user-friendly storyboarding tools so simple to use that people with minimal editing skills can easily make cuts, assemble media, record comments and package content.

New features with 2.0

- HD support;
- Improved CODEC support;
- Multi proxy management;
- Partial retrieve of near line archives;
- Powerful media migration engine.

Key benefits

- Comprehensive metadata management.
- Automated MXF file migration.
- HSM integration.

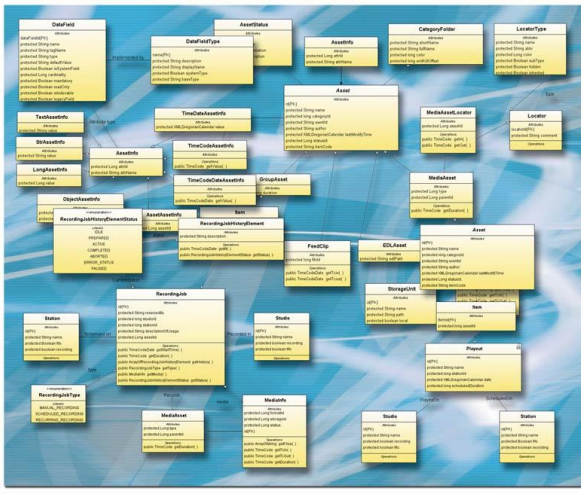
Overview – Dalet Enterprise Edition

- Embedded production tools.
- Video server automation.

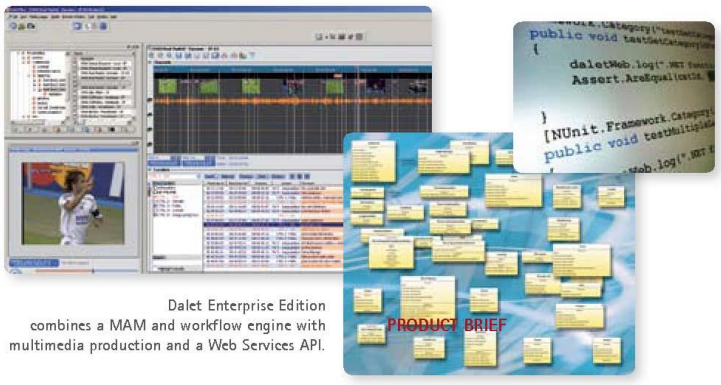
System requirements

From 5 to several hundred workstations.

- 100/1000 Mbps TCP/IP network.
- Microsoft Advanced Server 2003.
- Microsoft SQL 2005.
- Xendata or Front Porch compliant HSM
- library.
- supported video server.



Dalet Enterprise Edition offers a powerful web services Application Programming Interface (API). This empowers media corporations to integrate their digital production and media asset management platform within their organization and beyond. Compliant with Services Oriented Architectures (SOA), the Dalet API provides a comprehensive set of functions and calls which makes it possible for external, third-party systems to control the configuration of a Dalet Enterprise Edition platform. You can also manipulate any asset stored in a Dalet Content Catalogue. For example, through the Dalet API, an external scheduling system can dynamically update the internal category structure of a Dalet database and trigger recordings that will populate newly created categories. Similarly, an Enterprise Resource Planning (ERP) system can query a Dalet Enterprise Edition platform to dynamically retrieve the metadata of titles that meet specific search criteria; the attributes of these assets stored in the Dalet Content Catalogue can be seamlessly updated based on input from users of the ERP system. Such integration with existing scheduling and ERP platforms paves the way to improved productivity and better cost controls. Production and broadcast systems need not be digital islands anymore; they can finally be fully integrated within the enterprise back-bone.



Dalet Enterprise Edition combines a MAM and workflow engine with multimedia production and a Web Services API.

With Dalet Enterprise Edition, broadcasters have the freedom of choice: pick your preferred editing and graphics systems; select your playout platform; choose the storage and server infrastructure that best meets your requirements. Dalet does the rest. Flexible media migration and format conversion engines ensure that material and edit decision lists (EDLs) seamlessly migrate from one system to another.

Media—in SD, HD or in mobile low bit rate resolution—is where you need it, when you need it. Better still, Dalet adapts to your workflow. It combines a powerful status, versioning and notification engine with a uniquely flexible metadata schema editor. Create fields on the fly and make them contextual to ensure that information is collected at every step of the workflow. Journalists, editors and producers can browse comments and rights associated to any asset, at any time.

Dalet Enterprise Edition includes a comprehensive set of digital production and media management tools. Ingest from tape decks and feeds can be centralized or distributed. Fast editing tools provide simple transitions for quick edits and a number of formats and wrappers are supported to easily interface with third-party NLEs when more sophisticated edits are required. Advanced planning and scheduling combined with full-featured scripting means that rundowns and programs can be rapidly put together. Playout automation and multi-platform content distribution is optimized via dynamic live updates, secondary events management and store and forward media gateways. Simply choose the modules that you need for your workflow.

Key benefits
System requirements

- Open integration platform;
- From five to several hundred workstations;
- Flexible workflow engine;
- Gigabit TCP/IP network;
- Multi-format conversion;
- Microsoft Advanced Server 2003, SQL 2005;
- Automated media migration;
- NetApp or Exanet network attached storage;
- Modular tools.
- Grass Valley, Omneon or Quantel server.

New Improvement in Galaxy

Dalet in it's new product is moving away to use a standar broadcast HSM, to a more it solution as Stornext.
To integrate stornext Dalet has to include the data moving capabilities that before are included in the HSM solution, this was pratically a Disaster . Dalet has a very primitive suite that combined with Stornext inefficiency create a big, expensive and inefficient system.
Galaxy is also deeply based on drop folders that are bandwith hungry.
~~were~~

2.5.3. Dalet Media Library Feature Comparison Chart

Top Ten Factors	0/5	Details
1. Integral Ingest Component	**5**	Companion Product Dalet News Suite: Distributed, multi-channel feed ingest features advanced scheduling, loop record, router control and edit-while-record capabilities. Desktop FireWire transfers, Panasonic P2 and Sony XDCAM support make material coming back from the field a click away. No support of all legacy servers, cart machines and auto ingest features.
2. Integral Playout Component	**5**	Companion Product Dalet News Suite: Supports all the news automation a newsroom requires: from back-to-back to A/B/C roll, to secondary event management. Advanced planning and scheduling combined with full-featured scripting means that rundowns and programs can be rapidly put together. Playout automation and multi-platform content distribution is optimized via dynamic live updates, secondary events management and store and forward media gateways. Outside news they lacks on broadcast playout capabilities.
3. Hardware Platform	**0**	Hardware Agnostic
4. Search beyond Boolean (Or, And, Not)	**3**	Simple and Advanced Search, Search across different media
5. Metadata	**5**	Complete multilayer metadata set.
6. Rights Management	**3**	
7. Workflow	**0**	No integrated workflow system
8. Editing Integration	**3**	Some system like avid requires external middleware
9. SNMP integration	**3**	NO Snmp messages or console integrated
10. HSM	**1**	The provide stornext, but this is an external system valid for only it, very inefficient for broadcast
11. Pricing	**0**	Basic System with Hardware, Services and Software starting at about €150,000-€200,000 this would include five licenses. Typically, installations range from 200k up to just under a million euro.
12. data moving	**0**	It is probably the most primitive solution for data moving, no capability to manage with efficiency a big system.
Other Information	**0**	Biggest competitors mentioned: End to end News Systems –AVID from end to end Newsroom Playout – Grass Valley Pure MAM – ETERE, Ardendo & Blue Order

2.5.4. Dalet Unique Selling Proposition

What sets Dalet apart is that they provide one platform and openness with their configurable API's that talk to other systems. Dalet offers a complete solution that would enable a customer to have one system from Ingest through to Playout, and allows them to include their radio as well as television assets. This end-to-end system provides Dalet clients a very easily managed workflow schema.

2.6. Front Porch

http://www.fpdigital.com

2.6.1. Corporate Information

Front Porch Digital states that they are the global market leader in Content Storage Management (CSM) solutions. The company has long been an innovator in delivering unique software, services, and integrated hardware solutions for CSM to broadcasters and media companies worldwide. Today, Front Porch Digital's patented CSM technologies are found in more than 220 installations in more than 50 countries, representing 9.5 million hours of content and more than 60 PB of data under management distinguished for superior functionality, scalability, performance, and customer satisfaction. Front Porch Digital's award-winning DIVArchive technology manages the largest broadcast archives in operation for the world's best-known media brands. More information is available at www.fpdigital.com.

2.6.2. Product sheet Information

DIVArchive v.6.1

The focus of continuous investment and innovation, and protected by three U.S. patents, DIVArchive has become the CSM application preferred by the world's leading media companies.

DIVArchive is the industry-leading Content Storage Management system designed to allow broadcast, media and entertainment companies to manage and leverage their content regardless of where it resides. DIVArchive has proven interfaces with all of the leading broadcast automation and MAM systems and allows the client to create a unified Content Storage Management system of their near-line disk and data tape libraries. DIVArchive was created so that all content could be ingested, tracked, managed, converted and made available for playout with as little effort as possible.

DIVArchive is designed for:

- Broadcast, entertainment and media companies that need to manage content throughout the entire life-cycle, from ingest to long-term preservation
- Journalists, editors or other users wishing to automate searching and accessing offline storage media for editing and playout
- The new media environment where content must be easily leveraged for emerging revenue opportunities
- Any company making the transition from an SD to HD environment

Smooth Implementation

DIVArchive has been successfully installed in over 40 countries. Their success is built upon taking the time to consult with their customers, understand their needs, design a solution, and follow through with excellent integration services and long-term support.

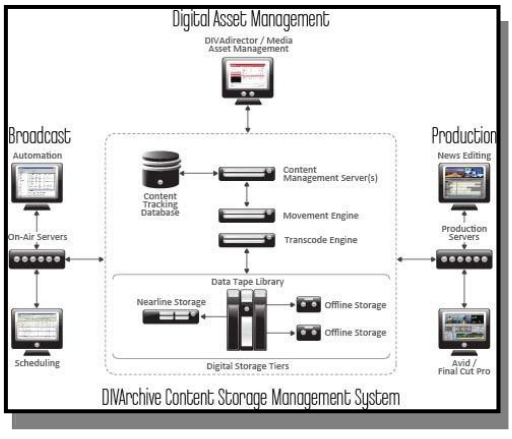
The newly released DIVArchive v.6.1 continues to deliver powerful functionality to meet the evolving needs of global broadcasters. Key enhancements include:

- multiple parallel ranscoder support
- rebuild of damaged data tape functionality
- DIVArchive components running as services
- Storage Plan Manager enhancements
- LTO-4 tape drive support
- IBM TS3550 library support
- partial restore of Leitch AVI DV-25 and Matrox IMX50

DIVAdirector

This distributed, Web-based content management application addresses the most fundamental asset management requirements for global broadcasters. DIVAdirector provides active tracking of all assets in the DIVArchive system and allows users to browse content leveraging automatically generated low bit rate proxies, create frame-accurate shot lists, and access a flexible asset metadata model using robust query tools.

With these powerful content management capabilities, DIVAdirector offers significant workflow benefits for operators of DIVArchive. DIVAdirector can be actively linked to external databases to provide a comprehensive and consolidated view of all metadata from a single configurable and secure interface.



2.6.3. DIVArchive Feature Comparison Chart

Top Ten Factors	0/5	Details
1. Integral Ingest Component	**0**	Via DIVAdirector, Other MAM or Ingest Control System
2. Integral Playout Component	**2**	Via 3rd Party Scheduling software/ automation system
3. Hardware Platform	**0**	They facilitate the workflow – so therefore are hardware agnostic, and will work with any other hardware/ product on the market. They prefer to outline the whole solution – but will work under the Systems Integrator umbrella, and fit in with customer requests.
4. Search beyond Boolean (Or, And, Not)	**3**	Metadata would have to be exported from the MAM system being used by the client. The metadata is on the MAM side – DIVArchive is agnostic to the MAM. With DIVAdirector, powerful tools allow you to locate content by searching any metadata fields. You can also view any content with the built-in Windows Media Player. With the player controls you can find exactly the frames you are looking for. Once you've found the content, you can schedule the full resolution asset to be restored, build shot lists, and send content to an editing application. The DIVAdirector option can be added to any DIVArchive system to enable you to search and view archived content. DIVAdirector allows you to: . Conduct extensive metadata searches . View proxies of archived content . Create frame accurate shot lists . Restore either a portion, or the whole clip, to any destination . Interface through Internet Explorer . Restrict access using the built-in security tools . Actively track all assets in the DIVArchive system
5. Metadata	**5**	
6. Rights Management	**0**	There are no rights management in place that would stop a user broadcasting a file that they have access to, this would have to be defined in the traffic system or MAM system.
7. Workflow	**0**	No workflow
8. Editing Integration	**3**	Transcoding can be done on the fly to send restored/ partially restored files to editor
9. SNMP Integration	**0**	No SNMP console integrated
10 HSM	**5**	It's a top value HSM but it relay on old design, some features like data tape migration are not included.
11. Pricing	**0**	There is an Entry Level Plug and Play System called DIVA Works This includes all software and a tape library – storage from 19TB Starting price 30,000-40,000 euro, this does not include a user interface. 100,000-120,000 euro start up price for DIVAWorks and DIVADirector, Limited to 25 seats
12. Data Moving	**2**	Good data moving capabilities but with limit in the protocols and inefficient for redundancy and link aggregation.

Other Information
Front Porch state that they are not video servers, they are not media managers – they are archive managers. The most important thing is that DIVA was developed to be video aware, there is always application working on top of DIVA that is driving the archive or restore. For example, Blue Order software will speak to DIVA to restore and retrieve items. DIVA can either be controlled by an automated system such as Harris or OmniBus or by a media management software. DIVA is a slave to these systems, so for example in a broadcast or government situation, someone has to say "I want to archive' or "I want to restore"

2.6.4. DIVA Unique Selling Proposition

Due to the infrastructure of the DIVArchive product –it is very easy for their customers to upgrade their storage system to take advantage of new technologies.
This system can be used in conjunction with any other MAM system – allowing a customer to make full use of any legacy systems.

2.7. Harris

http://www.broadcast.harris.com

2.7.1. Corporate Information

Harris is an international communications and information technology company serving government and commercial markets in more than 150 countries. Headquartered in Melbourne, Florida, the company has annual revenue of more than $ 5.3 billion and 16,500 employees — including nearly 7,000 engineers and scientists. Harris is dedicated to developing best-in-class assured communications® products, systems, and services.

Harris Broadcast Communications Division is one of four divisions within Harris Corporation, an international communications equipment company focused on providing assured communications™ services for government and commercial customers in more than 150 countries. One of the world's leading suppliers of broadcast technology, Harris Broadcast Communications Division offers a fill range of solutions that support the digital delivery, automation and management of audio, video and data.

2.7.2. Product Sheet Information

Harris® H-Class™ Invenio™ is a suite of software applications that provides tools for the ingest and management of rich media assets. With both automated and manual capabilities, content Invenio empowers creators and owners to manage the entire content life cycle, from ingest to cataloguing, storage and retrieval.
Invenio automatically extracts metadata from ingested content and makes it available for search, browse and basic editing at the desktop. The application links metadata to a single frame, clip, cut list or entire program — laying the foundation to search, find, retrieve and utilize associated content rapidly, effectively and productively.
Invenio's versatility brings value to your media-centric business environment by:

- Automating cataloguing, storage and retrieval of content
- Managing the efficient storage and retrieval of media assets within rich media archives
- Optimising content re-use
- Improving the revision control of in-production

Media assets Invenio creates value in your content by facilitating increased revenue opportunities.
The system delivers efficiencies and productivity gains in archiving operations and production activities — making it possible to create new products and services faster with shorter time to market.

Harris Invenio Digital Asset Management System Starter Pack

Designed and priced as a jump start to a successful digital asset management solution deployment, the Harris Invenio™ Starter Pack provides a scalable ingest and archive solution for managing content in rich-media environments. The Starter Pack targets workflows that include the ingest functions, send and/or retrieve video content from on-line, near-line and offline archival systems, and greatly assists in the migration towards a tapeless environment. The Invenio Starter Pack includes the I-Media, I-Content and I-Web tools, and has been engineered with to integrate seamlessly third party vendors' APIs.

Improves Operational Efficiency

The Harris Invenio Starter Pack offers significant improvements in productivity and operational efficiency for rich-media environments.

The Invenio Starter Pack includes:

- Automated capture of metadata
- Reduction in overlapping tasks during ingest and Quality Control
- Improved use of resources
- Automation of one-to-many transfer, ranscoder and/or archive functions at point of ingest or the desktop
- Automated distribution based on business rules and known metadata values
- Remote access to deep archival content via Internet or intranet
- The Invenio components currently integrate, with a range of best-of-breed archive managers, including:
- DIVArchive™ from Front Porch Digital Inc.
- MassStore™ from MassTech Group Inc.
- PetaServe® from Sony Electronics Inc.
- Avalon Archive Manager and Legato (OTG) Video Xtender from EMC Corporation
- FlashNet from Software Generations Ltd. (SGL)

In addition, the Invenio Starter Pack is scalable to meet long-term media management requirements, allowing users to address growth markets such as Video on Demand and media distribution without significant increases in operational overhead.

I-Media

I-Media allows users to easily and effectively ingest rich media and metadata from various sources, while providing connectivity for control of devices and media distribution processes. It allows batch digitizing with self-contained multitask control of multi task control of multiple source and destination devices to ingest all incoming material with frame accuracy.

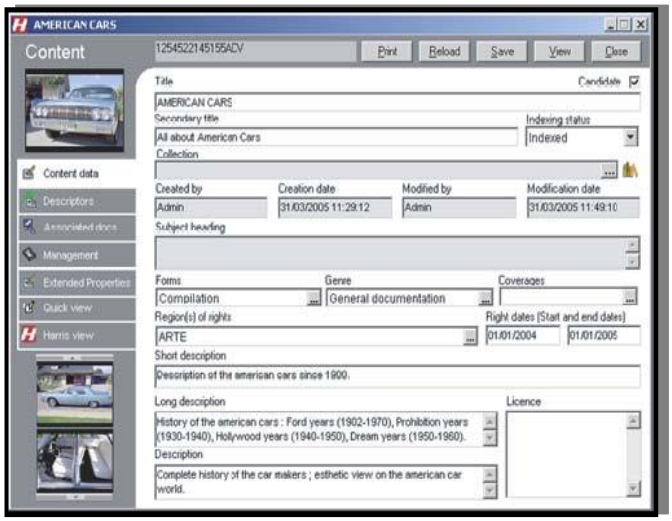
In addition, users can index incoming feeds on the fly, schedule and capture live feeds, and

Etere srl
Via Etere, 1
62029 Tolentino (MC) - Italy
T +39 0733 9564
F +39 0733 95633

automate movement of media, post ingest as a background process. The operator can define the media being ingested with a full array of indexing models while recording. At I-Media, users can configure up to 250 fields of metadata and associate to media being ingest by publishing to the asset record in the digital asset management database.

I-Content

I-Content allows users to manage online and archival content, and perform deep indexing and media distribution tasks from the desktop. Librarians and archivists can perform basic functions, such as the registration, segmentation and indexing of content, associate that content to tapes, discs and servers, manage multiple renditions of the media, and even associate documents to content.
With I-Content, hyper-navigational utilities can be accessed to locate areas of interest within the content.
Its powerful features allow users to preview content with associated metadata, maintain a knowledge base of content and sub-content, and access and/or act on content based on business rules.



With the I-Web component, users have access to all low-resolution representation of ingest content via either Internet or Intranet connection. The desktop Web browser application allows users to search, browse, and request ranscoder and media distribution of stored content.

2.7.3 Invenio Feature Comparison Chart

Top Ten Factors	0/5	Details
1. Integral Ingest Component	3	The automated capture of metadata includes both technical data and content subject information. Capture processes can include converting speech to text for frame-accurate, searchable transcripts; acquiring geospatial information from cameras and other devices; object and scene change recognition; and closed-captioning extraction.
2. Playout Component	0	Via other H-Class application
3. Hardware Platform	0	Not answered
4. Search beyond Boolean (Or, And, Not)	3	The Invenio thesaurus enables users to establish a common language for identification of content. The thesaurus, as the storehouse of similar, related, or opposite words and video images, is arranged hierarchically by themes and topics. The thesaurus improves both the accuracy and relevancy in content searching. It improves precision by defining the scope of terms and increases the relevancy of results by retrieving documents that employ different terms for the same concept. You can search for media stored across different sites, and workflow can be designed on how to retrieve assets.
4. Metadata	5	
5. Rights Management	2	Display Only – will not stop file playing to air
6. Workflow	0	
7. Editing Integration	3	
8. SNMP Integration	0	
9. HSM	0	No integrated HSM rely on third party
10. Pricing	0	Would not discuss pricing
11. Data Moving	1	Very primitive data moving with only policy, that do not allows clustering of resources and load balancing

Other Information

The Invenio components currently integrate, with a range of best of-breed archive managers, including: o DIVArchive™ from Front Porch Digital Inc. o MassStore™ from MassTech Group Inc. o PetaServe® from Sony Electronics Inc. o Avalon Archive Manager and Legato (OTG) Video Xtender from EMC Corporation o FlashNet from Software Generations Ltd. (SGL) .

In addition, the Invenio Starter Pack is scalable to meet long-term media management requirements, allowing users to address growth markets such as Video on Demand and media distribution without significant increases in operational overhead .

There is a plug-in available that will pull content in from a newsroom system, and alert the user that the content has arrived, via their dynamic folders .

With Invenio it is possible for the client to customize their metadata fields, it is advised that this is done during deployment . Any asset can be logged into the Invenio database, no matter where it is physically located . A user can segment video by using in and out markers.

They can then attach individual metadata can be attached to each segment, either free text, or thesaurus etc.

2.7.4 Invenio Unique Selling Proposition

Backing of large company, brand awareness.

2.8. Omnibus Now Miranda

Company Facts

Corporate Headquarters: Loughborough, Leicestershire, United Kingdom
U.S. Headquarters: Denver, Colorado, United States Number of Employees: 120

http://www.omnibus.tv

2.8.1. Corporate Information

OmniBus Systems was launched in 1994, with BBC Television Centre studios representing the company's first U.K.-based client. Using OmniBus automation, the studios were the first in the world to acquire totally automated control of their own transmissions. Over the following six years, the OmniBus Systems product portfolio grew to incorporate integrated media management, news automation and archive management, with solutions delivered to MTV Europe, TV4 (Sweden), HTV, BBC News 24 and ITN (U.K.), NRK (Norway) and NOB (Netherlands).

From 2000 onwards, the company's international customer base grew to include customers including Television Suisse Romande (Switzerland), ERTU (Egypt), MTV3 (Finland), TRT (Turkey), Doordarshan TV (India), TVNZ (New Zealand), Starz Encore Group and Time Warner Cable (U.S.). In 2001 the first generation of the Colossus multi-channel automation system was launched, and by 2003 the company had launched its G3 architecture.
With a range of flexible, scalable and robust products based on the G3 architecture, including the third generation of Colossus automation and the launch of the OmniBus OPUS content management and workflow suite, OmniBus grew rapidly. The customer list expanded further during this time with the addition of – amongst others – Arqiva (U.K.), Ascent Media facilities in Europe, Singapore and United States, BBC Broadcast, WDR (Germany), NOS and Chellomedia (Netherlands), Network 10 (Australia), Sahara TV (India) and Astro (Malaysia).

In 2006 OmniBus entered a new chapter in its history with the launch of the groundbreaking iTX technology. This technology helps broadcasters rapidly realize the vision of evolving to a fully IT environment, using standard IT hardware and advanced software throughout the broadcast chain.
In 2009 omnibus was sold to Miranda, omnibus changes a lot the business model of Miranda, from traditional hardware driven to Software only approach. This change move Miranda in a deep crisis, the board of director was forced to resign and at the end Miranda was sold to Belden. Now they are finding a new business model that is able to stop the loss of the group.

2.8.2. Product Sheet Information

Miranda OPUS is a suite of content management and workflow components that link multiple vendor systems with an integrated, efficient workflow. Offering a range of automated and manual task management tools on the desktop, the system brings unprecedented flexibility to the overall operations of today's media organizations.

OPUS:

- Ingests, tracks and manages video content through integrated, multi-system workflows
- Enables the combination of selected modules in a cost-effective, best-fit content management workflow from ingest to transmission
- Manages physical assets, proxy material, content logging and metadata exchange across broadcast processes
- Defines and automates content processing workflows with rules-based task flow and job tracking

OPUS Intake –Ad Hoc Tape Ingest and Clip Preparation

Intake provides an optimized G3 Desktop layout for the ad-hoc dubbing of new content from video tape and the preparation of content ingested or delivered by any method. This preparation can include simple marking of tracking start and end points of the recorded clip, segmentation of programs, or the creation of virtual “daughter” clips within larger parent clips

OPUS Feed Manager –Scheduled On-demand Feed Recording

Originally designed to support the demanding acquisition requirements of news and sports, OPUS Feed Manager combines the management of scheduled and recurring satellite or live feeds with on demand “crash” recording of feeds through the dynamic allocation of resources for all record events. The unique dual-timeline display shows the status and time allocation of both routing and iTX Ingest.

OPUS.PinPoint – Video Content Searching
OPUS.PinPoint provides powerful metadata search and content selection with basic and advanced search functions that include both core metadata elements like titles and durations, and user-defined elements such as those captured by OPUS.Logging.

OPUS.View – Desktop Content Viewing
OPUS.View enables Desktop viewing of live feeds or low-resolution content proxies, provides creation and preview of shot lists, and the export of selected shots and associated metadata to production editors like Avid and Apple Final Cut Pro.

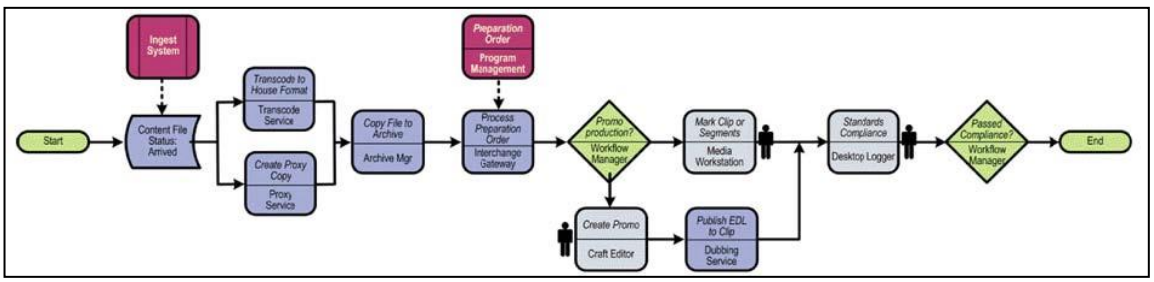
OPUS.Logging – Video Logging and Annotation
OPUS.Logging provides marking of "events" within video clips, annotation of clips and events with userdefined metadata, and categorization of logged events for multiple content management requirements such as news indexing, sports highlights or program compliance.

OPUS.Index – Enhanced Content Indexing
OPUS.Index enhances the video Logging and PinPoint search functions of OPUS Content Management with full-text indexing of metadata and automatic generation of key frames by time interval or scene change. OPUS.Index expands the capabilities of PinPoint to include advance search features such as proximity, phonetic, Thesaurus, and stem searching, as well as term indexing of XML-encoded metadata.

Tasks and Job Tracking
OPUS Workflow includes tools to design and track multi-task workflows and to perform automated tasks without operator intervention.

Automated and Manual Tasks
OPUS Workflows can include automated tasks, such as transferring and ranscoding content files. Workflows can also include automation-assisted manual tasks such as delivering a program compliance logging job to an operator with required metadata and instructions attached.

Multiple-System Workflows
OPUS Workflows can extend beyond the functions of OPUS and other OmniBus solution components by sending tasks to adjacent systems and triggering subsequent workflow steps based on the outcome of those tasks.



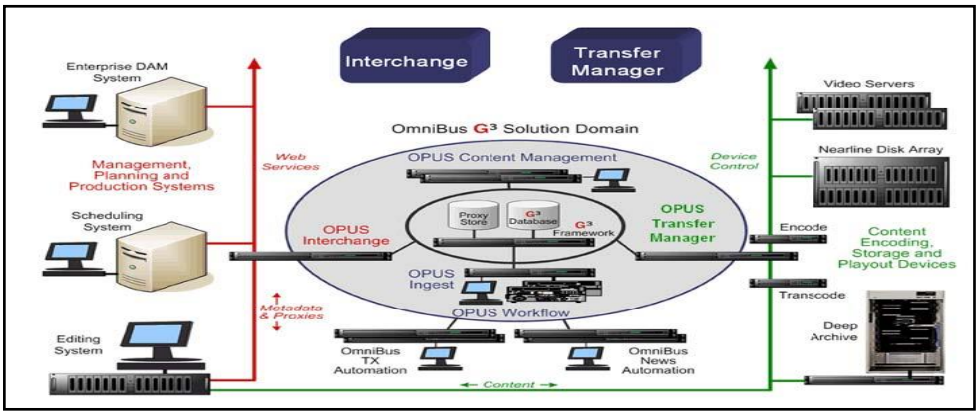
Systems Integration

OPUS.Interchange –Metadata Exchange and Task Flow

OPUS.Interchange is the gateway for the exchange of content metadata and workflow tasks. Using the platform-independent standard of XML Web Services, Interchange provides the bi-directional exchange of metadata and workflow tasks with adjacent systems in the end-to-end content process.

OPUS.Transfer Manager – Physical Content Management

OPUS.Transfer Manager provides the management and processing of physical content files within a broadcast operation. By controlling IT storage, video storage, HSM archive, and ranscoding devices, OPUS.Transfer Manager can move content around the facility – or around the world – as required by the content processing workflow.



2.8.3. OPUS Feature Comparison Chart

Top Ten Factors	0/5	Details
1. Integral Ingest Component	**5**	OPUS Intake and OPUS Feed Manager
2. Integral Playout Component	**5**	OPUS. Transfer Manager provides the management and processing of physical content files within a broadcast operation. By controlling IT storage, video storage, HSM archive, and ranscoding devices, OPUS. Transfer Manager can move content around the facility – or around the world – as required by the content processing workflow.
3. Hardware Platform	**0**	Hardware Agnostic
4. Search beyond Boolean (Or, And, Not)	**3**	OPUS.Index enhances the video Logging and PinPoint search functions of OPUS Content Management with full-text indexing of metadata and automatic generation of key frames by time interval or scene change. OPUS.Index expands the capabilities of PinPoint to include advance search features such as proximity, phonetic, Thesaurus, and stem searching, as well as term indexing of XML-encoded metadata.
5. Metadata	**0**	Using the cataloguing tool's metadata elements associated with portions of the media object along the timeline can be viewed and edited. If the user has appropriate rights, he/she may also add metadata
6. Rights Management	**3**	If using OPUS playout – rights management can be used to stop file going to air.
7. Workflow	**0**	No workflow
8. Editing Integration	**3**	
9. SNMP enable	**0**	No snmp
10 HSM	**0**	No integrated HSM
11. Pricing		
12. Data Moving	**0**	Very primitive data moving with only policy, that do not allows clustering of resources and load balancing

2.8.4. OPUS Unique Selling Proposition

This system seemed to have a number of pleasant GUI features – such as the ability to pre-assign logging buttons – for logging on the fly. For example in a sports environment, buttons could be created, that once pressed would give a number of options –for example if logging a live F1 race – the operator could have the option of

2.9. Open Text

http://digitalmedia.opentext.com/

2.9.1. Corporate Information

The Artesia Digital Media Group is Open Text's digital asset management software division with operations centred on the Washington, D.C. area and offices throughout North America and Europe. Throughout Artesia's history, the company and its Digital Asset Management solutions have consistently remained at the forefront of rich media content management technology.

Artesia Technologies

The company was originally a division of Thomson until a management buyout in 1999 created Artesia Technologies, Inc. The next year, Artesia was named one of Computerworld's 100 Emerging Companies to Watch in 2000, and spent the next several years as an innovator and thought leader driving the creation of the newly formed Digital Asset Management software category, an important competency area for firms dealing with intellectual property assets and digital media.

Open Text's Artesia Digital Media Group

As the company grew, Artesia secured additional capital from a group of investors that included Warburg Pincus, EMC, BEA Systems, Vignette and Razorfish. In August 2004, Artesia and its industry leading DAM solution was acquired by Open Text Corporation, a pioneering innovator in the field of Internet search and global leader in the Enterprise Content Management category. Shortly thereafter, the company became a line of business within Open Text and was re-branded as the Artesia Digital Media Group, forming the foundation of Open Text's digital media strategy and a key component in its plan to provide solutions to the emerging Enterprise 2.0 marketplace.

Artesia DAM

The company's software, Artesia DAM (formerly Artesia TEAMS), is a scalable, JEE enterprise-class digital asset management solution for ingesting rich media content and managing the creative workflows around editing, collaborating, and distributing digital media files. Artesia DAM is currently used by companies in a variety of industries and sectors to manage advertising and marketing activities, and also within production environments in broadcast, entertainment media, publishing, and the federal government.

2.9.2. Product Sheet Information

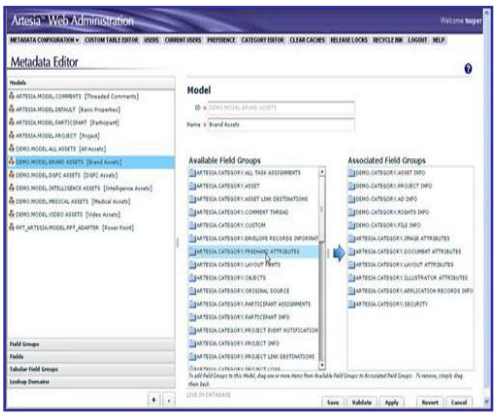
As digitalization of broadcast media continues to progress, proprietary solutions are giving way to standard solutions that optimize

- Integration and interfaces within larger digital media ecosystems
- Flexibility and speed of deployment to support rapidly evolving business needs
- Maintainability over successive generations of technology and business models
- Breadth of format support, and
- Overall system cost

Whether looking to preserve digital content within an archive and footage library, enhance postproduction workflows, or streamline review, approval, and distribution processes, Artesia DAM is a proven market leader. Influential broadcast and entertainment media companies like Discovery Networks, BBC, and Paramount depend on Artesia's Digital Asset Management solution to produce and distribute their digital content.

Metadata Editor

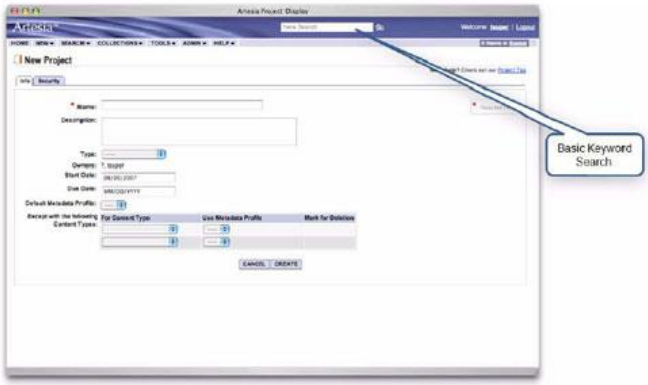
For all users of a Digital Asset Management solution, the true value of the system is proportional to the richness of the metadata and its underlying structure. Without the proper metadata, a media asset is merely a file. So it is critical that a Digital Asset Management system enable the modeling of metadata to fit business processes and content workflows. Further, to properly define, manage and evolve your metadata, the Digital Asset Management system should provide tools that maximize flexibility and control of metadata configurations.



With the latest release of Artesia DAM 6.8 in December of 2007, metadata configuration has become much simpler with the introduction of an industry unique Flex-based Metadata Configuration Tool. This drag-and-drop tool allows business analysts, rather than database administrators or IT personnel, to model and configure asset metadata. With a graphical interface that allows metadata configuration to be accomplished in minutes not hours, the effort of deploying and maintaining the Digital Asset Management system is greatly reduced. When metadata models have been defined and developed, it is only takes a few simple steps to move that configuration from a staging system to the production Digital Asset Management system.

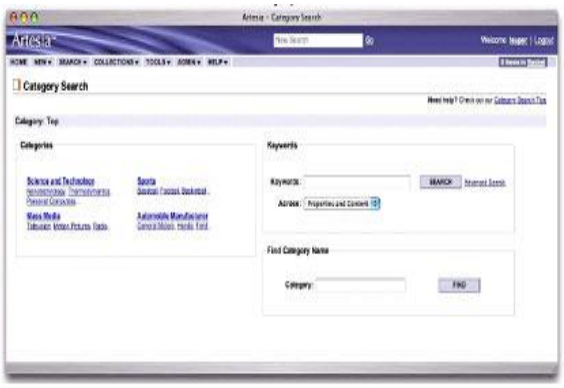
Search Functionality

One of the key strengths of Artesia DAM is its capability for finding and displaying assets. Artesia offers a range of search options including keyword, favorite, category, project and participant, federated, advanced and expert search. Two of the most common methods of searching for assets are keyword and category searches.



Keyword Search

Keyword searching is the process of looking for assets whose metadata or asset content contains a particular word or phrase. Artesia Search automatically indexes asset metadata upon import of assets. Subsequent keyword uses this index to return appropriate assets but also can be set to search for synonyms and plural forms of the keyword. The search results can be sorted by any associated metadata field and quickly refined with the ability to search within the search results.



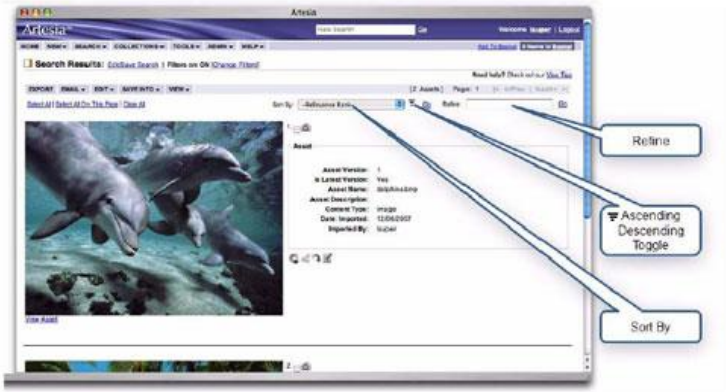
Category Search

can select a displayed category to continue to Category Search allows the user to navigate through and view assets by category. The Categories Search page represents a hierarchy of categories. The user browse the category hierarchy, or the user can search for a specific category by typing a word into the Find Category Name field and clicking the Find button.

Saving Searches, Sorting, and Refining

Users also have a wide range of capabilities available to them once a search is performed and they have a set of search results. Searches can be saved and search results can be filtered, sorted or exported with a wide range of options available for each.

For example, after performing a search, from the Search Results page the user can sort the results by using the Sort By prompt or the user can further refine the user search by using the Refine prompt.



API and Web Services

Accurate and relevant search capability is one of Artesia DAM ‘s greatest strengths, providing users with a range of search options including keyword, favorite, category, project and participant, federated, advanced and expert searches. Extending Digital Asset Management across the Enterprise First generation Digital Asset Management products provided distinct applications to store, index and manage rich media assets. Many organizations now recognize that Digital Asset Management is part of the growing array of Enterprise Content Management services that are no longer restricted to a single application and need to be available across their entire information infrastructure.

With the latest Artesia DAM 6.8 release, Artesia now provides a Web Services programmatic interface for accessing functionality within Artesia using SOAP style web services via HTTP.

Simple, Interoperable Web Services

- Search for assets: Retrieves assets that match the given criteria.
- Retrieve asset metadata: Retrieves all metadata fields defined in the system.
- Save asset metadata:
  Saves the given values in the metadata fields into all of the assets with the given ids.
- Import assets: Submits and processes an import job.
- Monitor Import job: Returns status information on a running or complete import job.
- Export assets: Performs the export of the contents of the export list according to the attributes of the export request object.
- Monitor Export job: Returns status information on a running or complete export job
- Retrieve Transformer information: Returns information on the requested asset transformer.

These services are built on top of a long tradition of providing programmable interfaces to customize and extend the Artesia DAM. These underlying Artesia APIs provide an interface to the Service-Oriented Architecture (SOA) upon which Artesia is built. Typically, the Artesia Java SDK has been used to build new client applications or new interfaces from scratch and to integrate Artesia DAM services into other applications. Such integrations include third party content related applications such as Web Content Management, Rights Management, Storage Management and Content Transformation applications but increasingly integrations into business systems such as ERP systems, product databases are becoming the norm.

Enabling Microsoft Windows applications

Because Artesia DAM is a JEE based application, a common use of these web services is for cross platform DAM application development using .NET. This enables surfacing DAM assets within Windows based applications, such as Microsoft SharePoint.

Building .Net clients for the Artesia Web Services

The Artesia WSDL can be utilized by code generators such as the svcUtil.exe program provided in the Windows SDK to build client-side proxy code. This proxy code can then be used to make the web service calls.

More About the Artesia Web Services

The Artesia Web Services are not standard, i.e. there is no concept of a ‘login’ session that remains active between web service method calls. Each web service method takes the Artesia user id as a parameter and generates a security session via login. This security session is valid only for the duration of the web service method and it will be logged out upon method completion.
The Artesia Web Services are built on a style of WSDL known as Document/literal wrapped and conform to the WS-I Basic Profile 1.1.
Artesia’s Web Services provide a programmatic interface for accessing functionality within Artesia using

SOAP style web services via HTTP. Each web service method is built on the existing Artesia API which provides distinct advantages to developers. These include:

- Efficiency – Artesia business objects are typically identified by an ID. This is a very efficient method of integration and the data to transfer is minimized and it avoids the need for a heavyweight business object to be retrieved. For example, it is possible to set metadata values without first retrieving the current metadata values.
- Bulk processing – The majority of the Artesia methods support processing of more than one object at a time. For example, it is now possible to save metadata for multiple assets in a single call.
- Transparent Business Objects – In general, business objects used and returned by the Services API are simple transfer objects. These objects are simple data objects with supporting methods and no or little business logic. This enables business objects to be more easily interrogated and constructed.
- Asynchronous methods – The Import and Export based web services methods are asynchronous. They are designed to return immediately when called, and monitoring support is provided so that the status of the operation can be monitored real time.
- Security – The Artesia web services can utilize WS-Security as the standard for securing the SOAP message between applications. By default WS-Security is disabled for the Artesia Web Services as one single security configuration would not suit all deployments.

In addition to above, the Artesia web services utilize JAXB for Java to XML binding from within Xfire. Since this is the case, the Artesia SDK classes can be used directly to build client programs that are intended to call Artesia web services. All of the mappings between Java and XML (and back) are known and automatically handled within the web services layer.

Fully Documented Examples

Along with the extensive Java doc documentation for the JAVA API, Artesia provides extensive method documentation for the Artesia Web Services. Artesia also provide working examples of all the API and Web Services call together with the build and deployment configurations necessary.

Federated Query Server

Artesia enables a user to search across multiple asset sources and locations with a single query. For example, from a single pre-configured Artesia DAM interface, users can search within Artesia DAM, other company repositories, legacy applications, and external sources including such familiar resources as search portals like Google and Yahoo, as well as media licensing portals such as Getty and Corbis. Artesia DAM Federated Query Server features include:

- Keyword and Boolean queries, including wildcards
- ‘Clustered’ results according to common phrases, sites, or both
- Assistance in differentiating similar terms
- Configurable result comparisons and duplicate results filter

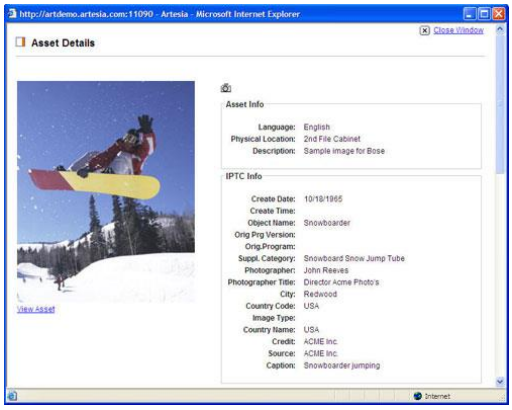
IPTC/XMP Import Transformer

Artesia DAM can automatically extract and store file data embedded in the popular image metadata standard from the International Press Telecommunications Council (IPTC) and Adobe (XMP). These data are emerging as important components to processing image content within Digital Asset Management workflows.

Artesia will detect and extract the IPTC or XMP information automatically from the digital image files upon ingestion and store it as metadata in the Artesia system, which significantly minimizes the effort required to ingest and catalogue digital images. Since XMP is extensible, Artesia can easily be configured to extract custom metadata fields that have been populated by other applications like Adobe Photoshop or Illustrator.

PowerPoint Adapter

Microsoft PowerPoint files are among the most commonly used digital media in business today. With the Artesia DAM Microsoft PowerPoint Adapter, importing, storing, and managing PowerPoint assets is a simple process. The adaptor automatically:

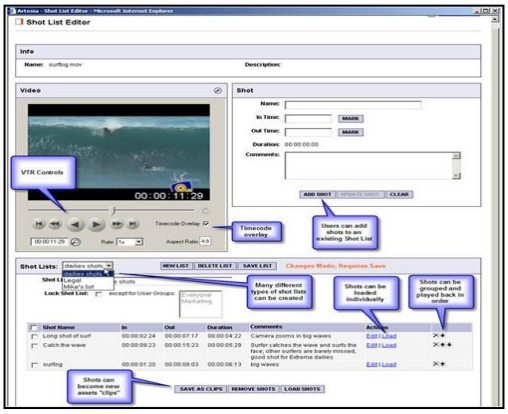


- Extracts the PowerPoint properties as metadata from the presentation
- Extracts each slide and stores it as a separate asset
- Extracts the slide text and indexes it for full text searching
- Links the individual slides to the entire original presentation

Generates a thumbnail of each presentation and each slide PowerPoint is another one of the many asset types Artesia DAM can intelligently ingest and break down, extracting and separately managing the presentation slides and templates while automatically maintaining relationships within the overall presentation for easy navigation. In addition, Artesia indexes each slide's full text to allow users to perform powerful searches on their presentations. In this fashion, the system enables a user to search for specific PowerPoint slides across different presentations, and to then easily select and re-assemble multiple slides into a new presentation governed by a user-specified master template.

Video Shot List Editor

The Artesia Video Shot List Editor is a video browse and annotation tool integrated with the standard Artesia DAM solution. The Video Shot List Editor provides geographically dispersed producers and users the ability to view and playback a low-resolution, web-friendly video. With the Video Shot List Editor, users can create annotations, referred to as "Shots", which represents a specific sub-section of video consisting of: name, in time-code, out time-code, duration time-code and comments related to time-code ranges.



Collections of Shots, called "Shot Lists", are related to a given video asset. Other Video Shot List Editor features to manage your video assets within Artesia:

- Frame accurate video playback including play forward, play backward, pause, advance forward one frame, advance backward one frame, jump to end of video, and jump to the beginning of video.
- Forward and backward playback enabled at a rate of 1x, 2x and 4x.
- Seek the video to a specific SMPTE time code.
- Overlay of the SMPTE time code within the video viewer.

- Video playback at standard definition (4:3), and high definition (16:9) aspect ratios.
- Create, edit and delete of Shot Lists stored as video asset metadata.
- Load and playback of a single Shot.
- Generate an Artesia video clip from a Shot.

Tele stream Flip Factory Adapter

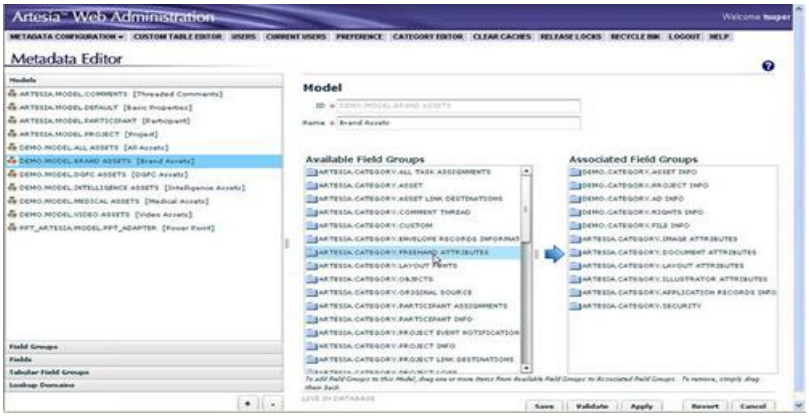
The Artesia Flip Factory Adapter ingests video while automatically creating low-resolution proxies, metadata, and thumbnail representations of the full-resolution master asset.

Web Toolkit

The Artesia DAM Web Toolkit is a web application package that allows developers to overlay the default Artesia DAM web client with a fully customizable portal interface.

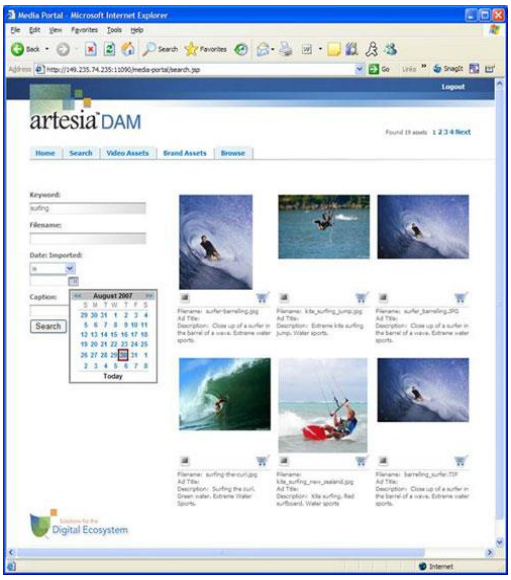
Media Portal

The Medial Portal enables organizations to quickly configure and deploy a highly customized portal interface to an Artesia DAM application server with minimal effort. External users are presented with a very simple interface to search for, browse, and retrieve assets from an Artesia DAM instance that has the look and feel of a corporate portal web site. Corporations that wish to have a number of independently customized portals for various corporate customers can deploy separate, customized instances of the Media Portal onto a single Artesia application server. With the rich features and functionality of the standard Artesia web client, administrators and power users can easily define the subset of assets available for search and download. Customers may deploy multiple, but distinctly branded, instances of the Media Portal to create separate web interfaces for specific vendors. All aspects of Artesia Asset Level security are adhered to within the Media Portal, thus ensuring users have access only to those assets to which they have been



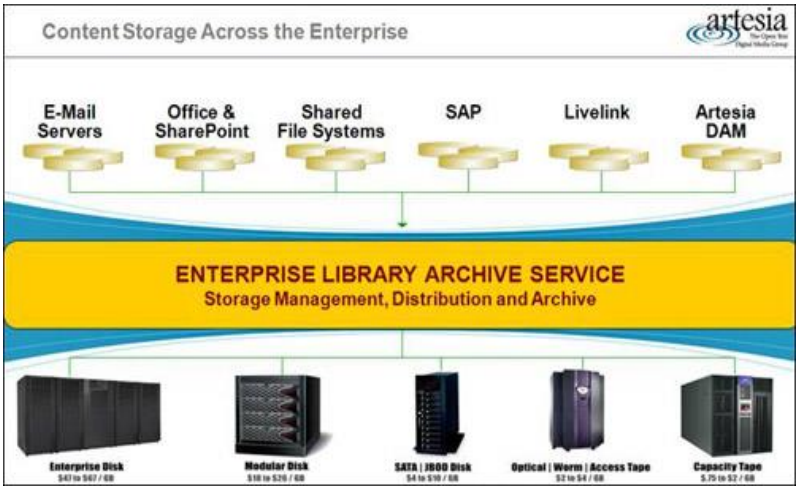
Front Porch Digital DIVArchive Adapter

With the advent of digital video (particularly HD video), Digital Asset Management systems must elegantly handle very large data files. Artesia DAM provides the flexibility of managing these large digital assets such as HD and SD video while taking advantage of optimized external storage via the Artesia Front Porch DIVA Adapter. The Artesia DAM application uses low-resolution content known as proxies for ease of function and speed while underlying inputs and outputs are still rich media of high quality and resolution. The Artesia DIVA Adapter allows all of the Digital Asset Management functions (Ingest, Search, Restore, and Delivery) to be performed within the application without the need for managing storage. These functions are passed via the DIVA Adapter for further processing and editing of the high-end assets. This includes sending content to editing systems, video servers, and digital media workflow applications. Manage your digital assets not your large storage integration.



Enterprise Library Archive Service

Existing users of Open Text Archive Server can achieve significant organizational efficiencies deploying Artesia DAM using their existing storage infrastructure.



2.9.3. Artesia Features Comparison Chart

Top Ten Factors	0/5	Details
1. Integral Ingest Component	**0**	Have to use a 3rd Party Ingest Tool
2. Integral Playout Component	**0**	No playout components
3. Hardware Platform	**0**	Hardware Agnostic
4. Search beyond Boolean (Or, And, Not)	**5**	One of the key strengths of Artesia DAM is its capability for finding and displaying assets. Artesia offers a range of search options including keyword, favorite, category, project and participant, federated, advanced and expert search. Two of the most common methods of searching for assets are keyword and category searches. Keyword searching is the process of looking for assets whose metadata or asset content contains a particular word or phrase. Artesia Search automatically indexes asset metadata upon import of assets. Subsequent keyword uses this index to return appropriate assets but also can be set to search for synonyms and plural forms of the keyword. The search results can be sorted by any associated metadata field and quickly refined with the ability to search within the search results. Category Search allows the user to navigate through and view assets by category. Users also have a wide range of capabilities available to them once a search is performed and they have a set of search results. Searches can be saved and search results can be filtered, sorted or exported with a wide range of options available for each. Different metadata schemas can be configured per department, per customer. Thesaurus Search Taxonomy as well as Metadata
5. Metadata	**5**	Good metadata management
6. Rights Management	**1**	They have a 'traffic light' system to show users whether a file is useable – but a facility would have to use an additional product – BPM- to stop this file going to air.
7. Workflow	**0**	Not mentioned
8. Editing Integration	**3**	
9. SNMP enable	**0**	Not mentioned
10. HSM	**0**	No HSM solution inside
11. Pricing	**0**	Pricing starts at around 50,000 Euros (software only/ approx 60 users) 20% Maintenance Fee Pricing is either based on processors or users
12.Data Moving	**0**	Very primitive data moving with only policy, that do not allows clustering of resources and load balancing.
Other Information □ Works well with SharePoint □ All web based . Based on Sun Technologies . Acquired by Open Text 3 years ago . Full Text index for any document – .pdf etc . Support approx 250 different digital file formats including AutoCAD , SAP data etc . They partner with Quantum, Front Porch, Signiant, Bee Hive and Mass Transit . New interface being launched in 6-7 months, this will include links to Adobe Bridge. They are not solely broadcast based and have a wide range of clients outside the broadcasting realm. They also offer some interesting file format handling – such as MS PowerPoint etc.		

2.10. Reply

http://www.discoveryreply.eu

2.10.1. Corporate Information

Reply describes itself as being a leading Consultancy, Systems Integration, Application Management and Business Process Outsourcing company, specializing in the creation and implementation of solutions based on new communication networks and digital media. Reply's offer is aimed at fostering the success of its customers through the introduction of innovation along the whole economic digital chain, thanks to its knowledge of specific solutions and a consolidated experience addressing the main core issues of the various industrial sectors. Reply's model is based on a network structure composed of subsidiary companies, each focusing on specific lines of offer. Reply [Rey.MI] is listed in the Star segment of the Italian Stock Exchange.

2.10.2. Product Sheet Information

Discovery Reply™ was a product stolen during the bankrupt of another Italia company SHS, after some court trail they loose, Reply decide to close Discovery division.

No more product as now.

2.11. TMD

TransMedia Dynamics

www.tmd.tv

2.11.1. Corporate Information

TMD specialized in the development and delivery of solutions and associated services to the global media, broadcast and archive industries.
In today's media-driven world, the need has never been greater for the effective management of media content throughout every stage of its lifecycle: from conception to creation, delivery and archive, re-purpose and re-use. Designing a business and operational management system to meet the exacting and ever-changing needs of media organizations, broadcasters and archive companies requires an organization with in-depth operational and business knowledge of these industries, extensive technical expertise in both the IT and broadcast environments, commitment to customer service - and clarity of vision. TMD states to be such an organization.

TMD's management team has years of experience in the development of systems for the broadcast industry, TMD was founded in 1998 with the specific goal of providing the global media marketplace with a Media Asset, Workflow and Resource Management System capable of driving businesses forward by effectively managing the existing plethora of linear based media, such as film and tape, as well as the new and evolving digital formats. Equally as important is providing a smooth and manageable transition between them. The result is Mediaflex.

TMD is a privately held company headquartered near London in the UK.
TMD is focused on designing and delivering media management solutions and services to the global media, broadcast and archive sectors. Solutions for the management of both the traditional physical media, such as film and video tape, as well as the evolving digital landscape.
Mediaflex, TMD's modular product suite, provides solutions for:

- Media Asset Management
- Media Library Management
- Broadcast, Archive and Media Workflow Management
- Ingest and Digitization
- Transcode and Re-purpose
- Digital Storage and Delivery
- Media Archives and Content Retrieval

2.11.2. Product Sheet Information

Mediaflex Overview

Mediaflex provides the solution to business requirements throughout the content chain. The Mediaflex architecture is modular to enable organizations to implement the elements they require whilst enabling them to grow the solution in line with business needs without the expensive upgrade or replacement strategies traditionally found in the media world. Mediaflex is a robust, flexible and scalable solution with core functionality for:

- Metadata management for the information associated with media content
- Library management for physical based media content such as film reels and tapes
- Ingest management for the digitization of media content
- Storage management for the holding and movement of file based media content
- Archive management for the long term storage of file based media content
- Workflow management for the business processes associated with media content
- Resource management for planning of resources utilized in the media content chain
- Integration management for the linking of other business and technology solutions associated with media content

In addition to the core functions, Mediaflex provides organizations with a media management solution for:

- Media Rights
- Post Production
- News
- Sports
- Media Access Services (Subtitling, Captioning etc.)
- Graphics
- Facilities
- Transcode and re-purposing
- Enterprise wide access

Mediaflex is a standards based IT solution specifically designed to cater for the complexities of highly time-critical broadcast environment running 24x7. It employs technologies such as:

- Oracle for the database environment
- SOA (Service Orientated Architecture) for integration to other business processes and systems
- XML messaging for exchanging data and information between systems
- IP network infrastructure
- MS Windows clients
- Web browse clients
- WM9 media streaming

Although Mediaflex is a technology based solution it is first and foremost an operational business system to enable users and management within organizations to:

- increase efficiency
- reduce costs
- improve profitability

In short, Mediaflex is the system of choice for many media centric organizations across the world.

2.11.3. Media Flex Feature Comparison Chart

Top Ten Factors	0/5	Details
1. Integral Ingest Component	**3**	Ingest Management Tool -works with 3rd Party – Omneon for example - for transcoding Will manage ingest schedule for multiple channels . No support of cart machine for massive ingest and of all the video servers
2. Integral Playout Component	**3**	Works with 3rd Party scheduling system
3. Hardware Platform	**0**	Not mentioned
4. Search beyond Boolean (Or, And, Not)	**3**	3 levels of metadata –series, version, actual media & location
5. metadata	**3**	
6. Rights Management	**0**	Were unable to answer whether they had anything in their system that would stop a file going to air
7. Workflow	**0**	Not mentioned
8. Editing Integration	**3**	
9. SNMP console	**0**	
10 HSM	**0**	No Hsm
11. Pricing	**0**	Priced on a project basis, by user, by ingest chain For example – a 200 seat Newsroom environment, 7 ingest channels would have a starting price approx $500,000 US Dollars.
12 Data Moving		Very primitive data moving with only policy, that do not allows clustering of resources and load balancing.
Other Information Generates Bar Codes for physical tape storage and will track shelf location . Can create serial codes that will automatically populate metadata fields when scanned. Integrates with other systems to populate system with metadata . Mentioned that they will work with Blue Order/ Front Porch/ Odetics/ FlashNet/ ProBel/ SGL/FlexiCart . Good User Interface to show what media is online, offline etc . Good audit trail for resources – when file accessed, when played, stopped, ingest machine, encoder used etc . From a workflow management perspective, TMD claims that it's product can manage any 3rd party systems that a customer has in place, and that their system fills in the gaps left by the other systems. They specifically mentioned that their customers have been using Blue Order or Front Porch and that those systems didn't cover everything they wanted to accomplish and came to TMD for a product that would manage all their legacy systems They call themselves a Media Supply Chain Management System		

2.11.4. Media Flex Unique Selling Proposition

Very useful workflow system for a customer who is still very physical/ analogue asset based. The Media Flex system includes bar code label generation and a hand held scanner system that allows the facility to check out tapes to individuals etc, and it will continue to track those assets. The barcodes also hold metadata.

2.12. Vizrt (formerly Ardendo)

http://www.vizrt.com/products/article138.ece

2.12.1. Corporate Information

Vizrt creates leading-edge content production tools for the digital media industry - from award-winning 3D graphics & maps to integrated video workflow solutions.

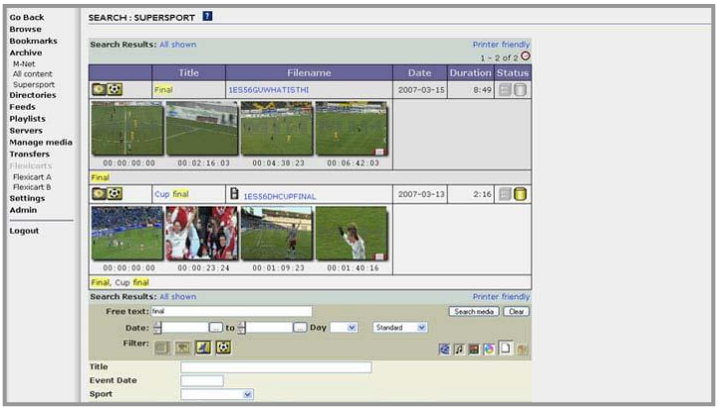
They propose a new vision for content creation and delivery with an end-to-end solution from conception to multi-format distribution. Through constant innovation and a good measure of fun, they create software and services that push creative boundaries and develop new ways of telling stories. Vizrt's product suite is used by the world's leading broadcasters including: CNN, CBS, Fox, BBC, Sky, ITN, ZDF, Star TV, Network 18, TV Today, CCTV and NHK. Also, many world-class production houses and corporate institutions, including both the New York and London Stock Exchanges, utilize Vizrt solutions. Vizrt media asset management suite's customers include CNN, Premier Media Group, Sveriges Television (SVT), Danish Broadcasting Corp., TV2 Norway, Network TEN, BBC Scotland, Australian Broadcasting Commission (ABC), Fox Business News, and the Swedish Parliament.

Vizrt is a public company traded on the Frankfurt Prime Standard and on the Oslo Main List: VIZ, ISIN: IL0010838154.

2.12.2. Product Sheet Information

Media Asset Management

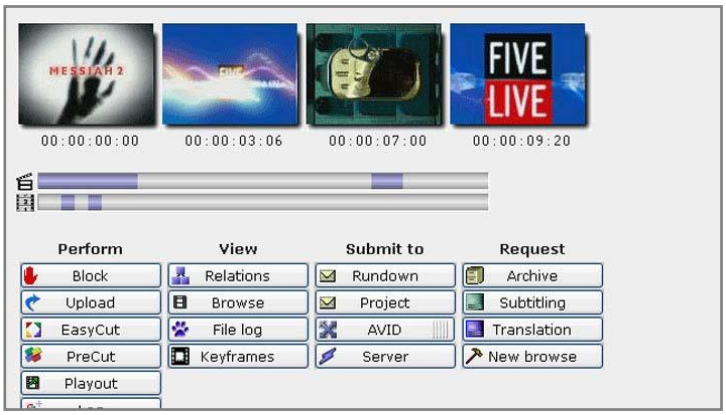
Viz Ardome is the core software module within the industry-leading Vizrt media asset management solution. (Vizrt acquired Ardendo in April of 2006.) Viz Ardome is the module responsible for media management and archiving tasks. The Vizrt media asset management product portfolio also provides capabilities for ingest and playout, transcoding, browsing, craft editing, and more.



The Viz Ardome solution is a highly scalable product that does far more than only providing access to ingested media files. An extensive rights and metadata system enables efficient workflows that, until now, required large amounts of time and manpower. Users can check the availability and status of media files

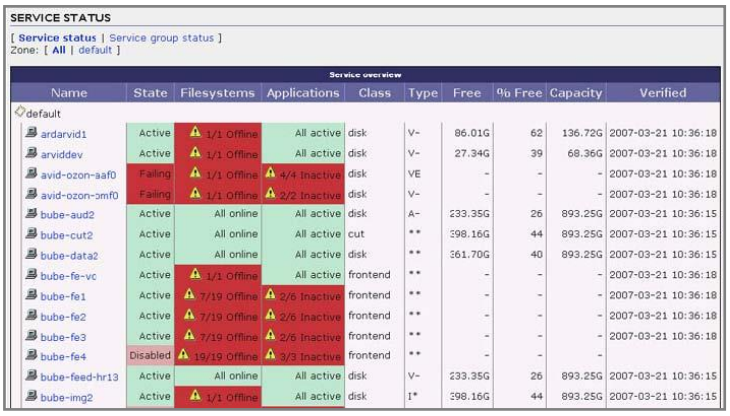
directly from their desktop. They can instantly see if media files are being used in other contexts, when a file was used the last time and even if special restrictions apply. Leading media companies use Viz Ardome to address cross-format storage and management, from small workgroups to enterprise wide systems across multiple sites.
A true multi-purpose MAM system Viz Ardome is designed to meet a variety of requirements, ranging from fast-paced news production to long-term preservation of media assets. Product capabilities and integration points can be added to compose a highly customized system. This way, the system can meet the needs of a news department, handle acquired programming workflows or be the gateway to new media implementations. And of course, Viz Ardome can be scaled to address all of the media asset management needs in an enterprise using one multi-purpose MAM system.

The new version is also fully integrated with all major newsroom computer systems such as Avid's iNEWS, Associated Press' ENPS, Avstar, and QNews. The software enables users to produce an audit trail – a series of records of computer events that monitors system activity.
Viz Ardome represents the top end in terms of system scalability. This can be achieved by growing a single system image, which is common for central archive repositories.



One Viz Ardome system can be configured to handle thousands of simultaneous users and hundreds of concurrent media operations. In addition, the system can also be scaled up by installing multiple Viz Ardome systems that exchange media, metadata and workflow tasks in accordance with configured policies. This method of scaling the system is used to implement work in progress libraries and to cross both geographical boundaries and multiple-site media installations.

The largest installation to date consists of 15 Viz Ardome systems storing over 10 million media files online and controlling 500 Terabytes of online storage plus a Petabyte-sized tape archive.


SERVICE STATUS

[Service status | Service group status]
Zone: [All | default]

Service overview

Name	State	Filesystems	Applications	Class	Type	Free	% Free	Capacity	Verified
default									
ardarvid1	Active	1/1 Offline	All active	disk	V-	86.01G	62	136.72G	2007-03-21 10:36:18
arviddev	Active	1/1 Offline	All active	disk	V-	27.34G	39	68.36G	2007-03-21 10:36:18
avid-ozon-aaf0	Failing	1/1 Offline	4/4 Inactive	disk	VE	-	-	-	2007-03-21 10:36:18
avid-ozon-omf0	Failing	1/1 Offline	2/2 Inactive	disk	V-	-	-	-	2007-03-21 10:36:18
bube-aud2	Active	All online	All active	disk	A-	633.35G	26	893.25G	2007-03-21 10:36:15
bube-cut2	Active	All online	All active	cut	**	598.16G	44	893.25G	2007-03-21 10:36:15
bube-data2	Active	All online	All active	disk	**	661.70G	40	893.25G	2007-03-21 10:36:15
bube-fe-vc	Active	1/1 Offline	All active	frontend	**	-	-	-	2007-03-21 10:36:18
bube-fe1	Active	7/19 Offline	2/6 Inactive	frontend	**	-	-	-	2007-03-21 10:36:18
bube-fe2	Active	7/19 Offline	2/6 Inactive	frontend	**	-	-	-	2007-03-21 10:36:18
bube-fe3	Active	7/19 Offline	2/6 Inactive	frontend	**	-	-	-	2007-03-21 10:36:18
bube-fe4	Disabled	19/19 Offline	3/3 Inactive	frontend	**	-	-	-	
bube-feed-hr13	Active	All online	All active	disk	V-	633.35G	26	893.25G	2007-03-21 10:36:15
bube-img2	Active	1/1 Offline	All active	disk	I*	598.16G	44	893.25G	2007-03-21 10:36:15

As with previous versions of Viz Ardome, version 4.6 demonstrates the integration between digital asset management, Vizrt's Viz Content Pilot graphic solution and control software and Apple's Final Cut Pro non-linear editing workflow. It adds full integration with major servers and libraries, such as Omneon, which are widely installed at broadcast facilities throughout the world.

Viz Ardome 4.6 facilitates such tasks as automatic detection, acquisition, and archiving of essence (the program content of digital media assets) and metadata (which provides production details about an asset's nature and origin). To track media assets, Viz Ardome supports advanced, high-performance free text search with Boolean, fuzzy, thesaurus, filtering, and grouping functions. It also enables faster than

real-time transcoding to enable video to be browsed (viewed) on desktop PCs complete with video and audio key frames when combined with Viz Media Processor software transcoder.

With support for MXF and AAF import/export, among other industry-standard media formats, Viz Ardome 4.6 can support thousands of users and large workgroups that need to manage media across an IT-based server infrastructure. This means automating complex tasks like the distribution of broadcast material to all relevant playout servers based on rundown content; deletion of material from archive and production servers; and the detection and import of all new content entering the pipeline.

Viz Ardome 4.6 features robust ingest, quality control, and scalability including: a technical quality check for audio and video (black, silence, noise detection) and VTRs; channel condition monitoring; automated ingest from Flexicart and Odetics tape robots, enabling automated and balanced ingest of large amounts of archived tape material; the new physical media management (videotape to file relations) enabling video items to be linked to physical videotapes, digital files, or when edited, to both formats.

Vizrt's media asset management software modules include: Viz Ardome for media management and archiving which is typically deployed together with companion products such as the Viz Dart ingest scheduler; Viz Upload and Viz Capture ingest station and play-out control; the Viz Media Processor transcoder;. Viz PreCut and Viz EasyCut – proxy based video cutting and editing; Viz Media Logger – advanced archive logging and Viz Video Engine, two channel HD and SD video server. Designed for ITbased broadcast production and digital media archiving, the modular, scalable Vizrt product suite supports a wide range of tasks from ingest to visualization, including digital archiving, ingest, transcoding, browsing, and system integration media management.

Core and Companion Products

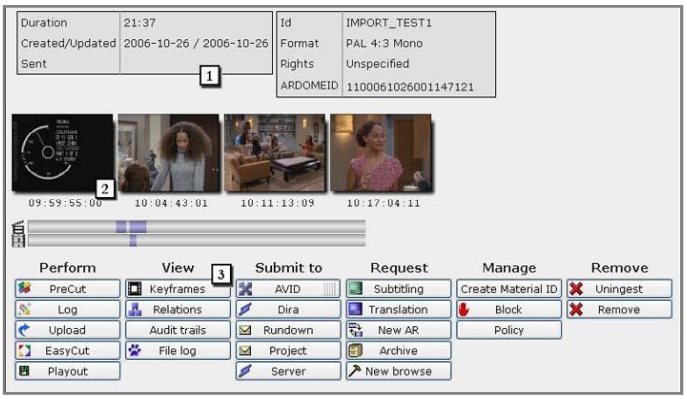
The Viz Ardome core product delivers the media management and archive foundation. Core functions include storage management, metadata handling, search, workflows, user management and security through audit trails and user activity reports. In addition, a number of Companion Products which entail licensed functional and connectivity options can be used to extend the capabilities of the core product. Viz Ardome not only integrates with leading craft editing systems but also supports major newsroom and broadcast management systems. Advanced storage subsystems can easily be integrated with the solution.

In order to build the full solution, Viz Ardome is usually deployed together with a number of companion products:

- *Viz Media Processor for the generation of proxy video, media format conversion and basic fileQC*
- *Viz DART, Viz Capture and Viz Upload for feed, tape and file ingest*
- *Viz Video Engine as a two channel HD and SD video server*
- *Viz PreCut and Viz Easy Cut for proxy based video cutting and editing*
- *Viz Media Logger for advanced archive logging*

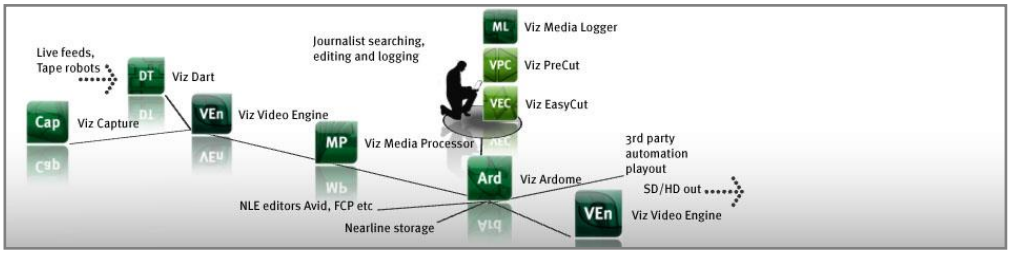
The combination of these products and integrations results in flexible and powerful end-to-end solutions while providing the freedom of infrastructure choice.

Open IT and broadcast product platform
In order to support varying preferences for IT, storage and broadcast products, Vizrt supports a number of hardware and software platforms. This support includes a set of 3rd party video server and router manufacturers and a list of providers of IT and storage infrastructure. In addition, a platform certification process exists to meet requirements to use products for which support does not yet exist.



System implementation expertise
Through many years of implementation experience, Vizrt has a solid, yet flexible approach to system implementation. Our collective expertise is made available for system implementation through a set of established and proven processes, documents, check points and training sessions. Depending on customer needs, Vizrt can contribute to system implementations with services ranging from basic installation support to fully undertaking turnkey projects.

- Large-scale Media Asset Management
- Multi-user interface allowing simultaneous work production
- Wide support for media operations in news, sports and broadcast services
- Leading archive capabilities including configurable metadata, search and policies
- Rich feature set for production of new media – mobile, broadband, etc
- Drives incremental revenue from repurposing of content
- HD support including integration with leading video servers and craft editors
- Large toolset for proxy video browsing, logging and editing
- Flexible configuration and customization options and Open APIs



2.12.3. Ardome Feature Comparison Chart

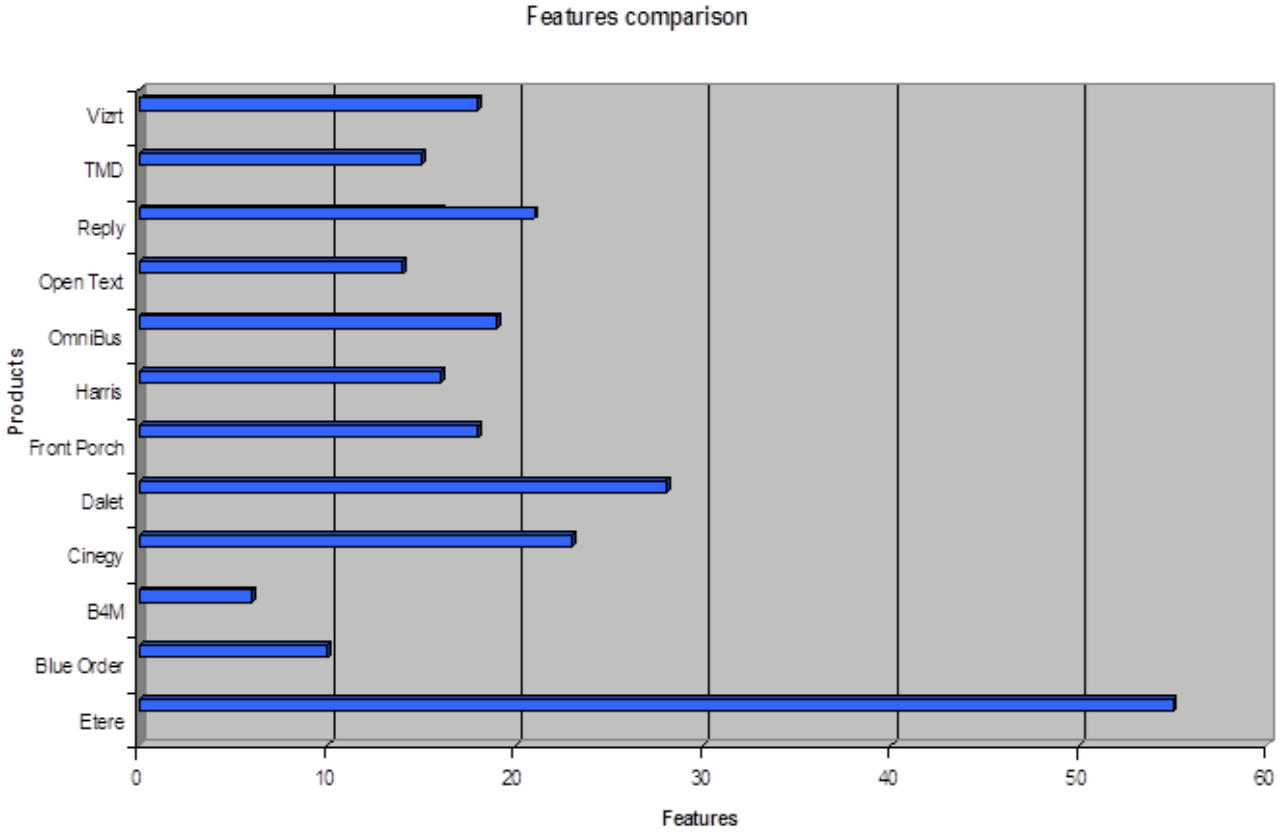
Top Ten Factors	0/5	Details
1. Integral Ingest Component	**3**	Companion Vizrt Products Vizrt Capture = single channel Vizrt Dart = multi channel. No support of legacy video servers or cart machine for massive ingest
2. Integral Playout Component	**0**	No playout tool, works with many 3rd party systems
3. Hardware Platform	**0**	Prefer IBM
4. Search beyond Boolean (Or, And, Not)	**3**	
5. Metadata	**5**	
6. Rights Management	**0**	Does display user indication, but unsure as to full functionality
7. Worflow	**4**	
8. Editing Integration	**3**	
9. SNMP console	**0**	
10 HSM	**0**	No integrated HSM
11. Pricing	**0**	Starting at 20 users approximately 100,000 Euros Largest User – Swedish TV with 300 seats For a full-blown news environment – price around one million Euros.
12. Data Moving	**0**	Very primitive data moving with only policy, that do not allows clustering of resources and load balancing, the data moving of Ardendo is one of the weakest part of the product.
Other Information Customer can easily define their metadata structure for each type of media, and whether the metadata field is mandatory etc . Has a logging tool for adding metadata on the fly during recording . Easy newsroom workflow using a Running Order Module – this will create a running order that can be exported to Newsroom Management System (Can integrate via MOS to newsroom systems such as iNews/ ENPS). Very flexible, adaptable system Voice Over capability at desktop . AVID would be their largest competitor. They are taking advantage of going from being a small company to being under the Vizrt umbrella . No integration with Adobe Premier . Mature product – was created in 1999		

2.12.4. Ardome Unique Selling Proposition

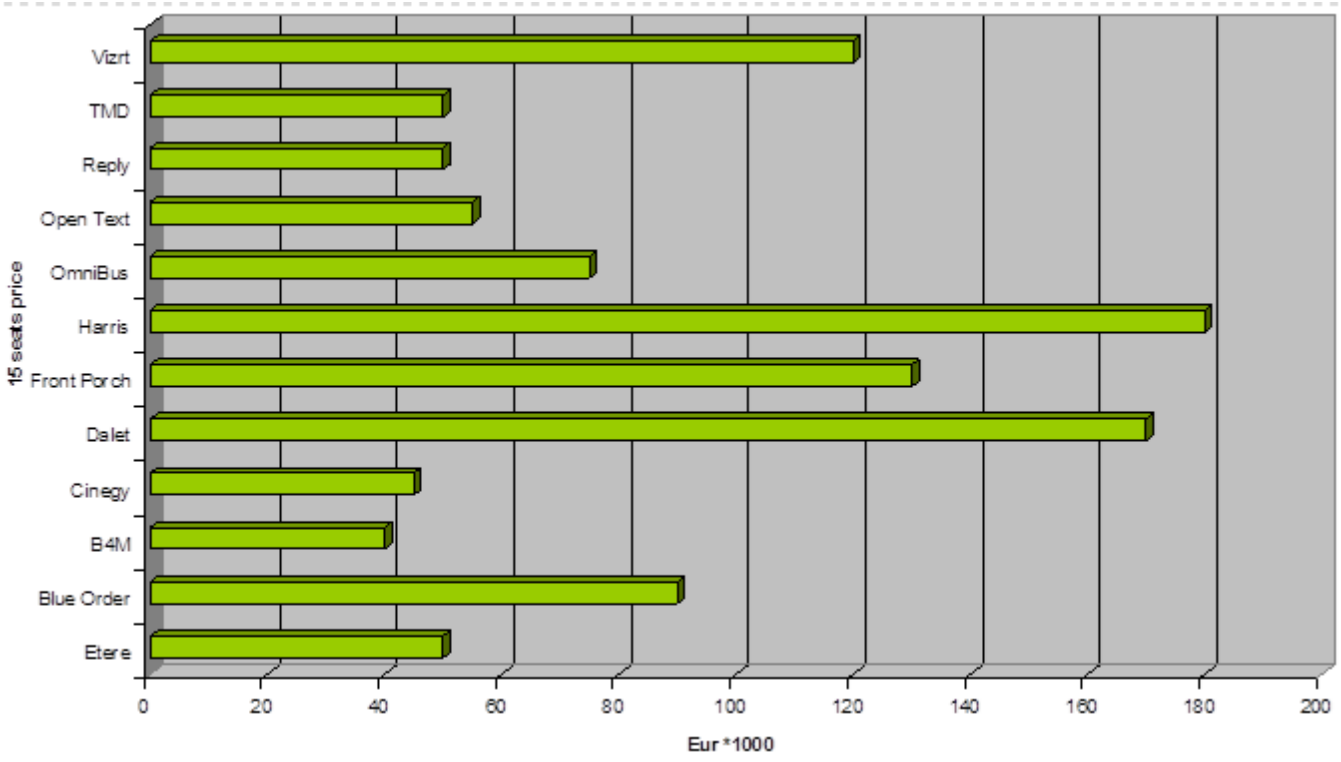
Very flexible in approach, mature product and experience of integrating with complex environments including MAC. User-friendly GUI showing progress of process:
Job Dispatched Basic Conform Source Transfers Conform Operation Result Transfers

3. GLOBAL FEATURE COMPARISON CHART

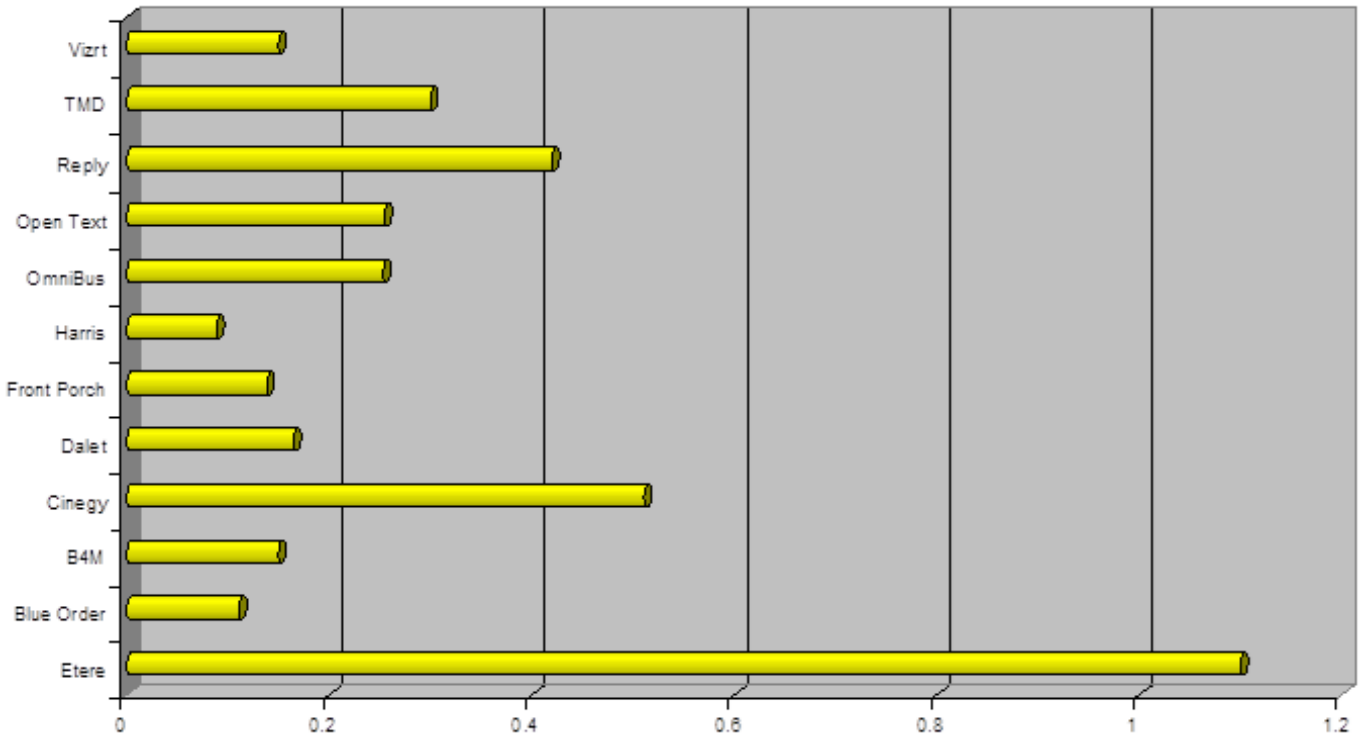
Top Ten Factors 0/5	Etere	Blue Order	B4M	Cinegy	Dalet	Front Porch	Harris	OmniBus	Open Text	Vizrt
Integral Ingest Component	5	2	3	2	5	0	3	5	0	3
Integral Playout Component	5	0	0	3	5	2	0	5	0	0
Hardware Platform	5	0	0	2	0	0	0	0	0	0
Search beyond Boolean (Or,And, Not)	5	3	0	3	3	3	3	3	5	3
Metadata Insert	5	3	0	4	5	5	5	0	5	5
Rights Management	5	0	0	3	3	0	2	3	1	0
Workflow	5	0	0	3	0	0	0	0	0	4
Editing Integration	5	2	3	3	3	3	3	3	3	3
SNMP	5	0	0	0	3	0	0	0	0	0
HSM	5	0	0	0	1	5	0	0	0	0
Pricing	5	0	0	0	0	0	0	0	0	0
Data Moving	5	0	0	0	0	0	2	1	0	0
Totals	**60**	**10**	**6**	**23**	**28**	**18**	**18**	**20**	**14**	**18**


Features comparison
Vizrt
TMD
Reply
Open Text
OmniBus
Harris
Front Porch
Dalet
Cinegy
B4M
Blue Order
Etere
Products
0
10
20
30
40
50
60
Features

4. PRICE COMPARISON CHART



5. VALUE FOR MONEY



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