



Media Backbone™ Enterprise Management System

At too many of today's broadcast networks, content distributors, post houses and movie studios, file-based production is woefully inefficient. Instead of a unified system, you have digital islands—separate workshops pursuing individual digital crafts. Now you can unify those workshops into a single, integrated content “factory.” With the Media Backbone Enterprise Management System you can cut repetitive tasks, boost productivity and automate content transfers. Workflow orchestration can even help you improve monetization of assets, enhance your ability to charge for storage, and upgrade management visibility into the operation.

The Enterprise Management System is based on Sony's Media Backbone Conductor software, and is the pinnacle of the Sony Media Backbone family of solutions.

Building the Future of Media Production

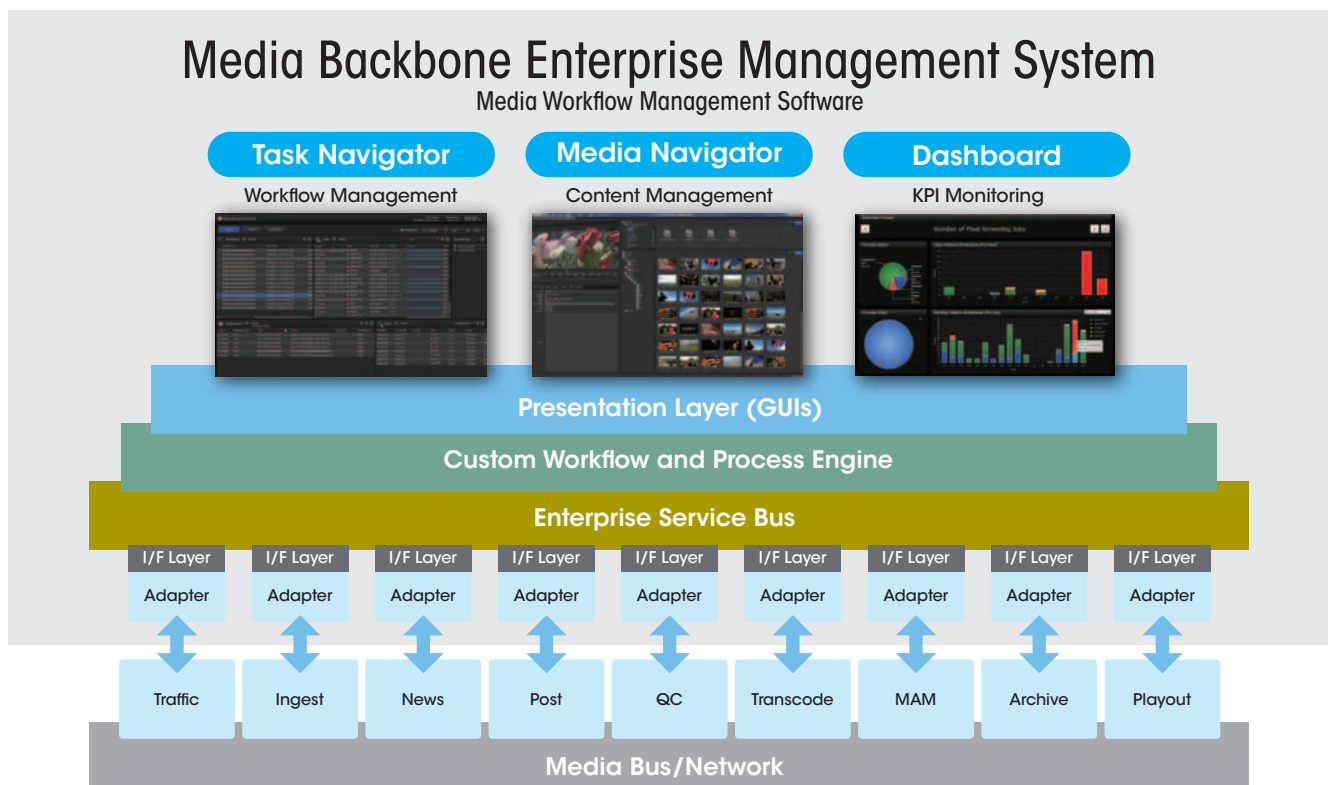
The Enterprise Management System is Service Oriented Architecture (SOA) middleware that orchestrates your workflow across all your operations.

Key Features

- Service Oriented Architecture (SOA)**
 Instead of replacing your current transcoders, color correction and editing systems, Sony orchestrates the systems you already have. Each is organized as a "service" and accessed through a SOA adaptor.
- Workflow and Business Process Management**
 The Enterprise Management System assists you in every phase of the business process cycle: Analyze, Design, Execute, Monitor and Improve.
- Enterprise Wide File Exchange**
 The system integrates not only with your existing media production tools but also with your business systems. You can exchange data, content files and metadata seamlessly among all systems.
- Task/Resource Allocation & Management**
 Upgrade your efficiency. Intelligent dynamic resource allocation algorithms allocate resources by priority or due date. Queue management enables you to reorder priorities on the fly.
- Unified Content Management System (CMS)**
 A powerful CMS with role-based access and audit trails gives the right people fast access to the right assets. The CMS can even serve as the front end portal to multiple MAMs throughout the enterprise.

Business Benefits

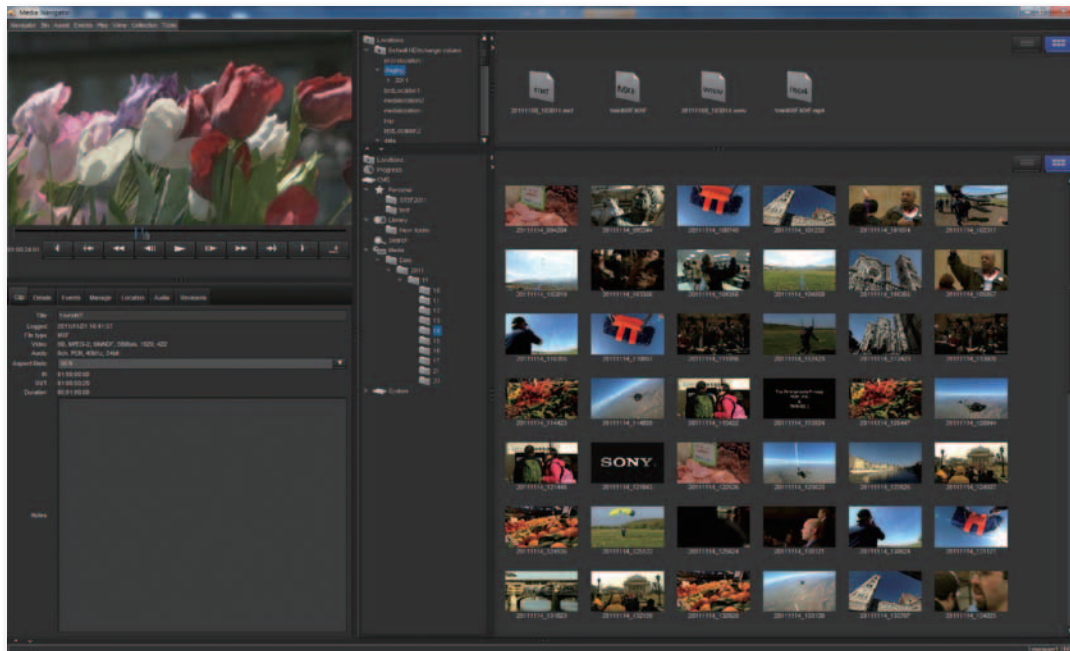
- Greater Operation Efficiency**
 The Media Backbone Enterprise Management System releases the operator from non-creative tasks. It improves workflow by combining automated and manual tasks, and reducing human error. Tasks which can be performed based on pre-defined rules (such as data transfer, transcoding, or quality checks) are automated. Tasks which require user interaction (such as approval, or assigning an operator) are not automated. And this solution eliminates handwritten notes by automating metadata exchange between digital production islands.
- Greater Platform Agility and System Scalability**
 As the system offers excellent platform agility, it's easy to customize workflows, and add or modify workflows. When you want to expand your system from an initial 'On-Air/Playout' workflow, simply add – for example – a new 'Distribution' workflow without having to stop the system. It is so easy to add users, capacities, and devices that you can expand your system step by step. To add or replace devices, you only have to add adaptors for new devices and change the business rules.
- Business Visibility**
 A dashboard provides real-time Key Performance Indicator (KPI) monitoring. You can create a dashboard screen appropriate to each manager, empowering them to monitor operations or trends over days, weeks, or months. This highly visible information helps managers optimize resources, to make effective future investment plans.



The Media Backbone Enterprise Management System has a customizable workflow and process engine which orchestrates the various business processes. Existing digital production islands are connected to an enterprise service bus (ESB) and communicate via service interface adaptors. A dedicated media bus and network are used to ensure content is transferred to the right place, at the right time.

Media Navigator

Media Management and Content Portal



Media Navigator provides a powerful content portal for media management, enabling you to search/browse assets stored in all of the digital media production islands connected to the Media Backbone Enterprise Management System. Since the Media Navigator is a web-based browser application, you can use it from any PC which has HTTP network access.

Format Independence

Various file formats can be managed:

- Video/Audio asset
- Sequence asset (DPX, etc)
- Container asset (group of related assets)
- Storyboard asset
- Composite asset (a set of assets which includes video, audio, and subtitle data)
- Still images/graphics and documents

Quick Search and Advanced Search

A powerful search capability is supported with quick search, advanced search, search-in-search, and more. Federated search performs searches across registered remote asset management systems.

Browsing Proxy or High-resolution Video

Media Viewer lets you view proxy assets or high-resolution assets. When assets contain subtitle tracks, the current subtitle text is displayed in the metadata area, in sync with the player timecode during playback or scrubbing.

Supported audio and video formats:

	Container type	Video Codec	Audio Codec
Proxy	mp4	H264	AAC
High Resolution	mxf	MPEG-2	AAC -LC
	mov	(Sony profile : HDV, XDCAM-HD, IMX)	a-law
	mp4		LPCM
	avi	MPEG-4	(various bit depths)
	m2t	DV	MPEG-2 Layer 1
	mp2	AVC	
	mpg	SSIP	
	wav		
	dv		

Metadata Editing

The Metadata Panel shows asset metadata and allows you to edit the metadata. The metadata scheme supports the Dublin Core scheme, and is configurable to specific user needs.

Version Control and Relation Management

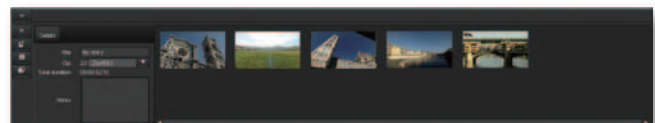
Asset revisions let you track metadata and essence file changes. The list of available revisions for a current asset is displayed, and you can add new revisions or change the active revision. Asset relations let you show a list of assets related to the current asset and its relations (links, copies, collections, parents, and children).

Add/Update/Delete Asset

Another feature of the Media Navigator is it can initiate processes. By drag-and-drop operation, you can import, move, and copy files, and also launch user workflows, such as a transcode or quality check.

Cuts-only Storyboard Editing

Cuts-only Storyboard Editing lets you create a playable sequence of video clips. You can add and remove assets, change the playback order, and mark the IN/Out points of each clip.



Audit Trail

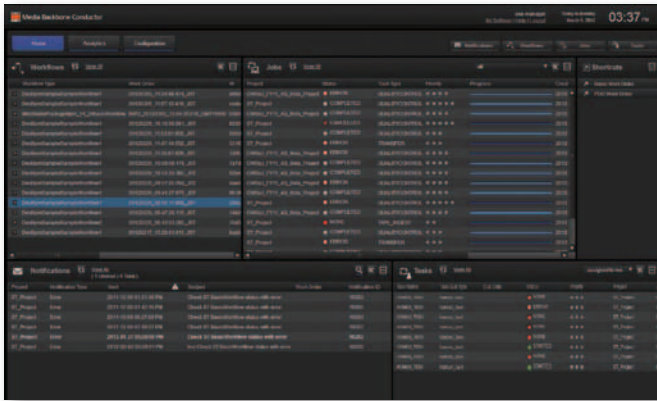
All user operations are logged to a database table for audit purposes. By using standard database tools, the audit table can be queried as an audit trail.

Access Control

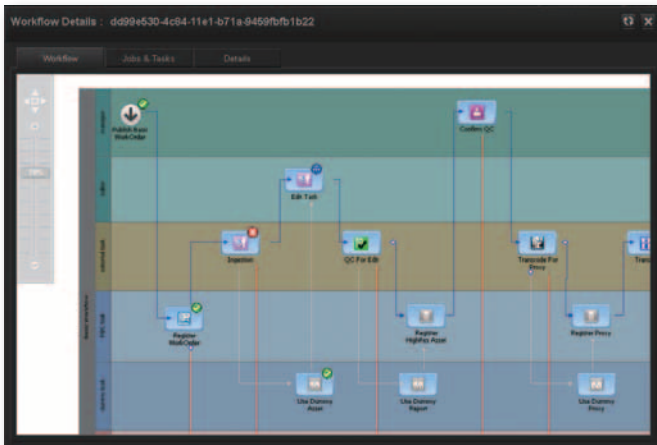
The administrator can assign particular roles either to a user or a group. Roles define sets of access rights. Functional rights control which application features are accessible to a user, while data rights control which assets are visible to or modifiable by a user.

Task Navigator

Workflow Management



- Task Navigator lets you monitor progress and any error information.
- Job List helps you check the status and progress of jobs which have finished, are in progress, or are queued. You can manually assign or change priorities and due dates for each job.
- Task List is a "to do" list showing the tasks which require user interaction steps (for example, accepting a job, assigning an operator, or giving approval).
- Notification List shows errors and warning messages as they occur in the system.
- Workflow List shows workflow progress and details.



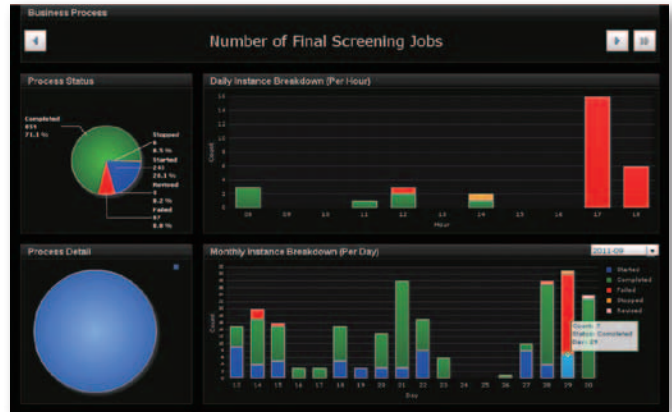
Third-Party Service Interface Adaptors

Thanks to SOA, the system works with third-party tools via interface adaptors.

- Traffic/Scheduling Interface
- Watermarking Interface
- Ingest Interface
- Automation Interface
- Transcoder Interface
- HSM Interface
- External file transfer Interface
- MAM Interface
- Auto QC Interface

Dashboard

Business Intelligence



- The dashboard screen offers a graphical view of KPIs so you can monitor and track process, resource usage, number of jobs, failed jobs, monthly/daily/weekly trends, and so on.
- This monitoring provides a simple and intuitive way to identify problems quickly, and shows system trends to improve performance, eliminate issues, and seize business opportunities.
- The dashboard screen above shows the number of final screening jobs, with operational KPIs especially for job workload. From these graphs, the administrator knows the process failure ratio, and the time/date when the system is busy or idle.



- The dashboard screen above shows the number of transcode jobs by format. It is a technical KPI to tell you what kind of format is used or whether transcoder capability is limiting productivity.