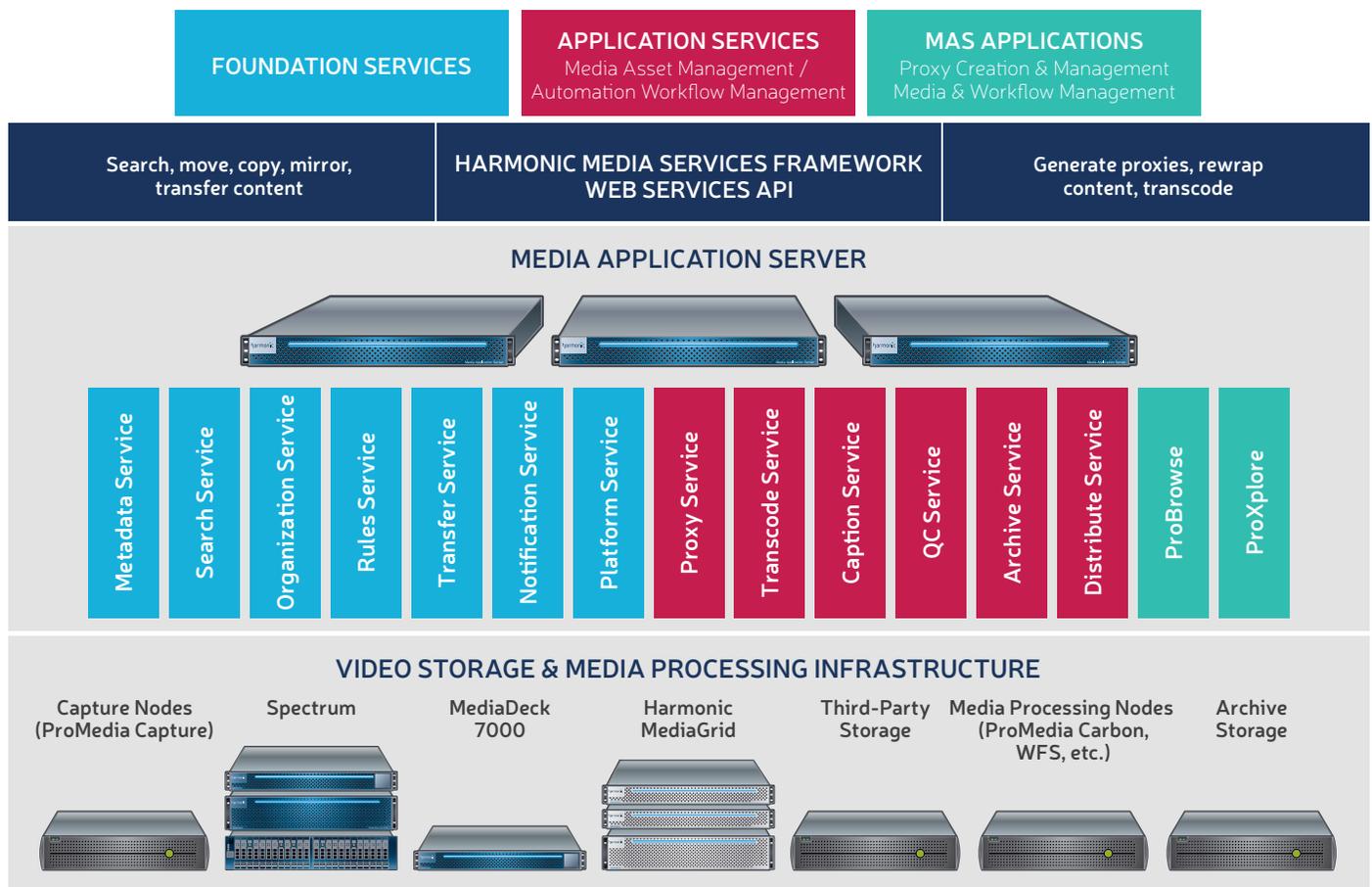# Media Application Server

MEDIA ASSET MANAGEMENT PLATFORM

The Media Application Server (MAS) provides the foundation for the development and deployment of media-centric applications. By combining a single virtualized view of content across managed systems and fundamental media processing services, MAS enables accelerated application development and minimizes the complexity of media management. Centralized media management empowers organizations to more effectively define and enforce workflow steps, adhere to business rules, and achieve strategic objectives.

Much like other industries with huge data sets and high-performance requirements—such as electronic commerce, medical imaging and energy exploration—media workflows also benefit from the coordinated control offered by a centralized application server. By leveraging this capability, the Harmonic MAS platform, running on standard hardware, enables workflow application integration in ways not previously possible.

FOUNDATION SERVICES

APPLICATION SERVICES
Media Asset Management /
Automation Workflow Management

MAS APPLICATIONS
Proxy Creation & Management
Media & Workflow Management

Search, move, copy, mirror, transfer content

HARMONIC MEDIA SERVICES FRAMEWORK WEB SERVICES API

Generate proxies, rewrap content, transcode

MEDIA APPLICATION SERVER

Metadata Service · Search Service · Organization Service · Rules Service · Transfer Service · Notification Service · Platform Service · Proxy Service · Transcode Service · Caption Service · QC Service · Archive Service · Distribute Service · ProBrowse · ProXplore

VIDEO STORAGE & MEDIA PROCESSING INFRASTRUCTURE

Capture Nodes (ProMedia Capture) · Spectrum · MediaDeck 7000 · Harmonic MediaGrid · Third-Party Storage · Media Processing Nodes (ProMedia Carbon, WFS, etc.) · Archive Storage

HIGHLIGHTS

· Built-in media-aware services for metadata, rules, search, transfer and organization

· Coordinates applications to optimize workflows across Harmonic Spectrum servers, MediaGrid shared storage and third-party systems

· Robust development environment to speed deployment of end user and third-party applications

Built-In Media Awareness

MAS understands media, and includes a number of features specifically designed for dealing with media content. Through the Metadata service, the integrated database is pre-populated with properties not found in generic systems, such as bitrate, resolution, wrapper type and video format. Even more importantly, these physical attributes of content are gathered by the system and automatically populate the database.. The Metadata service also supports extensive customization, allowing the server to support the unique data model requirements of each organization, from tracking episodes and seasons to sponsor and distribution agreement information.

Establish the Rules and Know They're Being Followed

MAS's centralized rules and notification engine powers the automated processing and routing of content across Harmonic Spectrum™ media servers, Harmonic MediaGrid shared storage, and third-party systems. Content processing and movement takes place as quickly and reliably as possible, yet still supports workflow steps that require human intervention and approval.

Any Clip—From Any Desktop—At Any Time

Applications powered by MAS are available to the entire enterprise using standard browsers for easy deployment and administration. Even individuals in departments not usually supported by media systems—like legal or marketing—can search, view and mark content for subsequent workflow steps. Every user of MAS is assigned a role which determines the features they are authorized to access and the set of tools available to them.

Scalable and Extensible

MAS is designed to scale to support massive client seat and content requirements. Systems are available pre-configured for redundant or clustered operation, or can be added as requirements evolve. For those facilities and third-party developers that would like to leverage the power of MAS by developing their own services and applications, Harmonic provides a complete software development kit which includes API documentation, sample code, a debug environment and graphical user interface source code.

Foundation Services	
Metadata Service	Captures structural metadata and supports the creation of custom descriptive metadata models. Accepts external data through XML imports and supports standard SQL query commands for advanced functions.
Search Service	Provides consolidated search across multiple file systems based on structural or descriptive metadata. Search settings can be saved and reused, populate dynamic virtual folders, or drive graphic system status.
Organization Service	Creates and maintains collections of content relationships regardless of data type and allows other services to treat those collections as single objects.
Rules Service	Allows the creation of workflow and processing rules based on system state, time, or manual parameters.
Transfer Service	Manages the movement of content as defined by rules or user requests. Automatically senses growing and static files and selects the most appropriate transfer method.
Notification Service	Sends alerts and status notification messages to users and external applications based on workflow events using standard messaging protocols.
Platform Service	Coordinates the activities of all services and applications running on the server. Monitors the progress of workflow steps to keep administrators informed. Allows for the reprioritization of jobs on the fly.

Application Services	
Proxy Service	A powerful automatic proxy generation service. Links H.264 low-res proxies to the corresponding full-res content and maintains metadata integrity. Enables viewing of content over standard corporate networks, VPN or Internet connections.
Transcode Service	Provides industry-leading video transcoding by leveraging Harmonic ProMedia Carbon technology, as well as third-party transcoders.
Caption Service	Enables third parties to extract captioning and subtitles out of video files, enriching the database and making spoken words searchable as metadata. In combination with ProBrowse, will display the captions with the proxy.
QC Service	Using market-leading QC engines from Harmonic and third-party providers, allows the QC status of clips to be a decision-making part of the workflow.
Archive Service	Manages long-term archiving through integration with third-party HSM solutions. Archives, finds and restores clips from tape-based storage in combination with ProBrowse low-res video, creating a powerful archive management solution.
Distribute Service	Enhances the Transfer Service in integrating with various file-acceleration services to send and manage clips over wide area networks, expanding to a distributed virtual file system.

MAS Applications	
ProBrowse	Efficiently creates, organizes and serves low-resolution "browse" copies of high-resolution media, simplifying access to high-resolution media right from the desktop.
ProXplore	Enables management of digital media workflows, enforcement of business rules and streamlining of content flow throughout a facility.