

Irdeto Media Manager

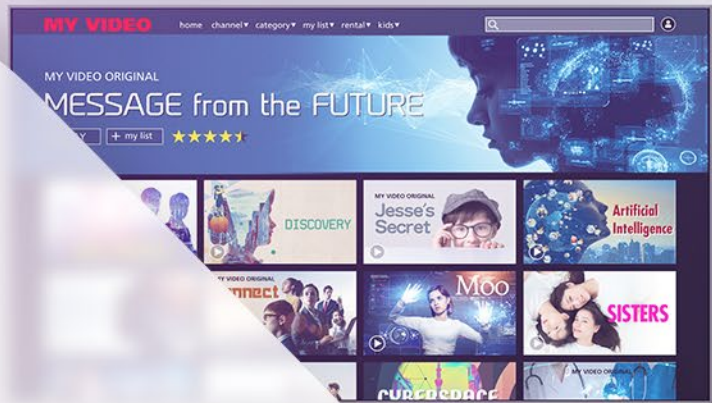
A scalable and extensible orchestration platform that enables pay TV operators to rapidly deliver TV everywhere.

Irdeto Media Manager simplifies and automates the process of preparing and managing content for multiscreen services. Media Manager supports multiple video and metadata formats from a variety of input sources. These are transcoded, packaged and protected by means of fully automated workflows, allowing you to rapidly deliver content to your enduser's device of choice, with the content protection that the studios require.

The Media Manager Workflow Engine automates all content workflow tasks. This includes metadata and content ingestion, transcoding, segmentation and stitching of video, packaging, DRM encryption, automated QA and distribution. Automation reduces processing time, staffing

requirements and the scope for human error introduced by manual processes. The Workflow Engine is pre-integrated with a wide variety of broadcast equipment. It is designed to be extensible for integration with different metadata formats, processing systems and publishing endpoints such as recommendation engines, content delivery networks, billing systems and discovery services.

When deploying Media Manager in conjunction with Irdeto Control, pay TV operators can securely protect their content. Media Manager can easily be integrated with third-party billing systems and the metadata can be published to a variety of recommendation engines.





KEY BENEFITS

Cost reduction with automated workflows

Fully automated workflows help reduce operating costs by cutting out manual work. Media Manager workflows deliver content in the format that users want, with the protection that studios require. Flexible workflows are quickly adaptable to support new devices and service demands. Workflows are built up from individual tasks in a graphical drag-and-drop interface.

Ease of adding new services

Media Manager adapts to any business need. Extendible workflows, flexible metadata schemas and a rich plugin model enable Media Manager to support any content preparation use case, allowing operators to easily introduce new services.

Faster and easier integration with other systems

Media Manager can ingest content from a wide variety of sources and publish to a wide variety of different endpoints such as content delivery networks (CDNs) and discovery and recommendation services. This is made possible by a customizable internal metadata schema, which can adapt to changing input and output requirements. Plug-in based ingest and publish mappers simplify integration with upstream and downstream systems.

Ready-to-use reference model

Media Manager comes with a complete, out-of-the-box, VOD orchestration model and set of workflows, which process EPG and VOD content from ingest through to publishing. It enables operators to start using Media Manager immediately for pilot projects.

Simplified management with an intuitive user interface

An easy-to-use interface, with a configurable set of dashboards, enables operators to customize their view of the solution depending on their role within the organization, and what information they need to see.

Support for live and catchup TV

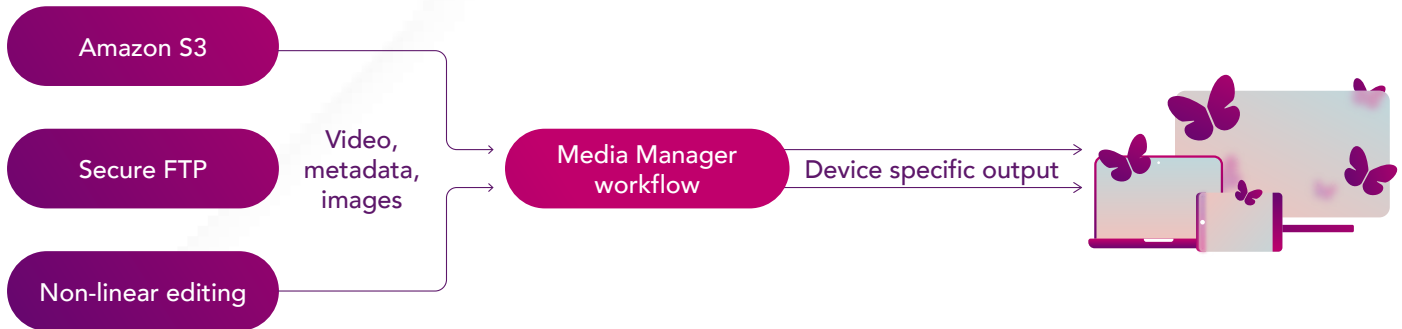
Media Manager supports the ingestion and management of high volumes of EPG data. It can be scaled to manage more than 1000 linear services metadata including live to catch-up orchestration.



HOW IT WORKS

Irdeto Media Manager enables pay TV operators and content providers to ingest, enhance, organize and publish content to a variety of platforms in a highly scalable and automated way.

The content processing and publishing workflows include three main steps:



1. Ingest

Media Manager includes a service which watches any number of hot folders, FTP services or Amazon S3 for new video, images, subtitles and metadata. Alternatively, workflows can poll upstream systems for changes. Video can be ingested from video servers and digital archive systems into Media Manager. When new content is detected, it is brought into Media Manager by means of an ingest workflow. This workflow will move content to a secure location either in the network attached storage (NAS) or on Amazon S3.

Metadata can be ingested in various formats, including CableLabs 3.0, XML-TV, custom XML, JSON formats and even CSV from different systems such as newsroom control systems, EPG feeds and scheduling and traffic systems. Pluggable data mappers allow the inclusion of different metadata formats. Media Manager has been optimized to support high volumes of EPG content.

2. Manage

Media Manager has a flexible and declarative metadata model, allowing entities and attributes to be freely modeled to support any business case. Relationships between entities can be set up as well as filters and constraints. The model automatically defines the forms used to interact with metadata, including multi-language support and validation rules.

Once video clips and metadata have been ingested, operators can use the Media Manager UI to enhance metadata and image assets.

Though content creation is normally fully automated, it can also be done manually in the UI. The Box Art Creation Tool allows missing image collateral to be produced from the source video. Operators can manually link an ingested video clip with metadata and images to create a new content item, and then trigger workflows to further manipulate the content, including stitching, transcoding and encryption of the video clip.

3. Distribute

Operators can configure Media Manager to trigger the automatic transfer of video files to multiple distribution points, such as a CDN, syndication partners and traditional archiving systems, or cloud-based archiving systems such as Amazon S3. Metadata can be published to end points such as discovery and recommendation engines as well as other third-party web services.



WORKFLOW ENGINE AND PLUG-IN MODEL

The Workflow Engine and its underlying Task Service are the workhorses of Media Manager. They automate various content workflow tasks, including transcoding, segmentation and stitching of video, packaging, DRM encryption, automated QA and distribution, by utilizing a variety of plug-ins.

The Task Service queues, dispatches and retries tasks, relying on a scalable set of service workers.

A comprehensive set of service workers allows file manipulation, transcoder integration, protection and packaging among many other functions. The framework is easily extensible to implement additional integrations as needed.

The Workflow Engine reports the status of each task, including the percentage of completion, to the Media Manager user interface. Operators can easily monitor the health, throughput and current activities of the system.

Irdeto is the world leader in digital platform cybersecurity, empowering businesses to innovate for a secure, connected future. Building on over 50 years of expertise in security, Irdeto's services and solutions protect revenue, enable growth and fight cybercrime in video entertainment, video games, and connected industries including transport, health and infrastructure. With teams around the world, Irdeto's greatest asset is its people and diversity is celebrated through an inclusive workplace, where everyone has an equal opportunity to drive innovation and support Irdeto's success. Irdeto is the preferred security partner to empower a secure world where people can connect with confidence.