

# Optimization method of MAH media asset management system

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**Abstract.** With its unique charm, media asset management has always been concerned, studied and developed by everyone. The self-developed new MAH media asset management system is the latest fusion product by hive with its special cloud management mode and relevance analysis mode. By analyzing the characteristics of media asset management system, this paper designs the optimization scheme for the aspects not involved, so as to realize a more complete media asset management system.

**Keywords:** Multi-media, Optimal design, Management system optimization.

## 1 Introduction

Recently, artificial intelligence (AI) has become a hot field in all walks of life. How to successfully reference AI to industry and production has become the mainstream research direction. In the media industry, AI applications are gradually coming into view, and the era of smart media is gradually coming. As the mainstream platform, media resource management system has gradually been widely studied and developed by the industry.

At present, many relevant enterprises have successfully established an intelligent tag system for different kinds of programs such as news, sports and variety shows. Supported by self-developed AI algorithms, they have generated rich semantic tags, improved content search efficiency, supported content recommendation, and injected new vitality into the development of media asset management system. Whether the media management system can improve efficiency, reduce the use of manpower and improve social benefits has become a new goal and research direction. In addition, the development of cloud platform also provides new design ideas for media asset management system. Online editing and management through the latest 5g technology or cloud storage will also become the focus of future research.

This paper focuses on the shortcomings of current media asset management, and puts forward new innovations to complete the optimization scheme for media asset platform.

## 2 Experiment and proposed method

### 2.1 Optimize structural design

Our optimization scheme mainly focuses on cloud services, business management and data management with poor application ability of the media asset management platform.

The optimized content structure proposed in the paper is shown in Fig. 1.

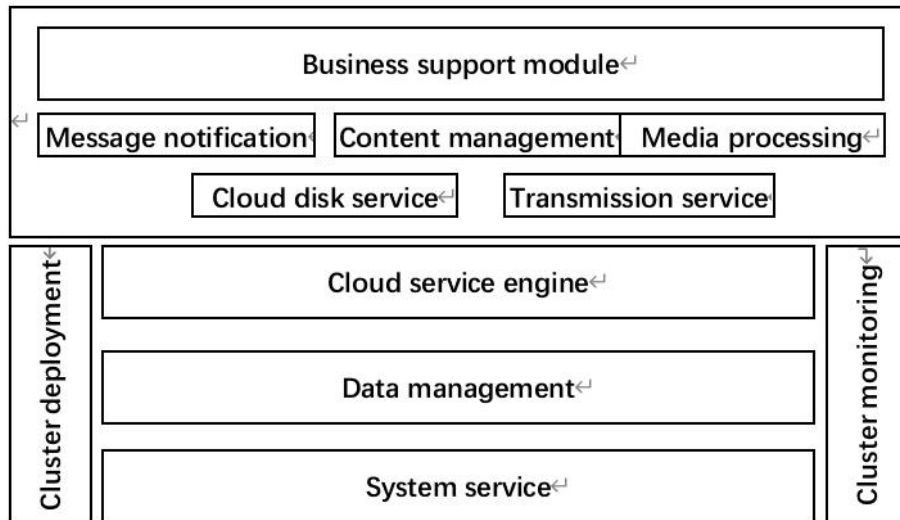


Fig. 1. The optimized content structure proposed.

### 2.2 Objective of the experiment

According to the user's actual use experience accumulated over the years, we have made a number of functional improvements and innovations on the premise of retaining the functions of traditional media resources:

- Optimize the search engine, improve the search accuracy, and support a variety of search methods;
  - It can be downloaded from web pages or lightweight clients;
  - Flexible system level business configuration to meet the actual use needs of different users;
  - Rich portal display and the latest interface style;
  - The data set display of folder structure makes the resource integration more concise and clear;
  - The functions of asset content mining and tag summary extraction based on intelligent technology are used to assist manual cataloging and improve efficiency and accuracy;

- Elastic architecture, which can meet the business volume requirements of various scales

### 2.3 Configuration settings of asset usage system

#### Requirements for the server where the windows actuator is located.

- CPU: 8 core;
- Memory: 16 GB;
- Local hard disk: 200 GB;
- Number of Gigabit Network Cards: 2;
- OS: Windows Server 2012 R2;
- Ports to be opened to the external network: 3389, 20, 21

## 3 Result

Our improvements to the media asset management system include five aspects in total. The results of the above improvements will be previewed and explained in the results display of this section.

### 3.1 Professional cataloging process

The optimized media asset management system has a complete cataloging process suitable for radio and television cataloging needs, including authority control, cataloging operation, cataloging task management, audit process, etc., which can be flexibly configured, so as to be closer to the use scenarios of different users.

- Description of cataloging process. The specific process is shown in Fig. 2.

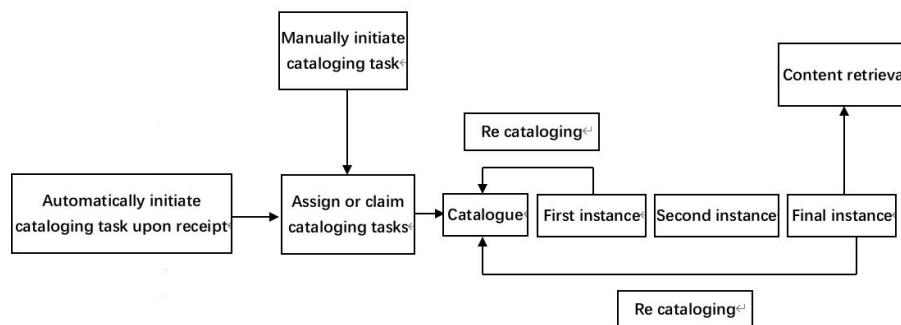


Fig. 2. Cataloging process.

- Catalog configuration;
- Cataloging management, system cataloging task tracking, cataloging task management, audit task management;

- Cataloging main interface, metadata editing, radio and television four-tier cataloging, mark point setting

### 3.2 Archive application

There are a large amount of content in the media information system, and the secure storage of content is very important. Our improvements to the media asset management system fully considers various factors such as content classification management, secure storage and efficient callback, and provides users with relevant functions of archiving policy management.

- It supports multiple conditional configuration of archive fetch policies, and can automatically allocate archive tasks, automatically delete time settings, backup mechanism settings, physical location assignments, etc. According to the specific characteristics of each content, different types of migration strategies can be automatically applied to achieve the functions of precious data backup, storage of similar data on the same media, capacity expansion support of multi band library, separation of high and low quality storage, etc;

- It supports a variety of near line devices, ODA Blu ray Library (ods-l30m), LTO tape library, etc;

- Support management and monitoring of archiving processes;
- Support management of storage media

### 3.3 My collection

It is used to store the content that users often use or like, so that users can quickly find the content they need. The main interface is shown in Fig. 3.

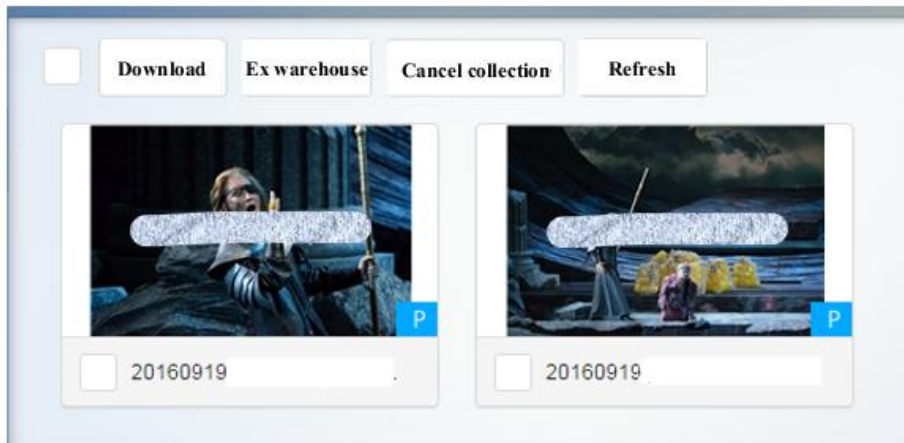


Fig. 3. My collection.

### 3.4 Copyright management

It can manage copyright related information of materials in the media database, including copyright information browsing, single or batch description and copyright information export, and support filtering and query according to copyright information.

- Copyright information description: It can describe and browse the copyright information such as the service life, times, authorized area, copyright owner, copyright user and copyright use mode of the material. When describing, it can describe a single material or select the materials on the same page for batch description;

- Conditional filtering: in the conditional filtering selection area on the left side of the page, conditionally filter the materials according to the copyright type, copyright term, authorized use region and whether to enable download protection; You can also query the material according to the title, responsible person and copyright owner of the material;

- Prompt of copyright expiration and restriction of copyright expiration;

- Copyright information export: you can export the copyright information of the material and form an excel table

### 3.5 Message notification.

It can be used to view all messages related to the current user, including message records and instant message push.

### 3.6 Task Center.

It can be used to view all tasks related to the current user, including receipt and issue tasks. Administrators can view the tasks of the entire system.

### 3.7 Business Statistics.

It can be used to count the upload, issue, catalog, record and review operations of the whole system, and support the export of reports. In addition, the system also supports stock out statistical analysis. The analysis results are shown in Fig. 4.

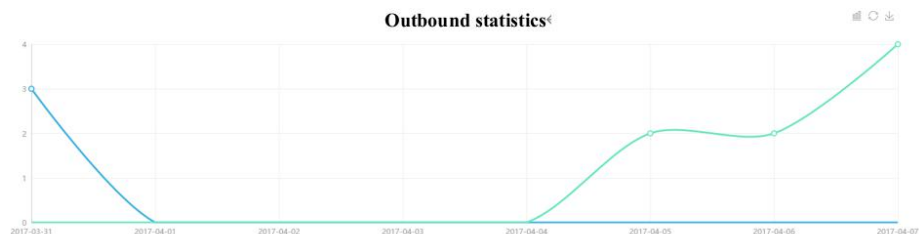


Fig. 4. Analysis results.

## 4 Conclusion

According to the expected results, we believe that the optimization scheme of media asset management system proposed in this paper is reasonable and has application value.

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