

# Design of media asset management system

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**Abstract.** Multimedia management system has become one of the core tools of multimedia development and application in today's era. Its application and development can be seen in the fields of computer, Internet and so on. As the mainstream trend of multimedia application, multimedia fund management system has been widely studied. This paper focuses on establishing a complete and perfect multimedia fund management system, and optimizing its main infrastructure to achieve a multimedia fund management system with excellent performance.

**Keywords:** Multi-Media, Fund management, System design.

## 1 Introduction

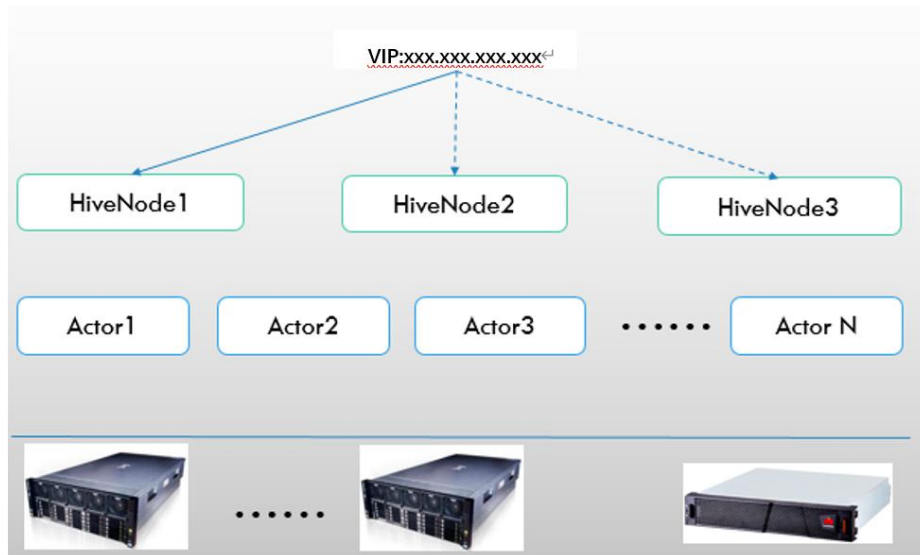
With the continuous popularization of multimedia in the field of people's life and the expansion and enrichment of functions, the demand and voice for a complete multimedia management system are becoming higher and higher. Nowadays, many mainstream media institutions in China have successively established media asset management systems to realize the digital storage of media content assets; Realize the overall connection with production network and broadcasting network; Realize digitization and unification. Achieving these goals can greatly improve the management efficiency and security performance of the fund management system.

At the same time, the combination of cloud services and multimedia has become a popular development scheme. Therefore, using cloud server to establish a fund management system with excellent performance has become a hot goal.

## 2 Experiment and proposed method

On the basis of hive platform, system provides various application layer toolsets to meet its storage management, business process, content management and use requirements.

System adopts the system deployment diagram shown in Fig. 1.



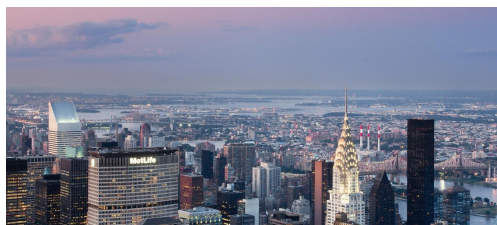
**Fig. 1.** Structure diagram of media fund management system.

### 3 Result

Based on the framework of management design system and innovative design, we designed a set of basic and complete management design system. The result of our system consists of the following parts.

#### 3.1 Portal display

The portal of media resources system can display the pushed poster content and the ranking obtained according to the aggregation and analysis of various big data in the system. We can also recommend content according to the user's operating habits and record the user's browsing history. The design of the portal display interface is in line with the main content of the current page, so we designed a poster in line with the content as the background of the portal display interface. Fig. 2 shows the background of our portal display interface.



**Fig. 2.** User background page.

### 3.2 Retrieval function design

As a basic and important function of media products, system greatly provides retrieval accuracy and efficiency on the basis of traditional media products and hive's technical advantages.

Full text retrieval, advanced retrieval, conditional filtering and secondary retrieval not only meet users' various retrieval habits, but also can be combined in a variety of ways to further improve the retrieval accuracy. The interface shown in Fig. 3 is the full-text retrieval interface included in our designed system.

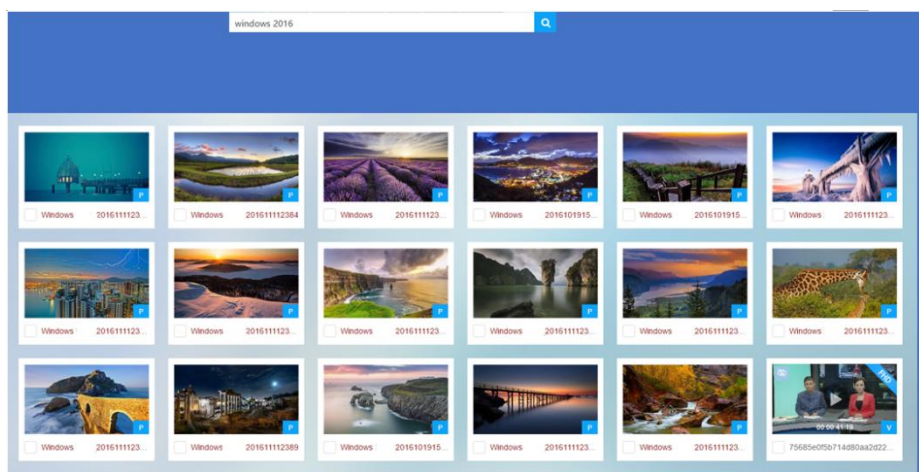


Fig. 3. Full text search interface.

In addition, the system supports re retrieval in the retrieval results, so the retrieval function of the system is very complete and practical.

Moreover, we have realized the advanced retrieval function similar to the mature search tools on the market. You can add more fields to check as needed, and only the results containing this information in the set fields can be retrieved. The function demonstration diagram is shown in the Fig. 4.

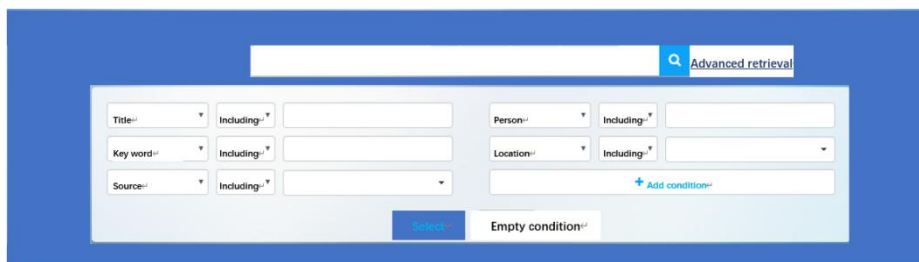


Fig. 4. Advanced search interface.

### 3.3 Permission control

Firstly, we designed the flexible configuration of system function modules to meet the needs of different users.

Secondly, we designed user permission configuration. Different users can have different permission configuration. This part consists of the following two parts.

- Function permission setting: each function permission setting. For users with permission, the corresponding functions are visible and available;
- Content permission setting: the permission control of the material itself, which can control the permission of different levels of materials

The function permission setting is the most important setting of the system, and its content is shown in Fig. 5.

catalog
copyrightmanage
download
entitydelete
entityedit
export
statistic
webimport

Fig. 5. Function permission setting.

The content permission settings are shown in Fig. 6.

	Read <sup>⌘</sup>	Modify <sup>⌘</sup>	Doing	Delete <sup>⌘</sup>
Public	✓	✓	✓	✓
Limit <sup>⌘</sup>	✓	✓	✓	✓
Secrecy <sup>⌘</sup>	✓	✓	✓	✓
Have no right <sup>⌘</sup>	✓	✓	✓	✓

Fig. 6. Content permission settings.

### 3.4 File exchange

This part mainly includes the following core contents.

**File import and data set import.** This part is mainly composed of web page upload and folder manipulation.

- Lightweight web page upload, upload of single or multiple folders and metadata editing, as well as batch editing;
- The folder structure of data sets can be uploaded to support the path structure of source files. After warehousing, a data set is used as a content exhibition to inherit the original folder structure. The structure of folder upload is shown in Fig. 7.

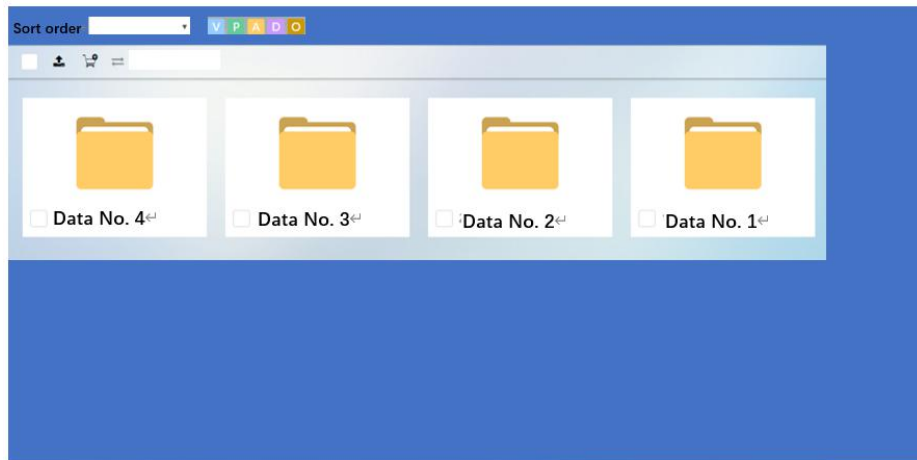


Fig. 7. The structure of folder upload.

**Client upload.** Support client file upload. Because the client supports a variety of devices (Sony ex device, Sony Blu ray machine, Panasonic P2 device, VTR device, etc.), the files obtained through the device can also be stored in the media database.

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**Material download.**

- Web download, support web page download;
- Client download, support client download.

**Material warehousing.** When the external system is warehoused, the materials in the shared folder can be automatically scanned and warehoused into the specified cloud disk folder.

**Material delivery.**

- Material issue to the external system, you can issue the materials in the system to the specified shared folder, and support a variety of protocols;
- Transcoding issue: materials can be transcoded into a specified format during issue;
- Automatic delivery: Materials conforming to the automatic delivery strategy can be automatically delivered to the specified external system.

## 4 Conclusion

It can be seen that the management system designed in this paper has relatively perfect functions and can have good application prospects.

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