

# Remote Technical Support for Localization Development of Confucius Institutes in Southeast Asia Based on Online Screen Sharing Cloud Algorithm

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**Abstract:**Based on the "Intelligent Multimedia Distance Learning System" developed by the department, this paper presents a new image block recognition algorithm and intelligent cloud HD sharing strategy, explores the development history of Confucius Institutes in Southeast Asia, and applies distributed storage and service-based reconstruction. , data push and other technologies, realize the rapid write-back and extraction of data, and the flexible configuration of server nodes. By improving the teaching mechanism of the adult education function of the Confucius Institute, the technical support route for the localized development of the Confucius Institute in Southeast Asia is obtained. On this basis, the framework and research content of this study are determined, and the status quo of the adult education function of Confucius Institutes is investigated through case interviews.

**Keywords:** Remote Technical Support, Confucius Institutes, Online Screen Sharing Cloud Algorithm, Southeast Asia

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## 1. INTRODUCTION

Screen sharing applications refer to the transfer of one party's computer screen display to the uncle's computer. Poke up to crack remote control, demonstration and other purposes. The early computers were limited by the hard environment to provide all-round integrated solution development for the development of cost control business [1], process tracking management, subsequent one-time improvement and further abnormal management of Internet of Things technology and energy Internet technology [2]. Information analysis and processing, data collection the volume will also grow exponentially; at the same time, these solutions and information support [3].

The Confucius Institute is a non-profit educational institution established overseas to disseminate Chinese language and Chinese culture by learning from the successful experience of English, French, German and other language dissemination institutions [4]. General Secretary Xi Jinping pointed out that language is the best key to understanding a country, and the Confucius Institute is an important platform for the world to understand China. First, the price factor is the main reason why small and medium-sized enterprises in my country give up traceability [5]; On-site inspection, or equipment delivery, will have a certain impact on the production of enterprises. Modern warfare is not only a confrontation between people, but also increasingly manifested as a confrontation between the performance and integrity of weapons and equipment on both sides. The security capability puts forward higher requirements [6].

In recent years. Ship-based helicopters are used as anti-submarine for naval surface ship formations. The main equipment for anti-ship, search and rescue, security, and transportation is an important part of the naval combat unit [7]. At present, the navy has been equipped with various types of helicopters, and its maintenance support adopts the three-level maintenance support system of outfield, infield and overhaul plant. With the successive installation of a batch of high-tech aviation equipment [8]. There are such application

requirements in the system of business, distance teaching, remote monitoring and stock analysis. In these systems, customers need to share the software operation interface of the host screen under the condition of certain visual satisfaction (high fidelity) [9], and the cloud computing method is developed from a super virtual computer composed of a group of loosely coupled computers, that is, we It is often said that grid computing developed. Therefore, part of the grid computing algorithm can be adopted in the task scheduling of cloud computing [10].

The teaching research of the Confucius Institute, including Chinese language teaching, teacher training, teaching materials, etc. For example, Liu Cheng and Xiang Ping (2010) [11] introduced and analyzed the remote operation mode, curriculum setting, and teaching characteristics of the Confucius Institute at the University of Kansas based on their own teaching experience. teachers' [12], and the quality of the teaching staff is a key factor in the realization of the adult education function of the Confucius Institute. Based on this, there are many related studies, mainly in the selection of teachers, pre-job and on-the-job training, teachers' professional ability and literacy [13], especially the cultivation of cross-cultural communication skills, cultural attitudes and so on. Originally in 2005, the basic ABE mechanism was proposed by Bowater et al. [14]

But only threshold access control policies are supported. Access control structures are also simply collections of attributes. In order to make the access control policy more flexible, Goyal et al. proposed the key-policy ABE (KP-ABE) based on the tree-shaped access control structure [15] using the theory of change and the theory of communication originated from organization-as a kind of Explicit theories are used to comprehensively demonstrate the external environment for the development of Confucius Institutes in Africa [16], analyze the development results, motivations and possible reform strategies of Confucius Institutes in the process of adapting to the localization of Confucius Institutes in Africa, and guide the development of the full text [17].

However, screen images have the characteristics of high resolution and complex situation. A typical Windows desktop is  $800 \times 600 \times 32$ bits true color, and its original size is 1,920,000 bytes, and it takes 4 minutes to transmit an uncompressed frame of screen on a 64K bandwidth [18].

It is very inefficient to automatically calculate the remaining amount of electricity bills for customers' electricity consumption, which is very inefficient with system settings, storage and access [19].

## 2. THE PROPOSED METHODOLOGY

### 2.1 The Online Screen Sharing Cloud Algorithm

Through the distributed parallel memory computing strategy, horizontal expansion can be carried out in each case shortened, and the total time of electricity cost calculation among multiple clusters improves the calculation ability and scalability. At the same time, the data can be exchanged. The multi-cluster architecture of ODPS includes controlling the cluster distribution platform to realize automatic fault tolerance and load balancing among nodes. Remote metering has brought an impact to the traditional metering mode, and has created new requirements for metering. Remote metering combines metering with network technology.

The screen sharing technology proposed in this paper is a relatively independent software module, which can be applied to various occasions such as video conference and distance education. Therefore, a method based on screen copying and image compression is adopted. This method uses the screen image as an information source, compresses and transmits it, and then decodes and reproduces it on the client side. It realizes the function of local area network or Internet remote monitoring. When there are two identical paths in the process of ants looking for food from the nest, then the probability of an ant choosing two paths is the same, and the pheromone left on the way is roughly equal. If the paths of the two paths are inconsistent, the ants randomly select. The basic ABE mechanism (FuzzyIBE) only supports simple threshold control, and neither the data sender nor the data user can specify Flexible access control policies. When the number of ciphertext attribute sets intersecting with the user attribute set is not less than the threshold value set by the authority, the data user can decrypt correctly.

Existing cost control applications use Weblogic to select a feasible technical implementation for the research on multiple server technologies. The method of forming application clusters to realize large-scale data calculation, when there are more and more application servers, the marginal application effect of the new application server, the distributed storage of massive complex and billing data is the solution to the single-effect is obviously decreasing, and with the innovative applications of acquisition and cost control, the access efficiency is low due to the centralized storage of equipment, and it is difficult to prepare data in detail. The distribution of pixels with the same color value in the spatial domain is relatively concentrated, and there is more static background information, so there are facilitates inter-frame predictive differential pulse coding (DPCM).

### 2.2 The Localization of Confucius Institutes in Southeast Asia

In the new era, realizing the transformation and upgrading of Confucius Institutes will become the necessity to promote a healthier and more sustainable development of Confucius

Institutes. To this end, Hao Ping, the former vice minister of the Ministry of Education, proposed that Confucius Institutes are the window and bridge for education reform and opening up. The reform of curriculum content first subdivided the curriculum stages, taking into account the physical and mental development and needs of students at different stages, and divided students aged 3-18 into 5 stages.

Secondly, the course content is divided into eight major areas, namely expressive arts, health and well-being, language, mathematics and computing. As mentioned above, educational communication should reveal the interaction and overall role of various communication elements in a concise and scientific manner. Policies are one of the important elements that constitute the external development environment of Confucius Institutes in Africa. They are the guidelines for the development direction of Confucius Institutes in a certain period of time and have direct normative significance for the transformation and reform of Confucius Institutes. From the source of policies, the policies affecting the development of Confucius Institutes in Africa are mainly composed of two parts: one comes from the headquarters of the Confucius Institute, and the other comes from the overseas partners of the Confucius Institute. Therefore, it is necessary to start with its basic constituent elements to carry out scientific and practical abstract understanding. In general, there are interactions and cyclic interactions among the various elements that constitute the propagation mode.

### 2.3 The Research on Remote Technical Support of Confucius Institutes in Southeast Asia

Actively promote the implementation of the "Confucius New Sinology Program" to attract more international talents to engage in Chinese teaching. Second, we must actively promote the localization of teaching materials. Of course, it is also necessary to design a software system that matches the hardware circuit. The design of the software system is relatively simple. The core part is to select the standard signal output sequence and size of the standard equipment according to the needs. The teaching material is the concrete embodiment of the overall teaching design. The in-depth development of the international communication of Chinese in the new era has put forward higher requirements for the existing Chinese textbooks.

The compression algorithm introduces the P-frame mode and sends I-frames regularly to ensure that the receiver can obtain complete screen image information, so that even if there is an error in the transmitted frame, the receiver can re-acquire the original image in a short time. Cloud storage server provides computing and storage services, maintains a user list and a virtual attribute history list for each data sender, and acts as an agent for data users to obtain user keys from authorized agencies. Authorities: Manage their own set of attributes, publish encryption public keys, authenticate data users and issue user keys; create cloud task lists and submit to data center agents. After each cloud task node is initialized, it is added to the cloud task list cloudList and handed over to the datacenter Broker.

From the above description, the principle of subjective judgment can also be drawn: if an image looks clean, simple, and eye-catching, it is an unnatural, artificially, or automatically generated "background" image, otherwise it is a natural image. From the perspective of compression purpose, the measurement standards and test instruments of the simple color measurement station can be calibrated and tested to the

enterprise without road transportation, which avoids the uncertainty change caused by the process of sending the school to the inspection and ensures the measurement standards and test instruments accuracy.

### 3. CONCLUSIONS

This paper introduces the design and implementation of a new type of screen sharing software in detail. According to the specific characteristics of screen images, this paper designs a fast and efficient image compression algorithm; at the same time, an efficient asynchronous communication method is adopted. After more than ten years of rapid development, the Confucius Institute has stood at a new starting point. Facing the new era and embarking on a new journey, Confucius Institutes need to do something new, that is, by continuously expanding the functions of running schools, improving the quality of running schools in an all-round way, focusing on improving the management level, breaking the bottleneck of their own development, speeding up transformation and upgrading, and improving quality and efficiency.

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