

Design and QoS Optimization Model of Party Building Cloud Platform Based on FoRTAN

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Abstract: Using FounNPowerSTAIloNv4. o to develop a simulation program is the core focus of this paper. It has a good WINDows interface, which can intuitively and conveniently carry out a man-to-machine dialogue, which is convenient for simulation racing. Its application example shows that the program has universality and practicability. The informatization work of party building in colleges and universities can be carried out according to different situations: confidential work can be combined with the campus informatization platform; collaborative work between units can introduce third-party questionnaires and cloud collaboration documents to connect the data communication network with information. Intranet integration and unified deployment. With the growth of communication data volume, higher requirements are put forward for the quality of service of converged network QoS and the resource consumption of base stations and users.

Keywords: QoS Optimization Model, Word Party Building, Cloud Platform, FoRTAN

1. INTRODUCTION

With the development of communication network informatization construction year by year, mass production, marketing and other application systems have been extended to counties, business outlets and substations [1]. Due to the problems of unreasonable network structure and insufficient security in the existing data communication network and information intranet, health information cloud storage needs to support high concurrent access of a large number of medical services in the region, and ensuring storage QoS is an important basis for developing reliable medical services [2].

At the same time, the party building in colleges and universities has ushered in a new test. Adhering to the correct political direction and school-running direction [3], and accelerating the connotative development of various schools in the new era, the party building in colleges and universities assumes the first and most important role [4]. It is also crucial for cloud service providers to study cloud storage QoS guarantee, cloud storage must ensure that storage applications obtain the minimum level of read and write bandwidth or IOPS required by themselves [5].

Party members in coal enterprises have many daily production and safety tasks, and they do not have much energy to study the content of party building after completing their business work [6]. The identity of party members cannot be highlighted in the process of safety production, and they cannot play an exemplary role. From design to test, operation assessment, the cycle used is too long to meet the requirements of the international market for new products. In order to shorten the design cycle, collaborative design must be carried out to improve design methods [7]. Fortran is the world's earliest high-level computer programming language and is widely used in scientific and engineering computing. The Fortran language reflects the ability of enterprises to rapidly develop new products in a cooperative and integrated collaborative environment with its unique functions in numerical collaborative design [8].

Excitation system is an important part of synchronous generator. When the system is in normal operation, it can

provide adjustable excitation current to the generator to adjust the terminal voltage of the generator and the reactive power distribution between units running in parallel [9]. Visual software development tool based on F0rtm language and Ms-windows graphical user interface. MicmsonForlanPowerst'on combines the two to provide users with a powerful numerical computing capability HITurbine is a Fortran and c# mixed programming implementation of CFD/NHT [10] The software is mainly designed and developed for the numerical simulation of the internal flow field and heat transfer of aviation and ground gas turbines. Existing implementations such as Globus's MDS[11], Web service UDDI, WSDL and VEGA resource discovery architecture [12], these models complete resource discovery from different emphases, but less consideration for QoS. Seriously affect network security and robustness [13].

In order to solve the above problems, consider the integration and unified planning and deployment of the data communication network and the information intranet. With the explosive growth of the amount of communication data, the integration and interconnection between them has become an urgent problem to be solved [14]. Cloud platform technology can interconnect all heterogeneous networks with it by establishing a cloud platform. The goal of cloud storage is to provide users with an infrastructure with high scalability, reliability, security, speed and low cost, so that users can pay on demand way to obtain usage of storage resources. Traditional storage technologies have bottlenecks in storage capacity, performance and scalability [15]. Taking the online education platform as the fulcrum to promote education informatization, taking the China Education and Research Network (CERNET) as the basis, and using the large-scale open course MOOCs (MOOCs) as the basis) as the core, and strive to make online education a highland for the development of education informatization [16].

Coal enterprise organizations are scattered, the party building work is difficult to carry out, and the process control is not strong. Many party building activities are mere formalities, and party members and the masses do not understand the purpose of the activities. These systems have their own

advantages and disadvantages, but through continuous improvement [17], they have adapted to their environment. On the basis of analyzing the shortcomings of the above systems and drawing on their advantages, the author introduces cloud computing technology into the field of collaborative design, and proposes and implements a collaborative design system scheme based on the manufacturing cloud platform [18].

2. THE PROPOSED METHODOLOGY

2.1 The ForTRAN

In order to realize the collaborative design based on the manufacturing cloud platform, we must first discover various collaborative design cloud services stored in the manufacturing cloud platform. Typically, services are described using WSDL so that service requesters can discover and access the service. For the complexity, particularity and expansibility of the resources of the manufacturing cloud platform. By analyzing the content of the LandMark software horizon file, its data composition is actually X, y plane coordinates plus. Z value (horizontal depth).

Therefore, in the face of a large number of formation pinch-out situations. Although, in the dynamic simulation of the system, the PSS/E standard model library provides many excitation system models such as IEEE1-5, IEEE1-4, SCRX and SEXS, and constantly improves the model library. , but does not include all the excitation systems that have been practically applied. Using the methods of Monte Carlo random sampling, sweeping fault trees and interval statistics, the system reliability index and the estimated value of the importance of basic components can be obtained. Although hybrid programming presents additional challenges for programmers, the value brought by the technology far outweighs the hassles. For the CFD/NHT software system, due to its historical reasons and computing requirements, many mature source codes may be written in Fortran. The collaborative design system under the manufacturing cloud platform has a very complex cloud workflow. The cloud workflow representation model of the hybrid Petri net lays the foundation for the realization of the collaborative design system based on the manufacturing cloud platform.

2.2 The Party Building Cloud Platform Design

=After the successful convening of the 19th National Congress of the Communist Party of China, at a new historical starting point, major colleges and universities are closely following the construction of "double first-class", taking discipline construction as the top priority of college work, and forging ahead with the connotative development of higher education as the main purpose. The business volume of various units and departments of colleges and universities will inevitably increase sharply. The collaborative design system based on the manufacturing cloud platform relies on a large number of cloud services to transparently provide users with safe, low-cost, on-demand application services through aggregation. It is based on cloud computing and integrates advanced manufacturing technology, Internet of Things technology, service-oriented technology and intelligent science and technology. The architecture of the platform is divided into presentation layer, functional layer and data access layer. The presentation layer interacts directly with users, and users browse through the server implements the access function of the application by means of the Internet, and the functional layer implements all functional operations and logical operations of the user.

The portal website includes three display pages at the company party committee, mine party committee and branch level, which comprehensively display the party building publicity and work display of the company party committee, mine party committee and branch. The company party committee party building information platform displays the company's party building work. Co-design has the characteristics of parallelism, group, different places and collaboration. Due to the complex information interaction among different tasks of product design, they depend on or restrict each other. In order to organize collaborative design scientifically and effectively and ensure the execution efficiency of collaborative design tasks, it is necessary to describe the design tasks reasonably.

2.3 The Party Building Cloud Platform Design and Qos Optimization Model

Traditional party building information propaganda is mainly based on newspapers, TV, websites and other media, which cannot meet the requirements of universality, mobility and immediacy of information exchange. In order to adapt to the new situation under the new situation. The network between cloud storage data centers refers to the connection the interconnected network between data centers around cloud storage, which belongs to the internal network of cloud storage. The network is mainly used for data transmission within cloud storage, such as general distributed transaction processing, data copy synchronization, data backup, etc.

Different transmission services have some of different QoS requirements. For the noise-limited network scenario, the optimal solution of the theoretical model proposed in this paper is solved, that is, under the constraints of base station transmission consumption and D2D signaling consumption, the cache distribution cpi that maximizes the success probability of total service transmission is solved. . The party building work system is divided into four functional modules: the party member work system, the branch work system, the mine party committee work system and the company party committee work system. The party member work system mainly realizes the self-education and self-management of party members. The service is described using WSDL, so as to serve the requester Discover and access the service. For the complexity, particularity and scalability of manufacturing cloud platform resources, WSDL is mostly based on the syntax layer, which cannot achieve the semantic description of Web service functions.

Aiming at the problem of unbalanced utilization of network link bandwidth between multiple data centers in cloud storage, a QoS-oriented network traffic scheduling model between multiple data centers is proposed. The optimization goal of the model is to ensure the performance requirements of data transmission with different QoS levels. They are the initial stage, the propagation stage, the control stage, the integration stage, the data management stage and the mature stage. The first three stages have the characteristics of the computer age, and the last three stages have the characteristics of the information age. The party member work system realizes the process of party members' self-education and self-management, and achieves the purpose of promoting party members' self-learning and self-education through comprehensive functional informatization and evaluation, and forms an internal dynamic mechanism for party members' self-management.

3. CONCLUSIONS

This paper proposes that the informatization work of the party building of the organization can be carried out by relying on different platforms to carry out "Internet +". The confidential work can be combined with the campus informatization platform. The propaganda work uses "two microcomputers and one end" to carry out the paper aiming at the QoS requirements brought by the multi-network fusion mechanism based on the cloud platform, and also introduces the communication mechanism, and in the future, the more discussions will be applied.

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