**Intelligent Cloud Training System based on Edge Computing and Cloud Computing**

**ABSTRACT:**

Equipment simulation training based on cloud computing is emerging. However, the latency between cloud center and client is long, and the energy consumption management is difficult, which are influencing the development of cloud training. Intelligent cloud training system based on edge computing and cloud computing is introduced in this paper. Intelligent gateway is introduced, through which the task and resources are scheduled and managed together. The popularity of training resources is analyzed. The management of servers in cloud center and edge is intelligently switched between timing sleep and task-activation. Intelligent training service provisioning is achieved through above measures. The simulation results show that the system and management methods are effective on improving training service quality and lower the energy consumption.

**EXISTING SYSTEM:**

By cloud training, users can go into equipment operation training, equipment maintenance training, and equipment command training without restriction of geographic location. During the training procedure, as the long distance connection is restricted by network bandwidth, the transaction and processing of large amount of 3D models, graphics and videos faces huge pressure, which results long time delay when transmitting data between client and cloud center. The energy consumption can be lowered in despite of resource scheduling technology, however, the problem of high energy consumption cannot be solved completely

**DISADAVANTAGES:**

* Time delay
* The energy consumption can be lowered in despite of resource scheduling technology,
* Security problem.

**PROPOSED SYSTEM:**

Use a new resource processing mode –edge computing as a reference, putting the resources used to be deployed in the cloud center to the edge node and gives the edge node resource processing ability. Cloud center and edge node cooperation method is proposed.Use this method to reduce the load of cloud center and then achieve the goal of lowering down energy consumption,reducing time delay, improving training efficiency.A multi-users multitasks simulation training conception to solve the equipment simulation training problem in the condition of informationization. The training system could satisfy the requirement of large scale, multi person-time equipment teaching and training

**ADAVANTAGES:**

* Part of the training resources, models, tasks used to be deployed in cloud center are decomposed and migrated to high performance edge nodes.
* cloud center and then achieve the goal of lowering down energy consumption,reducing time delay, improving training efficiency.
* To improve the service ability and reduce the energy consumption of cloud training.

**SYSTEM REQUIREMENTS:**

**HARDWARE REQUIREMENTS:**

❖ System : Pentium Dual Core.

❖ Hard Disk : 13 GB.

❖ Monitor : 15’’ LED

❖ Input Devices : Keyboard, Mouse

❖ Ram : 32GB.

**SOFTWARE REQUIREMENTS:**

Operating system : Windows 7.

Coding Language : Java

Tool : Netbeans

Database : MYSQL

**REFERENCE:**

Zhijia Chen, Yanqiang Di, Hongli Yuan, Shaochong Feng Equipment simulation Training Center, Shijiazhuang Campus of Army Engineering University Shijiazhuang, China youshenshui@163.com,“**Intelligent Cloud Training System based on Edge Computing and Cloud Computing**”, 978-1-7281-4390-3/20/$31.00 ©2020 IEEE