Research on LTE/WLAN Heterogeneous Network Access Control Algorithm based on DS Evidence Theory

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Abstract: Computer network technology has been widely used in various departments of enterprises, because of the convenience brought by network information technology, staff to a large extent improve their own work efficiency, network technology plays a great role in enterprise construction. It is the inevitable trend of enterprise fine management to make use of computer processing technology to make the enterprise information construction as the breakthrough point to carry on the effective reform. In order to meet the basic requirements of enterprise product quality, the measurement management work of the enterprise must be done well, because the measurement work is the premise demand that can help the enterprise to develop steadily. This paper also discusses the LTE/WLAN heterogeneous network access control algorithm based on DS evidence theory.

1. Introduction

Since entering the 21st century, China's Internet information technology and mobile network technology have made great progress and brought great convenience to our work and life. At the same time, the continuous improvement of mobile devices, especially the emergence of smartphones, also promotes the large-scale growth of mobile users, at the same time, it has caused great pressure on the carrying capacity of mobile networks. And the current network technology is far from meeting the actual needs of the majority of users. In this case, researchers developed network technology to improve the overall efficiency of network. The rapid development of the network brings new hope for enterprise processing, and promotes the improvement of enterprise processing level and quality. At the same time, it can guarantee the information exchange and transmission of each link, also can enhance many business contacts and exchanges, so as to speed up the process of enterprise network information, improve the processing level of enterprise modernization[1]. With the increasing popularity of computer applications and the continuous development and improvement of information management technology, computers play an important role in the field of information management, especially in the field of enterprise measurement management. In order to follow the new situation and trend, in order to ensure the quality of the project (product), measurement management as an important technical basis, it is necessary to go further on the original basis. In this case, we developed the "two-leaf metering management system" software, and in the two-leaf scope of promotion and application.

2. Function of the system

2.1. Accounting Management of Measuring Instruments

Edit, add and delete: The purpose of the modification is to ensure the accuracy of the information reflected in the metrology instrument database. Therefore, after implementation in the weekly inspection plan, the date of the last inspection must be changed with the data change function. If you want to replace, please add metering instruments on the basis of database changes, on the basis of original data changes and add new records, abandoned metering instruments can be eliminated.

Query statistics and printing: using the account database, the instrument can be measured by the
instrument name, scope of application, mandatory inspection, ABC points, use department, use unit and inspection time, etc., any inspection of condition or combination of conditions can print out this information immediately[2]. It can also search for measuring instruments that have not been verified before the deadline, so that the measurement management department can grasp the implementation of the measurement management system.

![Figure 1 LTE/WLAN heterogeneous networks](image)

2.2. Code Maintenance

Module can use department code, measurement instrument name code, inspection unit name code, verification cycle code to add, insert, delete and other processes.

2.3. Data Transmission

"Generate Quotations" can generate slave floppy disks to report data to superiors; use "data clearing "," receive quotes" and "report summary" This is the data that the superior department receives from the subordinate department. The superior department can get rid of the previous manual summary by receiving the data and summarizing the data, which ensures the efficiency and timeliness of the report summary.

2.4. Statement Management

Summary report: the use of summary report function can efficiently and accurately classify and summarize the statistical data and measurement tools in the work, and summarize the statistical data. Check the plan of measuring instrument weekly, summarize the statistical data of annual weekly inspection plan, summarize the statistical data of measuring instrument[3].

Print summary reports: can print out all the information data after the previous summary.

Editing and printing of separate reports: measurement management in concise statistical management, weekly work measuring instrument inspection statistics, equipped with safety measuring instruments, environmental monitoring measuring equipment, main parameters of product quality measuring equipment, development and testing of Equ energy measuring instruments, management of materials inside and outside measuring equipment, measurement standards and management statistics, monthly report data in measurement investment statistics printed out.

Commonly used form printing: can print the scrap application form in the commonly used measurement management work in the seal, sampling design, table sampling record, measuring instrument with schedule, monthly report, account coverage and so on.
3. **The Main Software Technologies Used in the System**

3.1. **Design and Use of Forms**

Form form as a user interface design tool, by defining its properties, the interface meets a variety of different design requirements, so as to obtain the best results. By running method code, the form can perform all the tasks specified in the interface.

3.2. **Use of Project Manager**

First, the system sets up the whole system project file, then the system uses the database, menu, report, program added to this project and other file [4], for organized management. After completing the entire program, connect it as an executable file.

3.3. **Use of Query Tools**

The query statistics of measuring instruments is an important function of the system. By using the query tool, combining the statistical command and statistical function, the combination can query and statistics the measuring instruments according to any specified condition or any condition.

3.4. **Use Report Designer**

All kinds of reports needed to design the system according to the report designer.

4. **The Main Advantages of the System**

4.1. **Date and Condition of Verification After Preservation**

When changing the latest validation date and status, the previous validation date and status changed will be placed in the validation date and status field. For the most recent audit, the date and status of the most recent audit are placed in the state [5] of the penultimate date and the third audit
field. the third test date and status test are out of date, so the date and status of the last three tests can always be saved.

4.2. Rapid Summary of Reports

The company can receive the data reported by the secondary units to analyze, analysis after the summary, this way for the company report summary saved a lot of time and energy.

4.3. Types of Statements are Complete

The system in development, from the actual situation of enterprise measurement management, the report management sub-module is designed, at the same time, all units of measurement report management sub-module design. Reports must be reported by individual units. In addition, we also designed the table form in the common form of measurement management.

4.4. Printing Accounts are Quick and Flexible

The account printing in the account can be printed in the usual order, or by the name of the measuring instrument, professional, scope, mandatory inspection situation, ABC classification, UT unit operation, use department, use unit, check time these inspection conditions, no matter which condition or combination can be printed.

5. General Application of the System

The system can be used in conjunction with the core computer hardware & WINDOWS95 or WINDOWS98 operating system. In the past, the use of measuring instruments and statistical classifications in the preparation of quarterly and annual verification plans for measuring instruments had to be manually searched for statistical data on the holdings of measuring instruments, which was time-consuming and error-prone. The application of the system had effectively changed the efficiency and quality of management from the lower sector and the status of departments and measuring instruments, the initial manual reporting, and the of which could be performed by computers, had clearly yielded significant results. Therefore, the core network technology should be better developed and applied.

6. Conclusion

Network technology plays a great role in the modern intelligent system of our country, which can not only realize all aspects of monitoring, all-round coverage of 24 hours uninterrupted operation, but also improve the signal coverage. Through this article, we also understand the close relationship between network technology application scenarios and this key technology. To sum up, the emergence of network technology fully meets the higher requirements of network networks in different industries, and its application makes the speed and coverage of network network better than the previous network technology. Therefore, in the practical application of network technology involving various complex advanced technologies, it is necessary to fully understand the key technologies and mastering ways of network technology, combine the characteristics of different application scenarios, select the corresponding technologies, and promote the optimization of application impact. Enterprises can integrate big data processing technology with enterprise information processing, form online information processing, and then develop relevant network information software, implement timely and effective online information processing, so as to promote the development of enterprises to implement network information processing mode. The information processing technology of enterprises includes three parts: information processing technology, information database technology and security and secrecy technology. It is necessary to establish an information security system to prevent attacks and threats against the processing information system. Establish a complete information database, preferably with full documentation of all information. The software "two-leaf metering management system" from the system research, design, programming, to the whole process of system debugging, system developers and software
developers can fully understand the situation of measurement management in the company, starting from the actual management, because of the operation of the measurement management personnel to carry out a comprehensive analysis, and the role of measurement management personnel in measurement management is carefully designed and developed. The system has been popularized and used all over the company, and has been welcomed by all levels of measurement management personnel to improve the management level, raise metrology management to a new level.

References


