Journal of Electronic Research and Application

Research Article

# Research on Information Security Technology of Online Insurance System Based on WEB

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**Abstract:** With the continuous development and advancement of science and technology, WEB-based online insurance system has become an inevitable choice to adapt to the development trend of the times. On the basis of establishing a system, it is necessary to manage the safe operation structure, thus effectively establishing complete supervision and maintenance. The system ensures that the management level of insured information security technology can be optimized. This paper briefly analyzes the framework of the WEB-based online insurance system and discusses the security mode and system implementation.

***Keywords:*** *WEB; online insurance system; framework; security system; implementation*

**Publication date:** July 2018

**Publication online:** 30th July 2018

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## 0 Introduction

Under the background of the continuous development of the insurance industry, the types of insurance products and the application channels of insurance products are changing and innovating. Internet insurance has become an important trend of development. The integration of information technology and internet technology has effectively subverted the traditional marketing structure. In the process of computer technology, we must pay attention to information security to create a good and secure management framework.

## 1 The WEB-based online insurance system framework

In the process of establishing a WEB-based online insurance system, it is necessary to integrate firewall technology, secure mail protocol, information encryption technology, etc. The system's operational advantages be effectively realized by ensuring the security of online payment.

### 1.1 Choosing a development environment

In the development environment selection process, it is necessary to combine the basic elements of the development environment to establish a better coordinating processing mechanism, effectively use Zend and other tools to complete data processing and to coordinate database information such as WEB server, development environment, and model-view-controller framework structure. Thereby the basic level of the management and control system was optimized, and the rationality of the management process was maintained.

### 1.2 Basic needs of the insurance platform

First, the website page and the client. It can realize the online insurance WEB end, and complete the mobile client processing process of the online insurance system, effectively maintain the broker's background management program, ensure the management efficiency of the customer, the insurance appraisal management and the insurance product management, so as to use the subsystem and the server.

Second, the public service terminal mainly runs and pushes the corresponding front-end product access system, rationally maintains the management

efficiency of the electronic insurance policy, ensures the integration of the report and financial accounting structure, and maintains the basic level of the report service.

Third, it is necessary to integrate business service projects and coordinate the basic projects such as statements, brokers, and customer resource management to ensure that basic management elements can be integrated and the effect of open and closed access processing can be maintained. It should be noted that in the process of establishing a corresponding service platform, it is necessary to integrate the broker management service project, effectively improve the insurance estimation management system, and lay the foundation for the subsequent improvement of management effects.

Fourth, the instrumental service system, in the insurance company product docking processing, online payment processing, and short messaging service mail notification management, should integrate the performance monitoring structure to achieve third-party payment services. The specific process is shown in Figure 1.

In the process of establishing different task systems, it is necessary to talk about the online insurance business as the center, integrate the basic requirements of product service, customer service, financial management, tool management, etc., and can perform the division and processing on the business field, and maintain the same business realization. Different service projects, thus fundamentally improving the management level of the insurance policy.

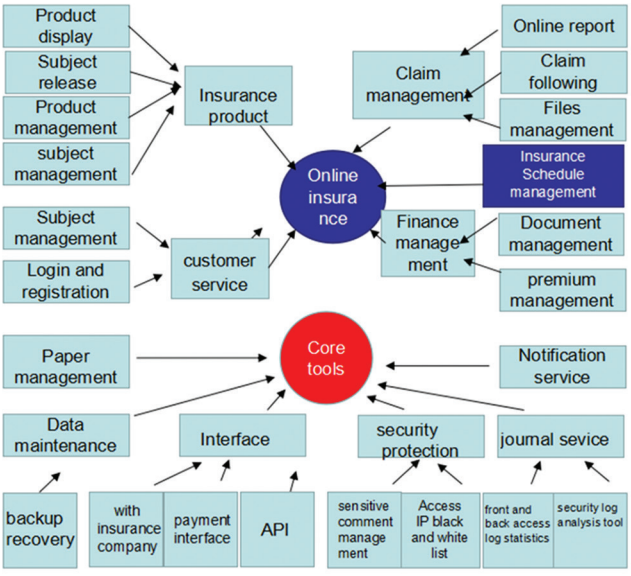


**Figure 1.** Functional module system chart

## 1.3 Implementation of the function of the insurance system

First, comprehensively manage and control online insurance projects, effectively improve product display processing, and conduct centralized analysis and judgment on product purchases and user centers. Only by constraining the system based on the level of security, security, and stability can it have practical research value and significance.

Second, it is necessary to centrally constrain and supervise product management, insurance progress management, and policy management to ensure that document management and administrator account supervision can be carried out in an orderly manner.

Third, it is necessary to regulate and manage the claims management, improve the stability and response level on the basis of improving the report management work, as well as the file transfer and file tracking, ensure that the scalability management requirements can be integrated, and maintain various types of insurance. Collaborative control and management to ensure that the level of file application can be maintained[1].

Fourth, it is necessary to regulate and supervise the two aspects of customer management and insurance assessment. The former mainly involves customer information maintenance and customer activity management, and it is necessary to explore potential business management. The latter is to assist in the tracking of damage items and also to provide assistance for personal injury.

## 1.4 Database system

In the case of large high-concurrency systems, it is necessary to integrate the data architecture and maintain the cluster deployment. After the user concurrency, the data processing mechanism can be established in conjunction with the associated system of data parameters to maintain the basic level of the system application so that the integration is database development effect. In combination with the basic business, it is necessary to design multiple design libraries. Among them, the system usage processing and design data must establish the corresponding analysis and processing relationship according to whether or not to continue the separation. The specific design process is shown in Table 1.

Table 1. The specific design process

| Database name | Continued separation | Horizontal segmentation | Routing key |
|---|---|---|---|
| Insurance product database | Already separated | - | Customer actual ID |
| Public database | Already separated | - | Customer actual ID |
| Customer management database | - | Already divided | Customer actual ID |
| Insurance assessment database | - | | Customer actual ID and Administrator ID |
| Tool database | - | Already divided | Customer actual ID |
| Report database | Already separated | Already divided | Super management ID |

## 2 WEB-based online insurance system security system

To fundamentally improve the security level of the WEB-based online insurance system, it is necessary to actively establish a sound and complete online insurance system structure to meet the security requirements and conduct a comprehensive analysis of policies, technologies, and management mechanisms, and improve the regulatory support system. In the process of actual supervision and management, we must actively implement the secure transaction mechanism of the online insurance system, effectively strengthen the construction of laws and regulations, establish a sound and complete operational management structure with the help of judicial power, and establish the trading behavior of the online insurance system. Moreover, supervision provides support. In July 2015, relevant departments to effectively supervise the operation of internet insurance, fundamentally guarantee the legitimate rights and interests of insurance consumers and achieve the goal of health management of internet insurance business. To integrate the development mechanism of the internet insurance business, it is necessary to integrate the operational mechanism and supervise the details[2].

On the other aspect, it is necessary to supervise the internal security management mechanism of the enterprise. To further improve the standardization of the internet insurance business, it is necessary to establish a healthy and orderly operation space and management process. The corresponding system should also conform to the actual development status of the enterprise. The management level of the optimization operation details also lays a foundation for the rationalization of the subsequent supervision mechanism. It is worth mentioning that, to proceed from the security guarantee process of internet insurance business transactions, it is necessary not only to ensure that the work rights and responsibilities set by the information security management organization are clear but also to centrally accept and control harmful information, and fundamentally maintain the integrity of management process[3].

On the other hand, it is necessary to supervise the information security management responsibility system. To fundamentally improve the security management level of the online insurance system, it is necessary to pay attention to the level of refinement of network information security management duties, as well as to conduct in-depth supervision of the network security incident emergency response and reporting system. To integrate the sudden network security incidents, it is necessary to establish a management control system that is discovered early and reported as soon as possible, to achieve the goal of rapid analysis and root cause[4].

### 2.1 Technical strength matching

In the technical management mechanism, to ensure the smooth application of the WEB-based online insurance system, it is necessary to integrate the technical management mechanism to ensure that the software and hardware can be supervised and systematically constructed, and the rationality of the management process is fundamentally guaranteed. The smooth implementation of the control work provides protection[5]. First, it is necessary to analyze the hardware matching results, not only to buy a server with good reputation but also to improve the broadband processing effect, to ensure that the generated business can be integrated and forecasted, and effectively ensure the server and broadband processes, and to ensure that it can meet the basic needs of business operations for improving the specific security operations in light of the actual situation. Most importantly, in the context of increasing business volume, it is necessary to update and add corresponding equipment to effectively improve the hardware processing system.

Second, it is necessary to pay attention to software configuration management. After making the WEB-based online insurance system, it is necessary to integrate the CMS framework structure. It has fewer bugs and does not have more security risks. Therefore, it is safer than others in the actual development and application process. It should be noted that developers need to use their corresponding technical measures to centrally check and process them to ensure the effectiveness of kernel security management[6].

Third, it is necessary to coordinate the technical personnel to ensure that a technical team with high comprehensive quality can be established, and a more systematic processing mechanism and security maintenance measures can be established in combination with the actual security problems of the enterprise.

### 2.2 Institutionalized management

After applying the WEB-based online insurance system, the relevant departments should actively integrate the management process and supervision and control measures, and integrate the information management system, and also pay attention to the regularization work arrangement of the information security management organization to improve the information security operation. Efficiency, create an objective and fair management model and maintain the efficiency of information security operation supervision[7].

## 3 The implementation of WEB-based online insurance system

### 3.1 Webpage anti-tampering solution

After the WEB-based online insurance system is put into operation, it is necessary to supervise and systematically manage the content arranged in the system, and after implementing the tamper-proof protection mechanism, establish corresponding authority mechanisms for different roles and customers, so as to effectively form a key resistance. The operating mode of the content achieves the technical goal of tamper resistance.

First, the publishing server itself is deployed in the local area network so that the operating environment of the entire local area network is relatively safe, and the corresponding program is installed, which can also provide guarantee for operation management, especially the processing and modification of the source code of the webpage, can reasonably improve the application efficiency of the source file[8].

Second, it is necessary to supervise the deployment of the WEB server, effectively implement it into the internal network security system, and integrate the anti-tampering module to ensure that the content can be synchronized to the corresponding security scope. The specific process is shown in Figure 2.

Combined with the diagram, the tamper-resistant system can effectively integrate the identity recognition mechanism based on the corresponding functions, and improve the management process and control structure[9].

### 3.2 Applying protection mechanisms

In the process of actual application work, it is necessary to supervise the protection plan, rely on the web application layer firewall technology to screen and process the corresponding information, ensure the comprehensive upgrade of the security detection work, and lay the foundation for the optimization of the subsequent application effects[10]. For example, with the system hardening processing structure, it is possible to automatically block illegal operations or reset responses. The specific process is shown in Figure 3.

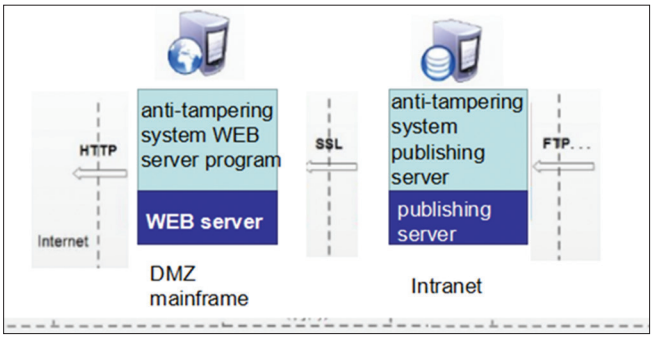


**Figure 2.** Schematic diagram of the anti-tampering principle

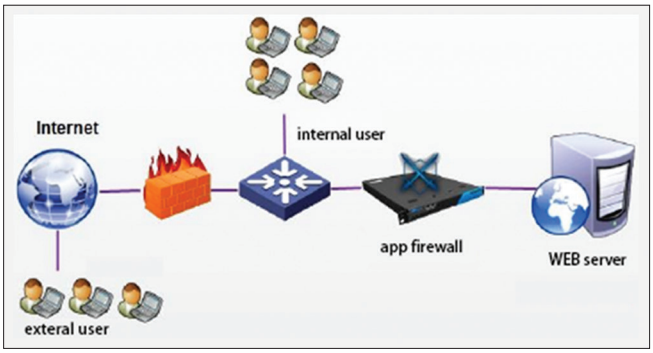


**Figure 3.** Schematic diagram of WEB application system security firewall

## 4 Conclusion

In summary, in the process of establishing a WEB-based online insurance system, it is necessary to establish a specific analysis mechanism based on specific problems, effectively integrate technical requirements and technical structure, and ensure that the impact of bad information on the overall system operation safety can be reduced, and application value and safety can be improved. Furthermore, lays the foundation for the safe transmission of system information sharing.

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