## <u>北京陆道培医院网络安全服务管理系统的</u> <u>设计</u>

## 摘 要

应对网络安全法和国家基础设施保护条例本文主要围绕北京陆道培医院的网络安全建设来展开,以医院的基础设施等级保护建设为背景分析燕达医院的现有的网络安全漏洞和存在的安全隐患,在此基础上我依据医院的安全风险分析制定一套燕达医院的整体网络方案设计。

文章重点是第二章和第三章两个部分,第二章医院的安全风险分析和技术需求分析从对 医院的业务系统和物理机房设备实地考察以及跟院方领导的实际沟通最终在结合相关上级政 府单位的整改框架来对医院的方案进行整体分析。文章的第三部分从院方的安全物理环境(机 房改造)、安全通信环境(通信物理链路)、安全区域边界、安全计算环境(内网的安全补 充设计)、安全运营管理(医院整体网络运维框架的展现)五个方面系统设计。

最终设计方案得到院方的采纳支持,对比传统医疗行业网安建设本方案主要的亮点是打造出一套完整的从外网隔离防护——内网计算环境对业务的支撑——全面清晰的医院网安运营管理设计方案考虑全面细致以一套一体化式的方案交付。其中的创新部分是燕达院区与亦庄院区的网络信息隔离与交换的实现既能够很好支撑两个不同物理院区的业务信息交换还能够符合国家信息安全的整改。

关键词: 企业网 服务质量 计算机性能

## **ABSTRACT**

In response to the network security law and the national infrastructure protection regulations, this paper mainly focuses on the network security construction of Beijing ludaopei hospital, analyzes the existing network security loopholes and potential security risks of Yanda hospital against the background of the infrastructure level protection construction of the hospital, and on this basis, I formulate a set of overall network scheme of Yanda hospital based on the security risk analysis of the hospital Design.

This paper focuses on two parts: Chapter two and chapter three. In chapter two, the hospital's safety risk analysis and technical demand analysis, from the field investigation of the hospital's business system and physical machine room equipment, as well as the actual communication with the hospital's leaders, the overall analysis of the hospital's plan is finally carried out in combination with the rectification framework of the relevant superior government units. The third part of the article is the system design from five aspects: the hospital's security physical environment (computer room transformation), security communication environment (Communication physical link), security area boundary, security computing environment (security supplementary design of the internal network), security operation management (display of the overall network operation and maintenance framework of the hospital).

The final design scheme has been adopted and supported by the hospital. Compared with the network security construction of traditional medical industry, the main highlight of this scheme is to create a complete set of external network isolation protection - the support of internal network computing environment for business - a comprehensive and clear design scheme of hospital network security operation and management considering a comprehensive and detailed delivery of an integrated scheme. The innovation part is the realization of network information isolation and exchange between Yanda district and Yizhuang District, which can not only support the business information exchange between two different physical districts, but also conform to the rectification of national information security.

**Key words:** enterprise network quality of service computer property

## 目 录

第1章	课题研究背景与价值	5
1. 1	网络安全趋势	5
1.2	选题背景	5
1.3	研究目的与研究方法	6
1.4	本文的工作	7
第2章	医院系统安全风险及需求分析	8
2.1	系统运营风险分析	8
	2.1.1 数量庞大的资产信息无法完全掌控	8
	2.1.2 分散多样的信息设备对策略的维护是巨大挑战	8
	2.1.3 高级威胁和未知病毒的检测和分析考验专业运维能力	8
	2.1.4 面对安全事件的快速响应是安全运营的关键	8
2.2	安全技术需求分析	9
	2.2.1 物理环境安全需求	9
	2.2.2 通信网络安全需求	9
	2.2.3 区域边界安全需求	10
	2.2.4 计算环境安全需求	10
	2.2.5 集中安全管控需求	11
<u>第3章</u>	<u> 医院安全技术体系设计</u>	12
3.1	安全物理环境	12
3.2	安全通信网络	12
	3.2.1 安全体系架构	12
	3.2.2 网络通信安全	15
3.3	安全区域边界	17
	3.3.1 边界访问控制	17
	3.3.2 边界入侵防范	17
3.4	安全计算环境	19
	3.4.1 终端安全防护	19
	3.4.2 应用身份鉴别与访问控制	20
	3.4.3 WEB 应用安全防护	20
	3.4.4 数据访问安全审计	22

以上内容仅为本文档的试下载部分,为可阅读页数的一半内容。如要下载或阅读全文,请访问: <a href="https://d.book118.com/598076042066006107">https://d.book118.com/598076042066006107</a>