

# 广播与电视技术



## Radio & TV Broadcast Engineering

全国百种重点期刊 专业核心科技期刊

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《广播与电视技术》是由国家广播电视总局主管，国家广播电视总局广播电视规划院主办，《广播与电视技术》编辑部编辑出版的国家级技术期刊，是发布广播电视科技政策，反映事业建设成就，介绍高新技术，交流工作经验，传播各种信息的重要媒体。本刊主要面向各级广播电视行业主管部门、各级广播电台、电视台、网络公司、发射台、微波站、卫星站、节目制作单位及电教系统，同时对企业、工矿、学校、部队等具有公共广播电视设施的管理人员、技术人员也有参考价值。

为繁荣学术交流，本刊已加入《中国学术期刊网络出版总库》、“万方数据”和“维普中文科技期刊数据库”，有权选取部分论文在本刊关联平台（如广电猎酷网 www.lieku.cn、“广电猎酷”微信公众号等）发布，作者著作权使用费已随论文稿酬一次性给付。本刊充分尊重作者的原创成果并合理保护作者享有的权利，如作者不同意本刊之外其他形式的发布，请在来稿中声明，本刊将作适当处理。本刊及主办单位对本刊已发布作品的内容和观点不持有任何立场、不做出任何承诺或保证、不承担任何责任。

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## [9] 广电媒体云服务容器平台的设计与实现

浙江广播电视集团以中国蓝云为依托推动媒体融合发展以及数字化改革,在省市县融媒体中心建设的模式下,基于实际业务及基础架构的研究设计建设了媒体云服务容器云平台。本文介绍了媒体云服务容器云平台的业务场景、关键技术、网络架构以及运营上线中的一系列设计与实践,可供参考。

## [31] 基于广电融媒云平台的专业级摄像机移动快传系统设计与应用

随着移动互联网技术的不断进步,特别是4G、5G移动通信技术的快速发展,移动端短视频制作与传播已成为主流媒体越来越重视的内容传播领域。基于广电融媒云平台的专业级摄像机移动快传系统,就是通过开发专业级摄像机即拍即传、快速制作短视频的功能并与融媒制作云平台的无缝对接,实现快发优发的实际需求,可资业界同行参考借鉴。

## [69] 广电网络互动业务平台IP化深度融合创新实践

互联网技术和新媒体的迅猛发展,给媒体传播格局带来了巨大的转变。在国家政策、科技创新、行业发展以及市场竞争的驱动下,广电网络如何抓住机遇,克服瓶颈实现转型升级,打造新时代广电网络业务发展新模式,是整个广电行业亟需面对的关键问题。在这个大背景下,山东广电网络探索实践出一条建设智能化全IP互动业务平台,融合传统广电网络平台,实现技术迭代创新、平台能力升级、资源整合利用的战略发展之路,对智慧广电的多元融合发展具有一定的借鉴意义。

## [74] IP组网模式多业态应急广播“智慧广电”云平台的设计与实践

数字化乡村振兴建设对政府部门的应急管理响应能力和现代化治理能力提出了多重需求。本文将基层的应急管理、公共服务、民生服务和地方综合治理深度融合,设计形成云服务、云资源、应急广播平台和云管理四部分组成的多业态应急广播“智慧广电”云平台,实现平时提供服务、紧急情况提供应急预警信息的应急广播“智慧广电”应用,为“智慧广电”在乡村振兴建设中的应用提供了一种思路。

## [113] 中国5G广播发展路径探析

加快推进5G广播电视系统建设已被列入《广播电视和网络视听“十四五”发展规划》,构建基于5G的新型广播电视传输覆盖体系成为“十四五”期间广播电视行业发展的一项重要任务。本文分析了5G广播电视的业务形态、关键技术,展望了推动5G广播电视业务的发展路径,提出了基于600MHz和700MHz频段的广域5G广播电视部署方案,以及推进过程中可能出现的问题和解决方案。



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## [ 9 ] Design and Implementation of Radio and Television Media Cloud Service Container Platform

Relying on China blue cloud, Zhejiang Radio and television group promotes the development of media convergence and digitalization reform. Under the construction mode of provincial, municipal and county converged media centers, Zhejiang Radio and television group designs and constructs the cloud platform on the media cloud service container based on the research of the actual business and infrastructure. This paper introduces the business scenario, key technologies, network architecture and a series of design and practice of the cloud platform on the media cloud service container for reference.

## [ 31 ] Design and Application of Professional Camera Mobile Fast Transmission System Based on Radio and Television Converged Media Cloud Platform

With the continuous progress of mobile Internet technology, especially the rapid development of 4G and 5G mobile communication technology, the production and propagation of mobile short video has been paid more and more attention by the mainstream media. The professional camera mobile fast transmission system based on the radio and television converged media cloud platform is to meet the actual demand of fast and excellent development by developing the functions of the professional camera shooting, transmission and rapid production of short video, and seamlessly connecting with the converged media production cloud platform, which can be used for reference by peers in the industry.

## [ 69 ] IP-based Deep Integration Innovation Practice of Interactive Business Platform of Radio and Television Network

The rapid development of Internet technology and new media has brought great changes to the pattern of media communication. Driven by national policies, scientific and technological innovation, industry development and market competition, how to seize the opportunity, overcome the bottleneck to realize transformation and upgrading, and create a new model for the development of radio and television network business in the new era is a key problem that the whole radio and television industry urgently needs to face. In this context, Shandong Radio and television network has explored and practiced a strategic development road of building an intelligent all IP interactive service platform, integrating the traditional radio and television network platform, and realizing technological iterative innovation, platform capacity upgrading and resource integration and utilization, which has a certain reference significance for the diversified integrated development of smart radio and television.

## [ 74 ] Design and Practice of IP Networking Mode Multi-format Emergency Broadcast "Smart Radio and Television" Cloud Platform

The construction of digital Rural Revitalization puts forward multiple requirements for the emergency management response ability and modern governance ability of governments. This paper deeply integrates the emergency management, public services, people's livelihood services and local comprehensive governance of governments at grass-roots level, designs and forms a multi-format emergency broadcasting "smart radio and television" cloud platform composed of cloud services, cloud resources, emergency broadcasting platform and cloud management, and realizes the application of emergency broadcasting "smart radio and television" that provides services under normal conditions and early warning information in emergencies. It provides an idea for the application of "smart radio and television" in the construction of Rural Revitalization.

## [ 113 ] Analysis of 5G Broadcasting Development Route in China

Accelerating the construction of 5G radio and television system has been included in the "14th five-year plan" for the development of radio and television and network audio-visual. Building a new radio and television transmission coverage system based on 5G has become an important task for the development of radio and television industry during the "14th five-year plan". This paper analyzes the business forms and key technologies of 5G radio and television, looks forward to the development path of promoting 5G radio and television business, and puts forward the 5G radio and television deployment scheme based on 600MHz and 700MHz frequency bands, as well as the possible problems and solutions in the promotion process.