

Cloud Networking Architecture and Security

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Abstract: *This paper explores the architecture of cloud networking and its security implications, emphasizing the integration of software-defined networking (SDN), network functions virtualization (NFV), and virtual networks to improve the scalability and resource management. As cloud services grow, they face security challenges such as unauthorized access and data breaches, which require robust protective measures. Key strategies for securing cloud networks are discussed, including encryption, identity and access management (IAM), and continuous monitoring, alongside the significance of regulatory compliance. By tackling these challenges, organizations can harness the benefits of cloud computing while effectively safeguarding their digital assets in a complex landscape. This paper seeks to offer an overview of current trends and future directions in cloud networking architecture and security, highlighting the importance of adopting a proactive strategy for protecting digital assets in an ever-more interconnected environment*

Keywords: Cloud Networking, Data Security, Encryption, Network Architecture, Cloud Services, Continuous Monitoring, Identity and Access Management (IAM), Security Policies, Zero Trust Architecture