Cloud Computing: Strategies for Cost-Effective Resource Management

Casey Lewis
PhD
Aalto University
Otakaari 1, 02150 Espoo, Finland

Ashley Thompson
Dr.
Trinity College Dublin
College Green, Dublin 2, Ireland

Robin Clark
Prof.
University of Auckland
Auckland 1010, New Zealand

Abstract. Cloud computing has become a cornerstone of modern computing infrastructure, offering scalable and flexible resources. This article discusses strategies for cost-effective resource management in cloud environments. The paper explores techniques such as auto-scaling, load balancing, and serverless computing to optimize resource utilization. By implementing these strategies, organizations can reduce costs and improve operational efficiency. The article also addresses the challenges of cloud security and compliance, providing insights into best practices for cloud resource management.

Keywords: Cloud Computing, Resource Management, Auto-Scaling, Load Balancing, Serverless Computing

Introduction

Cloud computing provides on-demand access to computing resources, enabling organizations to achieve greater flexibility and scalability. However, the dynamic nature of cloud environments presents challenges in managing resources cost-effectively. This article explores various strategies for optimizing resource management in the cloud, including auto-scaling, load balancing, and serverless computing. By adopting these techniques, organizations can enhance operational efficiency and reduce costs associated with cloud services. The paper also addresses critical challenges such as cloud security and compliance, offering best practices for managing cloud resources. By understanding these strategies, businesses can harness the full potential of cloud computing to drive innovation and growth.

References

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