Enterprise-Grade Security in Public Blockchain Networks: Handling Private Transactions, Strict Access Control, Key Management, Isolated Execution, Zero-Trust and Zero-Knowledge Principles

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Abstract

This research paper explores enterprise-grade security in public blockchain networks, focusing on the handling of private transactions, strict access control, advanced key management, isolated execution, zero-trust, and zero-knowledge principles. The study aims to address the critical security and privacy challenges in blockchain technology, particularly in environments where robust security measures are paramount. Through a comprehensive analysis of current security protocols and the implementation of advanced cryptographic techniques, this research provides insights into effective strategies for safeguarding blockchain operations. The findings demonstrate the importance of integrating these security principles to enhance the overall resilience and trustworthiness of public blockchain networks.

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Glossary

Name	Acronym	Description	Definition

Table 1: Glossary for the Logos network