## **ABSTRACT**

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## SECURITY IMPROVEMENT THROUGH DEBIAN 9 UPGRADE AND CASSANDRA VERSION UPDATE AT PT. BUKALAPAK.COM TBK

In this digital era, safeguarding the security of Information Technology (IT) infrastructure has become a top priority. This report highlights significant upgrade steps undertaken at PT. BUKALAPAK.COM TBK, including enhancements to Debian 9 and crucial revisions to the Cassandra version. This initiative is a part of the efforts to comply with the security standards of the International Organization for Standardization 27001 (ISO27001) and the Payment Card Industry Data Security Standard (PCI-DSS). Through the utilization of Ansible, a tool for Infrastructure as a Code (IaaC), the report underscores how the Cassandra updates not only bolster security but also facilitate the management of IT infrastructure. This enables more efficient deployment coordination and more controlled configuration management, ensuring a more reliable service availability and robust security.

**Keywords**: *Infrastructure as a Code* (IaaC), Debian 9, Cassandra, ISO27001, PCI-DSS, *The Security of IT Infrastructure.* 

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