ABSTRACT

This final project discusses the design and implementation application infrastructure using cloud services, specifically the Google Cloud Platform. In facing the challenges of servers failure, this final project provides alternative solutions related to this problem. By using the DevOps method, the application infrastructure design was successfully implemented to achieve the goal of the final project in building reliable, scalable, and highly available application infrastructure. The test results show that the existing application infrastructure has 100% availability in test scenario. Furthermore, load balancer that is created on applications infrastructure successfully distributes the request to other VM.

Keywords: Cloud Computing, DevOps CI/CD, Google Cloud Platform, Application Infrastructures