

ABSTRACT

Along with the development of information technology, the need for data storage becomes increasingly greater. The presence of cloud computing with a scalable and pay-as-you-go service model provides a number of significant benefits for data storage technology such as Object Storage. One company that uses object storage services is PT Andal Rancang Multi Solusi (PT ARM Solusi). PT ARM Solusi is a technology development company such as big data, analytical data, collaboration and automation in the administrative sector, application integration and API. One of the products is Coofis NDE (Electronic Service Note) which provides a mobile application and includes electronic correspondence management services or features. In an effort to improve this product, PT ARM Solusi uses object storage architecture for data and object storage. The aim of designing and implementing object storage is to design the object storage architecture and storage infrastructure, as well as integrate object storage using the S3 protocol to support more efficient and structured file management for Coofis Verse products.

In this final project, an Object Storage is designed using the Simple Storage Service (S3) Protocol, which is one of the protocols that is widely used for Object Storage. Object storage is a data storage system in which data is stored as separate units called objects. In this final project, the author focuses on designing object storage using the MinIO platform which has a maximum object size of 50 TiB with a section size range of 5 MiB to 5 GiB, as well as using Ansible as an automation tool in the deployment and operations process. In addition, the author provides an alternative application that is integrated with MinIO using reimbursement due to limited time in internship activities. By using reimbursement, the files sent will be saved into the bucket in MinIO.

The results of this research are the provision of S3 protocol-based Object Storage which is integrated with the Coofis Verse application at PT ARM Solusi and integrated with alternative reimbursement applications. Apart from that, in MinIO the author can manage user access in MinIO such as read only, admin console, read write and can regulate user access within a certain time period.

Keywords: Coofis Verse, Object Storage, Microservice, Simple Storage Service Protocol (S3)