ABSTRACT

Computer Network is a collection of several computers connected together and can communicate with each other. Through a computer network, users can exchange files, sharing (sharing resources) a hardware, and even control other computers remotely. With the development of information and communication technology, computer network pengguanaan increasing. The more an operator that builds a network widely and massively. This makes use of hardware and software on the network more and more also. For that we need a good management system without reducing the reliability of the device. OpenStack system can be a solution to these problems.

OpenStack is an operating system SDN (Software Defined Network) that control large computing environments, storage, and network resources across the datacenter. All managed through a dashboard that gives control to administrators. This system is an OpenSource software that is released under the terms of the Apache License. OpenStack has a modular architecture that consists of several parts of blocks that Application, Dashboard, Compute, Storage, and Network. At the end of this time the task will only be made on OpenStack Storage service that serves as a provider of data space. Storage using multiple platforms, namely Swift, Cinder and Glance.

From the results of the design service storage in this thesis can be concluded that the performance of each platform can be quite stable. This is because each user request can be served well. From start making the source image with the average measurement time about 1.379 minutes, cloud storage services with an average time about 1.441 minutes to upload files, and Block Storage Services with an average time about 1.515 second in volume manufacturing. Given this, the system OpenStack cloud computing systems will increasingly be effective and efficient.

Keywords: OpenStack, SDN, Storage, Swift, Cinder, Glance