

ABSTRACT

Internet of Things (IoT) is one of many the most popular technology that are in great demand by modern society. In order to prepare the students for facing that challenges, Currently IoT becomes one of the topic in the final project on the Diploma Computer Engineering Study Program, Telkom University. In order to achieving that goal, the role of server infrastructure is critical. This is because the server acts as a provider of the various services that required by IoT devices. In this final project discussed about the implementation process of Infrastructure as a Service based on OpenStack and OpenVPN to support IoT Devices. This final project was built using three units of server computers as infrastructure on the system, OpenStack as infrastructure manager, and OpenVPN as a medium of connecting between local network and public network. Through the process of implementing system at local network and public network, Instances (Virtual Machine) that generated by the system had been successfully implemented as a web server and MQTT broker. Instance is capable to handling requests from IoT devices that act as clients.

Keywords: Internet of Things, Infrastructure as a Service, OpenVPN, Virtual Server.