ABSTRACT

A language laboratory is a laboratory that is made to make it easier to deliver any material in a room. However, making a language laboratory requires expensive fees, therefore it is necessary to use an online system language laboratory using video conferencing to save costs. Video Conference is a multimedia application that allows the exchange of data, sound and images in real-time. To access a video conference an internet connection is required. Therefore, it is planned to create a Raspberry Pi-based local video conference server so that costs can be minimized. To do local video conferencing requires a server, access point and client where the client is a smartphone. So that the language laboratory is expected to be able to accommodate many users. The purpose of this research is to find out the power of raspberries, the amount of time performance on local video conference performance.The purpose of this study is to determine the power of raspberries, the performance of the amount of time on the performance of local video conferencing. Testing was carried out in 2 stages, namely off camera and on camera with fixed users and different time durations. The results obtained from the test were that the running time performance on the Raspberry Pi 4 could function properly and could be implemented based on its purpose but when there were activities such as chat on jitsi entering the CPU and RAM it increased. The use of the on camera and microphone features in jitsi meet affects the condition of the CPU and RAM, while when the camera and microphone are off, they do not.

Keywords: *language laboratory, local video converence, raspberry ip, server.*