# *ABSTRACT*

# BUILDING LIVE STREAMING AND ON DEMAND VIDEO INFRASTRUCTURE USING DOCKER AT BKMIA KARTINI

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*Video live streaming is video that is carried out directly from the website or application to the user. According to Tech In Asia through katadata, Tokopedia reported that weekly content production on the live streaming feature Tokopedia Play increased up to eight times during the corona pandemic. In the first half of 2021, the amount of monthly spending increased 16 times compared to January 2021. In addition, the adoption of shopping through the live streaming feature also increased by double digits or more than 10%. Tokopedia also stated that the store visit rate increased by 20% by using the Tokopedia Play feature. Video on demand is a service that allows users to request video shows as desired.*

*BKMIA (Community Health Center for Mothers and Children) KARTINI is the main clinic located in the Banyumas Regency area that focuses on maternal and child health services. One of the services provided at the clinic is patient consultation with midwives about checking usage. The clinic does not yet have live streaming and on demand video services regarding existing health services and can be accessed on a browser. In the research conducted by Diki Tri Pambudi entitled "Building an RTMP Streaming Server at SMP Negeri 1 Balapulang using Ubuntu 16.04" which aims to build a live streaming video server using the RTMP (Real Time Messaging Protocol) protocol, the result is that the RTMP protocol can be used as the main protocol in build live streaming video. However, there are drawbacks, namely the lack of easy access to live streaming video.*

*This will result in users who do not have access rights to become streamers or broadcasters (people who stream or broadcast) and make server performance worse. Based on the deficiencies in BKMIA (Maternal and Child Community Health Center) KARTINI and this research, in this research live streaming and on demand video services will be built using docker compose with additional streamer limitations at BKMIA Kartini to find out the services available at the clinic and can improve patient visits to the clinic. Live streaming video services are carried out in real time. The hope of this research is that live streaming and on demand video services have two streaming protocols, namely RTMP (Real Time Messaging Protocol) and HLS (HTTP Live Streaming) which have access limits to RTMP servers, so that only certain people can become streamers or broadcasters. and users can access live streaming and on demand video services through a browser. In this study, the people who will become streamers are workers from the clinic who work as health promotion. After that, an analysis of the quality of network services will be carried out using wireshark software with throughput, packet loss and delay parameters at 08.00-08.15 and 11.00-11.15 using the TCP and HTTP network protocols.*

**Keywords:** ***Docker, Video Live Streaming, Video on Demand, Wireshark*.**