

**The 2nd Conference on Management, Business,
Innovation, Education, and Social Science (CoMBInES)
Taichung, Taiwan 3-6 March, 2022**

**ANALYSIS OF MPLS L3 AND MPLS L2 VPN NETWORK USE DURING THE
COVID-2019 PANDEMIC TO SUPPORT WORK FROM HOME**

Haeruddin, Efendi

Faculty of Information System, University Internasional Batam

{haeruddin@uib.ac.id, 1831165.efendi@uib.edu }

ABSTRACT

From the end of 2019 to 2021 the coronavirus (COVID-19) had hit most countries, the use of information and communication technology as a guide in social distancing restrictions proposed by the government and the health department during the pandemic. The purpose of this study is how to implement and compare the use of MPLS VPN L3 and L2 networks during the COVID-19 period to support the world of education and industry by using implementation parameters, Quality of Service (QoS), security, and scalability. In this research, the method used is the Network Development Life Cycle (NDLC), using several stages, namely analysis, design, implementation, and monitoring. The results of this study provide an overview of the world of education and industry in determining and implementing MPLS technology that suits their needs.

Keywords: *Multi Protocol Label Switching, Network Development Life Cycle, Security, Quality of Service, Virtual Private Network*