ABSTRACTION

The internet networks need wider bandwidth. If we look into service provider side, it has be possible enough to provide the needs of wide bandwidth without adding the new network lines that make a higher cost. The technology that suitable in that case is xDSL based technology. This xDSL technology supported by multiplexers called IP-DSLAM positioned in MDF room.

This final project's aim is to give acknowledge about implementation of IP-DSLAM (Internet Protocol – Digital Line Subscriber Access Multiplexer) mainly about connectivity and network performance between IP-DSLAM MA5300 and BRAS (Broadband Remote Access Server) MA5200 as the server – belongs to Huawei Technologies Co., Ltd. – that allowed users to access internet services based on PPPoE (Point to Point Protocol over Ethernet).

This final project discusses the analysis of MA5300's and MA5200's connectivity and link performance on the service provider side, as PPPoE based internet services supporter, but the analysis doesn't reach into the end users. The analysis consist of the network formation process between DSLAMs. Also the analysis of DSLAM – BRAS network performance in Huawei Technologies Co., Ltd.'s West Jakarta operation area with existing parameters, so it can support PPPoE based internet service.