

ABSTRACT

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MONITORING MACHINE-TO-MACHINE COMMUNICATION PERFORMANCE ON THE AUTOMATED TELLER MACHINE NETWORK AT. LOT GLOBAL INTEGRASI

This professional work reviews the implementation of monitoring Automated Teller Machine (ATM) network connections and managing quota usage in supporting Machine-to-Machine (M2M) communications. Along with the rapid development of M2M applications that require real-time data transfer, monitoring network performance has become very important to ensure the stability and quality of communications. ATM networks, although not the main choice in today's network technology, are still used in several sectors that require reliability and high data transfer speeds, especially in industries that rely heavily on fast and reliable information transfer.

In this professional work, practitioners monitor the quality of ATM network connections via Multi Router Traffic Grapher (MRTG) at PT. Lot Global Integration, includes monitoring parameters such as latency, packet loss, and network reliability to ensure that communication between devices runs smoothly and without obstacles. Apart from that, monitoring quota usage is also carried out to ensure bandwidth distribution is appropriate to the volume of data transferred by M2M devices, in order to prevent waste or disruption to network performance.

The results of this analysis show that although ATM networks offer good QoS and reliability, the biggest challenge lies in managing bandwidth quotas, especially when data traffic volumes increase sharply. Therefore, effective bandwidth management and implementation of sophisticated monitoring systems are important factors for maintaining network performance. This professional work concludes that implementing an appropriate monitoring system is vital to maintaining smooth communication, reducing interference, and increasing the efficiency of using network resources.

Keywords: *Monitoring connections, ATM networks, quota usage, quality of service (QoS), bandwidth, latency, M2M communications*