Suradech Watthana-udomrot 2011: SNMP Polling Quantity Reduction Technique in Large Core IP Network. Master of Engineering (Computer Engineering), Major Field: Computer Engineering, Department of Computer Engineering. Thesis Advisor: Associate Professor Pradondet Nilagupta, M.Eng. 74 pages.

Management of large and complex networks efficiently needs a tool to manage. In general, a tool works on Simple Network Management Protocol (SNMP) standard which is the polling process used in the SNMP to enable information enquiry from an agent periodically. For large and complex networks management require a high volume of information requested. If the quantity of information requested exceeds the designated monitoring period, it will affect a loss of a monitoring data. The propose of this thesis is SNMP polling quantity reduction technique to reduce the amount of information requested and to review relationship of a periodical real time monitoring based on network services as SNMP polling quantity form real network information via different of interface utilization. The simulation shows that if data has a relationship, the data requested could be reduced by 71.25%.to 75 %. The quantity of information requested and network delay are important factors that make up the time period required in the process was high. The rate of increase is approximately equal to the rate of increase of these two variables as well.

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