47307316: MAJOR : COMPUTER SCIENCE KEY WORDS : GAME ONLINE/ COMPARISON / PROTOCOL IPV6 AMNART CHANGKEAW : PERFORMANCE COMPARISON OF GAME ONLINE ON BETWEEN IPV4 PROTOCOL AND IPV6. THESIS ADVISOR : SUNEE PONGPINIGPINYO, Ph.D. 59 pp.

This research aims to study the principles and methods in data management. The comparison of the performance between IPv4 network protocols and IPv6 network protocols in the research are conducted for three types of network: 1) IPv4 network protocol 2) IPv4 network protocol with NAT 3) IPv6 network protocols which are developed on game simulation program comes to online tests. The same pattern and same amount of experimental data are used to test on those three types of network. The experiments are also tested several times on 1 machine 10 machines and 30 machines respectively to find the average speed of data transfers.

The experimental results show that a small amount of data transfer speed IPv4 network protocols and IPv6 network protocols are slightly different speed. IPv4 network protocol is slightly faster. Conversely, the trial came to a growing number of machines when performances of IPv6 network protocols are better than the network protocol IPv4 performance.

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