

## ABSTRACT

In this final assignment has been implemented load balancing with Virtual Server Network Address Translation method. Nowadays, current system is still in the form of patch, so that the operating system which not yet supports load balancing needs to set up the kernel, so it lacks in efficiency. Because of that, administration module development and patch handling which helps the administrator are required to simplify the VS/NAT implementation.

The currently using methods are, by implementing VS/NAT in computer network and analyzing the performance of Least Connection and Weighted Least Connection algorithms. This module is expected to be a Linux Operating System-compatible VS/NAT implementation.

Generally, the obtained result from this final assignment is the suitable algorithm to be implemented on VS/NAT for HTTP and FTP application. First result is a module which is more efficient than the previous one. Last result is that weighted least Connection algorithm has better performances for delay parameter. For load system parameter, Least Connection has lesser loads than Weighted Least Connection.

**Keywords** : Network Address Translation, VS/NAT, Least Connection, Weighted Least Connection