

OPTIMIZATION OF LOAD BALANCING CLUSTER IN  
HOMOGENEOUS ENVIRONMENT

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A project paper submitted to

FACULTY OF INFORMATION TECHNOLOGY AND QUANTITATIVE  
SCIENCES

In fulfillment of requirement for the

BACHELOR OF SCIENCE (HONS) IN DATA COMMUNICATION AND  
NETWORKING

UNIVERSITITEKNOLOGI MARA  
SHAH ALAM, SELANGOR

## ACKNOWLEDGEMENT

*"In the name of ALLAH, the most Gracious and most Merciful"*

First and foremost, I would like to express my gratitude to ALLAH S.W.T for all His blessings and help in making sure the completion of this project. Without His consent, I would not have been able to finish this project.

Secondly, I would like to thank my highly regarded supervisor, Pn Shapina bt Abdullah, for all her supervision, comments, ideas, suggestions and guidelines given to me in order to complete this research project.

Special thanks also to Pn Rozita bt Yunos and En Adzhar b Abdul Kadir for the explanation and guideline given to me especially during the proposal period and also during the presentation of this project. Their contributions have been very helpful towards completing this project.

To my beloved family especially my mom and dad, a million thank you to them for their love, never-ending support, prayers and encouragements in making sure I do my best in completing this project.

Last but not least, my fellow friends and others who have contributed directly and indirectly towards the completion of this project, thank you very much and may ALLAH bless you all.

Thank you

*Wassalam*

## ABSTRACT

Load balancing cluster is a collection of computers that work together and capable of transferring workload from an overloaded unit to other computers in the cluster. There are many ways to implement the cluster. This project focusing on how to optimize the performance of cluster based on the hardware, connection type of the cluster and the operating system used. It will be tested using sample coding such as distkeygen, eatmem and timewaster to test the performance. The cluster system is built using two computers that have different architecture. This project not only determines the functionality of the cluster, but also determines the suitable coding to run on the cluster system. The findings of this study is proved that more RAM on the node gives more power to single node and consequently to the cluster which is RAM 504MB gives more power compare to RAM 256MB, the best connection to the cluster is P2P topology which is two computers directly connected with cross cable compare to the connection using switch and the last finding is the homogeneous environment gives better performance compare to heterogeneous cluster.

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