

THESIS REPORT
PARALLELIZATION USING PARALLEL VIRTUAL MACHINE (PVM)

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ABSTRACT

Parallelization is a process where the tasks can be distributed using Master and Slave paradigm. Parallel Virtual Machine (PVM) is a software infrastructure that emulates a generalized distributed memory multiprocessor in heterogeneous networked environment. It is an open source program which provides the capability for using a number of networked (TCP/IP) machines as a parallel virtual machine to perform the tasks. The purpose of this thesis project is to study the PVM and its significance to the users after using the software. Some researches about PVM itself have been retrieved through some books, journals, articles and also some valuable information from others. After that, the information was then divided into several parts which consist of the PVM background, PVM implementation and also its significance to the users. The second objective is to compare the time consuming of matrix calculation before and after using the PVM. Based on the findings, it is recommended to use more than two slaves in order to have a great difference of time consuming to perform the calculation. Since this project is fully tested on Linux platform, so it is suggested that the future researcher who will be continuing this project in depth may consider using multi platform such as Windows, Sun Solaris and Linux. In brief, we know that the implementation of PVM can benefits both the students as well as the lecturers other can give some contribution to the faculty generally.

LIST OF CONTENTS

CHAPTER 1	xi
INTRODUCTION.....	xi
1.1 BACKGROUND OF THE STUDY.....	xi
1.2 PROBLEM STATEMENT	xii
1.3 OBJECTIVES OF THE PROJECT.....	xiii
1.4 SCOPE OF THE PROJECT	xiii
1.5 SIGNIFICANCE OF THE PROJECT	xiv
1.5.1 Contribution to the lab user.....	xiv
1.5.2 Contribution to the faculty.....	xiv
1.5.3 Contribution to the researcher	xiv
1.6 OVERVIEW OF THE THESIS PROPOSAL.....	xv
CHAPTER 2	xvi
LITERATURE REVIEW	xvi
2.0 INTRODUCTION.....	xvi
2.1 PARALLEL COMPUTERS	xvi
2.1.1 Shared memory multiprocessor.....	xvi
2.1.2 Distributed memory multicomputer	xvii
2.3 VIRTUALIZATION.....	xix
2.3.1 Virtualization allows one pc to run multiple kernels.....	xx
2.3.2 Consolidating servers, isolated environment.....	xx
2.4.1 Background of PVM.....	xxi

2.4.2 Components of PVM.....	xxii
2.4.2.1 Daemon Program	xxii
2.4.2.2 Library	xxiii
2.4.3 PVM Language.....	xxv
2.4.4 Features Supplied by PVM	xxv
2.4.4.1 Resource management.....	xxv
2.4.4.2 Process control	xxvi
2.4.4.3 Dynamic Task Groups.....	xxvi
2.4.4.4 Fault Tolerance	xxvi
2.5 MASTER-SLAVE COMPUTATIONAL MODEL	xxvii
2.7 CONCLUSION	xxxii
CHAPTER 3	xxxii
METHODOLOGY.....	xxxii
3.1 INTRODUCTION.....	xxxii
3.2 DATA COLLECTION	xxxiv
3.3 PLANNING	xxxv
3.4 PROJECT METHODOLOGY.....	xxxv
3.4.1 Specifications.....	xxxv
3.4.1.1 ikhti (Master).....	xxxv
3.4.1.2 sun (Slave).....	xxxvi
3.4.1.3 host1 (Slave).....	xxxvi
3.4.2 Installation and Configuration	xxxvii