

UNIVERSITI TEKNOLOGI MARA

**EVALUATION OF VIRTUAL DESKTOP
INFRASTRUCTURE USING USER WORKLOAD
SIMULATOR**

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Thesis submitted in partial fulfillment
of the requirements for the degree of
**Master of Science in Telecommunication
and Information Engineering**

Faculty of Electrical Engineering

July 2015

ABSTRACT

Numerous of Virtual Desktop Infrastructure (VDI) solution available in market has invokes a reason to evaluate and compare those VDI solutions. One of important component for VDI is VDI host. Therefore, it is important to use an efficient VDI host. In this thesis, a VDI host evaluation is done by using three metric that is Virtual Machine (VM) density, IOPS (Input/output Operation per Second) consumption, and network bandwidth utilization. Two tools have been developed in order to evaluate the VDI host that is User Workload Simulator and VDI Host Evaluator. User Workload Simulator use to do user workload test, while VDI Host Evaluator will processed and evaluate the collected data from the test to indicate which VDI host is better between two VDI host. User workload categorized into four profiles which is light, medium, heavy and multimedia user profiles. User Workload Simulator will run the test based on those profiles. While user workload test is running, utilization data of VM resource will be collected by Performance Monitor. The test done on two VDI host, that are VDI A host and VDI B host. The collected data from both VDI host will produce estimated VM density, IOPS consumption and network bandwidth utilization per host. By using VDI Host Evaluator, the three VDI host metric mention previously will be compared and evaluated. VDI Host Evaluator will indicate which VDI host is better after done evaluating those three metrics.

ACKNOWLEDGEMENT

In the name of Allah the Most Beneficent, Most Merciful and Most Gracious who has giving me strength, life, idea and blessing to complete this project.

First, I would like to thanks to Universiti Teknologi MARA and MARA for giving me an opportunity and monetary support to complete the Master of Science in Telecommunication and Information Engineering studies. For the record, the work was partially funded by Research Intensive Faculty (RIF) grant - "Integrating Seamless Crash Recovery Support for f-way Test Generation Strategy" (Kod: 600-RMI/DANA 5/3/RIF (304/2012)) from Research Management Institute (RMI), Universiti Teknologi MARA (UiTM), Malaysia.

Second, special thanks to my project supervisor Mr Syahrul Afzal bin Che Abdullah for guiding and supporting me throughout this project.

My high appreciation goes to my beloved parents and family who have given me moral and physical support.

Last but not least, many thanks to my friends and other who indirectly contributed to this works. Thank you very much.

TABLE OF CONTENTS

	Page
SUPERVISOR'S DECLARATION	ii
AUTHOR'S DECLARATION	iii
ABSTRACT	iv
ACKNOWLEDGEMENT	v
LIST OF FIGURES	ix
LIST OF TABLES	x
LIST OF ABBREVIATIONS	xi
CHAPTER 1: INTRODUCTION	1
1.1 Overview of Virtual Desktop Infrastructure (VDI)	1
1.2 Problem Statement	3
1.3 Aim and Objective	• 4
1.4 Scope Of Project	5
1.5 Structure of Thesis	5
CHAPTER 2: LITERATURE REVIEW	7
2.1 Server-Based Desktop Virtualization	7
2.2 User Workload Testing	8
2.3 VDI Host Capacity Planning	9
2.4 Elements of VDI	10
2.5 Theory of IOPS	10
2.6 Summary	11
CHAPTER 3: METHODOLOGY	12
3.1 Project Process Flow	12

	Page
3.2 User Workload Testing	13
3.2.1 User Profiles Definition and Scripting	14
3.2.2 Development of User Workload Simulator GUI	16
3.3 Data Collection	21
3.4 VDI Host Evaluation	21
3.4.1 Estimation Formula	22
3.4.2 VDI Host Quality Evaluation	23
3.4.3 Development of VDI Host Evaluator	24
3.5 Summary	25
CHAPTER 4: EVALUATION	26
4.1 User Workload Testing	26
4.2 Data Collection	26
4.2.1 VDI A and VDI B Host resource data	27
4.2.2 VDI A and VDI B VM resource data	28
4.2.3 VDI A and VDI B VM resource utilization data	28
4.3 Summary	29
CHAPTER 5: RESULTS AND DISCUSSIONS	30
5.1 Comparison of data collected by VM density, IOPS consumption and network bandwidth utilization	30
5.1.1 Comparison in term of VM density	30
5.1.2 Comparison in term of IOPS consumption	33
5.1.3 Comparison in term of Network Bandwidth Utilization	34
5.2 Comparison of data collected by user workload profiles using VDI Host Evaluator	34
5.2.1 Light User Profile	35
5.2.2 Medium User Profile	36
5.2.3 Heavy User Profile	37
5.2.4 Multimedia User Profile	38
5.3 Summary	38