# **APPROVAL**

# AUTOMATED NETWORK PROFILE SWITCHER (ANPROS) BY

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This thesis proposal was prepared under the direction of thesis advisor, Mr. Adzhar Bin Abd. Kadir, Department of Computer Technology and Networking, and it have been approved by thesis supervisor, Mr. Wan Ya Bin Wan Hussin. It was submitted to the Faculty of Information Technology and Quantitative Sciences and Quantitative Science and was accepted in partial fulfillment of the requirements for the degree of Bachelor of Science Honors Data Communication and Networking.

Approved by:

Date: December 3, 2007

## **ACKNOWLEDGEMENT**

First and foremost I would like to express my highest gratitude to Allah S.W.T, the Almighty for granting me the will and strength to finish this research on time. Without His blessing and permission, this research could not have been completed.

Secondly, I would like to express my gratitude to all my family members, who cares about me, and giving me all the support that they can in hoping that I will be successful in anything that I do. Without their support, it would be a hard time for me to finish this thesis.

Next is to my thesis supervisor, Encik Wan Ya Bin Wan Hussin, for his support and hospitality throughout the course of this project. I would also like to express my sincere appreciation to Encik Adzhar Bin Abdul Kadir as the thesis advisor for his guidance, advice and critics along the development of this project. Without their continuous support and interest, this thesis would not have been completed.

Last but not least, I would like to give my thanks to the interviewees for the feedback given, my friends whose there for me when I needed someone to share my problems and to everybody involve direct or indirectly. Thanks for the inspiring me in such a means

### **ABSTRACT**

Network profile contains the configuration setting of network such as IP addresses on local area network. Usually there will be more than one network profile stored in a notebook of mobile user such as home, office or campus networks. These network profiles apply different setting and configuration. In the campus area, the user will have to apply the campus network profile setting which then enable the users to utilize all network services provided by the network. Dealing with several network profiles make it difficult for the users to manually switch from one profile to another. The users have to reconfigure the IP, subnet mask and default gateway address before they are able to use the network. For average users, these tasks are quite difficult because they have to remember a lots of network information. The Automated Network Profile Switcher (ANProS) solves these problems by providing the user the capability to enable the operating system to automatically switch the network profile without user intervention and restarting the notebook. Therefore it can reduce the time for user to use the network and also provide a more convenient way to handles various network setting for mobile user. The ANProS works by scanning the available network and matched it to suitable existing network profile, thus make it an ideal tool for notebook users. The users only need to manually configure the setting if there is no suitable profile for the network, which means they are in the new local area network. Therefore, the ANProS will offer the mobile user a more comfortable way managing their network setting and providing such as a plug-in-and-play like environment especially to the mobile user.

# TABLE OF CONTENT

		Content	Page				
Approv	val		i ii				
Declaration Acknowledgement Abstract Table of Content List of Tables							
				List of	Figures		viii
				CHAP'	TER 1 - IN	NTRODUCTION	
				1.0	Introduc	etion	1
				1.1	Backgro	und	1
1.2	Problem	Statement					
1.3	Objective		2 2 2 2				
1.4	Project S	Scope	2				
1.5	Significance of the Research		2				
CHAP'	TER 2 - LI	ITERATURE REVIEW					
2.0	Introduc	tion	4				
2.1	Definition of Terminology		4				
	2.1.1	Automated	4				
	2.1.2	Network					
	2.1.3	Network Profile	5 5				
2.2	Definition of Technology Used		6				
	2.2.1	Network Basic Input/Output System (NetBIOS)	6				
	2.2.2	Domain Name Service (DNS)	8				
	2.2.3	Wireless Networking	9				
	2.2.4	Transmission Control Protocol/ Internet Protocol (TCP/IP)	9				
	2.2.5	Dynamic Host Configuration Protocol (DHCP)	10				
	2.2.6	Wireless Fidelity (Wi-Fi)	11				
2.3	Similar Project		13				
	2.3.1	LAN over IP	13				
	2.3.2	Walter Wireless Networking Daemon	13				
	2.3.3	Dyndaemon	13				
	2.3.4	IWGUI – Internet Wireless GUI	13				
	2.3.5	Network Configuration Tool for Linux	13				
	2.3.6	KNetworkConf-KDE Network Configuration	14				
	2.3.7	Mobile NIC Switcher	14				
	2.3.8	Transparent Mobile IP	14				

## **CHAPTER 1**

## INTRODUCTION

## 1.0 Introduction

Network is the most important things in today's computing infrastructure. Many companies require internet for advertising and getting information to sell their products. Educational institutions nowadays have their own network between branches and the internet. This has become common to the students and staff which deal with many assignment and information exchange.

## 1.1 Background

Assume that users have a DHCP-enable network at campus, and a static IP address assigned to your network card at home. Every time users connect the notebook to a new local network they have to change the network adapter setting manually. It will be easier if the user store two profiles called "campus" and "home" and switch between networks with these two profiles. But it would be a lot easier if the switching is done automatically by certain utility installed to the operating system. The users just have to attach the Ethernet cable and the utility will examine the appropriate profile to apply to the system.

ANSProS has the ability to create a new network profile. For further flexibility, this utility provides ability for the users to manually customize the created network profile to suit advance user's need and requirement. Thus, if the users deal with two of more network locations, they can use ANProS utility to switch from one network profile to another network profile.