

**DEVELOPMENT OF PROTOTYPE WEB-BASED IPng ROUTER
CONFIGURATION SYSTEM**

QURRATUN AINI BINTI AKMAT

UNIVERSITI TEKNIKAL MALAYSIA MELAKA

BORANG PENGESAHAN STATUS TESIS

JUDUL: DEVELOPMENT OF PROTOTYPE WEB-BASED IPng ROUTER
CONFIGURATION SYSTEM

SESI PENGAJIAN: SEMESTER 2 (2008/2009)

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Tarikh : 2 JUL 09

CATATAN: * Tesis dimaksudkan sebagai Laporan Akhir Projek Sarjana Muda (PSM)
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**This report is submitted in partial fulfillment of the requirements for the Bachelor of
Computer Science (Computer Networking)**

**FACULTY OF INFORMATION AND COMMUNICATION TECHNOLOGY
UNIVERSITI TEKNIKAL MALAYSIA MELAKA**

2009

DECLARATION

I hereby declare that this project report entitled
Development Prototype of IPng Router Configuration System

is written by me and is my own effort and that no part has been plagiarized without citations.

STUDENT : _____ Date: 02.07.09
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DEDICATION

**Specially dedicated to
my beloved parents, my siblings and my family, who have encouraged, guide and
inspired me throughout my journey of education. Also I would like to dedicate this
special thank to my friends and my colleagues.**

ACKNOWLEDGEMENTS

**In the name of Allah,
Most Gracious and Most Merciful**

Alhamdulillah with the effort and patience in taking all challenges, Project Sarjana Muda (PSM) was accomplished successfully.

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ABSTRACT

Prototype of Web-based IPng Router Configuration System is a web-based user interface (WBUI) design system that used for router configuration. It develops in HTML and PHP programming language which can be running in Operating System without any requirement. This prototype used to help especially the beginner users to configure router even if they had no experience in router configuration. This project is built for network that using IPv6 addresses. But this system not includes the entire Cisco Router configuration, just a several basic and popular commands. In this system, the connection between the router and the server is using TCP connection that is using TELNET. In way to gives the user clear about all the commands that used for each configuration, one interface used for one of the router configuration. User can see the command at the text area. One of the advantages of using this system is, it can be running anywhere and anytime as long as the server is connected with the router in intranet network environment.

ABSTRAK

Prototaip sistem konfigurasi router IPng berasaskan web adalah reka bentuk sistem antaramuka pengguna yang digunakan untuk mengkonfigurasi router. Ia dibangunkan menggunakan bahasa pengaturcaraan HTML dan PHP yang mana boleh diakses dari sistem operasi tanpa apa-apa keperluan lain. Prototaip ini di gunakan untuk membantu khususnya pengguna baru untuk mengkonfigurasi router walaupun tanpa pengalaman didalam mengkonfigurasi router. Projek ini dibangunkan untuk rangkaian yang menggunakan alamat IPv6. Tetapi sistem ini tidak merangkumi kesemua arahan yang terdapat di dalam Cisco Router, ia cuma merangkumi arahan yang asas dan popular. Didalam sistem ini, sambungan antara router dan server adalah menggunakan sambungan TCP iaitu TELNET. Dalam usaha memberi gambaran jelas mengenai arahan-arahan tersebut, satu antaramuka akan digunakan untuk setiap satu arahan konfigurasi router. Pengguna boleh melihat arahan didalam kawasan teks. Salah satu kebaikan menggunakan sistem ini ialah, ia boleh diakses dari mana-mana dan pada bila-bila masa selagi mana terdapat sambungan diantara router dan server di dalam persekitaran rangkaian dalaman.

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**DEVELOPMENT OF PROTOTYPE WEB-BASED IPv4 ROUTER
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