

BAHRIA INSTITUTE
ISLAMANAD

Dated 22/3/04

FINAL APPROVAL

This is to certify that we have read the project report submitted by Mr. Azhar Mahmood and is our judgment that this report is of sufficient standard to warrant its acceptance by Bahria University, Islamabad for the degree of Masters in Computer Sciences.

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PROJECT BRIEF

Project Title	Security Over Dial On Demand Routing(DDR)
Undertaken by	Azhar Mahmood
Supervised by	Mrs. Farzana Khan
Starting Month	September 2003
Completion Month	February 2004
Equipment Used	CISCO Routers, Modems, PTCL Lines
Operating System	Windows 2000 Operating System
System	Pentium II or Above

ABSTRACT

This project describes the practical implementation of Dial-on-Demand Routing using PTCL lines. In this project there are two different scenarios exist. In first scenario, local user is connecting to the Branch office using DDR. Local user dials to the local branch office using modem and telephone line. Branch office is situated in Islamabad. In branch office, router authenticates the user using CHAP. In second scenario there are two site offices situated at Lahore and Islamabad. At each site office there are different user's connecting through a LAN. Routers are used to connect two site offices through a WAN link using PTCL lines. We are using DDR to connect these site offices; we need two external modems for achieving this task. In this scenario first site office is at Lahore and the other is at Islamabad. Security is an important issue when we are talking about WAN communication. So here, this issue is handled by using CHAP and Access List. At the end, some information is given about the latest technologies used for DDR like ISDN which provides Digital network. And for security purposes latest technique which is used is PIX firewall instead of Access Control List.

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Acknowledgments

Many people have contributed to this project, and I wish space were available to acknowledge and thank all of them. First of all, my respectable parents who help me not only during this project but also through out the completion of MCS, without their guidance and prayers I can't be able to complete my master's and in true wording not only master's but every achievement in my life is just because of my parents support whether it is moral or financial.

I certainly owe special thanks to the project advisor *Mrs. Farzana Khan* for her wonderfully insightful comments and suggestions on reading material as I endeavored to produce this report. Her enthusiasm and ideas on project development encouraged me to complete this project at a time when all I could see in front of me was a monumental disarray of images.

Mr. Imran Haider Naqvi (CORVIT SYSTEMS) has been a great source of information on Remote Access and has given me helpful contacts. He was the originator of the idea Dial on Demand Routing. He is the man who gives me the confidence and help at every stage through out of the completion of this project. He provides me all the equipment needed for this project, and also the place to demonstrate my project to the faculty of *Bahria University*. During practical labs his guidance makes my concepts stronger and stronger.

My family members and friends also help me in the completion of this project. My younger brother *Awais* provides me some source full information through internet, so I am thankful to him and other family members too.

DEDICATION

Dedicated to:

Allah Sub'hanahu wa Ta'ala (The Glorified and the Exalted)

For the love of:

The Blessed Prophet Muhammad Sallallahu 'Alaihi wa Sallam

The inspiration for this Project comes from the following verses of the Holy Qur'an:

In the Name of Allah, The Beneficent, The Merciful

Recite with the Name of your Lord who created.

Created man from a clot of blood.

Recite: And your Lord is the Most Honourable.

Who taught (to write) with the pen.

Taught man what he knew not. (96:1-5)

Invite to the way of your Lord with wisdom and goodly

exhortation, and argue with them in the best manner;

surely your Lord knows well

those who go astray from His path,

and He knows well those who are guided. (16:125)

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