

# M R N A

**Modular Remote Network Administration Web Based**

**(COM Component / Server)**

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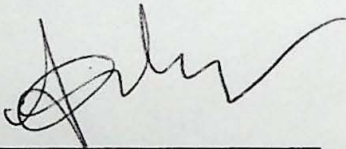
This report is submitted to the Department of Computer Sciences,  
Bahria Institute of Management & Computer Sciences, Islamabad.  
In Partial fulfilment of the requirement of Degree of MCS.

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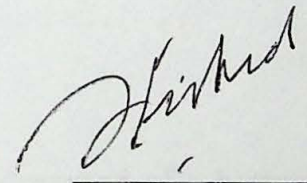
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# Certificate

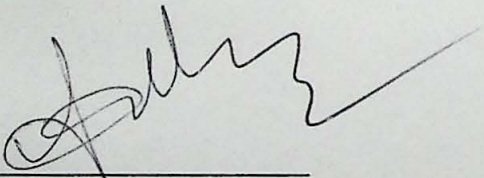
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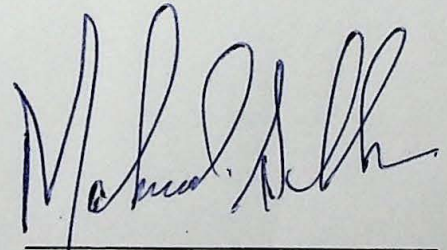
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To my Parents, especially my late Mother, who had always dreamed of a better more beautiful world for her children.

(Saif)

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Fi Aman Allah

Saif ur Rehman

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# Abstract

This report is the culmination of over eight months of hard work. These eight months saw us (i.e. Saif and Raheem) go from rank novices as far as Windows NT, and Windows 2000 administration was concerned, to our present state as joint architects of a **Modular Web Based Remote Network Administration Package (MRNA)** for Windows NT and 2000.

MRNA involves extensive use of the programming languages Visual C++ and Visual Basic. It is divided into two logically different modules which might be conveniently referred to as the **front end** (MRNA Client/Interface) and the **back end** (MRNA Server). These modules combine cohesively to provide the services of Network Administration over the internet.

But the thing that our group is really proud of is that this is **modular software**. By modular we mean that if the need arises we can with concerted hardwork redefine and extend its scope and bring into its fold many other Network Administrative Functions. This would make this software even more versatile than it already is.

Our report starts with the simple introduction of our project and the aims that we hope to accomplish. It also includes the strategies that we have adopted in order to accomplish the goals that we have set for ourselves. All the above mentioned details are covered in the chapter titled **Introduction** (Chapter 1).

Next we have included the basic theoretical knowledge that we deemed necessary in order to achieve a complete thesis that hopefully does not need to be backed up with any other document or text. This theoretical knowledge will help any layman understand the bare facts the forms the foundation of our project. This theory includes the basic definitions of Networks, the basic concepts of Network Administration, the duties of a Network Administrator and an in-depth analysis



of the concept and bounds of Remote Network Administration. Along with this basic information we have included the details of the tools being used in the coding of our package. This section also contains the comparison of the various tools that could have been used, and the relative merits of the tools we have chosen over the other available options. This chapter is titled as **Literature Survey** (Chapter 2).

This is followed by the definition of the scope of our project and a description of the system we plan to implement along with the design document implemented in accordance with UML Object Oriented Standards in the Chapter titled as **Proposed System and Design Document** (Chapter 3).

The details of the implementation of the back end or the MRNA Server along with all the CoClasses and functions that have been implemented in the course of the coding have been defined and portrayed in graphic detail in the chapter titled **Implementation** (Chapter 4).

The procedures used to check whether or not the software conforms to all the requirements that it is expected to fulfil are covered in the chapter concerning the **Testing and Evaluation** (Chapter 5).

The final overview of the software and the report is covered in the chapter titled **Conclusion** (Chapter 6).

In the end the envisaged future enhancements to the software are outlined in **Future Development** (Chapter 7).

Now we leave you to peruse this document. We hope that you as plain reader or examiner will also be satisfied and happy with this humble effort of ours, as we surely are.