



KUMARAGURU
COLLEGE OF TECHNOLOGY

Department of Computer Science and Engineering



ISO 9001:2000
Certified

ASSET MANAGEMENT TOOL FOR WINDOWS

**PROJECT WORK DONE AT
MENTOR LABS,
BANGALORE.**

P-1246

PROJECT REPORT

**SUBMITTED IN PARTIAL FULFILLMENT OF THE
REQUIREMENTS FOR THE AWARD OF THE DEGREE OF
M.Sc APPLIED SCIENCE (SOFTWARE ENGINEERING)
OF BHARATHIAR UNIVERSITY, COIMBATORE.**

SUBMITTED BY

**A.RANJIT
REG NO: 0137S0050**

Under the guidance of

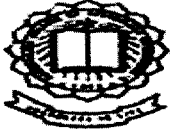
INTERNAL GUIDE

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KUMARAGURU
COLLEGE OF TECHNOLOGY
Department of Computer Science and Engineering



(Affiliated to Bharathiyar University)
Coimbatore - 641006
(JUNE-2004 TO OCTOBER -2004)

CERTIFICATE

This is to certify that the project entitled

“ASSET MANAGEMENT TOOL FOR WINDOWS”


Done by

A.RANJIT

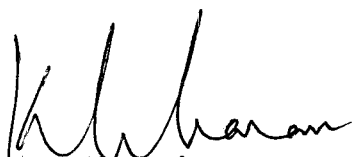
REG NO: 0137S0050

Submitted in partial fulfillment of the requirements for the award of the degree of
M. Sc (Applied Science) Software Engineering of Bharathiyar University.


Professor and HOD


Internal Guide

Submitted to University examination held on _____


Internal Examiner


External Examiner

COMPANY CERTIFICATE

Certificate of Accomplishment

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Was provided with facilities to do a project work at Mentor Labs, Bangalore as per the following details:

Project Title

“Asset management Tool For Windows”

Under the Guidance of

Mr. Sunil Kumar

During the period from 25th June 2004 to 15th September 2004

The student of MSc Software Engineering has completed the project work and during the development period, he has evinced keen interest in the project & Successfully completed the project

Place: Bangalore

Date: 15/09/2004



[Handwritten Signature]

of Issuing Authority

DECLARATION

DECLARATION

This is to Certify that this project work entitled “**ASSET MANAGEMENT TOOL FOR WINDOWS**” Submitted to Kumaraguru College Of Technology, Coimbatore (affiliated to Bharathiar University) is a record of original work done by **A.Ranjit**, **Reg No.0137s0050** under the guidance of **Mr.S.Sunil Kumar M.C.A.**, Mentor Labs, Bangalore and **Mr.C.Rajan Krupa, M.C.A.**, Department Of Computer Science and Engineering, Kumaraguru College Of Technology, Coimbatore and that this project formed the basis for the award of any Degree / Associate ship / Fellowship or similar title to any candidate of any university.

Signature Of The Candidate



(A.RANJIT)

Place: Coimbatore

Date: 24/09/04



Staff in-Charge

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SYNOPSIS

SYNOPSIS

“ASSET MANAGEMENT TOOL FOR WINDOWS” is utility software developed for MENTOR LABS using WIN32 API's under VISUAL BASIC.NET.

In the emerging world of networking it is a hectic task to monitor System 's process, services, events, and hardware configurations in each and every system in the network. In order to trace their existence, hardware engineers have to manually check the entire network and then consolidate the report. This is a difficult task when there are lots of systems connected to the network.

This software retrieves all the information of the client systems and remote systems and displays it on the server. It also captures the currently running processes, services provided by the system, events that are handled by the system, devices that are being currently used by the system and it allows administrators and users to communicate each other through chat module, white board facility will allow the administrator to demonstrate any functions to the various users of the clients from the server. It allows to transfer file from one system to other systems. It will capture all the desktop operations that are being currently used by the client users. This software is used to map the network drive and it is allows the administrator to view the shared file of any client and remote system. through this software corresponding file information can be retrieved from the client or remote system.

The main users of this system are system administrators who wish to monitor the client activities at any instance of time.

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INTRODUCTION

1. INTRODUCTION

1.1 Project Overview

“ASSET MANAGEMENT TOOL FOR WINDOWS” is developed using Win32 API's under VISUAL BASIC.NET. The objective of this software is to monitor all the systems in the network and to retrieve all the information of the client systems and remote systems.

The main features of this product are as follows:

- **Network Management**

The Network Management will retrieve all the systems ip address and the system id that are connected in the network, and it allows the administrator to disconnect the systems in the network.

- **File Management**

The File Management will retrieve all the Files in each and every drives of the system that are present in the network.

- **File Explorer**

The File Explorer will retrieve all the information's about the particular files from the drives of the system that are present in the network.

- **Event Management**

The Event management will retrieve all the events that are handled by the system like log type, log message, log time, log source, from the corresponding system in the network

- **Media Management**

The Media Management will allow the administrator to play all the media files from the server to clients.

- **Device Management**

The Device Management is used to retrieve all the device information's like Driver name, device descriptions, device state and device type their status

- **Process Management**

The process management is used to retrieve all the process information's like process name, process id, CPU usage, RAM usage, and process priority about the corresponding system in the network.

- **Service Management**

The service management is used to retrieve all the service information's like service name, service descriptions, and service state, start up about the corresponding system in the network

- **Desktop Management**

The desktop management is further divided in to

Chatting: - chatting will allow the administrator and the users to communicate each other.

White board: -White board is used to explain any working process from the server as soon as when administrator performs text function it will be displayed in the client or in the remote system monitor.

File transfer: -File transfer is used to transfer files from one system to other system.

Desktop monitoring:-It will capture all the operations that are performed in the client or remote system.

1.2 Organization Profile

MENTOR LABS is a software development & Networking Company, incorporated on the year 1991 This prestigious Software establishment is a technology-driven Multi National company it established its Branches in various parts of the world in Australia, Austria, America, Belgium, Germany, India, Singapore, England, & France.

There are 32 prestigious branches in India and it is Head Quatered in Hyderabad, and its branches are in Bangalore, Secunderabad, Mumbai, Chennai, Gujarat, Kolkatta, and Baroda.

There are totally 51,000 Employees are working in this establishments, this Establishment is concentrating its activities on core information technology areas to provide highly creative solutions.

Its major clients are,

- ❖ Analytica India Pvt Ltd.,
- ❖ Apex Technologies
- ❖ Asera Software
- ❖ Bluestar Infotech.
- ❖ Canarys Automation Pvt. Ltd.
- ❖ Celstream Technologies Pvt. Ltd.,
- ❖ Component Insights (I) Pvt. Ltd.,
- ❖ DeDuCo Software India
- ❖ Digital Global Soft
- ❖ Infinite Computer Solutions
- ❖ i-flex solutions
- ❖ CGI (IMR Global)
- ❖ ITTI
- ❖ KESDEE Systems
- ❖ L & T Infotech, Bangalore
- ❖ Mahaveer Academy of Technology and Sciences
- ❖ Mascot Systems, Bangalore.
- ❖ Edge Matrix (Microcon)
- ❖ Mphasis- BFL Software
- ❖ Novell Software
- ❖ Oracle Corporation
- ❖ Paragon Solutions
- ❖ PSI Data Systems
- ❖ RelQ Software
- ❖ Sage Design Systems
- ❖ Siemens Information Systems Ltd ,
- ❖ Sony India Software
- ❖ Thru Logic
- ❖ Wipro Technologies
- ❖ Wipro Infotech

SYSTEM STUDY AND ANALYSIS

2.0 SYSTEM STUDY ANALYSIS

2.1 Existing System

The Existing System is developed in VC++ 6.0. This is specially designed for monitoring all the client system information's, this Software will only work on Windows NT 4.0 or in Windows Server 2003.

Limitations

- The Existing system is developed only for the Local Area Network.
- It is not so effective in retrieving the remote system information's.
- Normally the existing package will only run on Windows NT or in Windows Server 2003 Operating System.
- Connecting the systems in distributed environment and Sharing data's is so difficult.
- The system information's that are retrieved from the client is not highly secured in the network

2.1.1 System Analysis

System analysis is an activity that encompasses the most of the tasks collectively called as computer engineering. This is the most important step in the software project where we get general idea about the needs of the end-users by having man-to-man conversation with them and about the various Conditions and restrictions that have to be taken care of while developing the software.

- Identify the users need.
- Evaluate the system concept for feasibility.
- Perform economic and technical analysis.
- Allocate functions to hardware, software, people, database and other system elements.
- Establish cost and schedule constraints.

- Create a system definition that forms the foundation for all subsequent engineering work.

Identification of need

As a first step in the analysis of the system, the end – users of the proposed project were met to get first hand information regarding their needs. Ideas from both the sides were exchanged in order to get a standard and satisfactory system.

Feasibility Study

The feasibility study is carried out to test if the proposed project is worth being implemented. Given unlimited resources and infinite time, all projects are feasible. Unfortunately; such results and time are not possible in real life situations. Hence it becomes both necessary and prudent to evaluate the feasibility of the project at the earliest possible time in order to avoid unnecessary wastage of time and effort and professional embarrassment over an ill-conceived system. The following feasibility studies were carried out for the proposed project, namely:

Technical Feasibility

These are the technical feasibility constructs

- The memory capacity of the existing hardware is quite sufficient for the execution of the system.
- The speed of the existing hardware and the system is quite sufficient.
- Technical enhancement may be needed in this system in future, and it will not force barriers to estimated budget.

Thus a through study reveals that this project is technical feasible.

Economic Feasibility

The cost of the system is evaluated here

- There is no extra cost needed for implementing the system, because this organization already has a local network facility and windows environment.
- Since it is very easy to use, no training is needed. so training cost can be avoided

- The system is flexible so that further enhancement is possible according to the future needs of the users.

Behavioral Feasibility

People are inherently resistant to changes, and if the user needs a sufficient amount of training, it would result in the expenditure of the users time, which is precious enough for them and also for the organization.so, generally the user would reject a proposal if it were going to consume much amount of time an effort from them .so, the outcome of establishing of project should bring user-convenience and satisfaction.

As, the suggested project is much more advantageous and requires less amount of time and effort for the users, they readily welcomed the proposed system, when asked for approval.

2.2 Proposed Systems

The aim of the proposed system is to have the system that monitors the activities of the client systems connected to the network. the proposed system is a win32 API windows based application, developed using Visual basic. NET.

2.2.1. Product Perspective

The perspective of the projects is to provide the user with an effective means for monitoring the Client & Remote Systems by viewing all the system information's and controlling the system from the server.

- Provision for adding new user to the system and allowing the existing user to modify the user name & password.
- Provision for selecting the inputs from a list of active systems in the network
- Provision to view the system information that is connected in the network.
- Provision to kill the system process, services, and events and to disable the device driver files from the system.
- Provision to chat between the users of the system in the network.
- Provision to transfer the files between the systems in the network

- Provision to capture the systems desktop from the server.

2.2.2. Product Functions

- Retrieving of all the systems ip address and the system id that is connected in the network.
- Retrieving of all the system information's about the particular files from the drives of the system that are present in the network.
- Retrieving of all the events that are handled by the system like log type, log message, log time, log source, from the corresponding system in the network
- Allowing the administrator to play all the media files from the server to clients.
- Retrieving of all the device information's like Driver name, device descriptions, device state and device type their status.
- Retrieving of all the service information's like service name, service descriptions, and service state, start up about the corresponding system in the network
- Allowing the administrator and the users to communicate each other.
- Whenever the administrator performs any function it will be displayed in the client or in the remote system monitor.
- Transferring of files from one system to other system.
- Capturing of all the operations that are performed in the remote systems.

2.2.3 General Constraints

The general constraints regarding this software are :

- A time gap occurs between sending the request and displays the output.
- Whenever a new system is added to the network, its details should be entered.
- Except the administrator no other person should access this program excluding chat.

2.2.4. Functional Requirements

List Of Inputs: -

- The users of the system should be provided with a point &click interface, i.e., the users of the software mainly users mouse to provide inputs.
- Initially the user should authenticate themselves by means of a user name and password. Once the authentication process is over he/she is allowed to perform the required operations provided by the software.
- The primary input is the ip address of the client system to be captured.

2.2.5 Performance Requirements

Security

Security should be implemented by means of a user name / password validation process. Only authorized users should be allowed to access the software.

Availability

Availability is the probability that a program is operating according to requirements at a given point of time. The availability is an indirect measure of the maintainability of software.

The successful function of the software depends on the validity of the inputs given to it. If the data entered is not appropriate or data is missing the system should indicate the possibility of an error.

Capacity

Capacity measures number of systems software can access. The software should manage up to 5 user sessions simultaneously.

Response Time

Response time is the time with in which a system identifies the instructions of the user and responds to it.

The time required to capture the screen/process from the client system and to display it in the server with in 5 seconds.

2.3. Hardware Constraints

- A Pentium processor of 166 Mhz speed (to make sure that application does not take too long to run).
- A Random access memory of 64MB.
- A mouse and keyboard.
- LAN (Ethernet Interface).
- Modem.

User interface and Screen Formats

It is required to maintain certain GUI standards during the development of this system. The user can either use a mouse or a keyboard to operate the product.

The user should be provided with menus, dialog boxes and controls such as textbox, edit box, command buttons, scroll bars, data grids, etc., the system should make the best use of the resources provided by .NET Frame work.

Operation required by the User

The users of the system should access the software after providing a user-name & password. The only operation required by the user is to provide inputs to the system. The user should provide valid inputs to the system.

2.4 User Characteristics

The system has been designed a very easy to understand point-click interface system. The whole system is to retrieve the system information from the remote system.

The main users of the system are system administrators. Since the product is user-friendly. The user need to posse's only minimum data very knowledge. They should also have knowledge on basic networking concepts.

2.5 Final Outline of the Proposed System

This is a piece of writing that deals or shows how to use the system that manages the new system. A system based on this concept has been developed to manage the details in the efficient and reliable way.

The proposed system deals with friendly management methodology and how to use the actual resources in the developed system. It also deals with the economical aspects like minimum memory and minimum hardware mixtures. The proposed system is economically good for every end user because it makes the system as much as easy than that of existing system.

PROGRAMMING ENVIRONMENT

3.0 PROGRAMMING ENVIRONMENT

3.1. Hardware Configuration

The configuration that are quoted below are minimum requirements

Processor	: Pentium R II
Processor speed	: 500 MHz
RAM	: 64 MB
Cache Memory	: 512 KB
Hard disk	: 5 GB
Display	: 14''Color Monitor
Mouuse	: Microsoft 2 button mouse.
Keyboard	: Samsung 105 key.
Networking	: Intel 21040 based Ethernet controller(16-bit).

3.2 Description of software and tools used

Operating System: Windows 2000

Programming Environment: Visual Basic. NET.

3.2.1 About Windows 98

Windows 98 is a preemptive multitasking operating system that belongs to Microsoft windows family of operating system products. Microsoft windows 98 are the most powerful and reliable operating system. This operating system, which is very familiar Windows 95 user interface. Some of the other features include Multi tasking & Multi threading facilities.

It provides highly reliable fault tolerance features. It has the capability to run more than one process at a time.

The major feature provided includes

Probability: -

Unlike most operating system, Windows 98 can run on variety of platforms. The flexibility can be a great advantage when implementing a computer strategy for an organization.

Multi-tasking Operation: -

From the perspective of the end user, multi tasking means that different type of application can be running in the background.

File Systems: -

Windows 98 supports a variety of file systems, including FAT 32 File Systems.

Features of Windows 98: -

Windows and programs open faster than ever before. By using the Maintenance Wizard, you can easily improve your computer's speed and efficiency. The power management feature allows newer computer to go in to hibernation mode awaken instantly, instead of requiring you to shutdown and restart your computer. also, you can use the FAT32 file systems to store files more efficiently and saves hard disk space.

3.2.2. About Visual Basic.NET

Microsoft's Visual Basic Programming language is about to take its biggest technology leap its ten-year history. Microsoft Visual Basic.NET and is a complete and total rewrite of Visual Basic Compiler.

Features Of Visual Basic. NET**Object Oriented Capabilities:-**

Visual Basic .NET is Object-Oriented, which means that it's a true Object-Oriented Programming Language. VB .NET supports all the key OOP features

like Polymorphism, Inheritance, Abstraction and Encapsulation. It's worth having a brief overview of OOP before starting VB.NET

Some important features of Object Oriented programming are as follows:

- Emphasis on data rather than procedure
- Programs are divided into Objects
- Data is hidden and cannot be accessed by external functions
- Objects can communicate with each other through functions
- New data and functions can be easily added whenever necessary
- Follows bottom-up approach

.NET Framework

.NET is a "Software Platform". It is a language-neutral environment for developing rich .NET experiences and building applications that can easily and securely operate within it. When developed applications are deployed, those applications will target .NET and will execute wherever .NET is implemented instead of targeting a particular Hardware/OS combination. The components that make up the .NET platform are collectively called the .NETFramework. The .NET Framework is a managed, type-safe environment for developing and executing applications. The .NET Framework manages all aspects of program execution, like, allocation of memory for the storage of data and instructions, granting and denying permissions to the application, managing execution of the application and reallocation of memory for resources that are not needed. The .NET Framework is designed for cross-language compatibility. Cross-language compatibility means, an application written in Visual Basic.NET may reference a DLL file written in C# (C-Sharp). A Visual Basic.NET class might be derived from a C# class or vice versa.

The .NET Framework consists of two main components:

- ▶ The Common Language Runtime (CLR)
- ▶ Set of Class Libraries

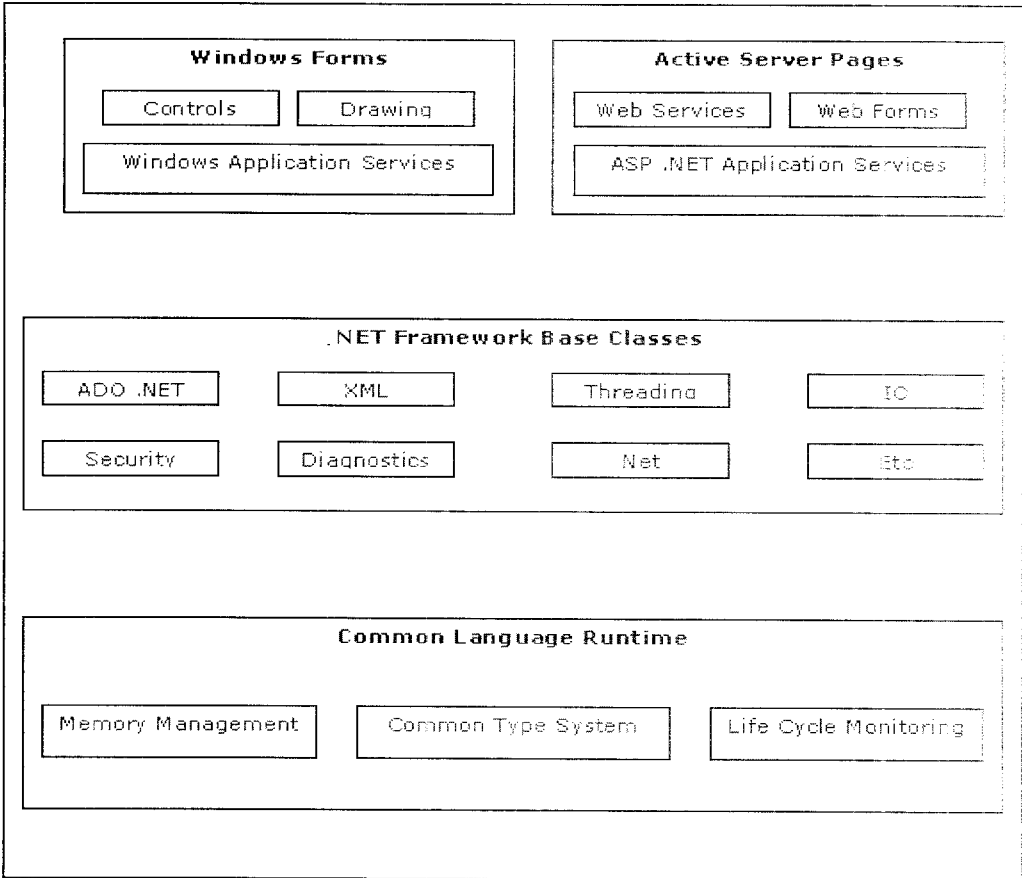
The Common Language Runtime (CLR)

The CLR is described as the "execution engine" of .NET. It's this CLR that manages the execution of programs. It provides the environment within which the programs run. The software version of .NET is actually the CLR version. When the .NET program is compiled, the output of the compiler is not an executable file instead it is a file that contains a special type of code, which is the Microsoft Intermediate Language (MSIL). This MSIL defines a set of portable instructions that are independent of any specific CPU. It's the job of the CLR to translate this Intermediate code into a executable code when the program is executed making the program to run in any environment for

Which the CLR is implemented. And that's how the .NET Framework achieves Portability. This MSIL is turned into executable code using a JIT (Just In Time) compiler. The process goes like this, when the .NET programs are executed, the CLR activates the JIT compiler. The JIT compiler converts MSIL into native code on a demand basis as each part of the program is needed. Thus the program executes as a native code even though it is compiled into MSIL making the program to run as fast as it would if it is compiled to native code but achieves the portability benefits of MSIL.

Class Libraries

Class library, is the second major entity of the .NET Framework. This library gives the program access to runtime environment. The class library consists of lots of prewritten code that all the applications created in VB.NET and Visual Studio.NET will use. The code for all the elements like forms, controls and the rest in VB.NET applications actually comes from the class library.



.NET Framework

The Common Language Specification (CLS)

If we want the code, which we write in a language to be used by programs in other languages then it should adhere to the Common Language Specification (CLS). The CLS describes a set of features that different languages have in common. The CLS includes a subset of Common Type

System (CTS), which define the rules concerning data types and ensures that Code is executed in a safe environment.

SYSTEM DESIGN AND DEVELOPMENT

4.0 SYSTEM DESIGN AND DEVELOPMENT

4.1 Design And Development Process

✓ Fundamental Design Concepts

The most creative and challenging phase of the system life cycle is system design. The term design describes a finite system and the process by which it is developed. It also includes the construction of program and testing.

System design is the process by which the detailed design of the system selected in the study phases accomplished. The system design goes through the logical and physical state of the development. In this the user oriented performance specification is expanded into design specification. While designing a new system we should have in mind a clear picture of inputs that may be required for the system.

The design covers the following:

- Reviews the current physical system
- Prepares output specifications
- Prepares input specifications
- Prepares edit, security and control specifications
- Specifies the implementation plan
- Prepares a logical design walkthrough of the information flow, output, input, controls and implementation plan
- Reviews benefits, costs, target dates and system constraints

4.2 Design Notations

The analyst uses a set of techniques and graphical tools that allow the analyst to develop a new kind of system specifications that are easily understandable to the user. The analyst considers new goals and structured tools for analysis.

The new goals specify the following:

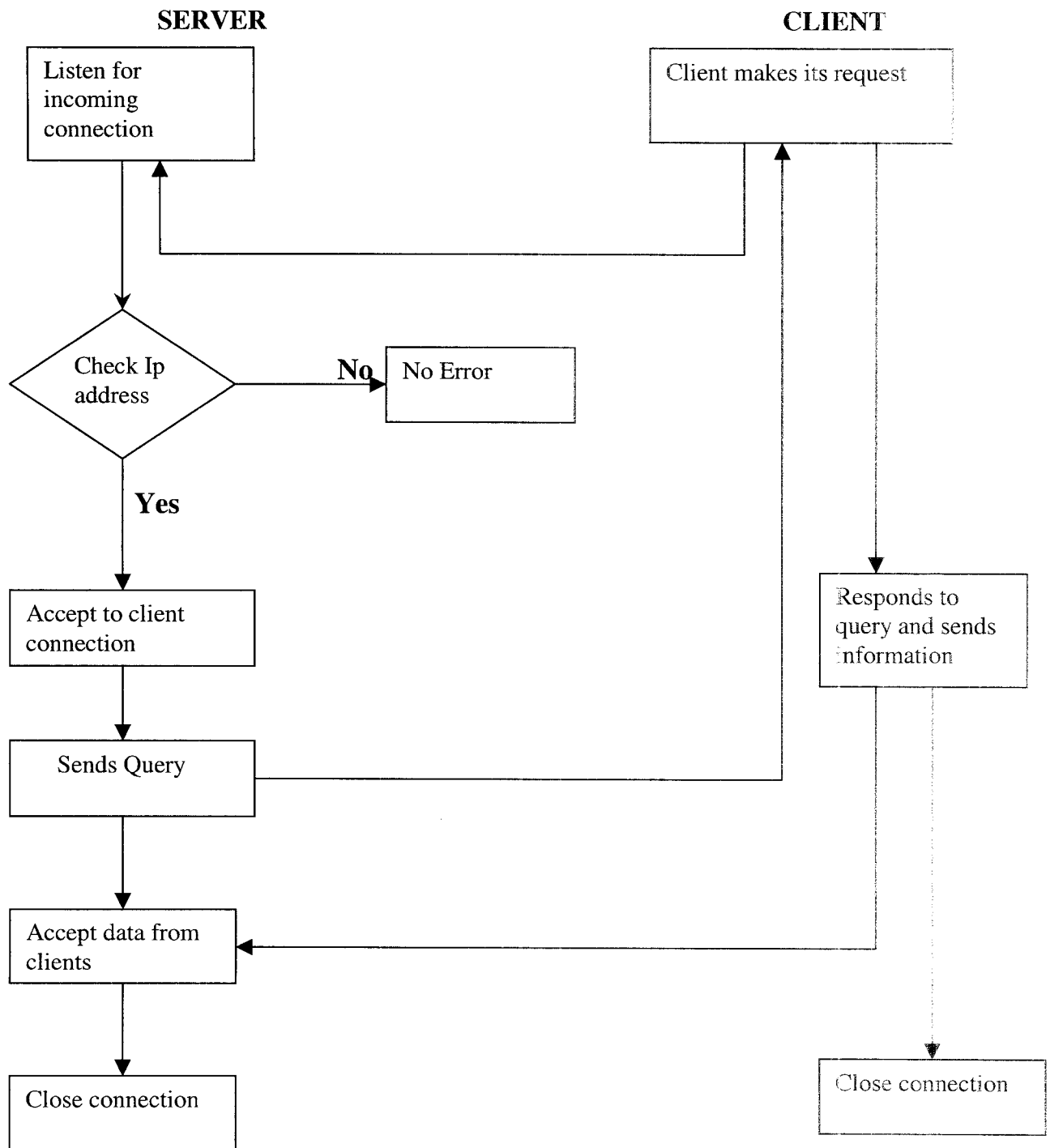
➤ Use graphics wherever possible to help communicate Better with the user.

The analyst use the various design notations such as Data flow diagram, Structured chart for analysis

4.3 Data Flow Diagram

A Data Flow Diagram also known as a “Bubble chart” has the purpose of clarifying system requirements and identifying major transformations that will become programs in system design. So it is the starting point of the design phase that functionally decomposes the requirements specifications down to the lowest level of detail. A Data Flow Diagram consists of a series of bubbles joined by lines. The bubbles represent data transformations and the lines represent data flows in the system.

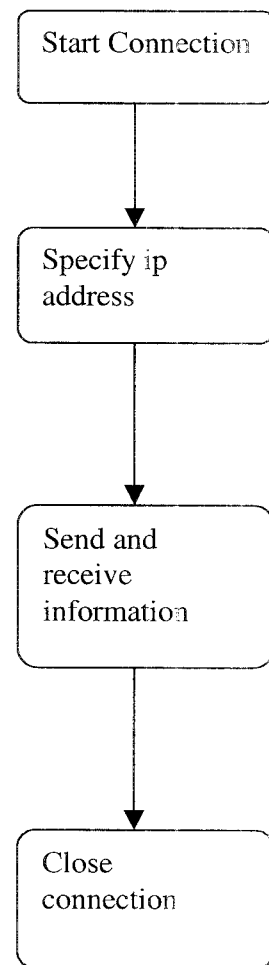
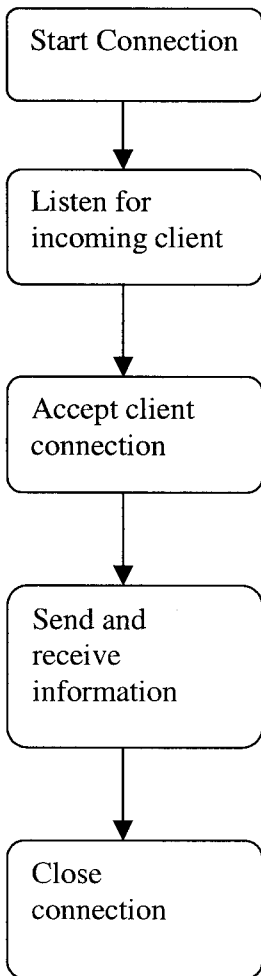
4.3.1. Over all Process Diagram



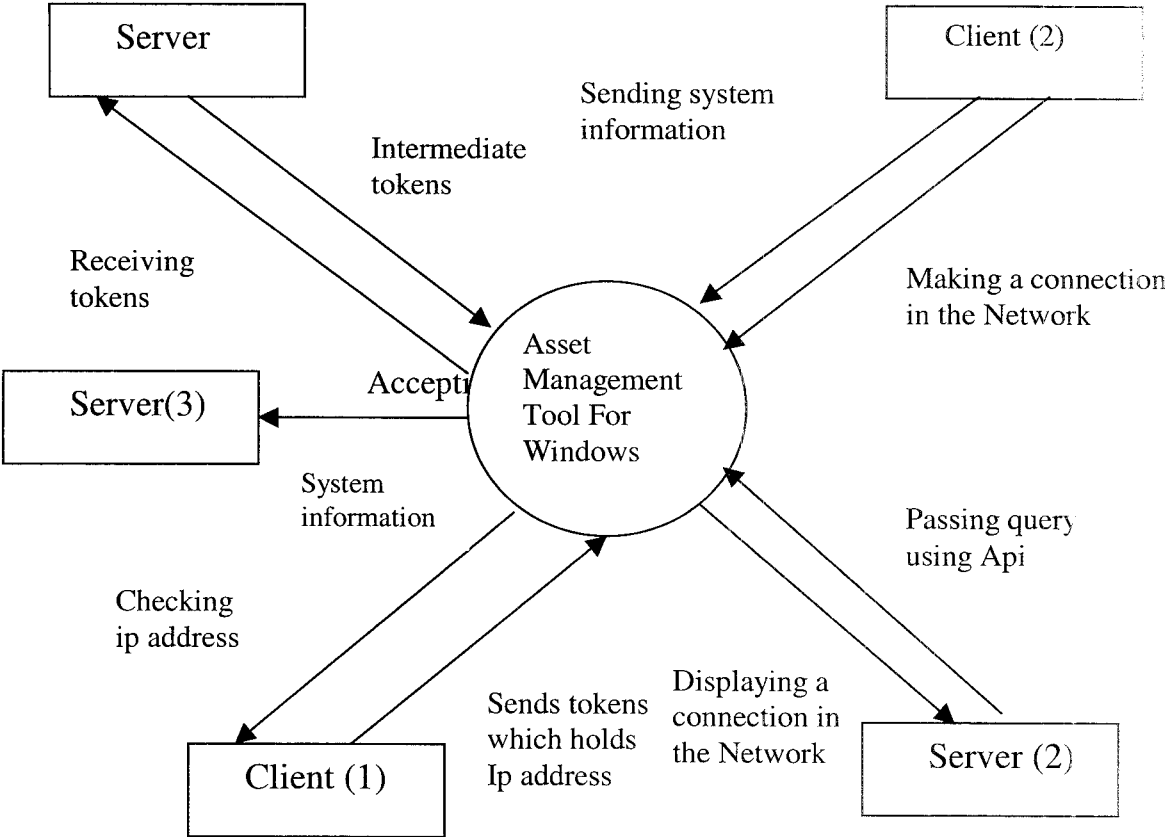
4.3.2. Client-Server Communication Diagram

SERVER

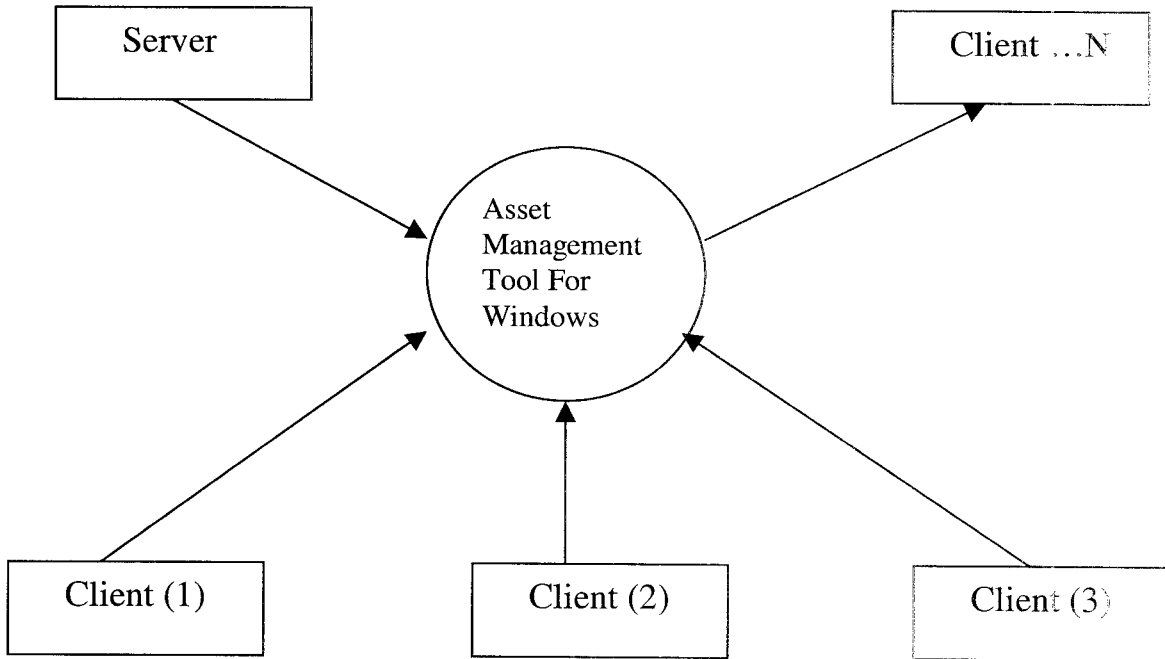
CLIENT



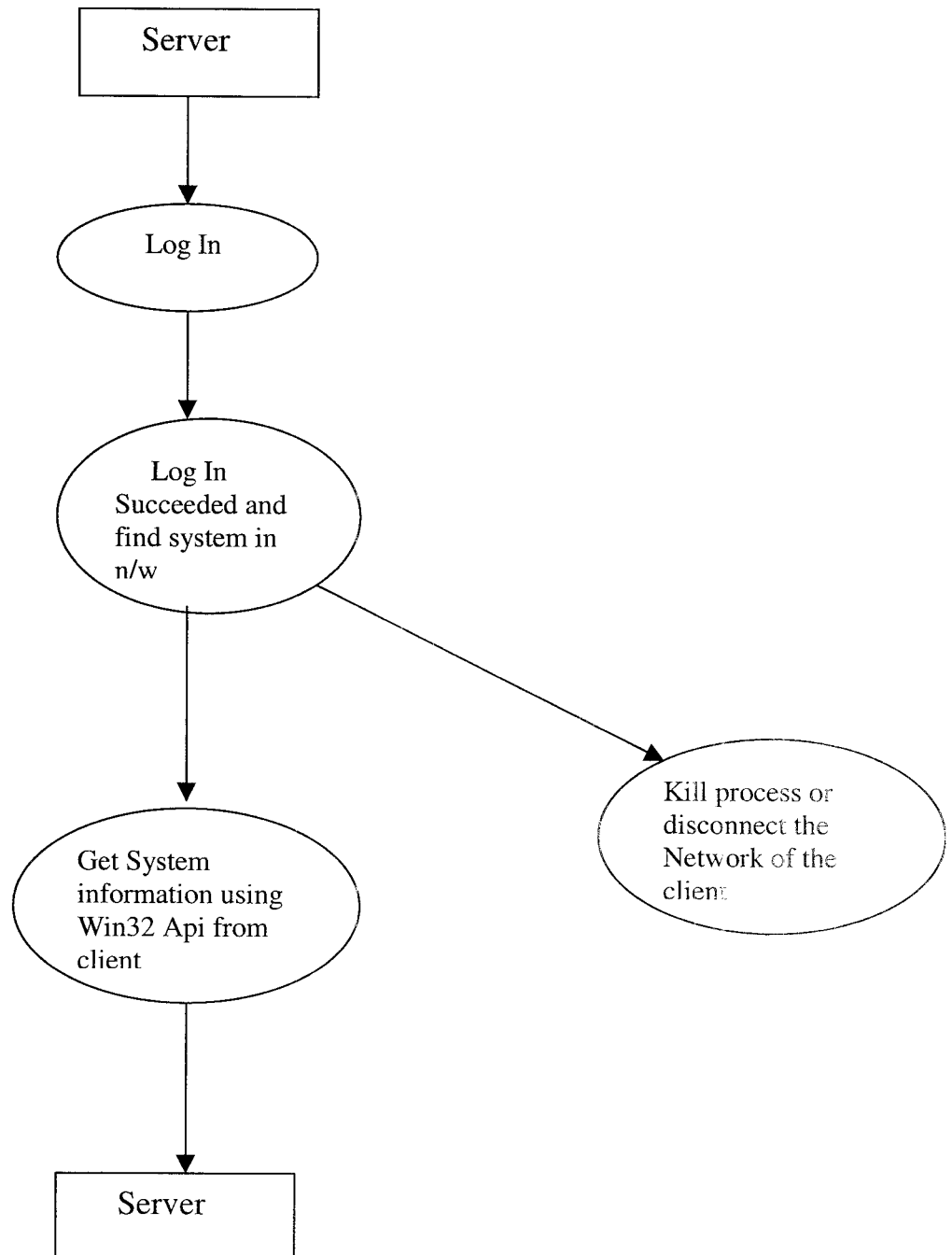
4.3.3.Context Flow Diagrams



4.3.4 DATA FLOW DIAGRAM (LEVEL 0)



4.3.5 DATA FLOW DIAGRAM (LEVEL 1)



SYSTEM TESTING & IMPLEMENTATION

5.0 SYSTEM TESTING & IMPLEMENTATION

5.1.1 Testing

Testing is a technique to establish in an experimental way the reliability and robustness of the software. Testing is an important process, which leads to the success of the system. System testing is mainly performed in the intention of finding error free system. System testing makes a logical assumption that all parts of the system are correct and move towards it to make the system error free. Inadequate testing of the system will lead to errors, which even can arise after long time of the system implementation.

When validating a system, number of aspect play role. First it must be determined whether the software satisfies the original requirements and global set by user, as specified during analysis. Secondly it must be established whether the system meets the specification laid down in the design document.

5.1.2 Testing Methodologies

The following are the various testing methodologies that can be applied in order to find an error free system.

➤ Unit Testing

In Unit Testing, the various programs of the system are listed. Unit testing first locates errors on those modules that are independent of one another. This enables to detect errors on those modules that are independent of one another.

This enables to detect errors in loading and logic that are contained within the same module. Various test cases were generated to categories of transport management system processing.

- ❖ Improper or incorrect typing.
- ❖ Erroneous initialization or default values.

- ❖ Inconsistent data typing.
- ❖ Overflow or underflow of records.
- ❖ All error handling paths where tested.

➤ **Code Testing**

Coding translated the detailed design specification into a program language that is ultimately transformed into machine executed instruction. The code testing examines the logic of a program.

➤ **Software Testing**

Software testing represents the ultimate review of specification, design and preview. The test and integration phase is the final filter for all errors of omission and commission. Hence, testing performs a very critical role for quality assurance and for ensuring the reliability of software.

➤ **Functional Testing**

The philosophy is that if the module accepts all test cases inputs and produces correct result, we do not care how it does it. This approach places burden on test design test cases and procedure to provide operational eventualities. The objective is to search for interface errors, functional errors, performance errors, and shortcomings and startup/shutdown errors.

➤ **Program Testing**

A program represents the logical elements of system. For a program to run satisfactorily, it must compile and test data correctly and tie in properly with other programs. Achieving an error-free program is the responsibility of the programmer. Program testing checks for two types of errors: syntax and logic. A syntax error is a program statement that violates one or more rules of the language

in which it is written. An improperly defined field dimension or omitted key words are common syntax errors. These errors are

Shown through error messages generated by syntax errors. These errors are shown through error messages generated by the computer.

A logic error, on the other hand, deals with incorrect data fields, out-of-range items, and invalid combinations. Since diagnostics do not detect logic errors, the programmer must examine the output carefully for them.

When a program is tested, the actual output is compared with the expected output. When there is a discrepancy, the sequence of instructions must be traced to determine the problem. Breaking the program down into self-contained portions, each of which can be checked at certain key points, facilitates the process. The idea is to compare program values against desk-calculated values to isolate the problem.

➤ **Validation Testing**

Software validation was achieved through series of block box testing that helps to find out errors incorrect and missing functions, interface errors, errors in the data structures, performance errors, initialization errors and termination errors.

➤ **User Acceptance Testing**

An acceptance test has the objective of selling the user on the validity and reliability of the system. It verifies that the system's procedures operate to system specifications and that the integrity of vital data is maintained.

Performance of an acceptance test is actually the user's show, user motivation and knowledge are critical for the successful performance of the system. Then a comprehensive test report is prepared. The report indicates the system's tolerance, performance range, error rate, and accuracy.

5.1.3 Quality Assurance

The goal of quality assurance is to provide management with the data necessary to be performed about product quality, there by gaining insight and confidence that product quality meeting its goal. The quality assurance is the activity for any business that produces to be used by others. Quality Assurance is composed of technical works for quality as planning, oversight and record keeping analysis and reporting.

Quality assurance defines the objectives of the projects and reviews the overall activities so that errors are corrected early in the development process.

5.1.4. Generic Risks

Any large project involved certain risks, and that is true of software projects. Risk management is the area that tries to ensure that the impact of risks on cost, quality, and schedule is minimal.

Risk assessment is an activity that must be undertaken during project planning. This involves identifying the risks, analyzing them and prioritizing them on the basis of the analysis.

At a very high level, the software risks can be broadly divided into three categories. These are:

- Cost risk
 - Performance risk
 - Schedule risk
-
- ✓ Risk control comprises active measures that are taken by project management to minimize the impact of risks.

5.1.5. Security Technologies & Policies

The system security problem can be divided into four related issues:

- **Security**
- **Integrity**
- **Privacy**
- **Confidentiality**
- **System Security**

System Security refers to the technical innovations and procedures applied to the hardware and operating systems to protect against deliberate or accidental damage from a defined threat.

- **System Integrity**

System Integrity refers to the proper functioning of hardware and programs, appropriate physical security, and safety against external threats such as wiretapping and eavesdropping.

- **Privacy**

Privacy defines the rights of the users or organizations to determine what information they are willing to share with or accept from others and how the organization can be protected against unwelcome, unfair, or excessive dissemination of information about it.

- **Confidentiality**

The term Confidentiality is a special status given to sensitive information in a database to minimize the possible invasion of privacy.

5.2. System Implementation

An important aspect of a system analyst's job is to make sure that the new design is implemented to established standards. The term implementation has different means,

ranging from the conversion of a basic application to a complete replacement of a compute system.

Implementation is used here to mean the process of converting a new or a revised system design into an operational one. The other aspect is the post implementation review.

5.2.1. Implementation Procedures

Change over is the stage of moving from existing system to new proposed system. The change over from the old to new system may take place when the system has been proved to the satisfaction for the system analyst, users managers and operational staff. One strategy for change over is the parallel running.

In this methods, the old and new systems are run simultaneously for an agreed of time and result from the two systems are compared. Another strategy is the direct change over. This method is the complete replacement of the old system by the new system in one more.

5.2.2User Training

An analysis of user training focuses on two factors:user capabilities and the nature of the system being installed. Users range from the naïve to the highly sophisticated. Developmental research provides interesting insights into how naïve computer users think about their first exposure to a new system. They approach it as concrete learners, learning how to use system without trying to understand which abstract principles determine which function. The distinction between concrete and formal learning says much about what one can expect from trainees I general. Three important lessons that pertain to user training can be concluded from this case situation.

➤ Users are reluctant to read manuals, but they will learn from demonstrations and through visual aids. Users also tend to be natural teachers.

- Another user training element is a training demonstration. Live demonstrations with personal contact are extremely effective for training users. In a demonstration, a new concept that is show in many ways learned.
- The third element of user training is the resident expert. In our example, one clerk read the manual carefully, spent time on her own to practice, and ended up being the resident expert a natural teachers

5.2.3. Operational Documentation

After the design phase, operational documentation was done. This document specified the user how information should be entered. The details of planning inspection and physical storage are entered. The details relating to how to use a particular control and how to generate useful reports are also specified to the user.

CONCLUSION

6.0 CONCLUSION

“Asset management tool for windows” is successfully designed and developed at mentor labs, this project is developed using Microsoft visual basic.Net.this project was done keeping in mind the fact it should follow all the steps of software engineering process and covers the complete software development cycle. The user interface provided by this project will be widely accepted by the user in general the software was tested thoroughly to ensure that it works effectively and efficiently. Complete documentation that is provided makes the changes and enhancements that are to be done very easy and provides the vitality of documentation. The preference of vb.net to any other GUI is also justified since any further enhancement of this project would mean that more of platform independent extensions that are fore seen with this project.

The application is tested with the user requirements and verify for validity. The software requirements have been met. Needed documents were generated and adequate documentation has been provided for maintenance and future enhancements

SCOPE FOR FUTURE DEVELOPMENT

7.0 SCOPE FOR FUTURE DEVELOPMENT

Though this application meets the requirements specification, there is always some room for progress in the future. This project has left the scope for further enhancements wide open as it was developed in an environment that supports both LAN, WAN&MAN.

In future further software can be extended using telephonic interface i.e., if there is any problem occurs in the hardware of the client, the software should automatically make a call to the hardware engineer and inform about the problem.

Still in order to make this software effective protocols for file transferring, file compressing and secured data transfer can be implemented.

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8.0 BIBLIOGRAPHY

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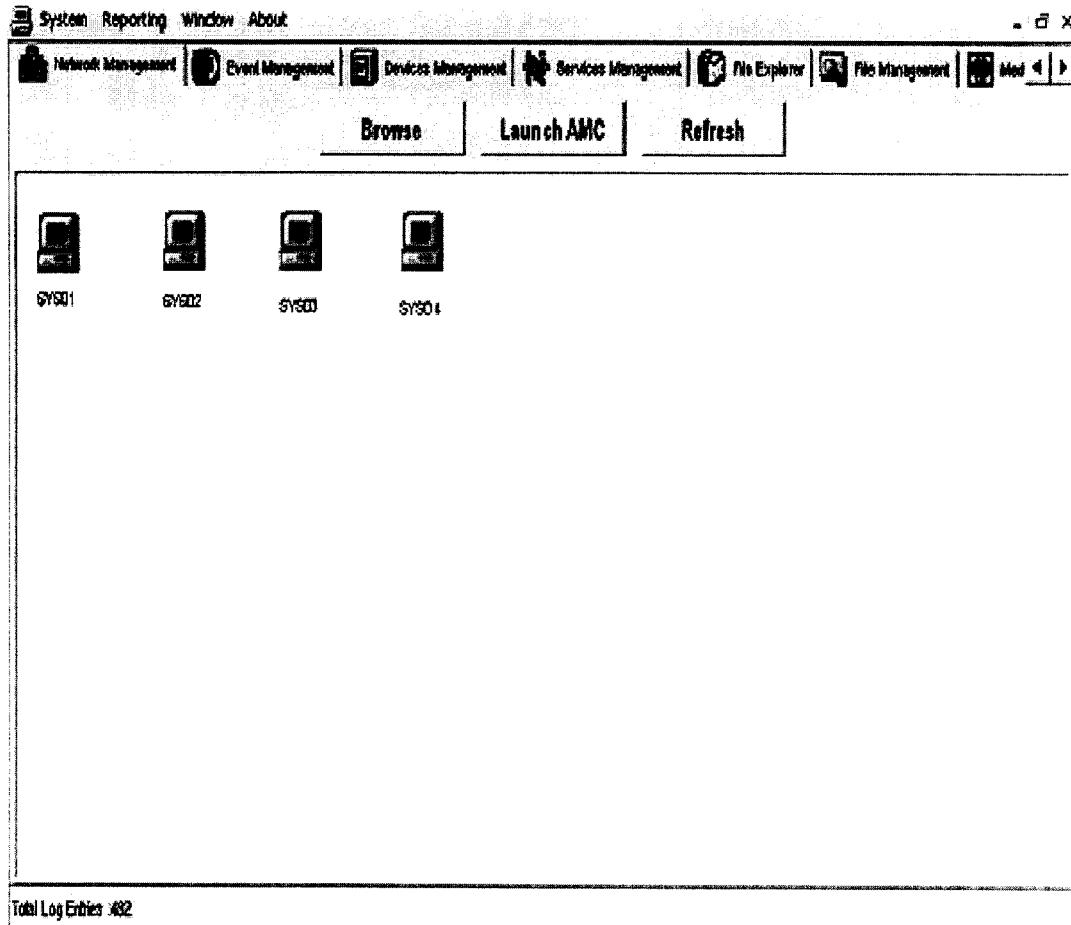
www.microsoft.com

www.apexsc.com

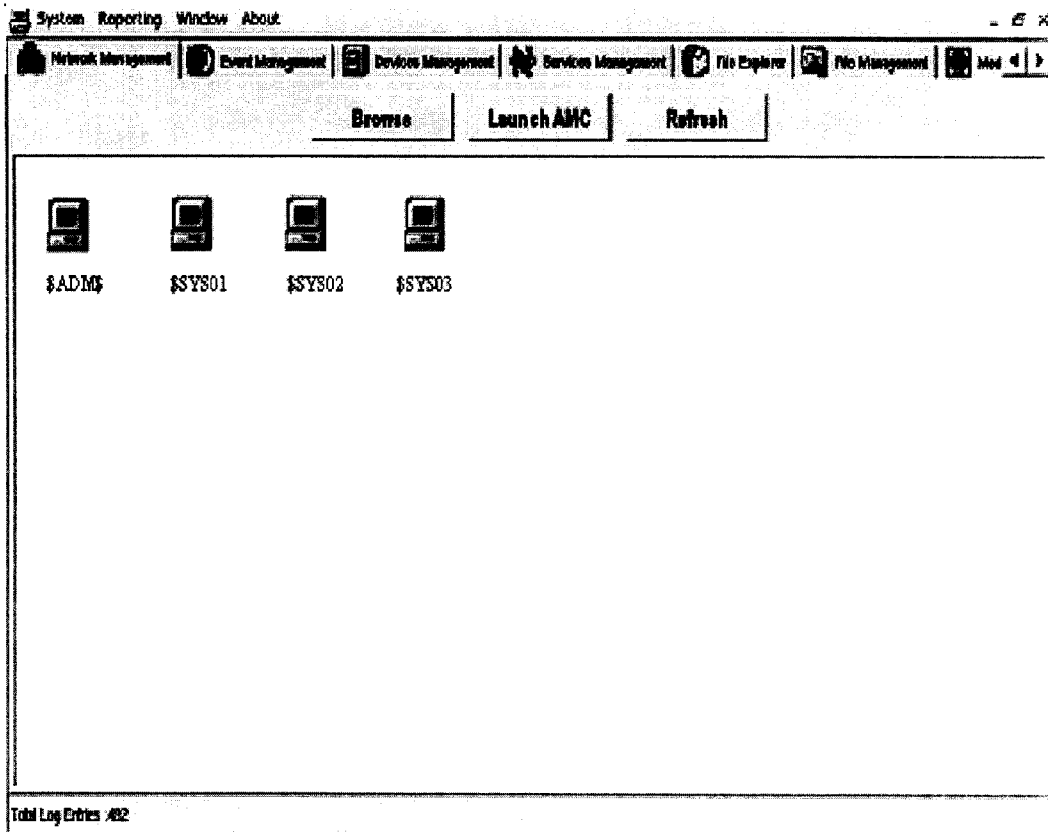
APPENDIX

9.APPENDIX

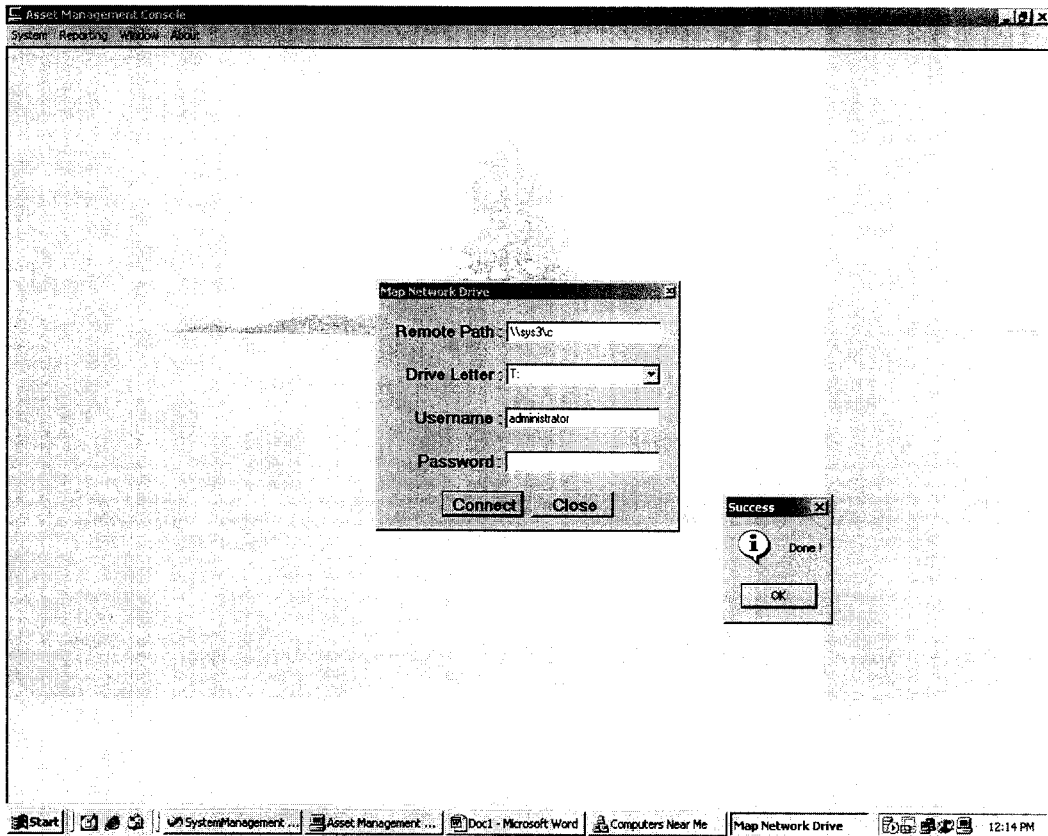
9.1 Screen Shots



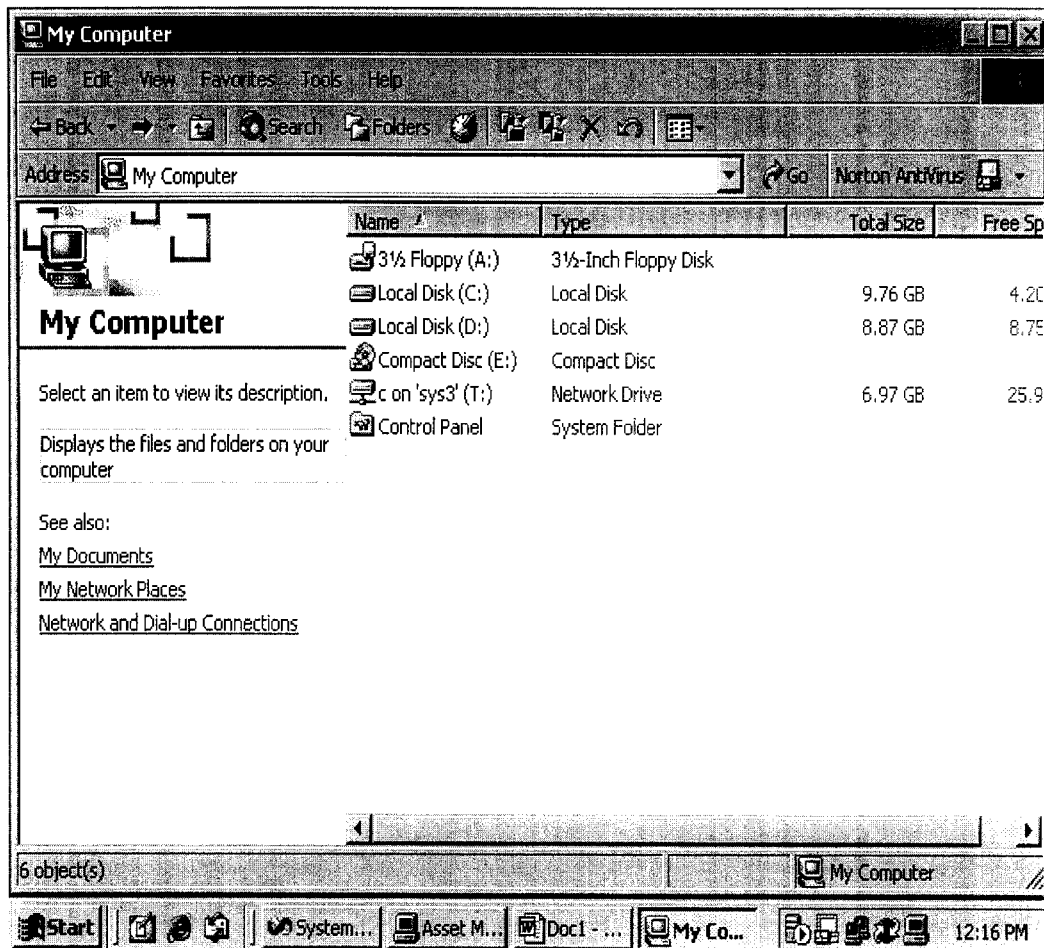
Retrieving Local system in the network



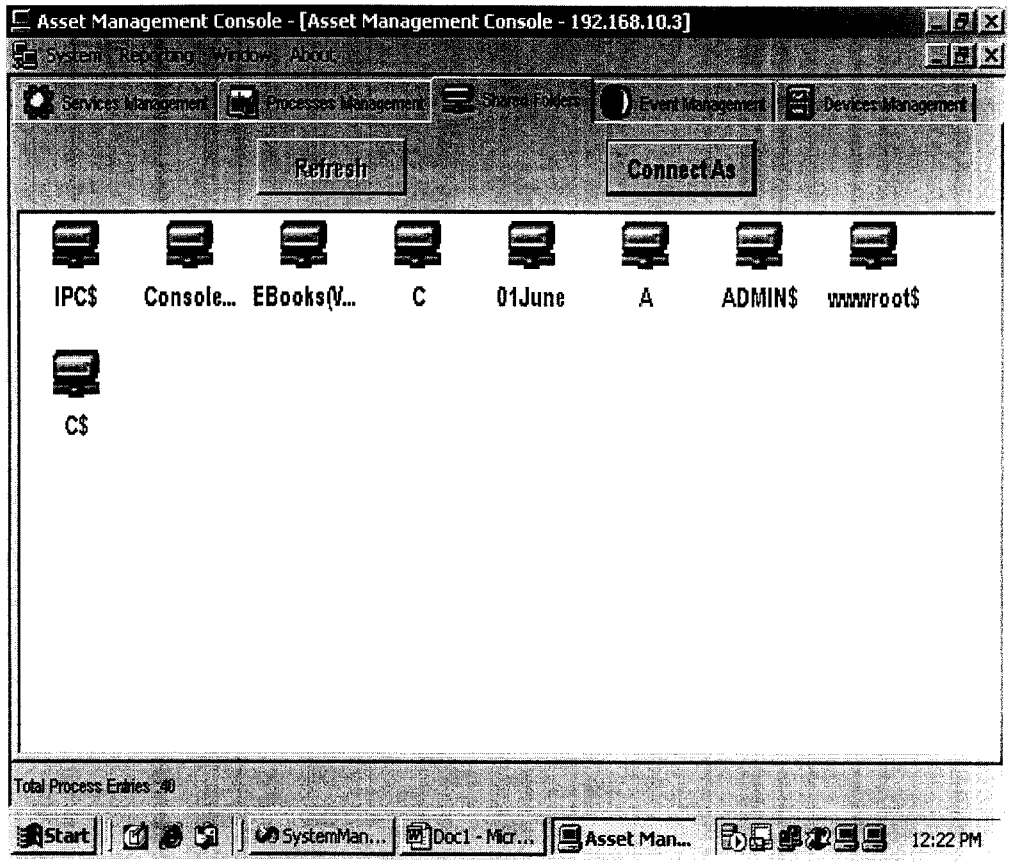
Retrieving Remote Systems in the Network



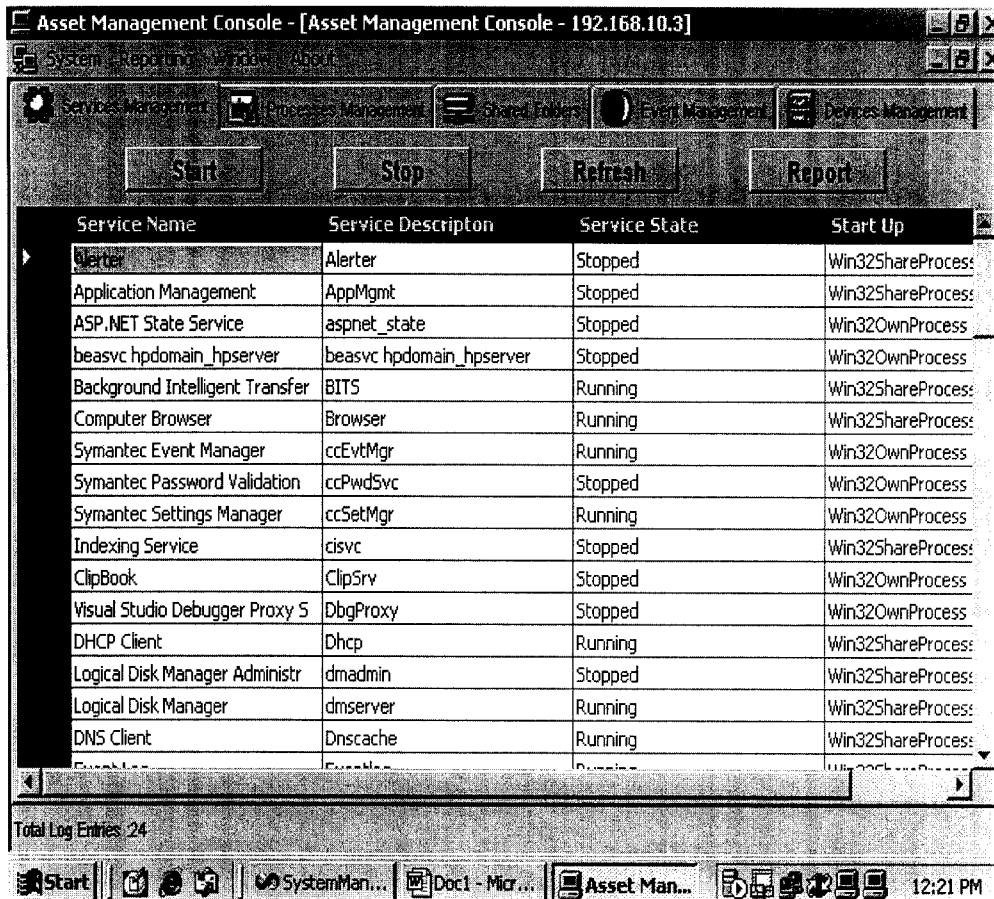
Mapping Network Drive



Drive is Mapped



Displaying Shared Folders & Files



Displaying the Service Of the System

Asset Management Console - [Asset Management Console - 192.168.10.3]

System - 192.168.10.3 - 11/12/2002

Sensors Management | Processes Management | Alerts Filter | Events Management | Devices Management

Select a Eventing to View:

Log Type	Log Message	Log Time	Log Source
Information	Product: Microsoft Speech SDK	11/12/2002 12:08:50 PM	MsiInstaller
Information	Security policy in the Group poli	11/12/2002 11:19:56 AM	SceCli
Information	Savscan service started.	11/12/2002 11:19:24 AM	SAVSCAN
Information	The message '-1073724769' for	11/12/2002 11:19:21 AM	MSSQL\$MENTORLABS
Information	The message '-1073724769' for	11/12/2002 11:19:19 AM	MSSQL\$MENTORLABS
Information	The message '-1073724769' for	11/12/2002 11:19:19 AM	MSSQL\$MENTORLABS
Information	The message '-1073724769' for	11/12/2002 11:19:19 AM	MSSQL\$MENTORLABS
Warning	The message '-1073722813' for	11/12/2002 11:19:19 AM	MSSQL\$MENTORLABS
Information	The message '-1073724769' for	11/12/2002 11:19:04 AM	MSSQL\$MENTORLABS
Information	The message '-1073724769' for	11/12/2002 11:19:02 AM	MSSQL\$MENTORLABS
Information	The message '-1073724769' for	11/12/2002 11:19:01 AM	MSSQL\$MENTORLABS
Information	The message '105' for applicati	11/12/2002 11:18:51 AM	ptssvc
Information	The service was started.	11/12/2002 11:18:48 AM	NProtectService
Information	The message '-1073724769' for	11/12/2002 11:18:47 AM	MSSQL\$MENTORLABS
Information	The message '-1073724769' for	11/12/2002 11:18:47 AM	MSSQL\$MENTORLABS
Information	The message '-1073724769' for	11/12/2002 11:18:44 AM	MSSQL\$MENTORLABS

Total Process Entries :40

Start | SystemMan... | Doc1 - Micr... | Asset Man... | 12:22 PM

Displaying the Events Of the System

Asset Management Console - [Asset Management Console - 192.168.10.3]

System Reporting Window About

Services Management Processes Management Storage Driver Event Management Devices Management

Refresh Report

Device Name	Device Description	Device State	Driver Type
Abiosdsk	Abiosdsk	Stopped	KernelDriver
abp480n5	abp480n5	Stopped	KernelDriver
ACPI	Microsoft ACPI Driver	Running	KernelDriver
ACPIEC	ACPIEC	Stopped	KernelDriver
ACRUSB	ACR USB Smart Card Reader Dri	Stopped	KernelDriver
adpu160m	adpu160m	Stopped	KernelDriver
AFD	AFD Networking Support Enviro	Running	KernelDriver
Aha154x	Aha154x	Stopped	KernelDriver
aic116x	aic116x	Stopped	KernelDriver
aic78u2	aic78u2	Stopped	KernelDriver
aic78xx	aic78xx	Stopped	KernelDriver
ami0nt	ami0nt	Stopped	KernelDriver
amsint	amsint	Stopped	KernelDriver
asc	asc	Stopped	KernelDriver
asc3350p	asc3350p	Stopped	KernelDriver
asc3550	asc3550	Stopped	KernelDriver

Total Log Entries : 7

Start SystemMan... Doc1 - Micr... Asset Man... 12:23 PM

Displaying Device Information

Asset Management Console - [Asset Management Console - 192.168.10.3]

System Reports Window About

Services Management Process Management Shared Folders Event Management Devices Management

End Process Refresh Report

Process Name	Process ID	CPU Usage	RAM Usage[kb]	Process Priority	PagedMemory	5 Virt
SERVICES	212	00:00:02.473556	38530.14k	9	2957312	3807
qttask	1816	00:00:01.011454	60594.532k	8	4071424	6058
regsvc	956	00:00:00.751080	81618.388k	8	4136960	8158
WinMgmt	1168	00:00:04.606624	25502.132k	8	1236992	2549
sqlmangr	1916	00:00:01.381987	28762.956k	8	1269760	2875
ptssvc	948	00:00:00.090129	21908.64k	8	655360	2190
ccSetMgr	412	00:00:00.300432	31675.356k	8	2564096	3167
mdm	732	00:00:00.340489	34107.724k	8	1290240	3410
internat	1848	00:00:00.080115	16808.18k	8	413696	1680
NPROTECT	836	00:00:00.260374	22585.06k	8	778240	2258
KodakCCS	704	00:00:00.080115	24404.616k	8	872448	2439
SAVScan	292	00:00:00.240345	41513.872k	8	7258112	4150
ScsiAccess	1040	00:00:00.030043	11420.9k	8	249856	1141
S3apphk	1788	00:00:00.020028	12396.112k	8	262144	1239
carpserv	1460	00:00:00.010014	5563.496k	8	147456	5562
navapvc	816	00:00:03.124492	44030.064k	8	8040448	4402

Total Process Entries :40

Start | SystemMan... | Doc1 - Micr... | Asset Man... | 12:21 PM

Displaying Process Information

System Reporting Window About

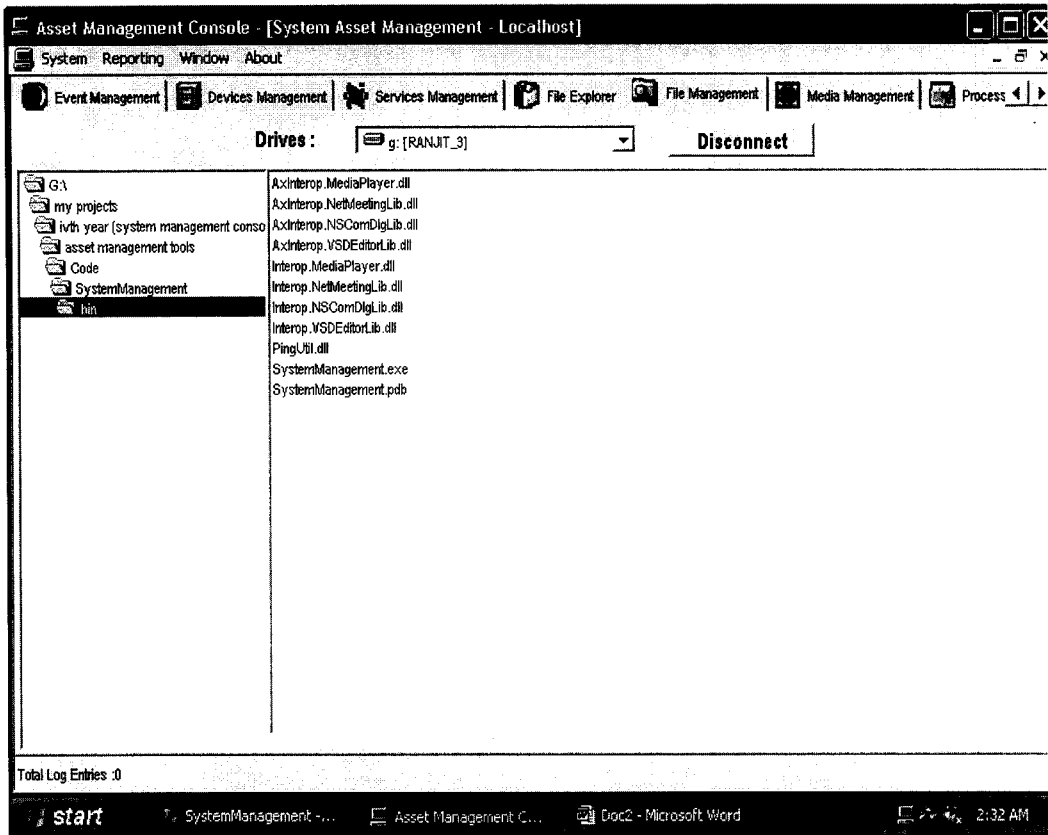
File Explorer | Event Management | Devices Management | Services Management | File Management | Media

nldetect.com
 boot.ini
 D:\
 E:\
 F:\
 WINDOWS
 My Documents
 RECYCLED
Program Files
 System Volume Information
 CONEXANT
 Doc1.doc
 G:\

Attributes	ReadOnly, Directory
Creation Time	12/31/1979 11:00:00 PM
Last Access Time	8/15/2004 12:00:00 AM
Last Write Time	8/15/2004 2:22:26 PM
Extension	
Full Name	F:\Program Files
Name	Program Files
Parent	F:\
Root	F:\

Total Log Entries: 9

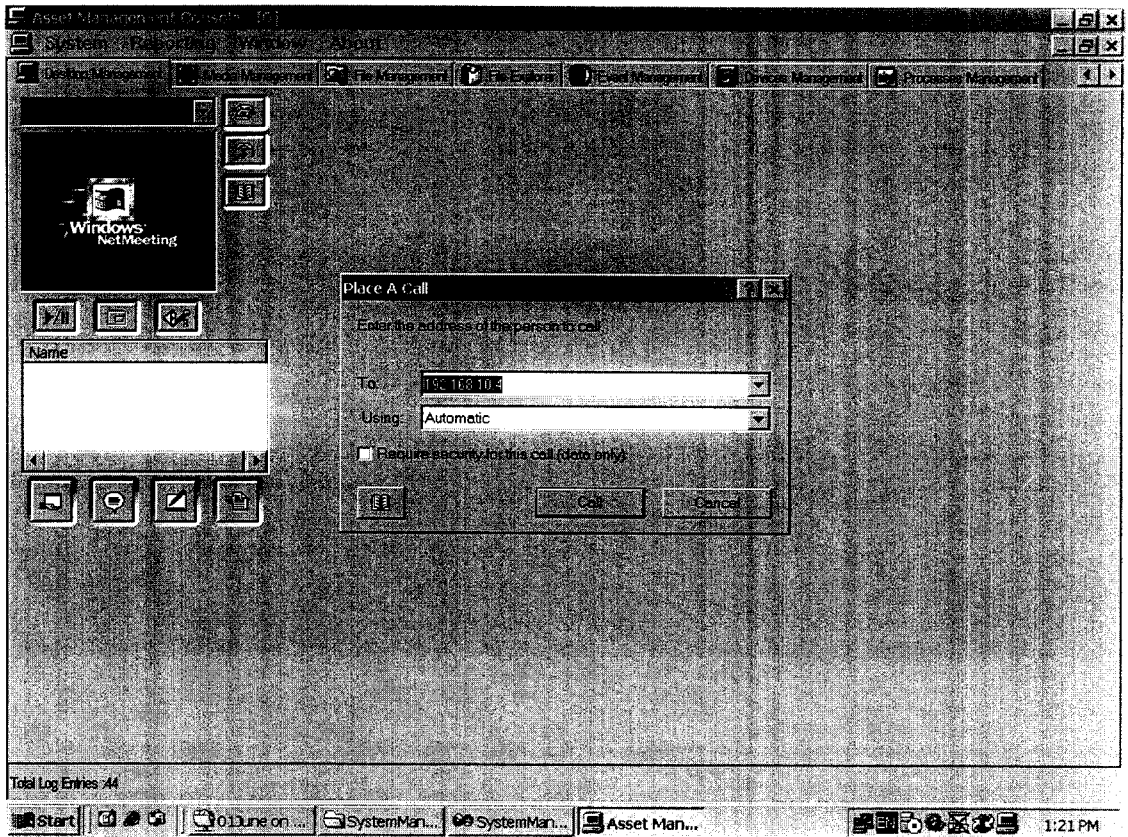
File Explorer



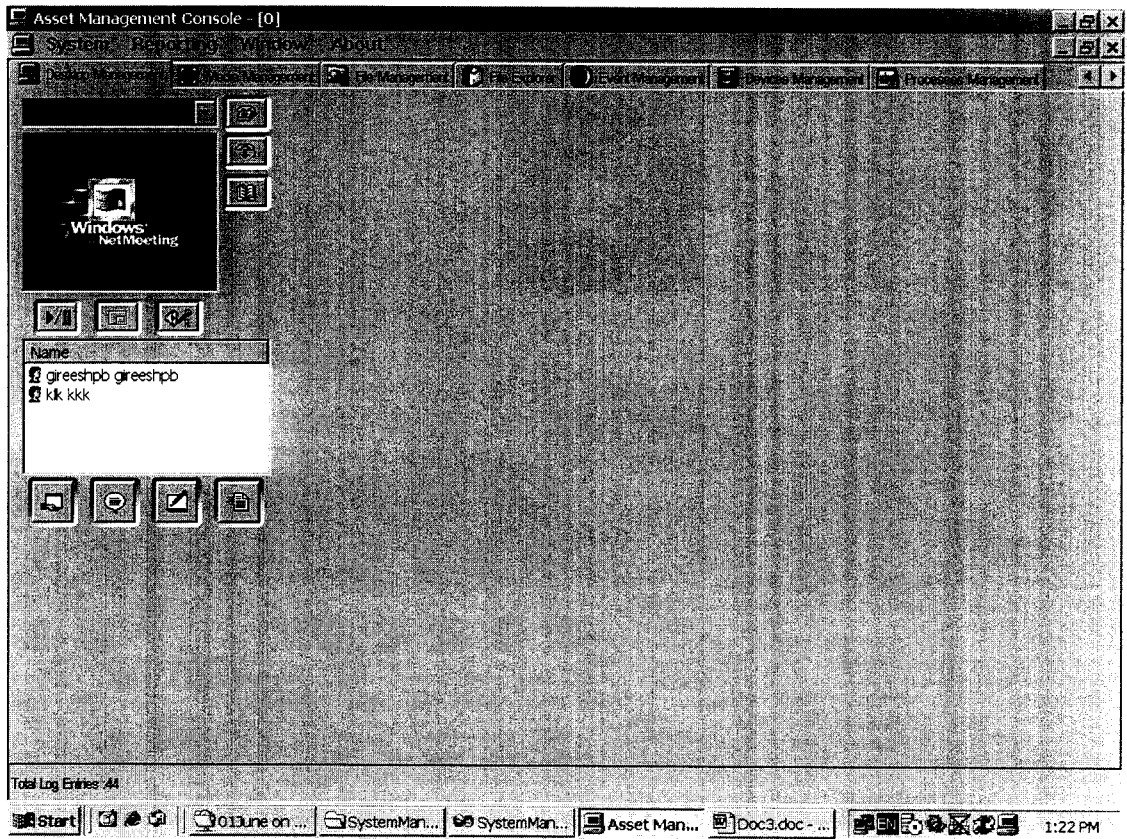
File Management



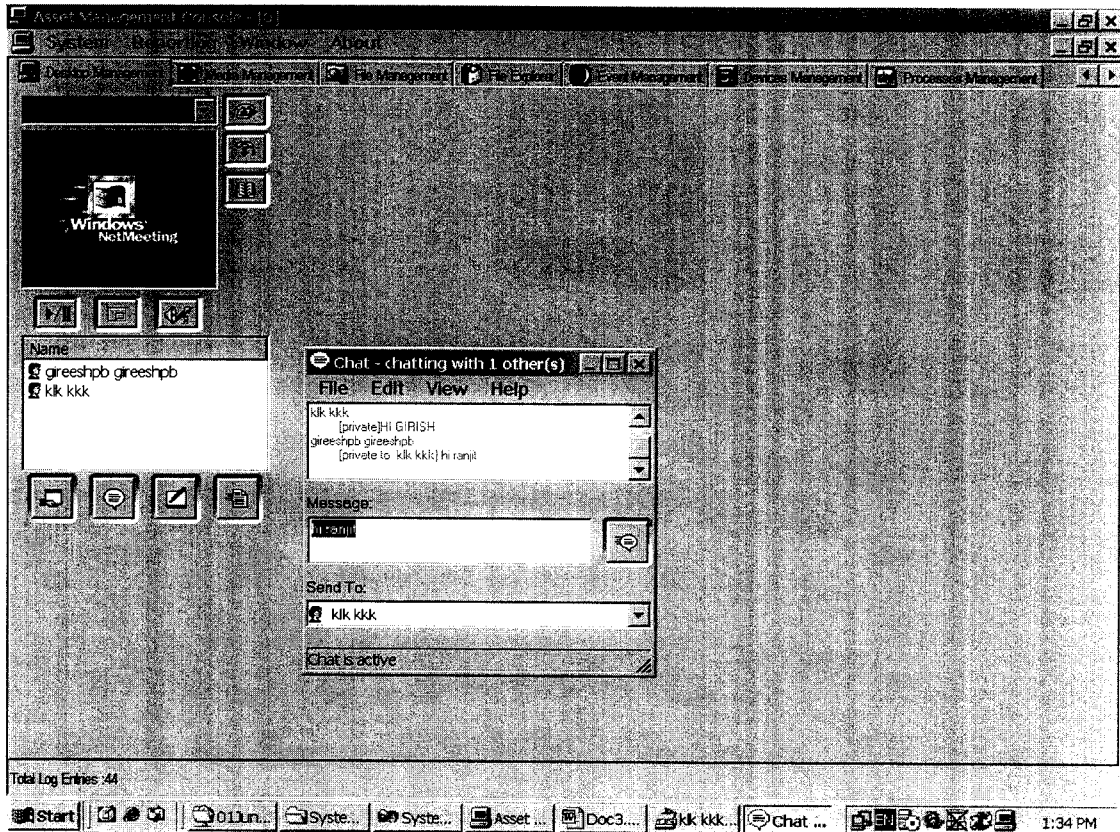
Media Management



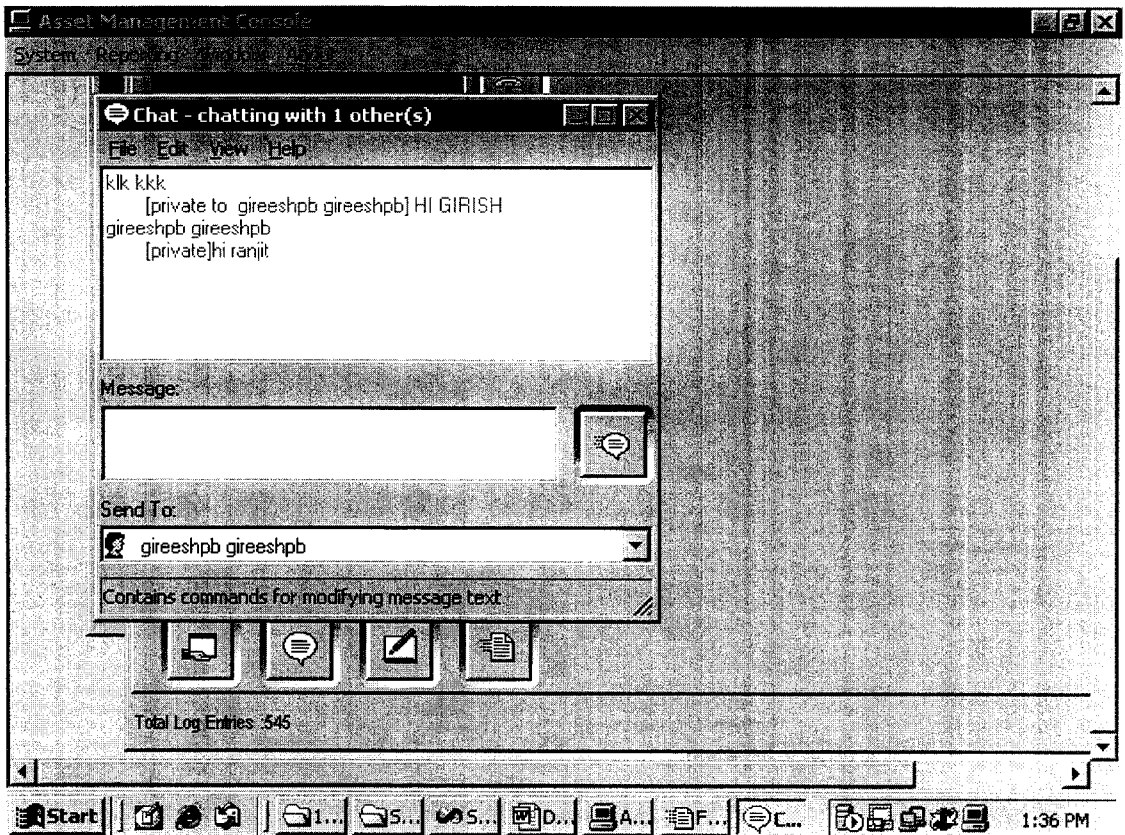
Making a call to Remote system



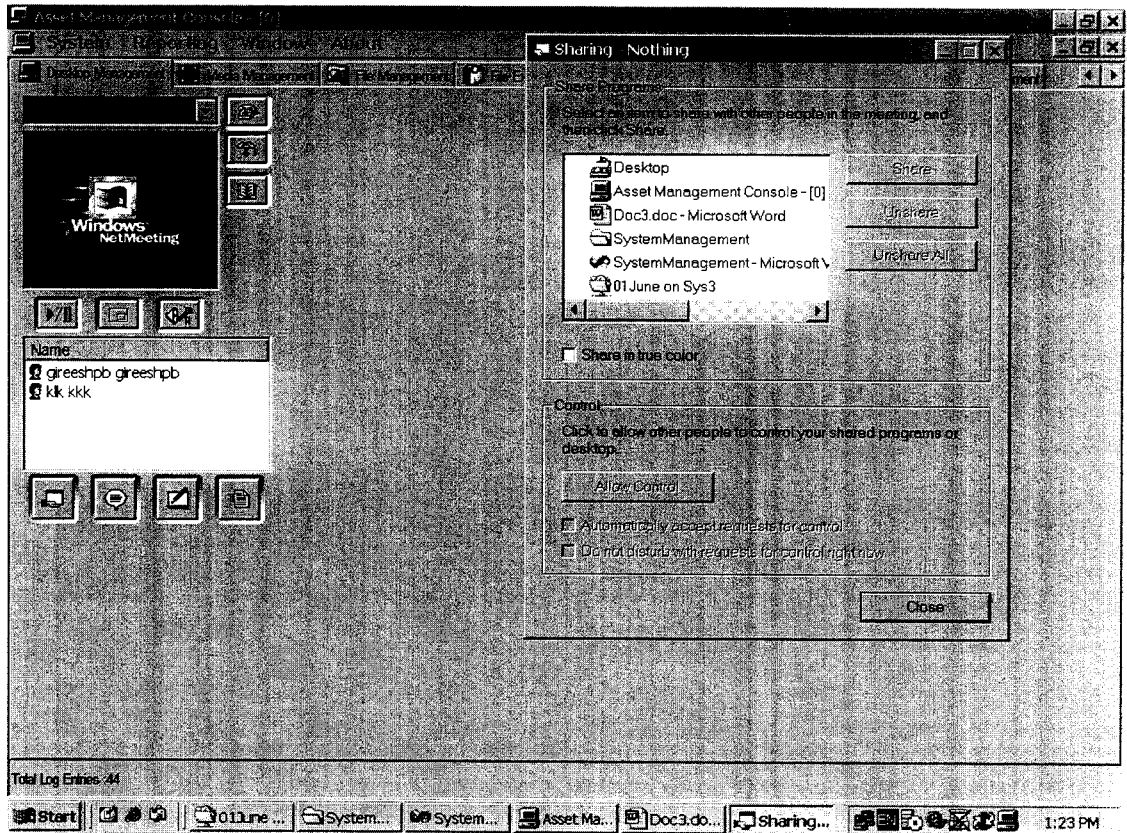
Users In The List



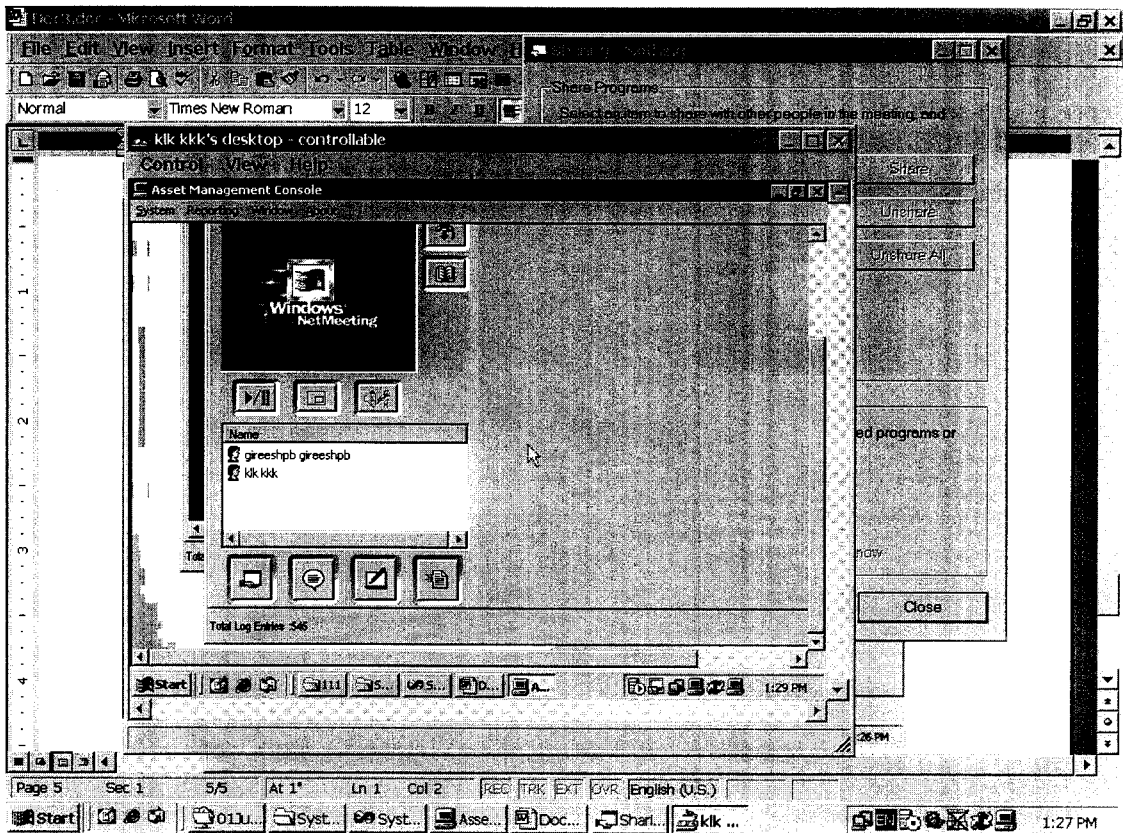
Chatting Between Two User



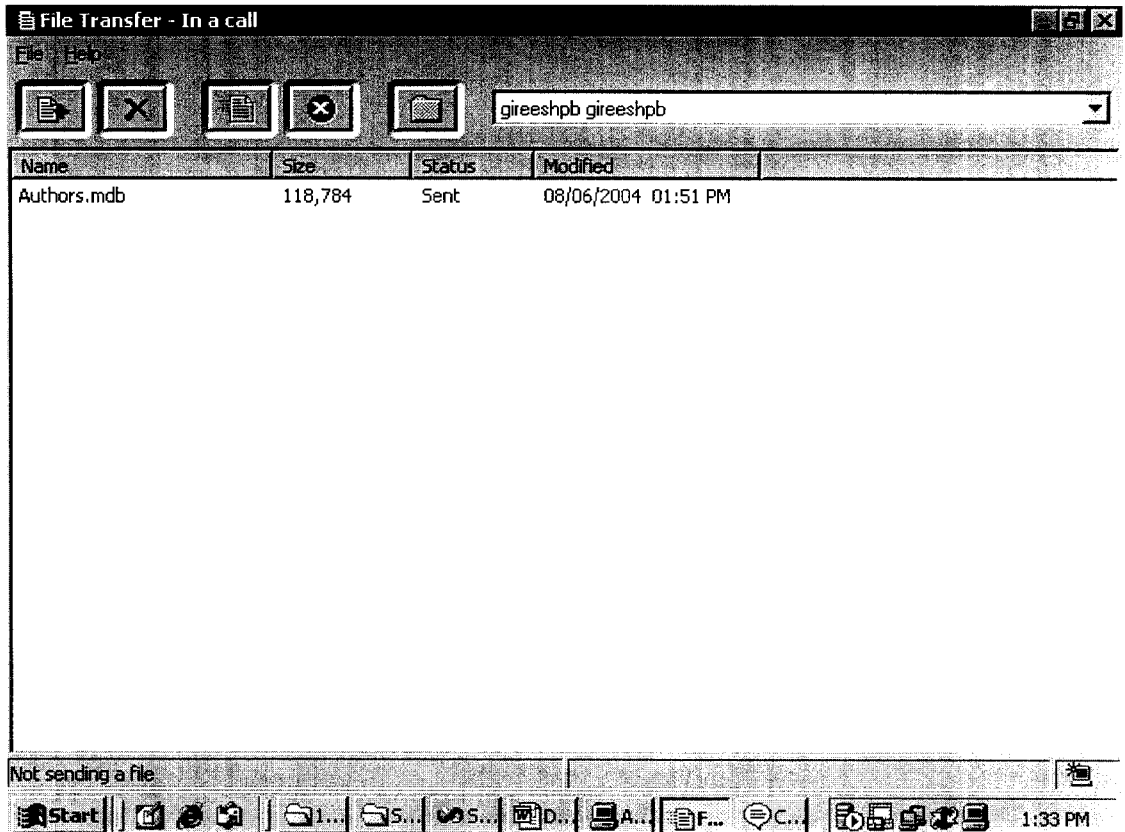
Chatting Between Two User



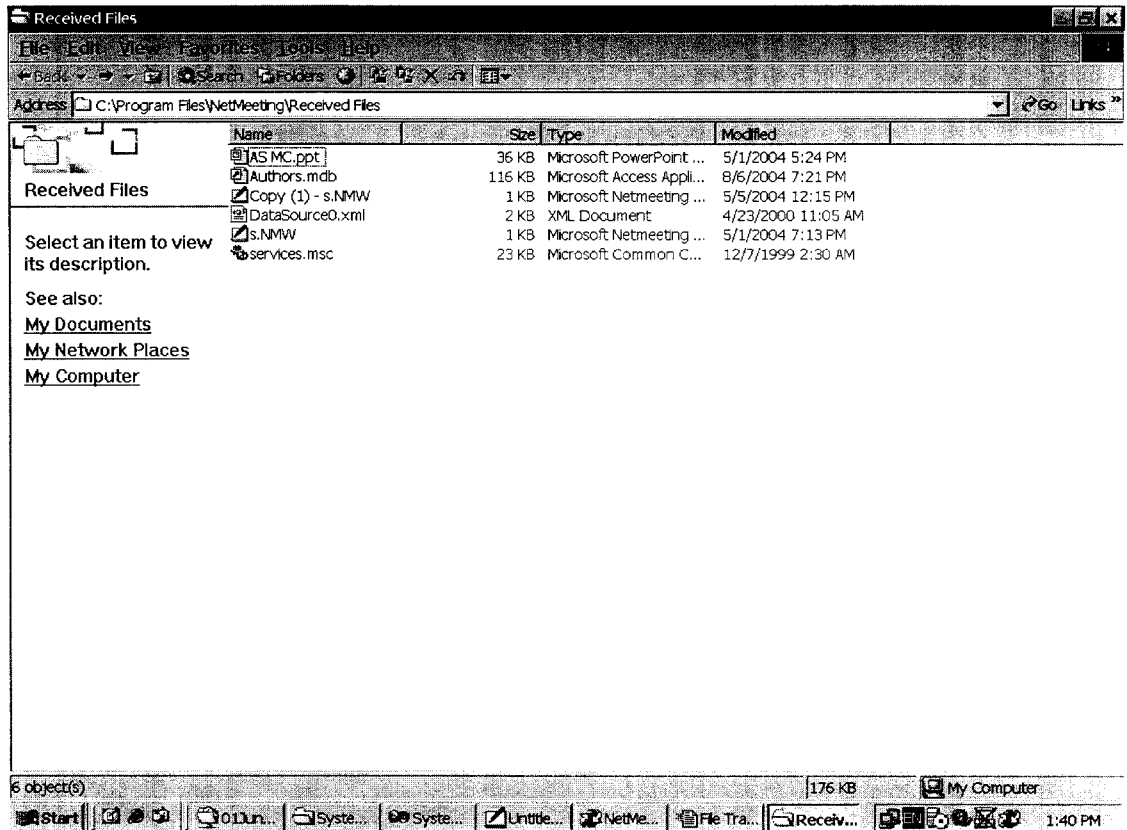
Desktop Capturing



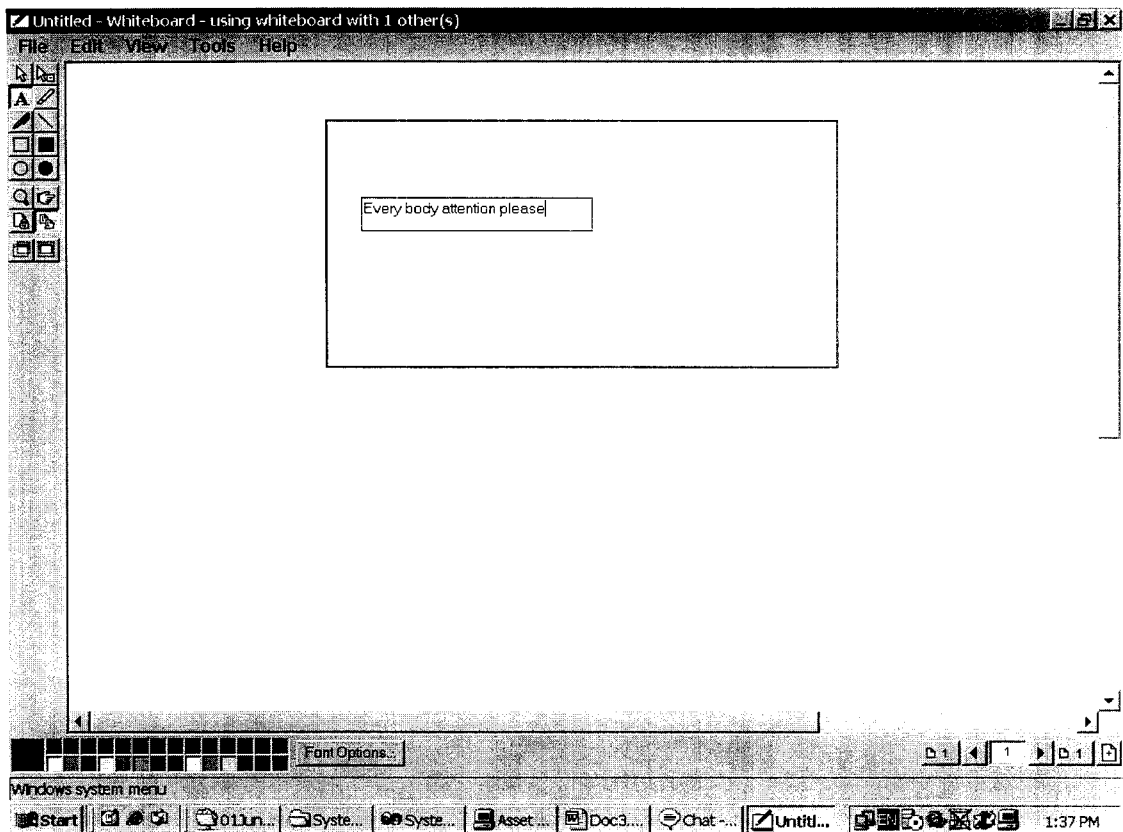
capturing CLIENT Desktop



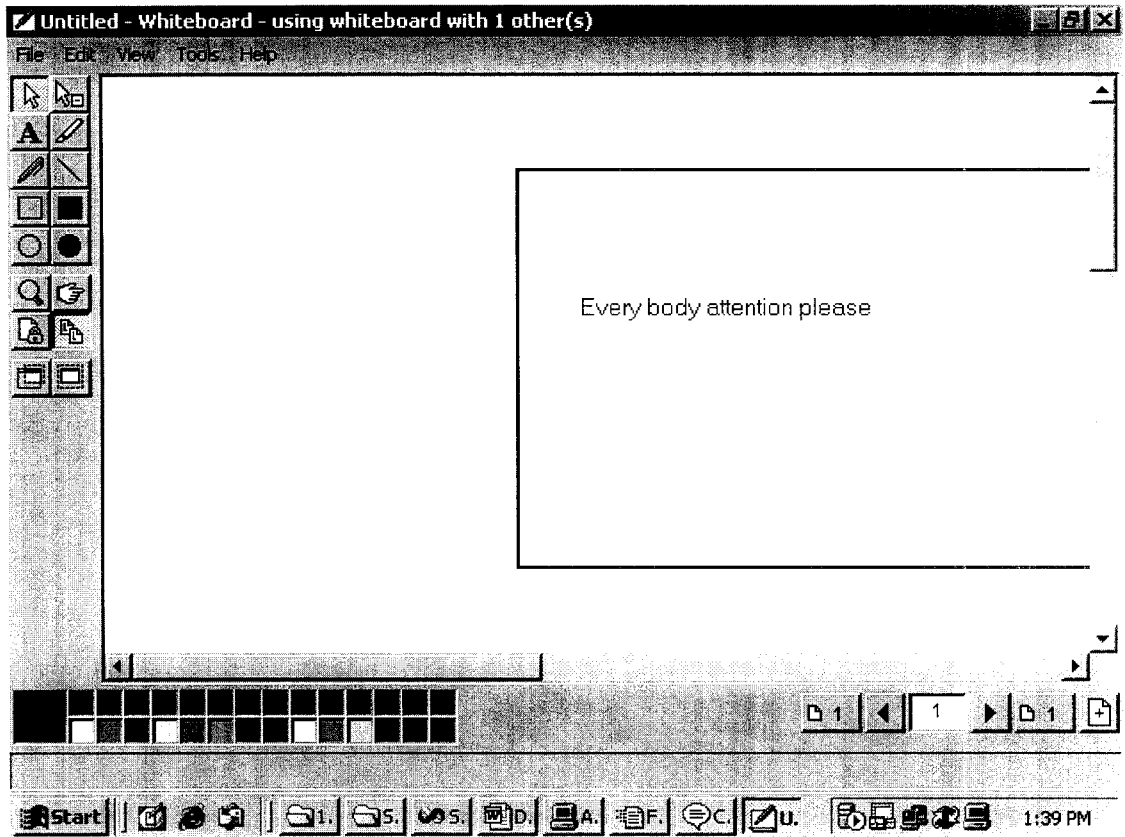
File Transfer



File Transferred To Client



White Board Used in Server



White Board Used in Client