

**KUMARAGURU COLLEGE OF TECHNOLOGY**  
**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**  
Coimbatore – 641006



April 2003.

**EXECUTIVE INFORMATION SYSTEM – SERVER SIDE INCLUDES**  
**PROJECT WORK DONE AT**  
**INDIAN OIL CORPORATION LTD**  
**CHENNAI.**

**PROJECT REPORT**

Submitted in partial fulfillment of the requirements for the award of  
the Degree of **Master of Computer Applications** of Bharathiar  
University, Coimbatore.

**SUBMITTED BY**

**MR. SRINIVAS. J**  
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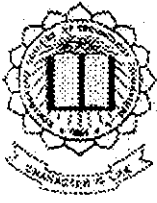
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**KUMARAGURU COLLEGE OF TECHNOLOGY**  
**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**  
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April 2003.

**CERTIFICATE**

This is to certify that the project work entitled

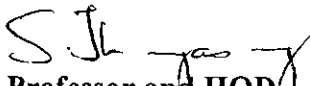
**“EXECUTIVE INFORMATION SYSTEM – SERVER SIDE INCLUDES”**


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Submitted to University Examination held on 16.07.2003

  
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ision

SRT/34  
06.03.2003

To  
Prof.Dr.S.Thangasamy, Ph.D.,  
Professor and Head,  
Dept. of Computer Science and Engineering,  
Kumaraguru College of Technology,  
Coimbatore - 641 006.

Dear Sir,

## **CERTIFICATE**

This is to certify that **Shri J.Srinivas** has done his project on "**Executive Information System - Server Side Includes**" at our Organisation from December 2002 - March 2003. During this period, his conduct and character was found satisfactory.

  
(S.GANESH KUMAR)  
MANAGER(TRG)

**DECLARATION**

## DECLARATION

I here by declare that the project entitled “ **EXECUTIVE INFORMATION SYSTEM-SERVER SIDE INCLUDES**”, submitted to Bharathiar University as the project work of Master of Computer Application Degree, is a record of original work done by me under the supervision and guidance of Mr.T.R.Murali, Deputy IS Manager, **Indian Oil Corporation Ltd., Chennai** and Miss. N.Rajathi M.E Senior Lecturer, Department of Computer Science & Engineering, Kumaraguru College of Technology and this project work has not found the basis for the award of any Degree /Diploma/Associate ship Fellowship or similar title to any candidate of any University.

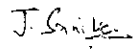
Name of Candidate

**J.SRINIVAS**

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Signature



**Place:** Coimbatore

**Date:** 10.4.2003

**ACKNOWLEDGEMENT**

## **ACKNOWLEDGMENT**

To add meaning to the perception, it is my indebtedness to honor a few who had helped me in this endeavor, by placing them on record.

With profound gratitude, I am extremely thankful to Dr.K.K.Padmanaban B.Sc. (Eng.), M.Tech, Ph.D., Principal, Kumaraguru College of Technology, Coimbatore for providing me an opportunity to undergo the M.C.A (Master of Computer Application) course and there by this project work also.

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Gratitude will find least meaning without thanking my guide Miss.N.Rajathi B.E and course coordinator Mr.A.Muthukumar M.Sc., MCA.,M.Phil for the valuable guidance and support throughout my project.

Words are boundless for me to express my deep sense of gratitude and profound thanks to Deputy IS Manager Sri. T.R.Murali and to my Junior IS Manager Sri. S.Gunasekaran and all my associates at Indian Oil Corporation Ltd., for all their kind guidance and encouragement towards my project work.

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**SYNOPSIS**

## SYNOPSIS

The objective of “**Executive Information System – Server Side Includes**” is to gather data from various branches of IOC and to generate the reports which is used for Management purposes in the administration level. There are four states coming under the southern region namely Tamil Nadu, Kerala, Andhra Pradesh and Karnataka. The systems in the regional office have to dialup to their Divisional Office, State Office and Territory Office to gather flat files and finally producing the consolidated reports for the IOC products.

This project contains four modules namely *Authentication and Authorization*, *File transferring*, *Flat file Processing and Formatting Data*. Authentication and Authorization provides the security for the system. File transferring is done using FTP and MSCOMM control. Flat file Processing examining the downloaded file and converting it into compatible file format. Filtering and storing the data is done by Formatting Data module. Once the data is inserted in to the database then required reports like *Ten product report*, *Daily update report* and *Daily FTP report* can be generated. These details provide sufficient information for the Management level.

## CONTENTS

# CONTENTS

|   | Page No |
|---|---------|
| <b>1. Introduction</b>                        |         |
| 1.1 Project Overview                          | 01      |
| 1.2 Organizational Profile                    | 02      |
| <b>2. System Study</b>                        |         |
| 2.1 Existing System                           | 05      |
| 2.2 Proposed System                           | 06      |
| <b>3. Programming Environment</b>             |         |
| 3.1 Hardware Configuration                    | 07      |
| 3.2 Software Configuration                    | 08      |
| <b>4. System Design</b>                       |         |
| 4.1 Database Design                           | 09      |
| 4.2 Process Design                            | 10      |
| <b>5. System Implementation &amp; Testing</b> |         |
| 5.1 System Implementation                     | 20      |
| 5.2 System Testing                            | 22      |
| <b>6. Conclusion</b>                          | 26      |
| <b>7. Future Enhancements</b>                 | 27      |
| <b>8. Bibliography and Online References</b>  | 28      |
| <b>Appendices</b>                             |         |
| A. Data Dictionary                            |         |
| B. Screens                                    |         |

## INTRODUCTION

# 1. INTRODUCTION

## 1.1 PROJECT OVERVIEW

The explosion in the size and complexity of today's local and wide area networks, combined with the increasing demands placed upon them for their resources has resulted in establishing remote file access as a factor of paramount importance

**“Executive Information System – Server side includes”** is used to receive files and then insert those data into database. It uses Java for Intranet file transferring and update file to database. Moreover MSCOMM control is developed in Visual Basic to transfer file for those offices does not have Intranet or Internet facilities.

- Authentication & Authorization.

Username and password is check in local database for proper entry of the system.

- Flat file Processing

Examining the downloaded file and converting it into compatible file format.

- File Transfer.

- ❖ Intranet

Remote file were fetched using File Transfer Protocol (Java).

- ❖ Dial Up.

Remote file were fetched using Telephone connection (VB).

- Formatting Data.

- The downloaded file is formatted using delimiter and stored in MS-SQL Database.

## 1.2 ORGANIZATIONAL PROFILE

Indian Oil Corporation (IOC) continues to be the country's largest commercial organization. It is presently the only Indian Company to be featured in the Fortune Global 500 listing and improved its ranking from 317 to 257 this year. Among the top Asian companies, it is currently ranked 76. The Govt. of India has identified Indian oil as one of the 'Navaratnas' with a potential to emerge as a global giant.

Customer focus as a customer-friendly organization, Indian oil has always aimed to provide its customers prompt, courteous and efficient service, and quality products at reasonable prices. The retail visual Identity programme - 'Vision - 2000' - has ushered in 'new look' retail outlets across the country. These have selectively 'convenio' shopping store, snap services, quick lube oil change, and automatic car wash, unmanned card operated pumps and 24-hours ATM. A start has recently been made in Introduction of multi-fuel dispensing units. Over 1200 retail outlets were upgraded under the 'Vision-2000' programme during 1996-97. In line with its commitment to environment protection, low sulphur diesel was introduced in the metros and later in the Taj Trapezium area low lead petrol which had earlier been introduced in the metros and radial routes, was extended to cover all over the country effective January 1997. For easy product availability, Indian oil commissioned 146 petrol/diesel stations and 51 SKO/LDO dealerships during the year raising their total number to 6731 and 3413 respectively. The reseller points and consumer outlets are assured of uninterrupted product supplies from 47 Coastal and inland installations and 131 bulk depots. To cater to the fuel and other special needs of rural areas, the Corporation has set up 231 multipurpose distribution centers. In addition, 33 Taluka Kerosene Depots are operating to augment availability of kerosene in remote and far-flung areas. To enhance the range of products offered to our customers, regular marketing was begun of Hexane ex-Koyali refinery and Propylene and IOC Solvent' 95 ex-Mathura refinery.

During the year, Indianoil assisted 37 private parties in the import of SKO for sale of 2.6 lakhs tonnes under the parallel marketing scheme.

Indian oil's Aviation Service continued to be the market leader in the aviation fuel business with a market share of 68% through sales of 1.51 million tonnes. The total aviation fuel requirement of the Indian Navy and Army and over 89% of the Indian Air Force, besides, the requirements of other market segments like Indian Airlines, Air India, private airlines and International airlines were catered to by the Corporation. With the setting up of an aviation fuel station (AFS) at Bhuj, the Corporation has 92 AFSs to meet customer needs. Indian Oil continues to provide technical assistance to neighbouring countries like Maldives, Nepal and Bhutan.

Indian oil's Research & Development Centre, which completed 25 years on 10th March, 1997, was showered with accolades during fiscal year 1996. Its titanium complex grease, patented in USA and Australia, won the National Research Development Corporation (NRDC) award 1996 as the 'best invention of the year'. It also bagged the silver medal of the World Intellectual Property organization, an arm of UNIDO, as well as the ICMA citation award for the best Invention. The Federation of Indian Chamber of Commerce (FICCI) selected it for the 1996 Annual Award for best contribution In Service & Technology. Commercial production of this novel grease has already commenced and is marketed under the brand name SERVO Titex HT. During the year, the R&D Centre developed a catalytic converter for two and three wheelers which has also been field-tested. Formulations for 80 new products were developed during the year and approvals obtained from 21 International & National Equipment Manufacturers for SERVO lubricants. With the commissioning of the multi purpose pilot plant during the year, the scale-up of R&D efforts at commercializing new technologies is expected to receive a boost



. Local Area Networks installed at HO, Regions, State Offices, Divisional Offices, Terminals, Depots, LPG Bottling plants and AGSs. Lotus Notes mail implemented at HO, Regions and State Offices. A virtual private network set-up between Corporate Office, Head Office and Koyali Refinery using Windows 2000 Advanced Server. Guruji Groupware package was further upgraded. Multi-point video-conferencing installed at Head Office, Regions and State Offices.

**SYSTEM STUDY**

## **2.SYSTEM STUDY**

### **2.1 EXISTING SYSTEM**

The Existing system is partially manual. The company receiving flat files from various offices (State, Divisional, Territory) through Fax machine or Floppy. Then they enter these flat files into system and then insert those data into Database, which they may use for further manipulation.

#### **Problem faced in the existing system**

- Time consuming process.
- Require lot of manpower.
- Cost ineffective.
- If the file size is too large then it cannot be transferred by floppy.

### **NEED FOR PROPOSED SYSTEM**

The existing system was studied to get an overview about the proposed system. There was manual process of file transfer between systems either by Fax or Floppy. This kind of activities is time consuming and hence in order to overcome the above said difficulties the need for the proposed systems arises.

## **2.2 PROPOSED SYSTEM**

The proposed system aims to provide better solution to the problem encountered in the existing system. The Proposed system fully automates file transfer and report generation. The proposed systems were using Java and Visual Basic 6.0.

### **Features of proposed system**

- No file size limitation.
- Handle various errors occurring during transferring files, insert data into database
- Reducing manpower and time.
- Cost effective.
- User friendly.

**PROGRAMMING ENVIRONMENT**

## **3. PROGRAMMING ENVIRONMENT**

### **3.1 HARDWARE CONFIGURATION**

#### **Server Machine**

RAM – Minimum 256 MB

HARD DISK capacity – 20 GB IDE

CPU – PENTIUM III or above

MONITOR – SVGA Color monitor

KEYBOARD – 104 keys keyboard

MOUSE – Windows PS/2 – two buttons

NIC (LAN) card – INTEL PCI PRO 100 or above

Modem - Rockwell 128KBPS

#### **Client Machine**

RAM – Minimum 64 MB

CPU – PENTIUM II or above with Windows 95/98/ Windows NT

MONITOR – SVGA Color monitor

KEYBOARD – 104 keys keyboard

MOUSE – Windows PS/2 – two buttons

NIC (LAN) card – INTEL PCI PRO 100 or above

Modem - Rockwell 128KBPS

## 3.2 SOFTWARE CONFIGURATION

The following Technologies have been used in the development of EIS –Server Side Includes.

|                            |   |  |
|----------------------------|---|--|
| Front End / User Interface | : | Java, Java Swing.                      |
| Back End / Business Logic  | : | Microsoft SQL-Server 7.0               |
| Protocol                   | : | File Transfer Protocol.                |
| IDE                        | : | Sun ONE Studio 4 Update1, Community Ed |

**SYSTEM DESIGN**



## 4. SYSTEM DESIGN

The system design is the final phase that indicates the proposed system and its process.

### 4.1 DATA BASE DESIGN

Database design are crucial in managing the data received through the forms, the management of data involves both the definition of structures for storage of information for the mechanism of information .In addition, the database, must have a unique and appreciable security features.

A good database must furnish the following:

- Ease of use
- Data independence
- Accuracy and integrity
- Recovery from failure
- Performance

Data redundancy can be controlled by extensive normalization of the tables.

The Executive Information System – Server Side Includes consists of tables that are normalized to maximum extend, the normalization is the process of simplifying the relationship between data elements in a record

Normalization has been carried out for 4 reasons:

- To structure the data so that any persistent relationship between entities can be represented.
- To permit simple retrieval of data in response to query and reports required
- To simplify data maintenance procedures such as insertion, deletion and updating.

The database tables used in the system in desired in Appendix A.

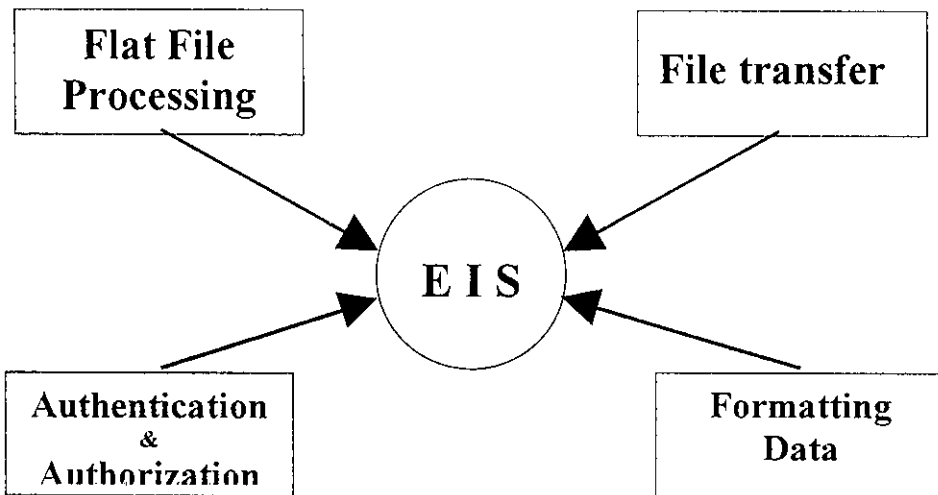
## 4.2 Process Design

The process design is defined as a ordered set of events that accomplishes some tasks required for a system. The events are actions, operations, or series of changes taking place in a definitive manner.

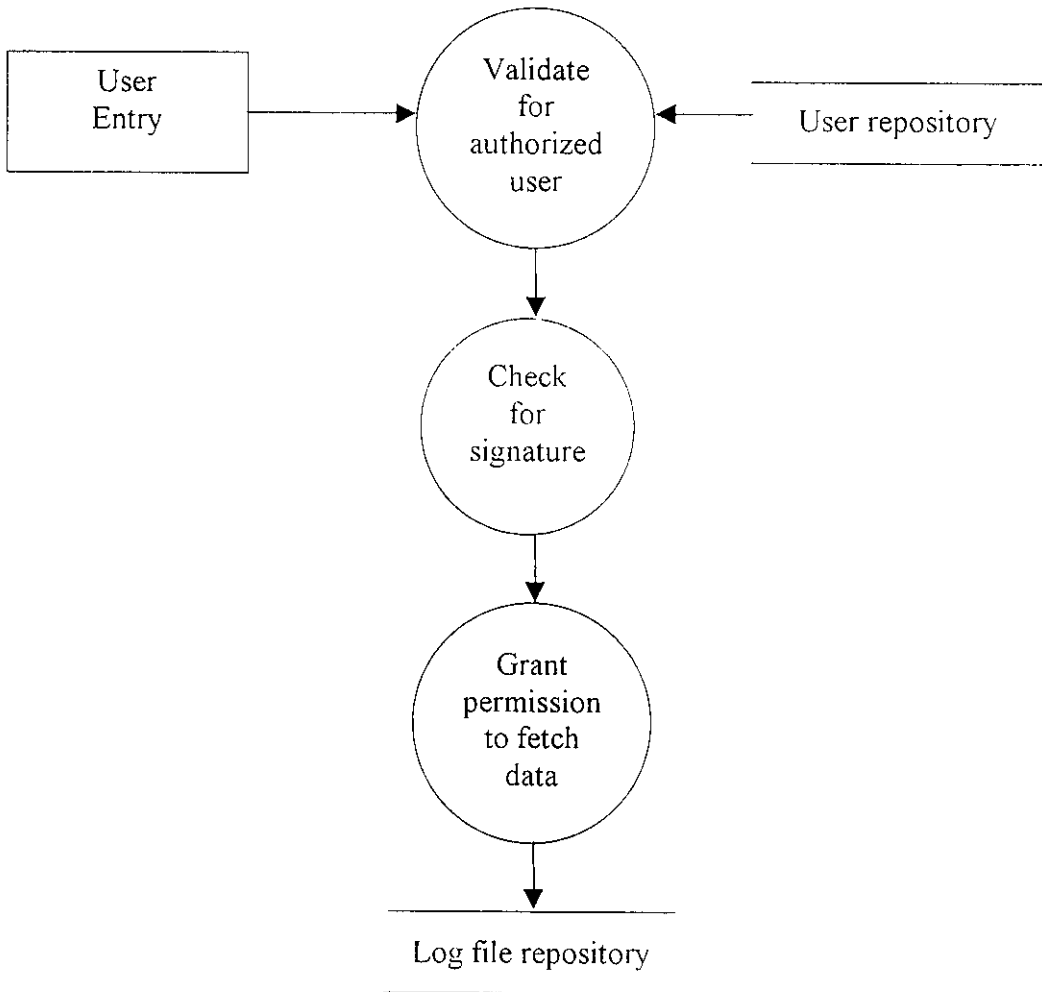
Process design consists of three levels policies, procedures and standards. The architectural framework provides a definition for basic elements, how they relate and how are decomposed into greater detail, the basic element of process design is unit cell.

A DFD consists of numerous unit cells which is defined to the accomplish a specific task and is uniquely identified. Each cell has required entry condition with inputs, task standards, procedures, methods, responsibilities and measures. Exit conditions define the result produced, there level of validation, and may post task condition.

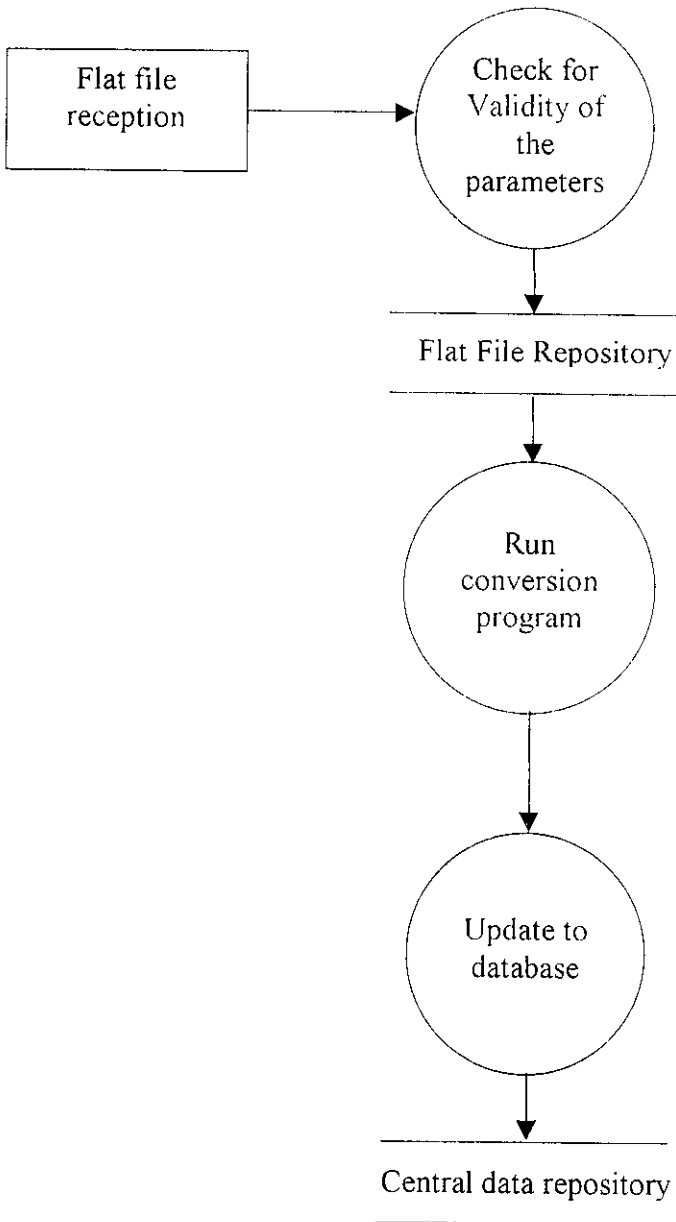
## Overview of EIS



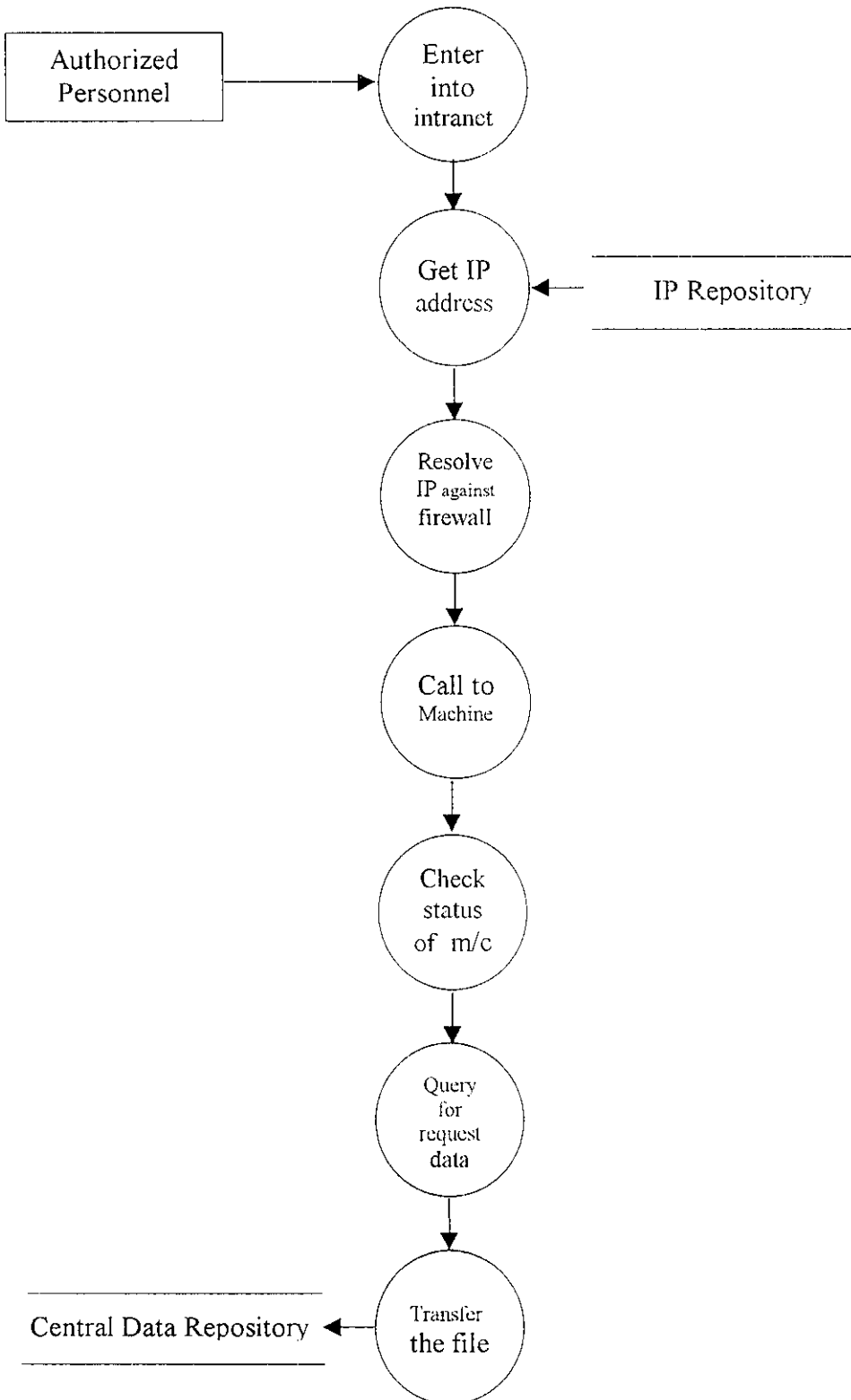
# AUTHENTICATION AND AUTHORIZATION



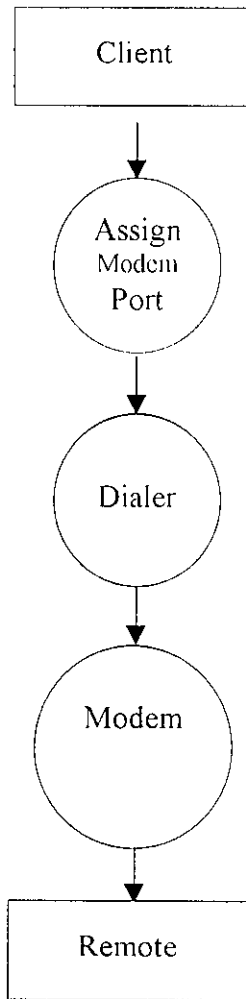
# FLAT FILE PROCESSING



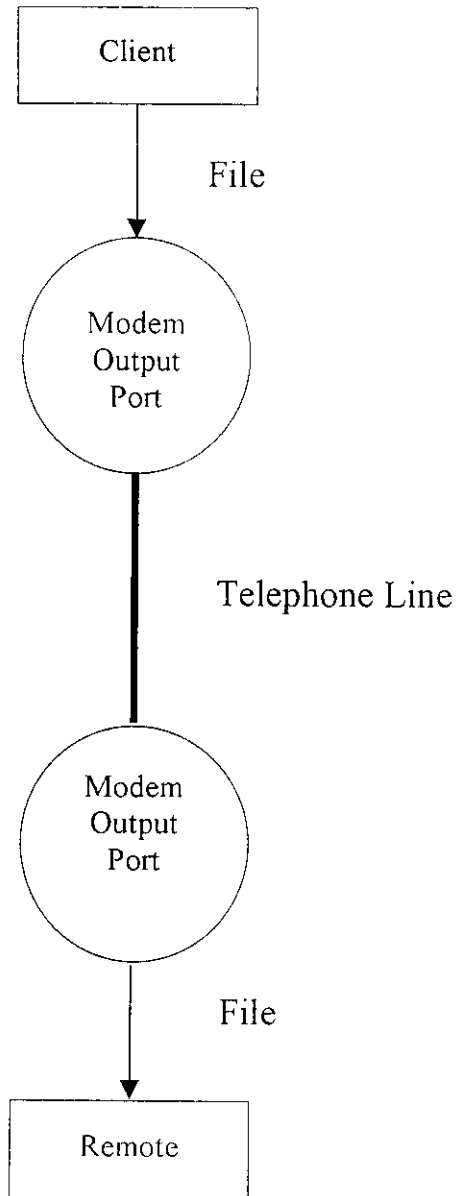
# INTRANET



# DIAL UP - CONNECTION ESTABLISHMENT

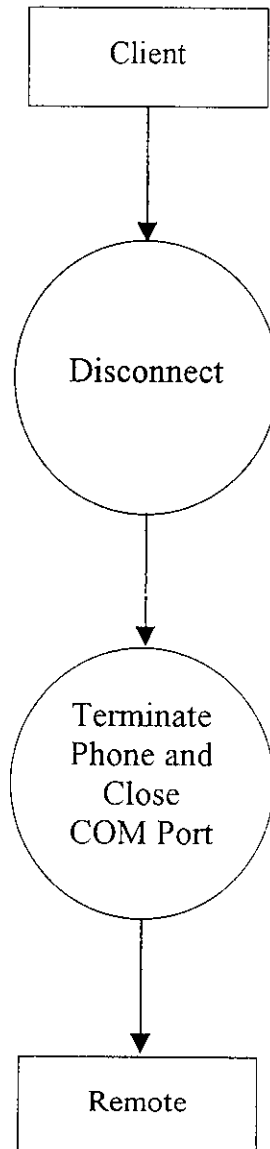


# DIAL UP – RECEIVING MODULE

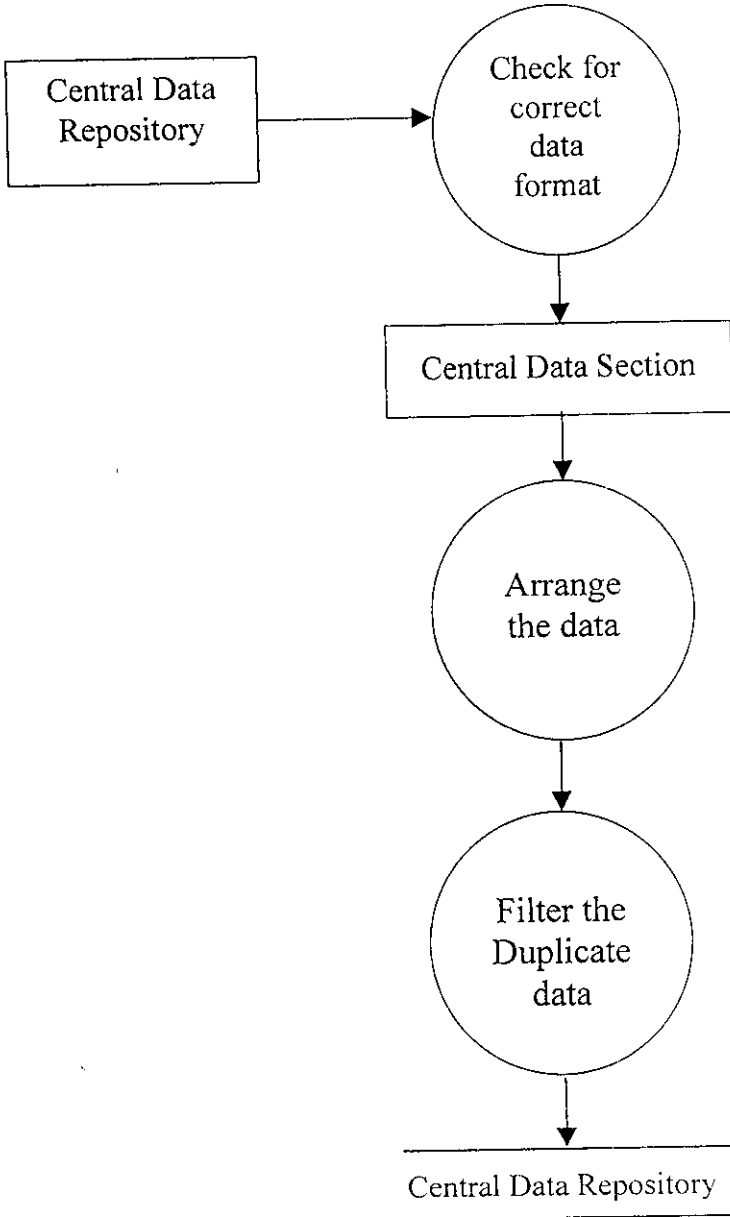




## DIAL UP – DISCONNECTION



# FORMATTING FILE





**SYSTEM IMPLEMENTATION AND TESTING**

# 5. SYSTEM IMPLEMENTATION & TESTING

## 5.1 SYSTEM IMPLEMENTATION

Implementation is the stage of the project when the theoretical design is turned into a working system. At this stage the main workload, the upheaval and the major impact on the existing practice shifts of the user department. If the implementation stage is not carefully planned and controlled. It can cause chaos. Thus it can be considered to be the most crucial stage in achieving a new successful system and in giving the users confidence that the new system will work and be effective.

Implementation involves careful planning, investigation of the current system and its constraints on implementation, design of methods to achieve the changeover, training of staff in the changeover procedures and evaluation of changeover methods. The first task is implementation planning, i.e., deciding on the methods and time scale to be adopted.

Once the planning has been completed, the major effort in the computer department is to ensure that the programs in the system are working properly. At the same time the user department must concentrate on training user staff. When the staff has been trained, a full system test can be carried out, involving both the computer and clerical procedures.

Education involves creating the right atmosphere and motivation the user. Staff education section encourages participation from all sides.

### **CODING:**

Conversion of design specification into source code in the software product developed includes the usage of set of factors given below:

### **Structured Coding Techniques:**

- Single Entry, Single Exit Constructs.
- Efficiency Considerations.

## **Coding Styles:**

- Use of few Standards, agreed upon control constructs.
- Use of User defined data types.

In the code sheet, the code written for particular event of the selected object will get executed if the control acquires the object. For Example, control passes through the code written in the key code event of the object, says Text Box, if the key press action takes place in the corresponding Text Box on the screen. This implies that the data variables and functions written for that object are encapsulated to it. Hence the security for the execution of code holds goods. Also comments have been included in the coding when the part of the program needs to specify the remarks.

## **Documentation Guidelines:**

Supporting documents such as requirement specifications, design documents, test plans and maintenance reports have been included. Thus documents are the result of systematic development and maintenance of software.

Program until completion notebook has been maintained on the due date of the module's completion. Also remarks are entered which are then referred in further coding.

## **Internal Documentation:**

This consists of a standard prologue for each program init with the commenting conventions in it. The factors that are used in the commenting conventions are as follows.

- The needs are attached to block of code that perform major data manipulations perform Exception Handling.
- The needs for embedding the comments are minimized.
- Blank lines, border and identification to highlight the comments have been used.

Comments and code are written in such a way that they agree with each other and with the requirements and design specification.

## 5.2 SYSTEM TESTING

Software testing can be looked upon as one among the many processes. This is the last opportunity to correct any possible flaws in the developed system. Software testing includes selection test and test data that have more probability of finding errors.

System is the stage of implementation that is aimed at ensuring that the system works accurately and efficiently before live operation commences. In principle, system proving is an on-going activity throughout the project.

The logical design and the physical design should be thoroughly and continually examined on paper to ensure that they will work when implemented. Thus the system test in implementation should be a confirmation that all is correct and an opportunity to show the users that the system works.

The first step in system testing is to develop a plan that tests all the aspects of the system. Completeness, correctness, reliability and maintainability of the software are to be tested for the best quality assurance – an assurance that the performance.

System testing is the most useful practical process of executing a program with explicit intention of finding errors that make the program fail. The following phases were developed.

### **Test Plan:**

This document describes the plan for testing the shape factor computation and its GUI software. All major testing activities are specified here.

## **Test Units:**

In this project i perform two levels of testing Unit Testing and System Testing. The basic units to be tested are:

- Modules and Object of Database
- Modules and Object operation to forms and menus

The testing for these different units will be done independently.

## **Features to be tested:**

1. All the functional features specified in the requirement document will be tested.
2. Performance testing will be done to
  - Increase system speed
  - Decrease saving time response.
  - Decrease the time taken for request and response from server.

## **Approach for Testing:**

For Unit testing, structural testing based on statement, branch and path coverage criteria will be used as per need in the modules and operations. The goal is to achieve branch and path coverage of more than 95%. The focus is on the invalid and valid cases boundary value and special cases.

## **Test Deliverables:**

The following documents are required (besides this test plan):

- a. Unit report for each unit.
- b. Test case specification for System Testing.
- c. The report for system testing.
- d. Error report.

The test case specification for system testing has to be submitted for review testing commences.



## **Unit Test Report:**

Here i present the test report for major modules and operation., the goal of testing is to achieve over 95% branch or path coverage.

## **Black Box Testing:**

This is conducted at the software interface. This test though is designed to uncover errors, is used to demonstrate that software functions are operational., input is properly accepted and outputs are produced correctly and that integrity of external information is maintained. Black box testing attempts to find errors in the following categories.

- Incorrect or missing functions.
- Interfaces errors.
- Errors in data structure/external database access.
- Performance and termination errors.

Accordingly, all the inputs to each if the modules were checked and like wise all the outputs were tested to meet requirements of the system under development.

## **White Testing:**

White box testing of software is predicated on close examination of procedural details. Providing test cases that exercise specific tests of condition and/or loops tests logical paths through the software. White box testing attempts to guarantee that all independent paths within a module have been exercised atleast once.

## **Integration Testing**

The objective is to take unit tested modules and build the program structure that has been dictated by design. All modules are combined in advance. The entire program is tested as a whole.

In Integration testing the modules are combined to form clusters. Each of these clusters is tested using a driver. In general, a combined approach (sometimes called sand witch testing) that uses the top down strategy for the upper levels of the program structure, coupled with a bottom-up strategy for subordinate level can be considered as the best.

Thus the different units that were tested were put together to see its functionality and flow of data from module to module.

### **Refinement based on feedback**

Proper unit testing had been underwent to check that the changes made to the system as a result of feedback after testing, have not affected the modules of the system.

**CONCLUSION**

## 6. CONCLUSION

This system has been developed to overcome all the difficulties that were faced in the manual file transfer method. The whole system is automated which reduces the workload and eliminates the error that creep into the system by providing proper validation techniques.

The programming techniques used in the design of the system provide a scope for further expansion and implementation of any changes, which may occur in future. The various reports generated by the system have provided to be quite useful.

The system has been tested with sample data covering all possible options for each function. Its performance is satisfactory. The system is under implementation.

This system is developed with the specifications and abiding by the existing rules and regulations of the company.

Since the requirements of any organization and their standards are changing day to day the system has been designed in such a way that its scope and boundaries could be expanded in future with little modifications. As a further enhancement this system can be integrated with any other system.

This package has been developed using JAVA and VB for designing phase and SQL Server for storage of data. The main aim behind the development of this package is to provide a comprehensive solution that is capable of handling and meeting the company's stated and implied requirements.

**FUTURE ENHANCEMENTS**

## 7. FUTURE ENHANCEMENT

- Simultaneously receiving multiple files.
- Faster file transfer than current times.
- Communication between systems in a full duplex mode.
- Transferring multimedia data.
- Automated report creation.
- Telephonic conferencing.
- Suggestions and tips for the accurate usage help line.
- Automatic error and bug tracking facility.

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## **APPENDICES**

## APPENDIX

### A. DATA DICTIONARY

#### Table Description:

| <b>Table Name</b> | <b>Description</b>                       |
|-------------------|--|
| LOGIN             | User / password is stored in this table. |
| SALES             | IOC products are maintained              |
| LOCATION          | Various location of IOC office           |
| PHONE             | Phone number of territory office         |
| FTP               | Details of downloaded file               |
| UPDATE_DB         | Details of File Inserting Process        |

## Table Design

### 1. LOGIN

| Field Name | Data Type | Size | Description                      | Key Relationship |
|------------|-----------|------|----------------------------------|------------------|
| username   | Text      | 15   | ID for user authentication       | Primary Key      |
| password   | Text      | 15   | Password for user authentication |                  |
| Permission | Text      | 4    | Privileges of user               |                  |

### 2. LOCATION

| Field Name | Data Type | Size | Description      | Key Relationship |
|------------|-----------|------|------------------|------------------|
| Lcode      | number    |      | Location code    | Primary Key      |
| Lname      | Text      | 20   | Location name    |                  |
| St_name    | Text      | 2    | State name       |                  |
| Ipaddress  | Text      | 20   | IP address       |                  |
| u_name     | Text      | 10   | Username         |                  |
| Password   | Text      | 15   | Password         |                  |
| Pathname   | Text      | 30   | Pathname of file |                  |

### 3. PHONE

| Field Name  | Data Type | Size | Description   | Key Relationship |
|-------------|-----------|------|---------------|------------------|
| Lcode       | Number    |      | Location code | Foreign Key      |
| Phonenumber | Text      | 15   | Phone number  |                  |

## 4. SALES

| Field Name | Data Type | Size | Description                    | Key Relationship |
|------------|-----------|------|--------------------------------|------------------|
| do_code    | Number    |      | Divisional office code         | Primary Key      |
| Loc_code   | Number    |      | Location code                  | Foreign Key      |
| Chln_da    | Date      |      | Chelan date                    |                  |
| Actu_da    | Date      |      | Actual date                    |                  |
| Date_in    | Text      | 1    | Status                         |                  |
| Msr        | Number    |      | Motor spirit retailer          |                  |
| Msc        | Number    |      | Motor spirit consumer          |                  |
| Mst        | Number    |      | Motor spirit total             |                  |
| Hsdr       | Number    |      | High speed diesel retailer     |                  |
| Hsdc       | Number    |      | High speed diesel consumer     |                  |
| Hsdt       | Number    |      | High speed diesel total        |                  |
| Skor       | Number    |      | Superior kerosene oil retailer |                  |
| Skoc       | Number    |      | Superior kerosene oil consumer |                  |
| Skot       | Number    |      | Superior kerosene oil total    |                  |
| Ldor       | Number    |      | Light diesel oil retailer      |                  |
| Ldoc       | Number    |      | Light diesel oil consumer      |                  |
| Ldot       | Number    |      | Light diesel oil total         |                  |
| Fo         | Number    |      | Furnace oil                    |                  |
| Lshs       | Number    |      | Low Sulphur High Speed diesel  |                  |
| Bitp       | Number    |      | Bitumen                        |                  |
| Bitb       | Number    |      | Bitumen                        |                  |
| Bittot     | Number    |      | Bitumen total                  |                  |
| Lubr       | Number    |      | Lube retailer                  |                  |
| Lubc       | Number    |      | Lube consumer                  |                  |
| Lubt       | Number    |      | Lube total                     |                  |
| Grer       | Number    |      | Grease retailer                |                  |
| Grec       | Number    |      | Grease consumer                |                  |
| Gret       | Number    |      | Grease total                   |                  |
| Lpgr       | Number    |      | Liquid petroleum gas retailer  |                  |
| Lpgc       | Number    |      | Liquid petroleum gas consumer  |                  |
| Lpgt       | Number    |      | Liquid petroleum gas total     |                  |
| Nath       | Number    |      | Naphtha                        |                  |
| Atf        | Number    |      | Aviation Turbine Fuel          |                  |
| Others     | Number    |      | Others                         |                  |

## 5. FTP

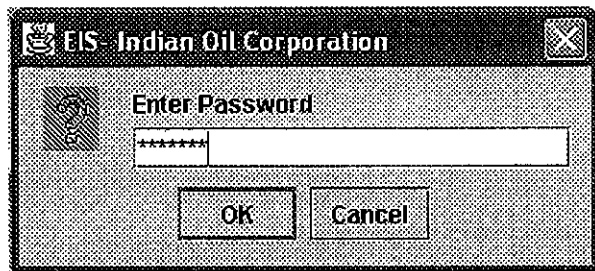
| Field Name | Data Type | Size | Description        | Key Relationship |
|------------|-----------|------|--------------------|------------------|
| Lcode      | Number    |      | Location code      | Foreign Key      |
| Date       | Date      |      | Date of ftp        |                  |
| Dialedtime | Time      |      | Ftp dialed time    |                  |
| Status     | Text      | 25   | Status of ftp      |                  |
| Filesize   | Number    |      | File size          |                  |
| Timetaken  | Number    |      | Time taken for ftp |                  |

## 6. UPDATE\_DB

| Field Name | Data Type | Size | Description                  | Key Relationship |
|------------|-----------|------|------------------------------|------------------|
| Lcode      | Number    |      | Location code                | Foreign Key      |
| Date       | Date      |      | Date of insertion            |                  |
| Dup_rec    | Number    |      | Number of duplicated records |                  |
| Ins_rec    | Number    |      | Number of inserted records   |                  |
| Tot_rec    | Number    |      | Total records                |                  |
| Timetaken  | Number    |      | Time taken for insertion     |                  |

## B. Screens

### Login Screen



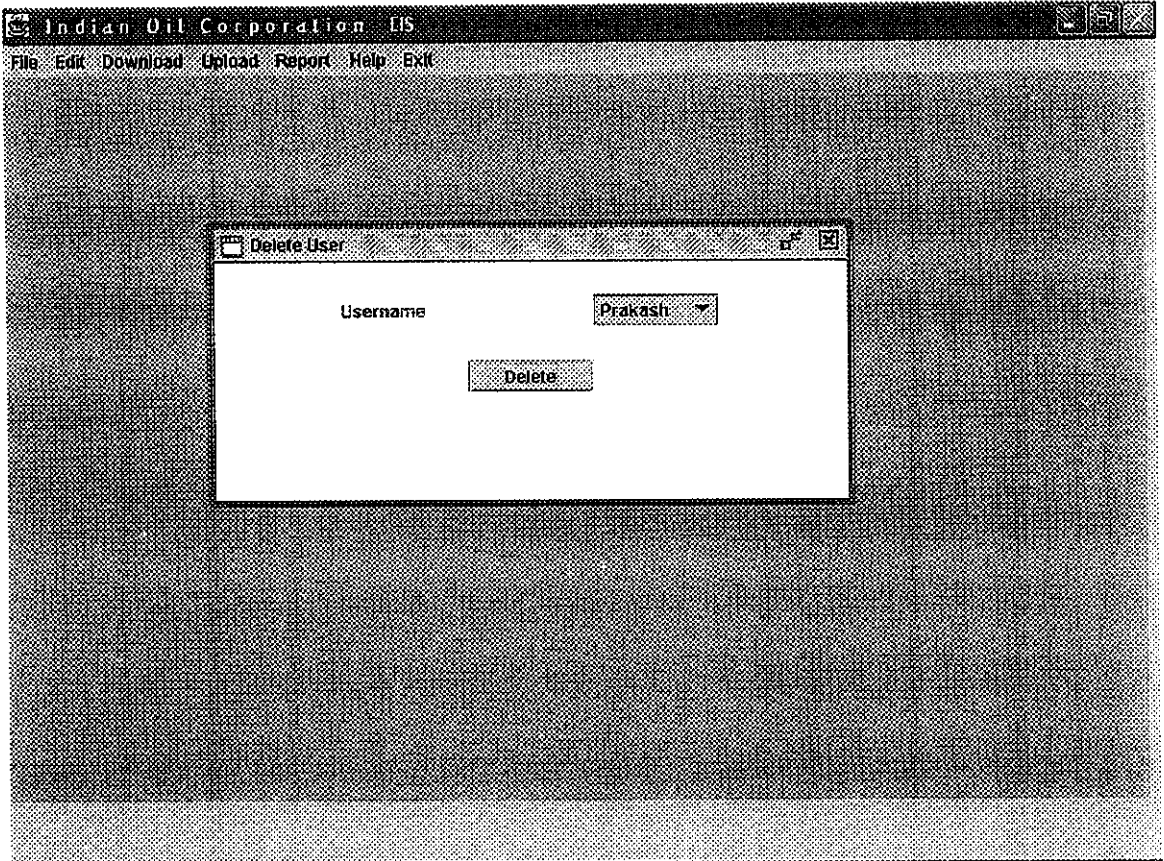
# Add New User

The image shows a screenshot of a software application window titled "Indian Oil Corporation EIS". The window has a menu bar with the following items: File, Edit, Download, Upload, Report, Help, and Exit. A dialog box titled "Add New User" is open in the center of the screen. The dialog box contains the following fields and controls:

- Username:** A text input field containing the value "murali".
- Password:** A password input field with masked characters (asterisks).
- Confirm Password:** A password input field with masked characters (asterisks).
- Permission:** A section containing four checkboxes:
  - Read
  - Delete
  - Modify
  - Create
- Buttons:** Two buttons at the bottom: "Save" and "Cancel".



# Delete User



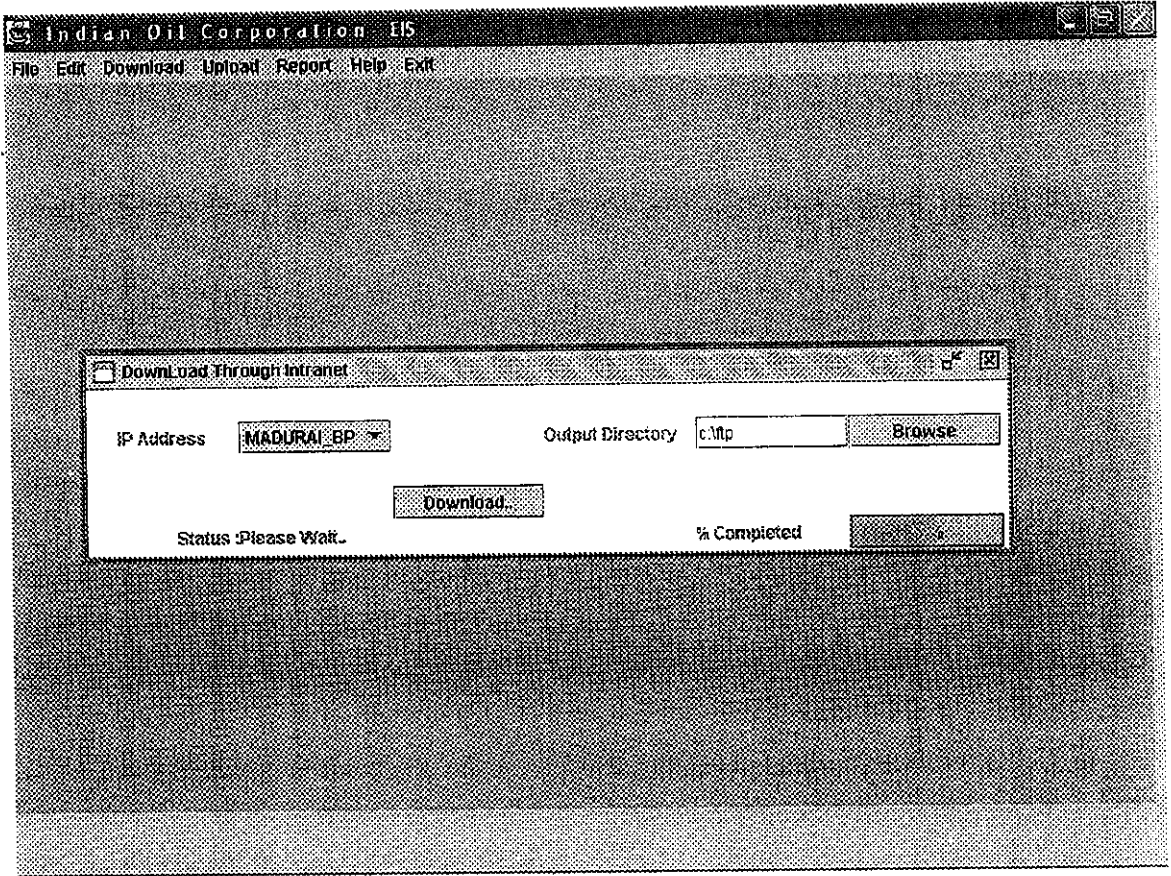
# Edit Location DB

The screenshot shows a web browser window titled "Indian Oil Corporation EIS" with a menu bar containing "File", "Edit", "Download", "Upload", "Report", "Help", and "Exit". A modal dialog box titled "Edit Location DB" is open, displaying the following fields and values:

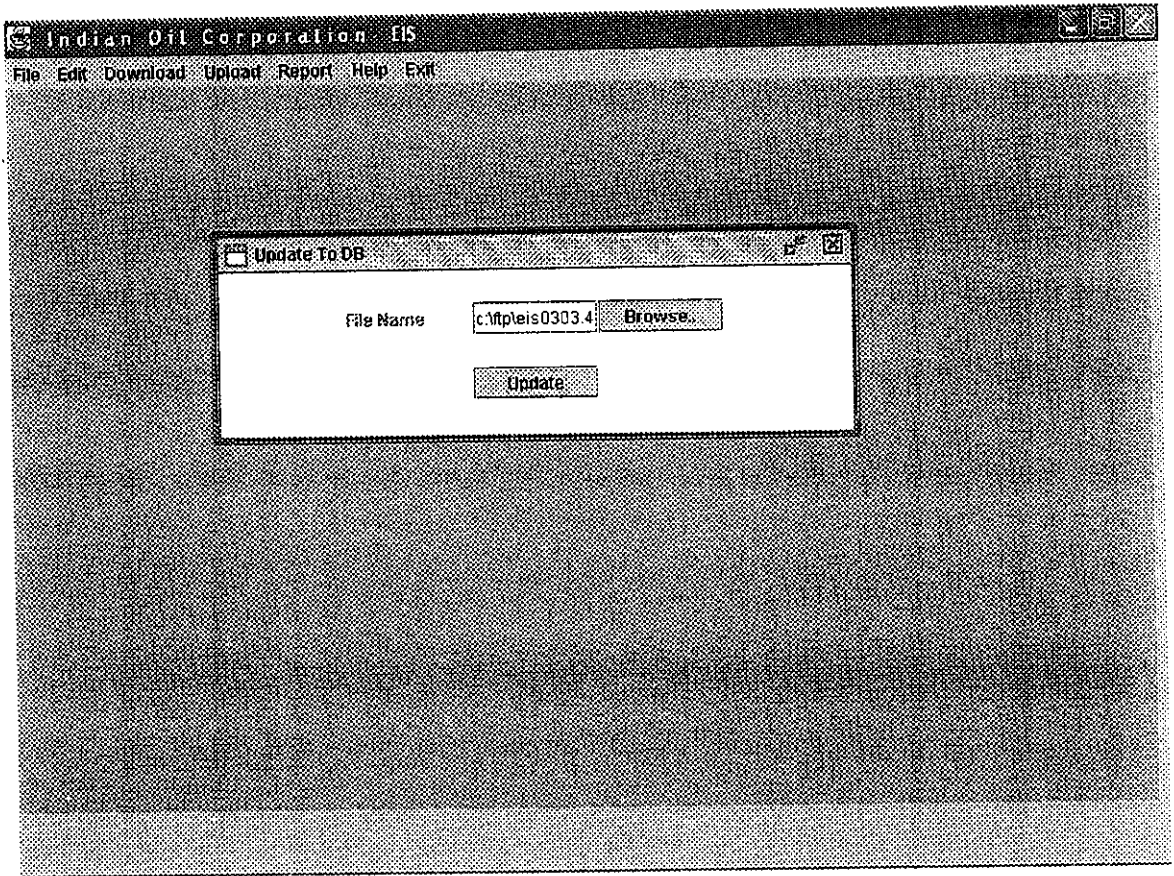
|          |               |            |              |
|----------|---------------|------------|--------------|
| Loc Code | 405           | Loc Name   | MADURAI_DEP  |
| State    | TN            | IP Address | 128.163.3.10 |
| Username | tdm           | Password   | ***          |
| Pathname | /usr/tdm/data |            |              |

At the bottom of the dialog, there are two buttons: "Save" and "Cancel".

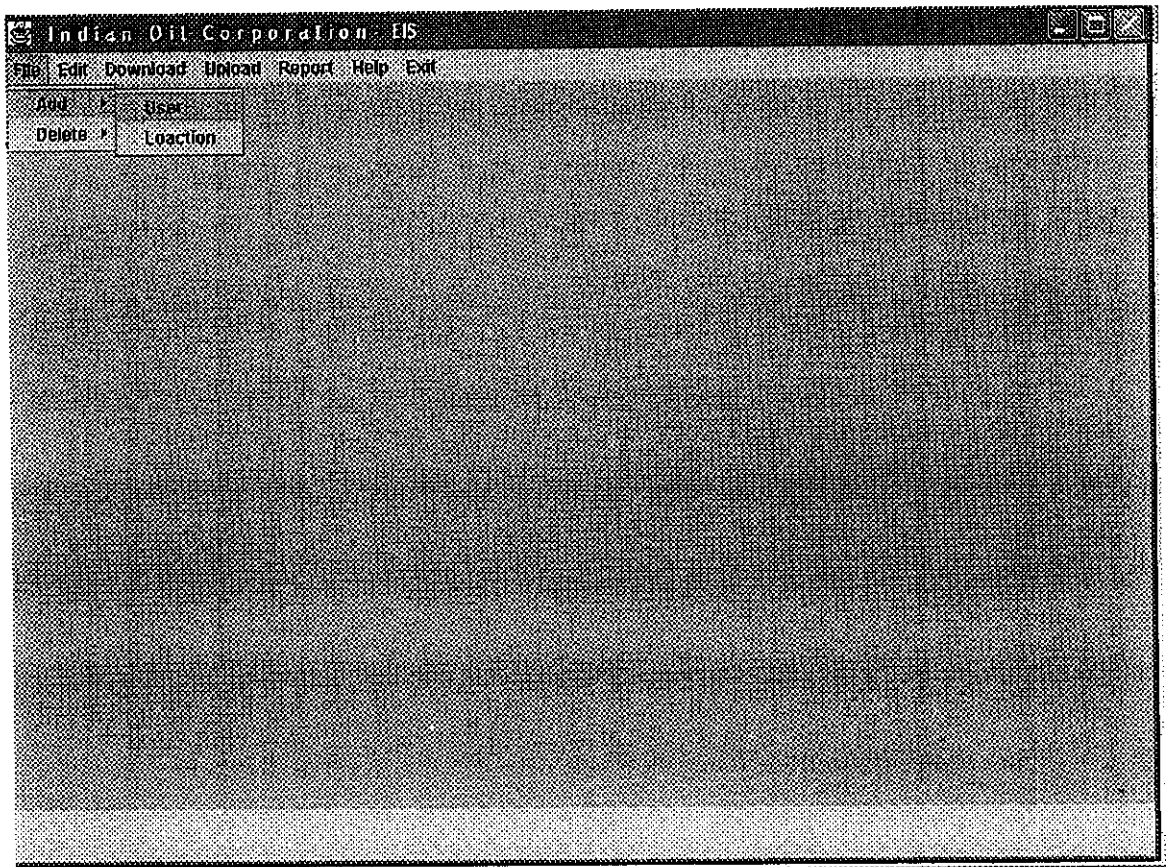
# Download FTP

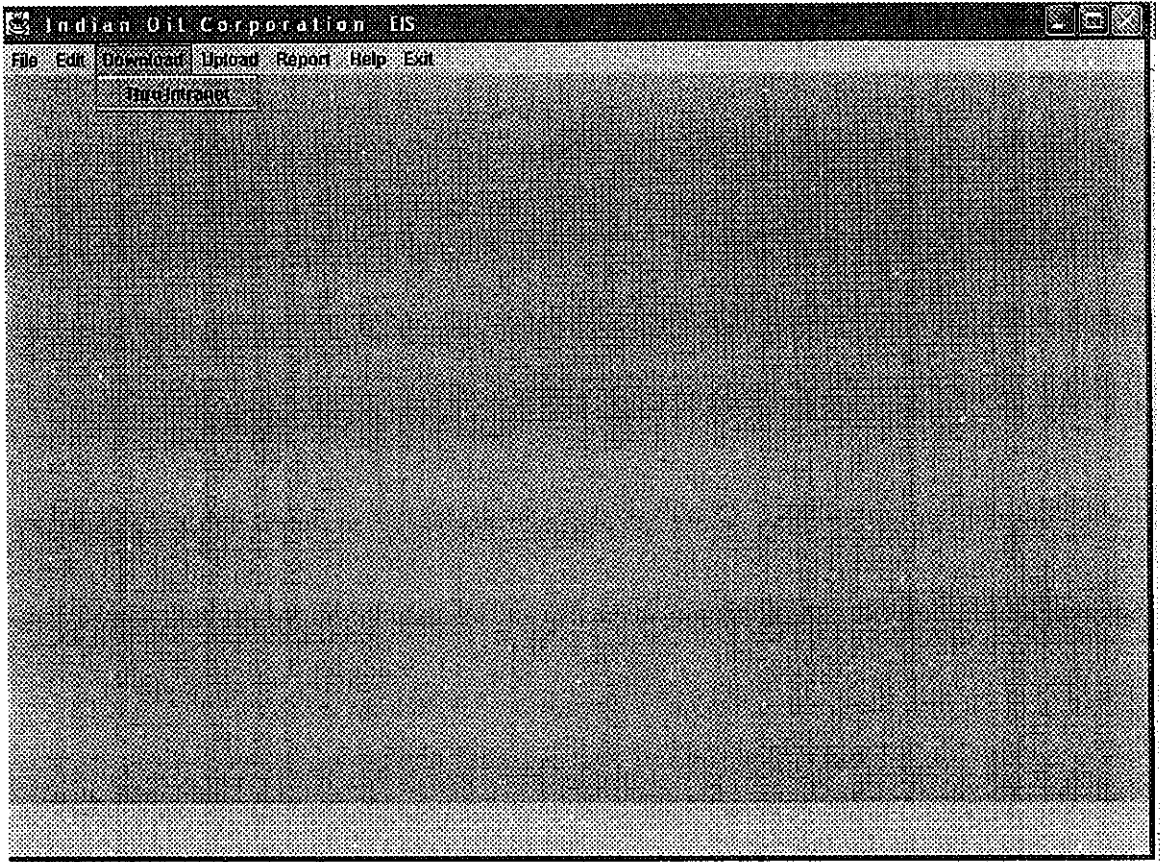


# Update DB

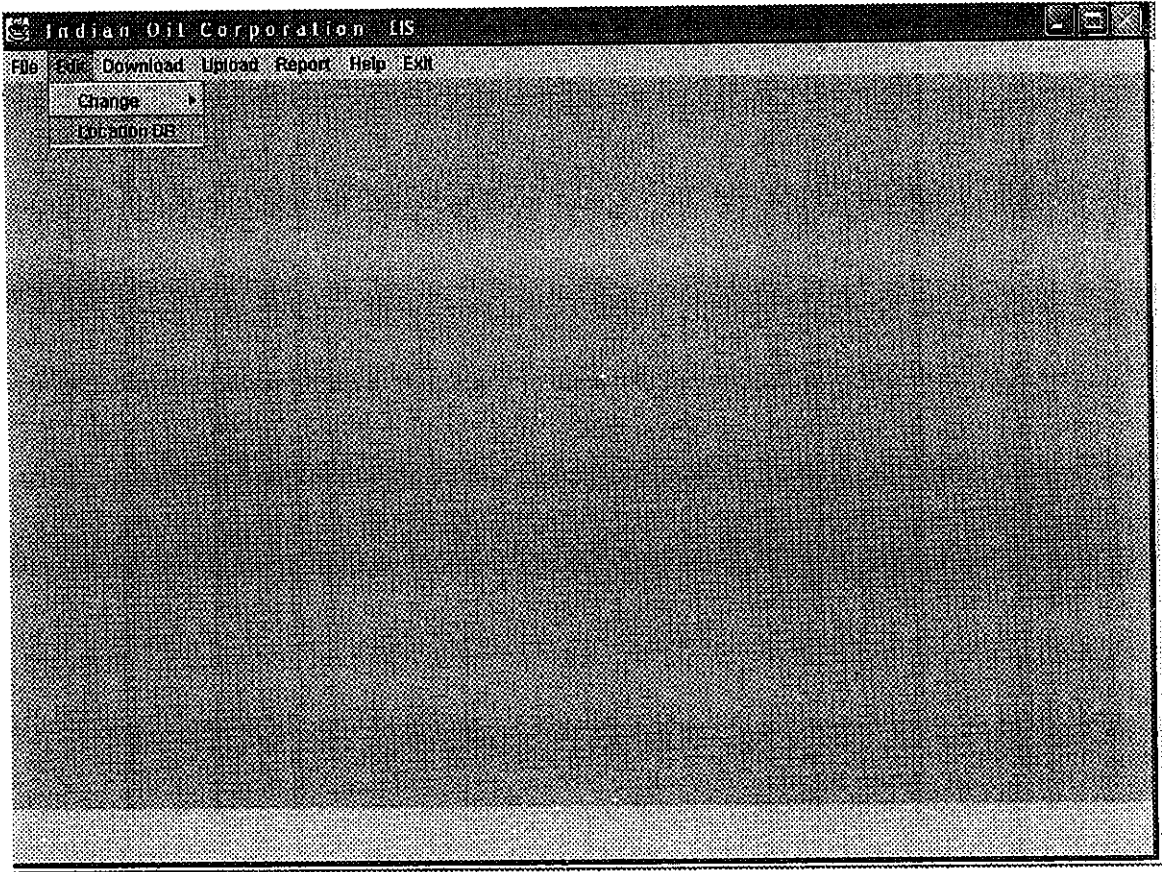


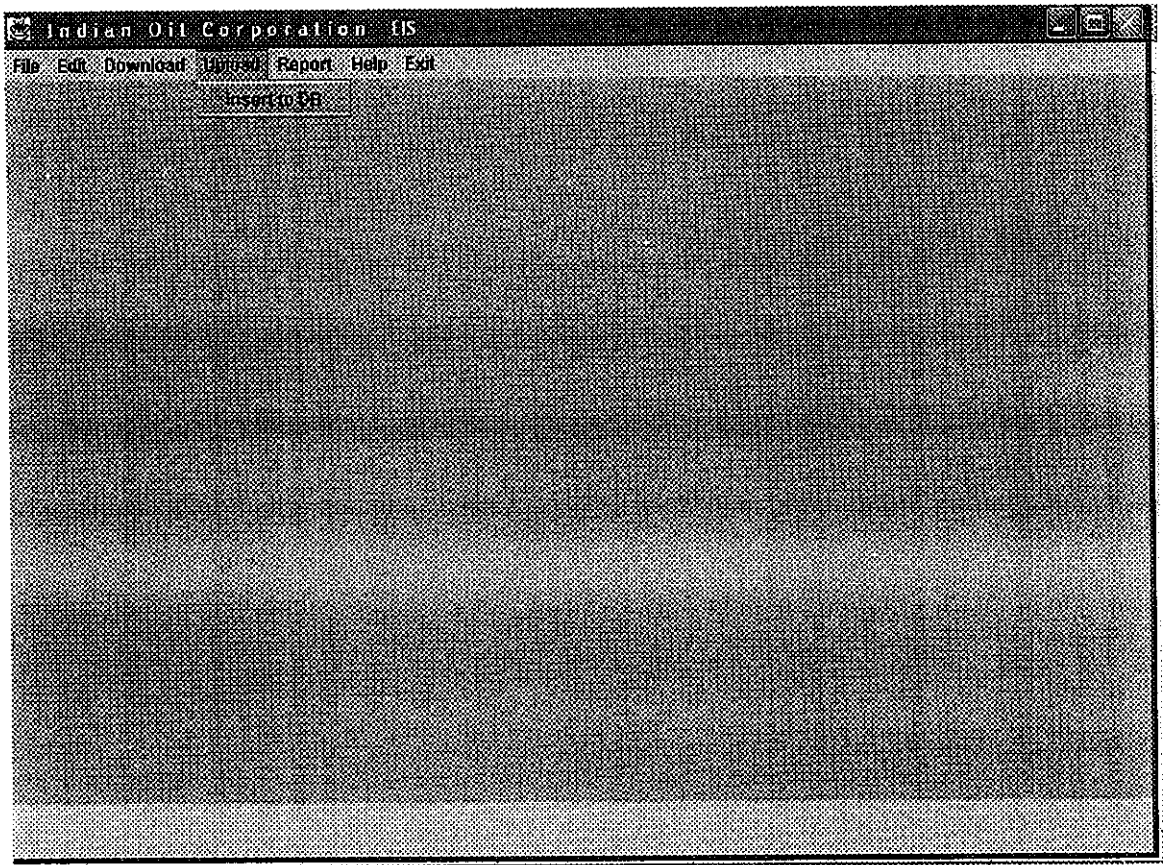
# Menu Screens



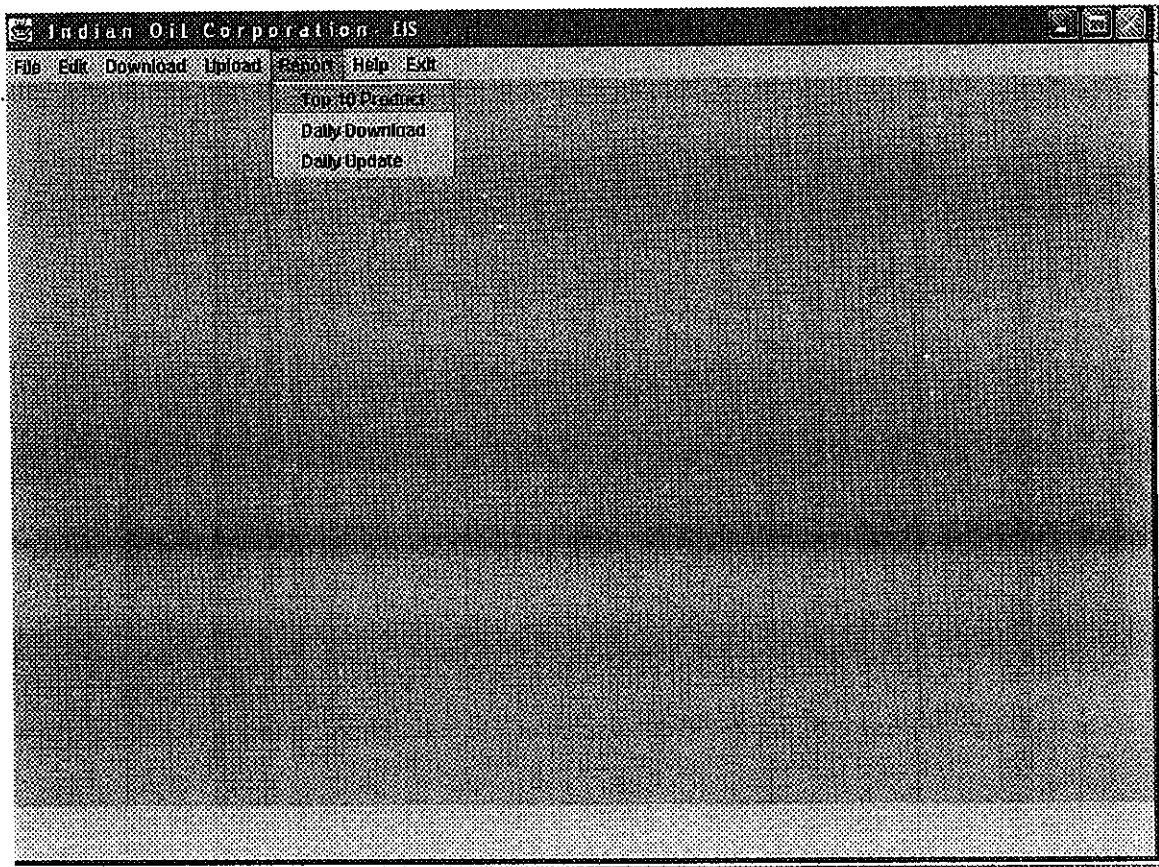












# Top 10 Product Report

Indian Oil Corporation IS

File Edit Download Upload Report Help Exit

| DM Office | Ms    | Hsd    | Skd   | Edn  | Fo    | Lshs  | Bit   | Napth | Lube | Liq   |
|-----------|-------|--------|-------|------|-------|-------|-------|-------|------|-------|
| Chennai   | 8384  | 41110  | 9282  | 898  | 23440 | 2566  | 6893  | 2599  | 959  | 9936  |
| Colmbat   | 5931  | 34384  | 8112  | 392  | 7021  | 6798  | 3246  | 0     | 732  | 6932  |
| Madurai   | 6410  | 45771  | 11937 | 92   | 23924 | 16781 | 2634  | 25702 | 629  | 7431  |
| TNSO      | 20736 | 121266 | 29332 | 1382 | 54386 | 25146 | 12774 | 28302 | 2320 | 24299 |
| Secundr   | 7378  | 46279  | 9440  | 798  | 7322  | 861   | 4612  | 0     | 172  | 8221  |
| Vijayawa  | 3477  | 44797  | 6223  | 434  | 1385  | 157   | 4411  | 740   | 298  | 3501  |
| Visakapa  | 2734  | 24794  | 5528  | 776  | 3688  | 3548  | 66    | 0     | 409  | 4     |
| APSO      | 13590 | 115871 | 21192 | 2009 | 12395 | 4557  | 9090  | 740   | 881  | 11727 |
| Bangalore | 10410 | 41599  | 12392 | 1315 | 8196  | 11196 | 552   | 0     | 435  | 11505 |

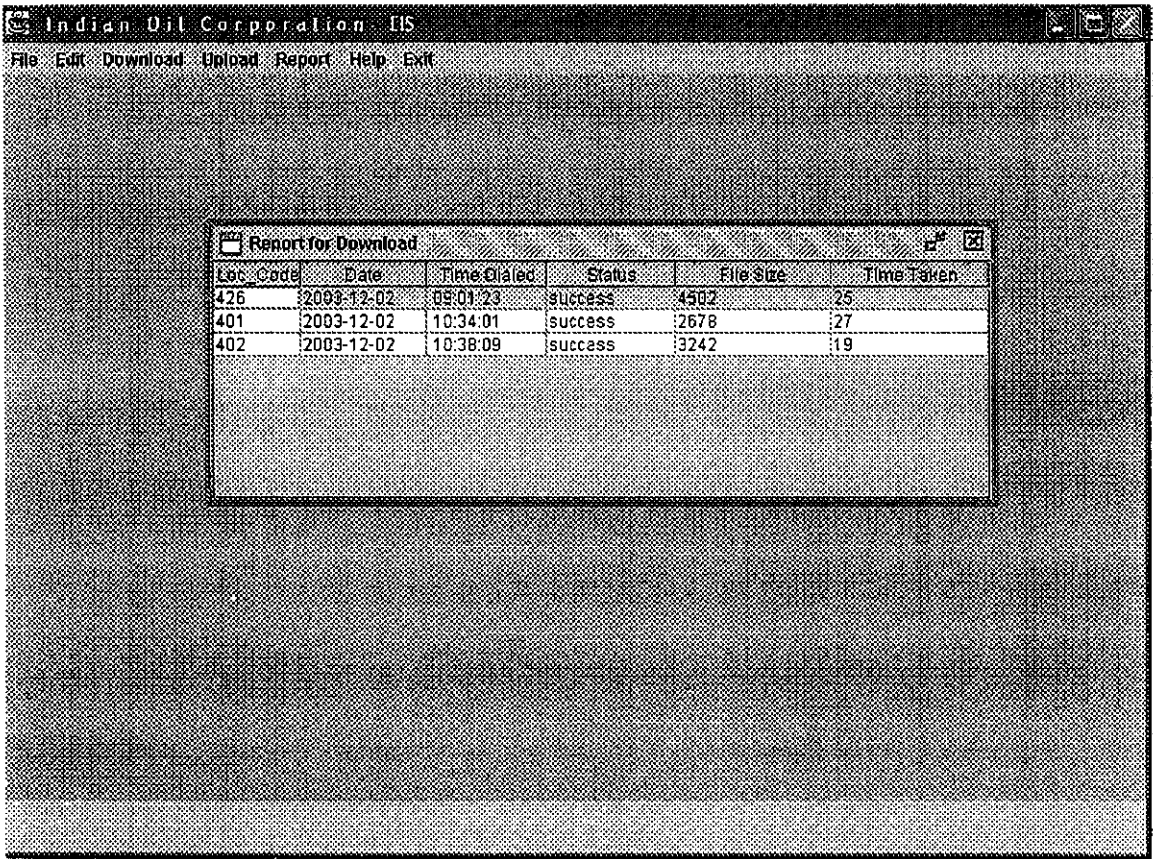
# Update DB Report

Indian Oil Corporation EIS

File Edit Download Upload Report Help Exit

| Loc Code | Date            | Duplicate Records | Inserted Records | Total Records | Time Taken |
|----------|-----------------|-------------------|------------------|---------------|------------|
| 426      | 2003-12-02      | 43                | 102              | 146           | 32         |
| 401      | 2003-12-02      | 20                | 267              | 287           | 39         |
| 402      | 2003-12-02 0... | 56                | 101              | 157           | 25         |

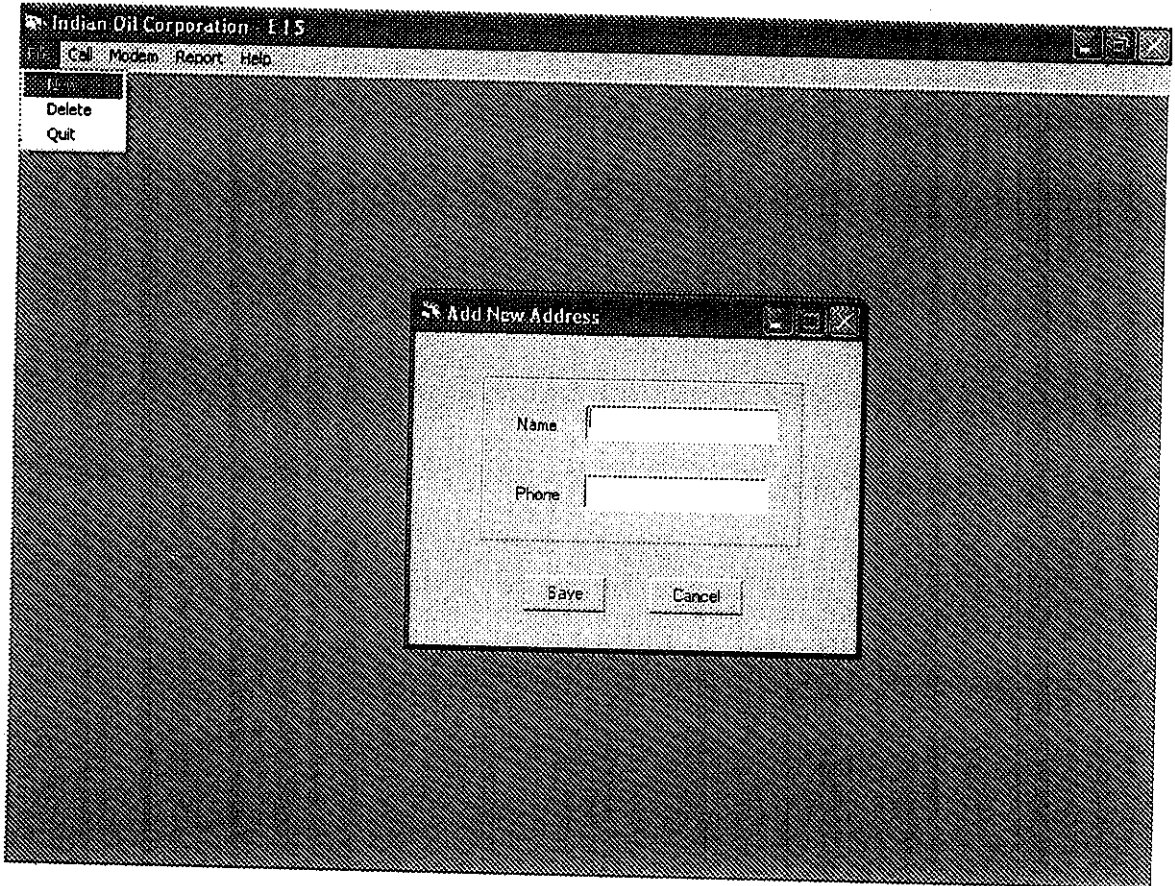
# Download FTP Report



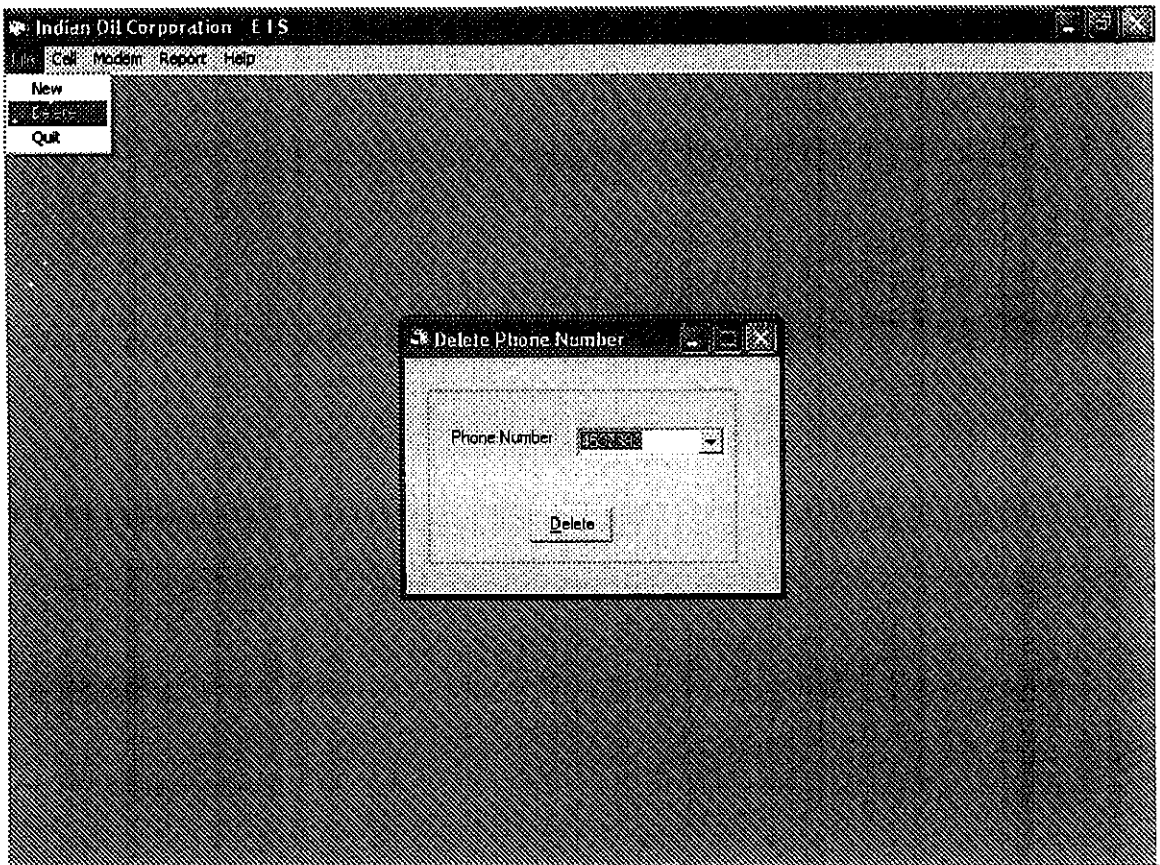
The screenshot shows a web application window titled "Indian Oil Corporation IIS". The menu bar includes "File", "Edit", "Download", "Upload", "Report", "Help", and "Exit". A table titled "Report for Download" is displayed, containing the following data:

| Loc Code | Date       | Time Diated | Status  | File Size | Time Taken |
|----------|------------|-------------|---------|-----------|------------|
| 426      | 2003-12-02 | 09:04:23    | success | 4502      | 25         |
| 401      | 2003-12-02 | 10:34:01    | success | 2678      | 27         |
| 402      | 2003-12-02 | 10:38:09    | success | 3242      | 19         |

# Add New Phone Number



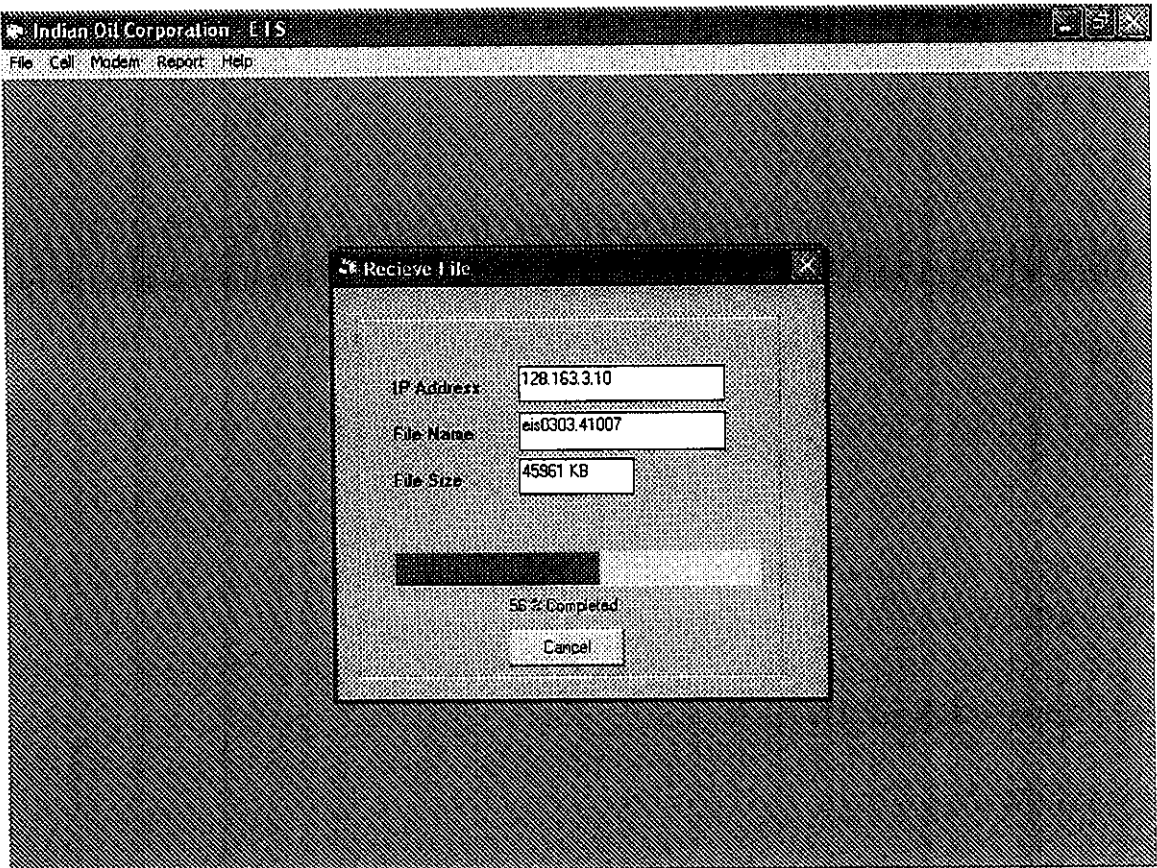
# Delete Phone Number







# Receive File





# Port Settings

