IBA eHIS 10.x - eMail Interface Installation and Configuration

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1. Introduction

This document explains the Hardware, Software requirement for eMail and explains the configuration details.

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2. MAIL Hardware, Software Requirements

2.1. Mail Software Requirements

Sending out the email from IBA eHIS is using Microsoft Outlook. Currently IBAeHIS uses Messaging Application Programming Interface (MAPI) for emailing IBAeHIS ports.

Note: MAPI is a set of functions that mail-enabled and mail-aware applications use to create, manipulate, transfer, and store mail messages. It gives application developers the tools to define the purpose and content of mail messages and gives them flexibility in their management of stored mail messages.

2.1.1. Launch Express ClickYes

Mail Server (SMTMLSRV.EXE) uses MAPI controls to send mail. Due to enhanced security model of Microsoft Outlook, Microsoft Outlook will pop-up the following message for each mail being sent.
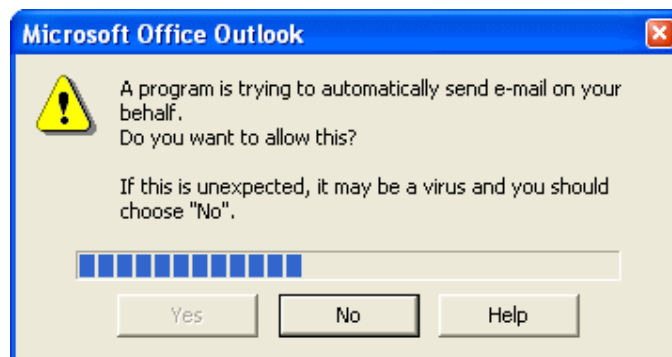

Figure 2-1

To avoid this pop-up, use freeware tool namely "Express ClickYes". Express ClickYes is a tiny program that runs in the system tray and automatically clicks the Yes button for the Outlook security prompt that asks you to confirm mail sending from third party applications or access to Outlook's address book.

Note: Express ClickYes does not acknowledge for any other prompts.

2.2. Email Server System Requirements

IBAeHIS recommends a dedicated system with the following configuration as minimum system requirements for IBAeHIS Email Interface Gateway and PDF creation Utility (Further referred to as IBAeHIS_EMAIL_GATEWAY).

Hardware Requirements

Hardware Item	Requirement
CPU	An IBM compatible PC with a Pentium 4 processor or better (Pentium IV with 2.8 GHz recommended)
Memory	512 MB or higher
Disk Space	20 GB or higher
Media Device	CD-ROM drive functioning as a logical drive. Required during installation time only

Software Requirements

Software Item	Requirement
Operating System	Windows 2000 with Service Pack 3 Windows XP with Service Pack 2
Microsoft Components	Microsoft Outlook 2000 or 2003 Microsoft Access 2000 or 2003
Others	IBAeHIS Email Service1 Office XP (Word, Access) Oracle Forms software as per details provided in eHIS Installation. JDK 1.5 or 1.5 above

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CHAPTER

3

3. Installation and Configuration

This section describes the system requirements and installation steps to be followed for enabling mail interface and PDF Creation Utility.

3.1. Email Interface Gateway Installation and Configuration

This section describes the system requirements for IBA_EMAIL_GATEWAY and installation steps to be followed for enabling email interface.

3.1.1. Installing IBAeHIS Email Interface Gateway

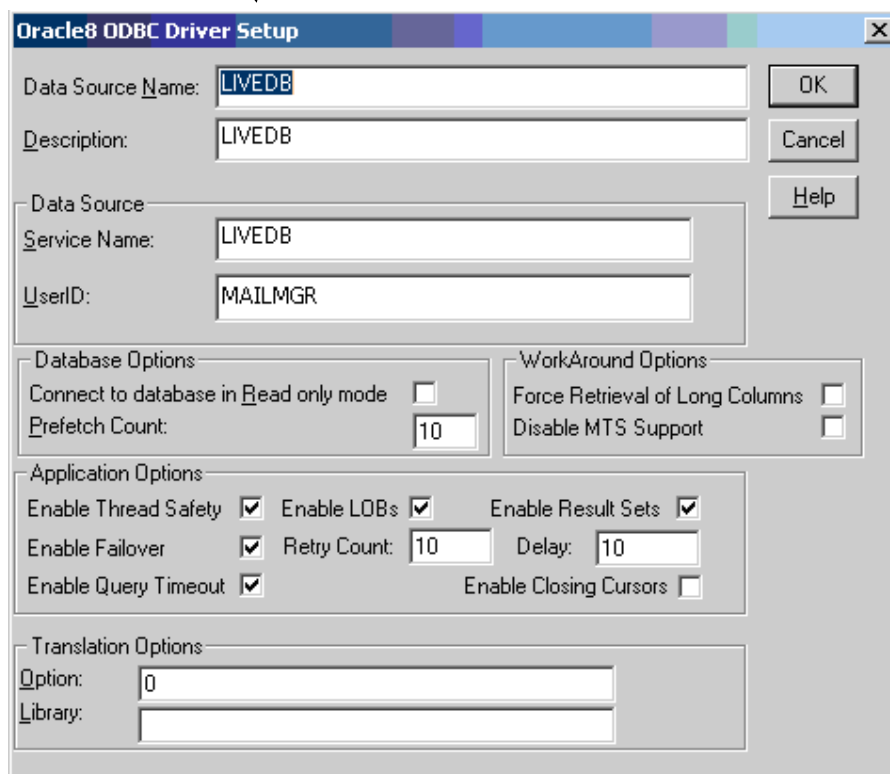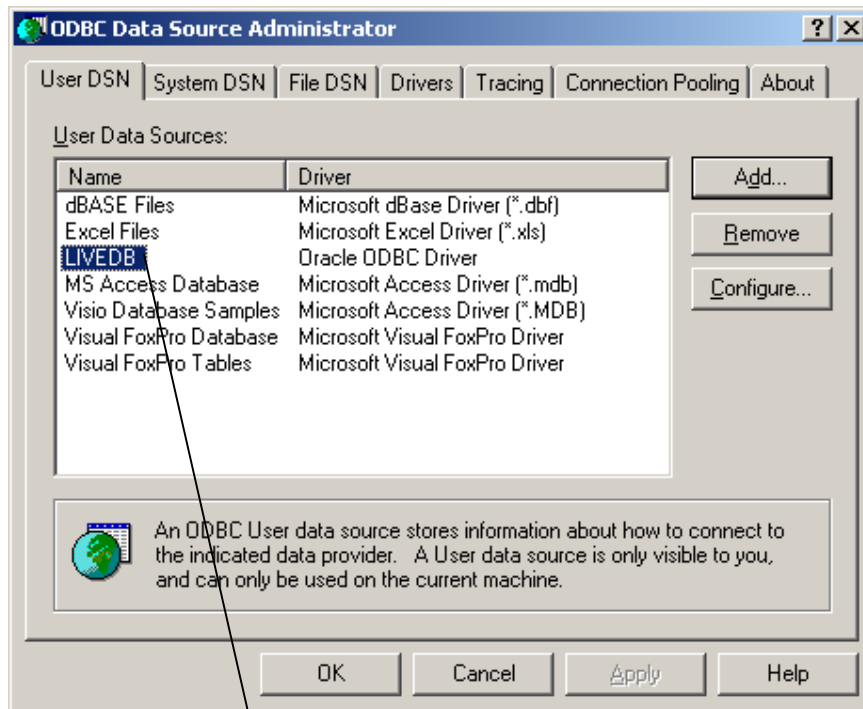Do the following in IBAeHIS_EMAIL_GATEWAY system:

- Create the sub-directory **'IBAEHIS\SMTMLSRV'** under C: drive (if not exists)
- Share the sub-directory 'SMTMLSRV' and specify the share name as 'SMTMLSRV'
- Copy the supplied file 'SMTMLSRV.MDB' to the sub-directory 'IBAEHIS\SMTMLSRV'
- Ensure the MSMAPI32.OCX file is available in the **C:\winnt\system32** folder and has to be registered (**Local Administer Privilege required**)
  - o Command – Go to **C:\winnt\system32**, type REGSVR32 MSMAPI32.OCX and run.

3.1.2. Configuring ODBC

IBAeHIS Email Service and PDF Creation Utility that is running in IBA_EMAIL_GATEWAY system should be able to read email requests from IBA database. For this purpose, ODBC should be configured in IBA_EMAIL_GATEWAY system.
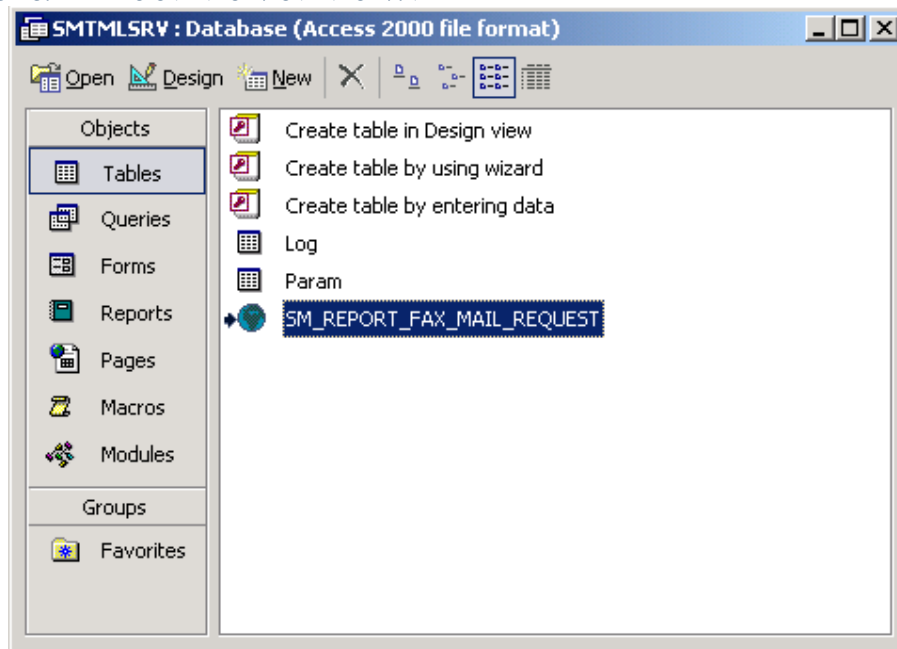
Following are the steps for configuring ODBC:

- Select 'Data Sources (ODBC)' by selecting 'Start → Settings → Control Panel → Administrative tools'
- Select 'User DSN' or 'System DSN' Tab
- Press 'Add' button and select data source driver as 'Oracle ODBC Driver'
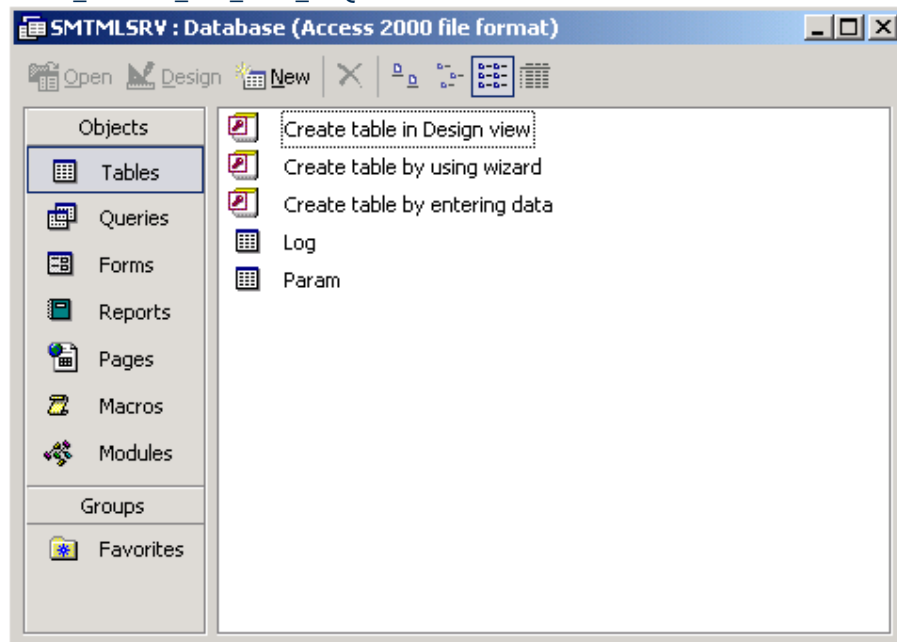- For example add a DSN as shown in the below figure.

ODBC Data Source Administrator

User DSN | System DSN | File DSN | Drivers | Tracing | Connection Pooling | About

User Data Sources:

Name	Driver
dBASE Files	Microsoft dBase Driver (*.dbf)
Excel Files	Microsoft Excel Driver (*.xls)
LIVEDB	Oracle ODBC Driver
MS Access Database	Microsoft Access Driver (*.mdb)
Visio Database Samples	Microsoft Access Driver (*.MDB)
Visual FoxPro Database	Microsoft Visual FoxPro Driver
Visual FoxPro Tables	Microsoft Visual FoxPro Driver

Add...
Remove
Configure...

An ODBC User data source stores information about how to connect to the indicated data provider. A User data source is only visible to you, and can only be used on the current machine.

OK | Cancel | Apply | Help

Oracle8 ODBC Driver Setup

Data Source Name: LIVEDB

Description: LIVEDB

OK
Cancel
Help

Data Source

Service Name: LIVEDB

UserID: MAILMGR

Database Options
Connect to database in Read only mode ☐
Prefetch Count: 10

WorkAround Options
Force Retrieval of Long Columns ☐
Disable MTS Support ☐

Application Options
Enable Thread Safety ☑   Enable LOBs ☑   Enable Result Sets ☑
Enable Failover ☑   Retry Count: 10   Delay: 10
Enable Query Timeout ☑   Enable Closing Cursors ☐

Translation Options
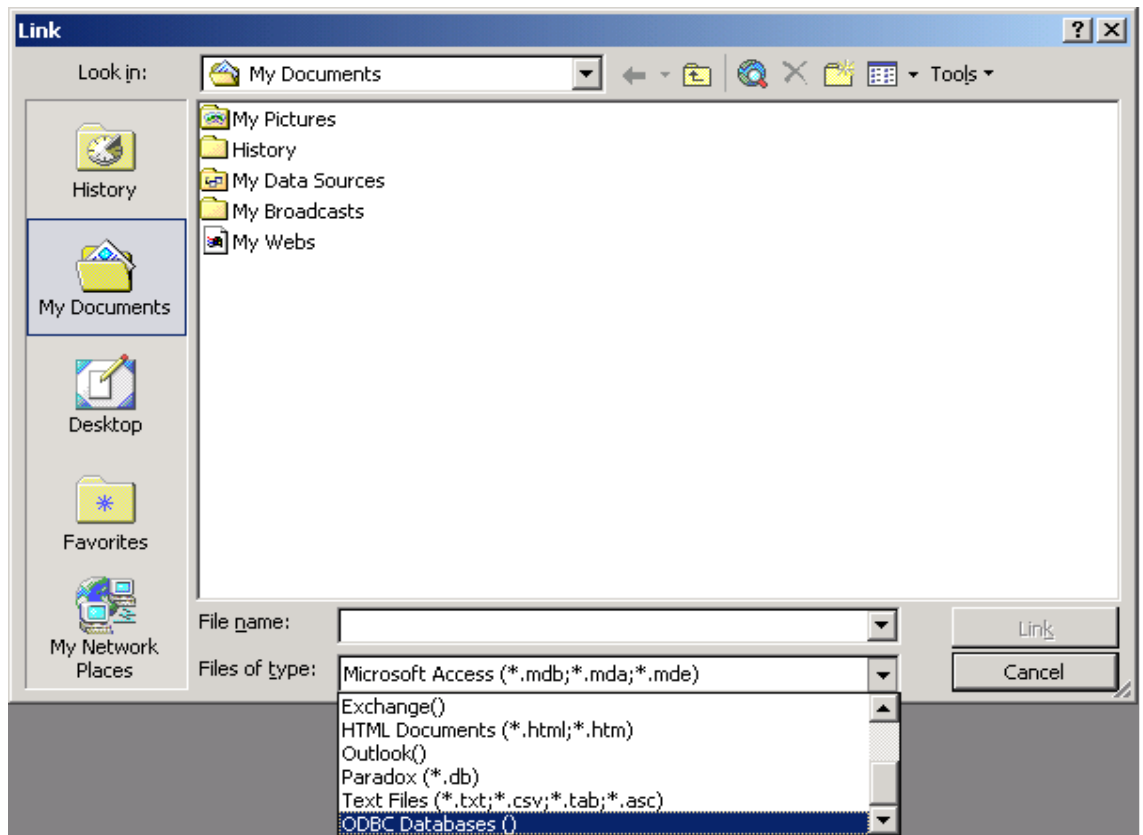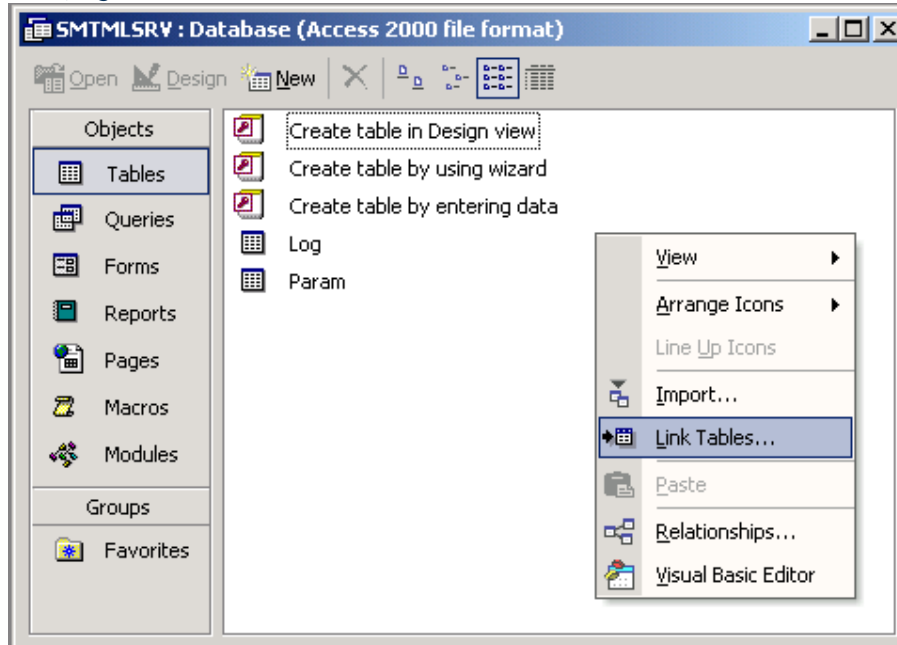Option: 0
Library:

3.1.3. Configuring MDB

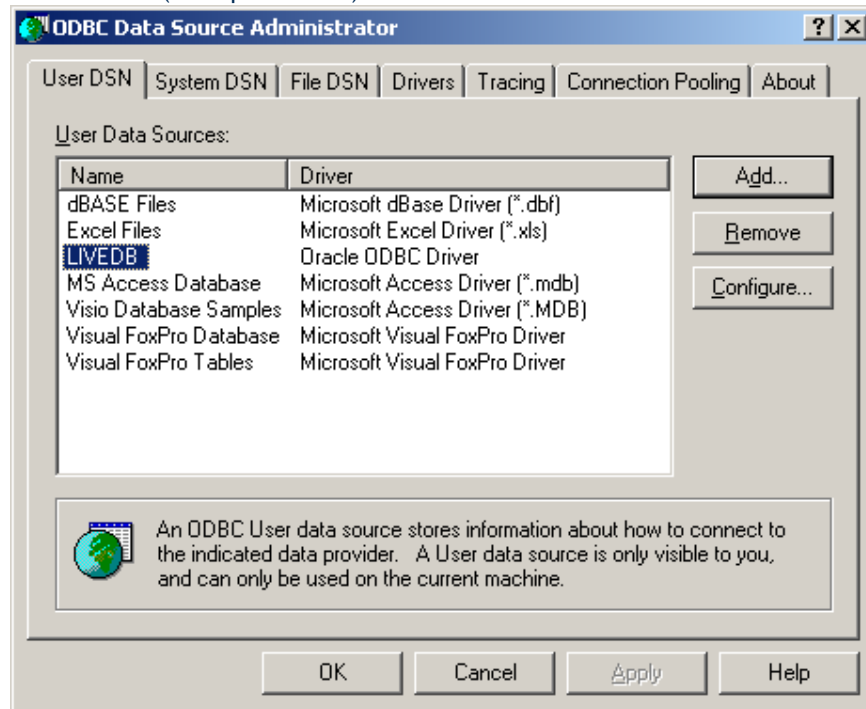- Open C:\IBAEHIS\SMTMLSRV\SMTMLSRV.MDB
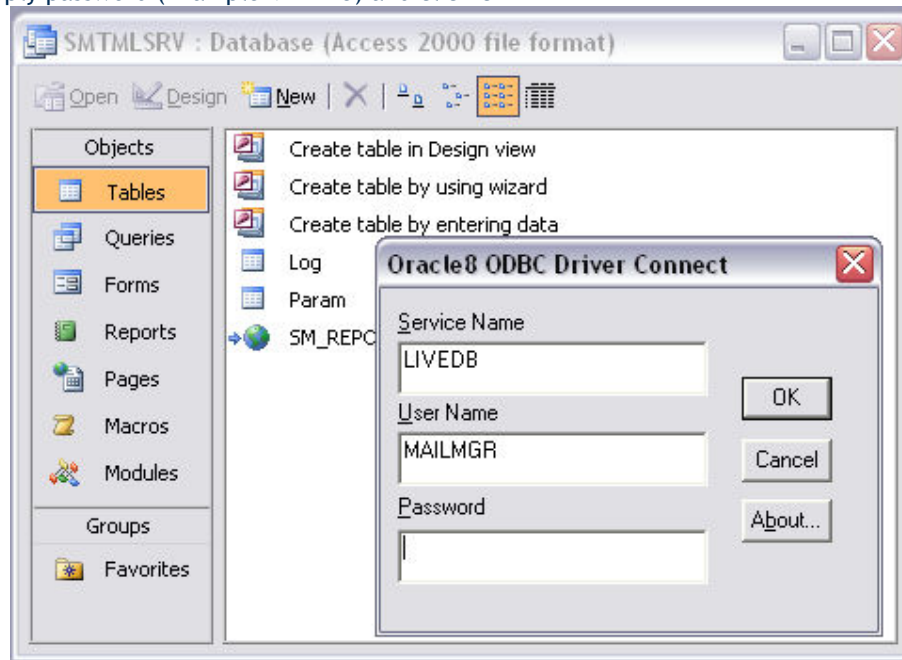

- Delete SM_REPORT_FAX_MAIL_REQUEST

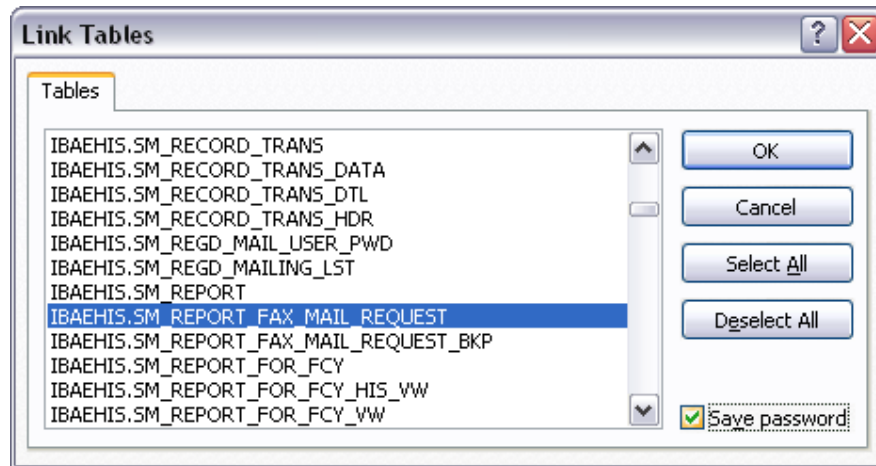- In Tables, right-click and select "Linked Tables".
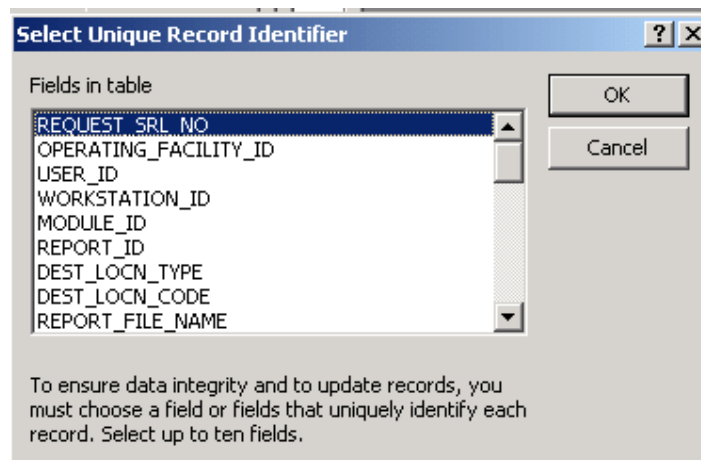
- Select ODBC DSN (Example LIVEDB)

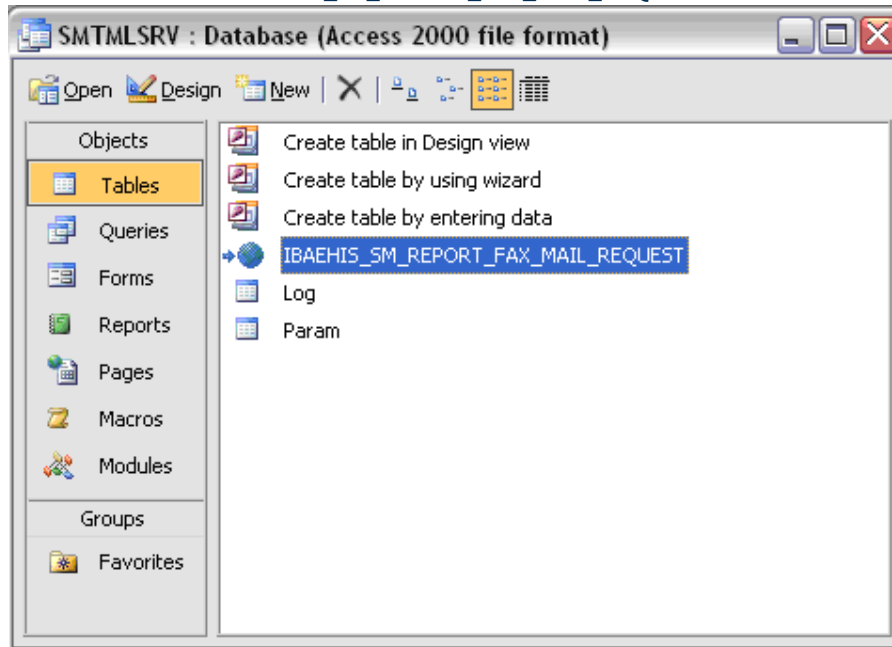- Supply password (Example MED123) and click OK

- Select IBAEHIS.SM_REPORT_FAX_MAIL_REQUEST.
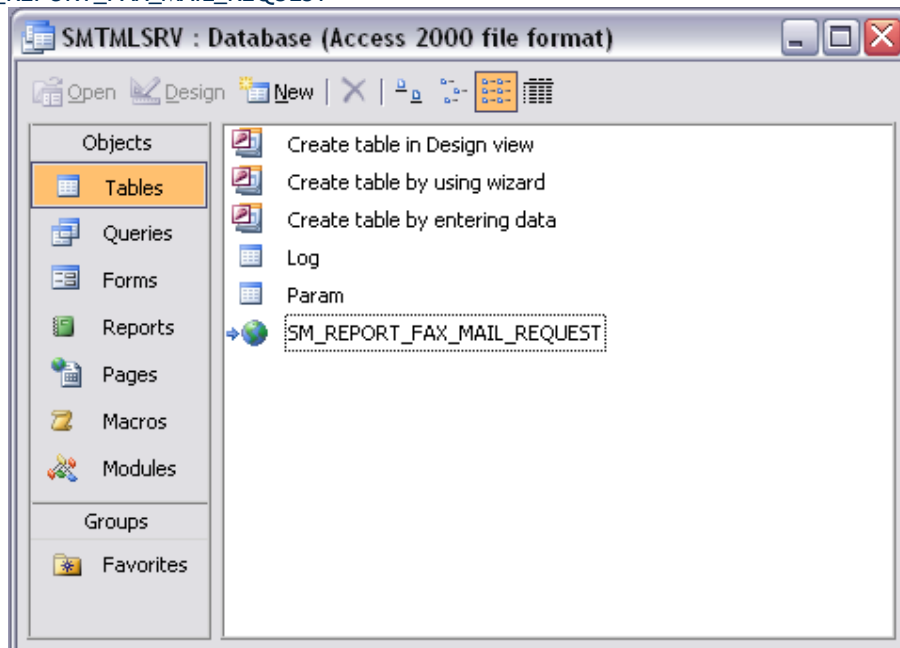 **IMPORTANT: Check "Save password"**

- Select REQUEST_SRL_NO as Unique record identifier (If this screen prompts).

- Table is linked. Name is IBAEHIS_SM_REPORT_FAX_MAIL_REQUEST

- Right click IBAEHIS_SM_REPORT_FAX_MAIL_REQUEST and rename as SM_REPORT_FAX_MAIL_REQUEST

3.1.4. Setting up Parameter for IBA Email Service

IBA Email Service parameters can be modified to suite the installation requirements at site. These parameters are stored in the Access database for easy modification at site. In the IBA_EMAIL_GATEWAY system, do the following to configure the parameters.

Open the 'SMTMLSRV.MDB' file from 'C:\IBAEHIS\SMTMLSRV' sub-directory by double clicking. To view / modify the supplied parameters, open the 'Param' table. Following table lists the parameters that are supplied.

ID	Value	Description
Connect String	uid=emailuser;pwd=email123;driver={Oracle ODBC Driver};	Uid – Valid IBA database username Pwd – Password for the above user Driver – Driver name used while configuring ODBC
DSName	LIVEDB	Data source name of ODBC configuration
ProfileName	lismailsdg	Email profile name which IBAeHIS Email Service will use to login and send email messages.
TestMailID	Any valid mail id	Test mail can be sent by double-clicking the version number which is appearing on IBA Email Service screen. Test mail will be sent to this mail id.
TestMailCcID	Any valid mail id	Test mail is sent to this mail id (Cc field)
TestMailBccID	Any valid mail id	Test mail is sent to this mail id (Bcc field)
TestMailAttachment	File name with full path	Test mail will be sent with this attachment. Example: C:\Temp\Test.PDF
TestMailSubject	Mail Subject	This value will be used as Subject when sending test mail
TestMailText	Mail text	This value will be used as mail body when sending test mail

3.1.5. Example 'PARAM' table entry

Figure 3-1

3.1.6. Start the Mail Service

- Mail Server should be started logging into **IBA EHIS 2 Tier → System Manager → Process Management → Administer Server Process**
- Select the **Mail services** process and select the facility, priority and serviced requests parameters for the process and press the **start** button for starting the process


- Once the process is started it can be seen in Active tab of Administer Server Process; upon selecting the process from list item it will show the workstation in which this process is started and other details as shown in the below screenshot

Note: Any changes in the parameter table ('Param' of SMTMLSRV.mdb) while the 'Mail Services' is running will be in effect only after restarting it.

3.1.7. Test Mail through Mail Manager Service window

- Edit the 'Param' table, set ID 'HideFormYN' value as '0'. This shows the Mail Manager Service window when you start the 'Mail Service'.
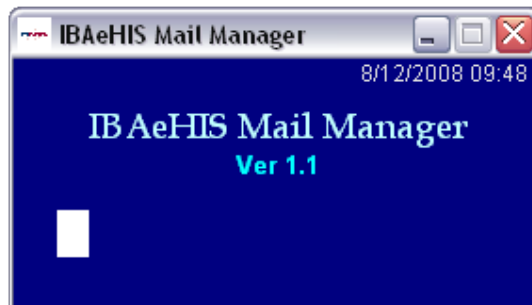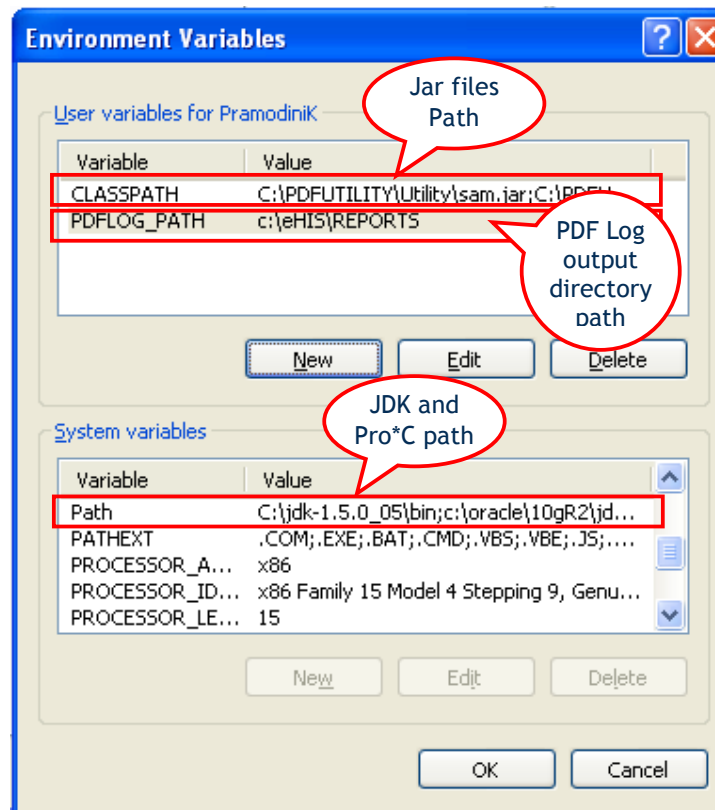

- Double click on the **'Ver 1.1'** to send the test mail.

3.2. PDF Creation Utility Installation and Configuration

3.2.1. Installation requirement for PDF Creation Utility

Ensure JDK 1.5 or above and Forms Runtime is installed in IBAEHIS_EMAIL_GATEWAY system.

3.2.2. Setting up Environment Variables

Setting the Class Path:

1. Create a directory **PDFUTILITY** in IBAEHIS_EMAIL_GATEWAY system **C:\ drive.**
2. Copy the following PDF Creation Utility JAR files into **C:\PDFUTILITY** directory.
3. specify the JAR files in **environment variables CLASSPATH** as shown in the above screenshot; **ex:**
   C:\PDFUTILITY\Utility\sam.jar;C:\PDFUTILITY\Utility\IBAPdfUtility.jar;C:\PDFUTILITY\Utility\iText-2.0.8.jar;C:\PDFUTILITY\Utility\bcprov-jdk14-138.jar;C:\PDFUTILITY\Utility\log4j.jar

Note: incase you want to copy PDF Utility JAR file into a different directory, you can do it, for this you need to specify the same directory in the JAR file path.

Setting the PDF Log Path:

1. Create a directory for PDF log files; it would be better if the Report Output directory (PDF Creation Directory) and Log file directory are same for easy management.
2. Ensure logged in windows user has the read / write privilege on PDF log directory.
3. Specify the PDF Log directory in environment variables **PDFLOG_PATH** as shown in the above screen shot; ex: c:\eHIS\Reports.
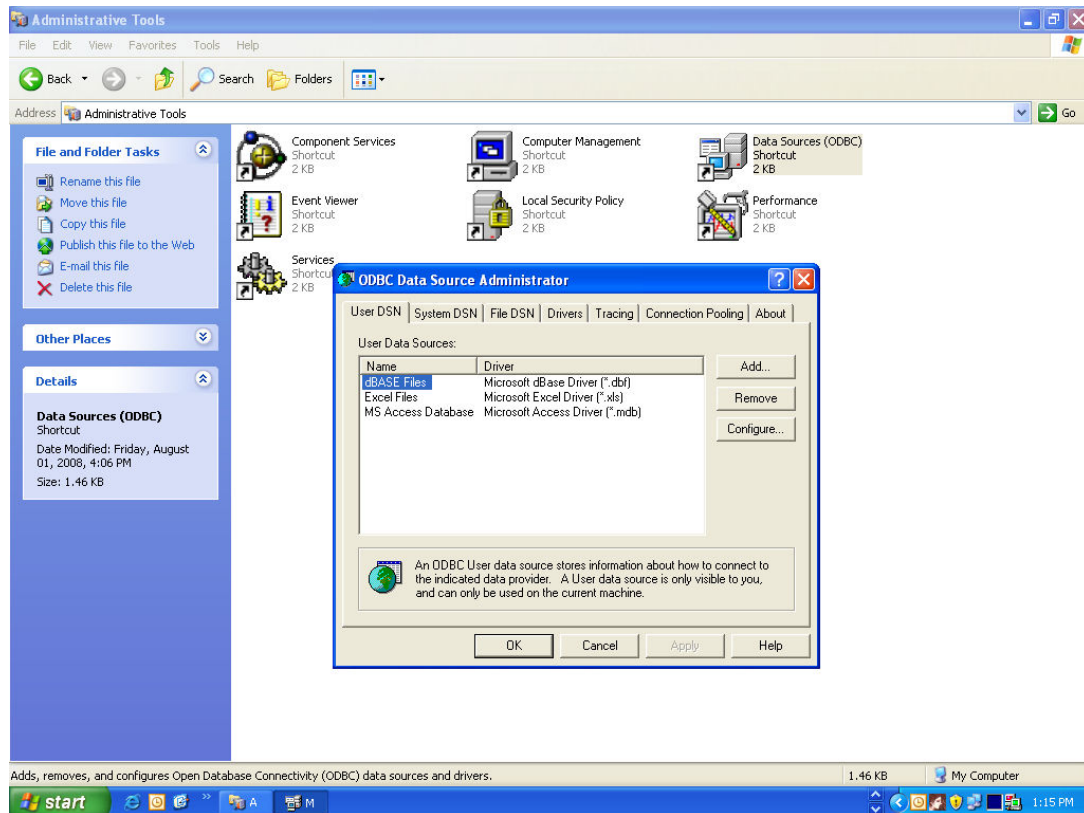
Setting the JDK and Pro*C path:
1. Specify the JDK Path and Pro*C path in environment variables **PATH** as shown in the above screen shot; ex: c:\jdk-1.5_05\bin;o:\proc;

3.2.3. Configuring ODBC

ODBC connection should be created to acquire database connection.

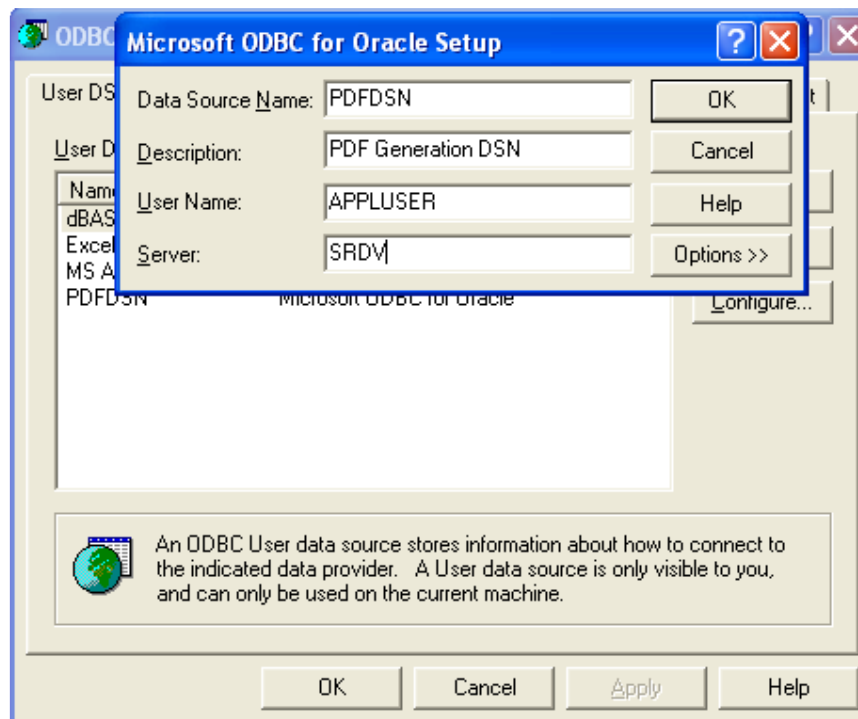- Go to Control Panel -> Administrative tools -> Data Source (ODBC). Double Click on Data Sources (ODBC)

- Select "User DSN" tab You get a window as shown above

- Click Add button. The following screen will appear
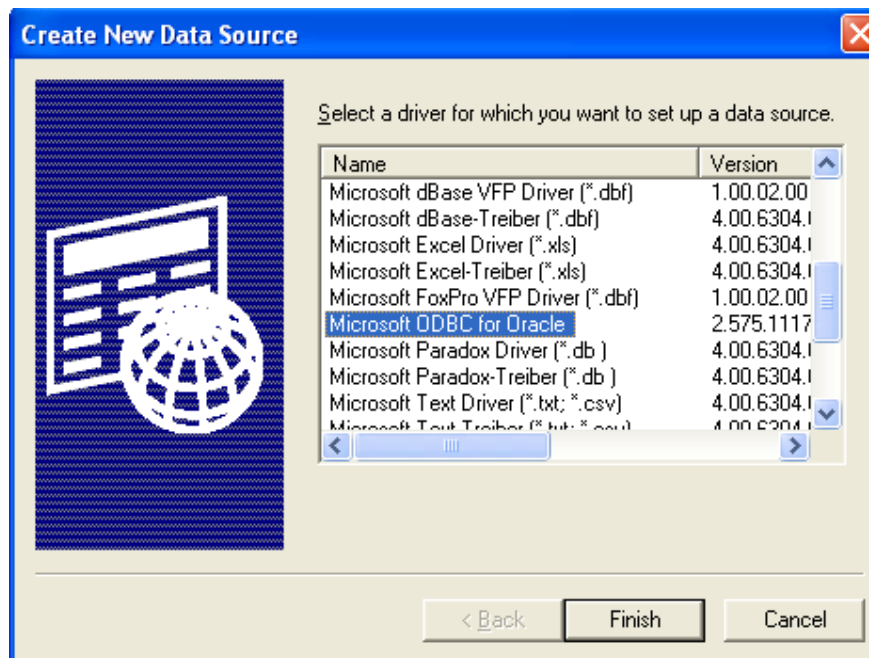
- Select **Microsoft ODBC for Oracle** from the list. And click Finish. You will get a screen shown as below

- You need to enter the values as below:

Parameter	Value to be Given	Remarks
Data Source Name	PDFDSN	Same Value should be specified as it is used internally in application.
Description	PDF generation DSN	Optional, can give a brief description.
User Name	APPLUSER	Same Value should be specified as it is used internally in application.
Server	<Database Connect String> ex: SRDV	Database Connect String value should be specified in this.

- Click Ok. You will get a screen shown as below which lists the DSN that we have created
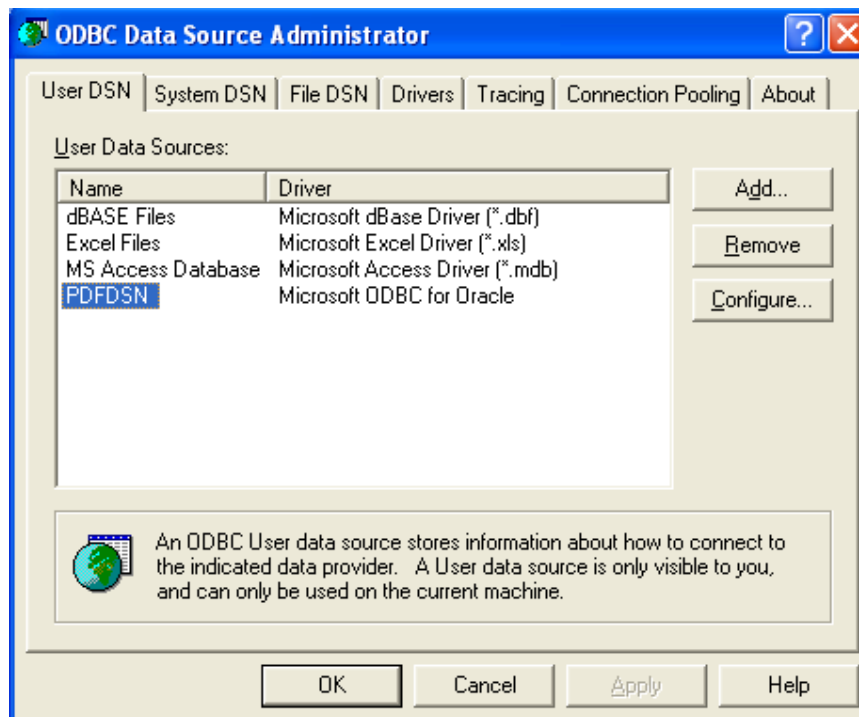
3.2.4. Workstation Parameters configuration

Specify the PDF file output directory in **IBA EHIS 2 Tier → System Manager → Report Management → Setup → WorkStation Based Print Routing / Parameters.**

Specify the parameter value for **Report Output Directory** variable. Refer the below screenshot.
Ex: W:\SM\PdfFiles\ (it is mandatory that the value should end with '\')

3.2.5. PDF Creation Utility Process Starting

- PDF Creation Process should be started logging into **IBA EHIS 2 Tier → System Manager → Process Management → Administer Server Process**

- Select the **PDF Generation** process and select the facility, priority and serviced requests parameters for the process and press the **start** button for starting the process
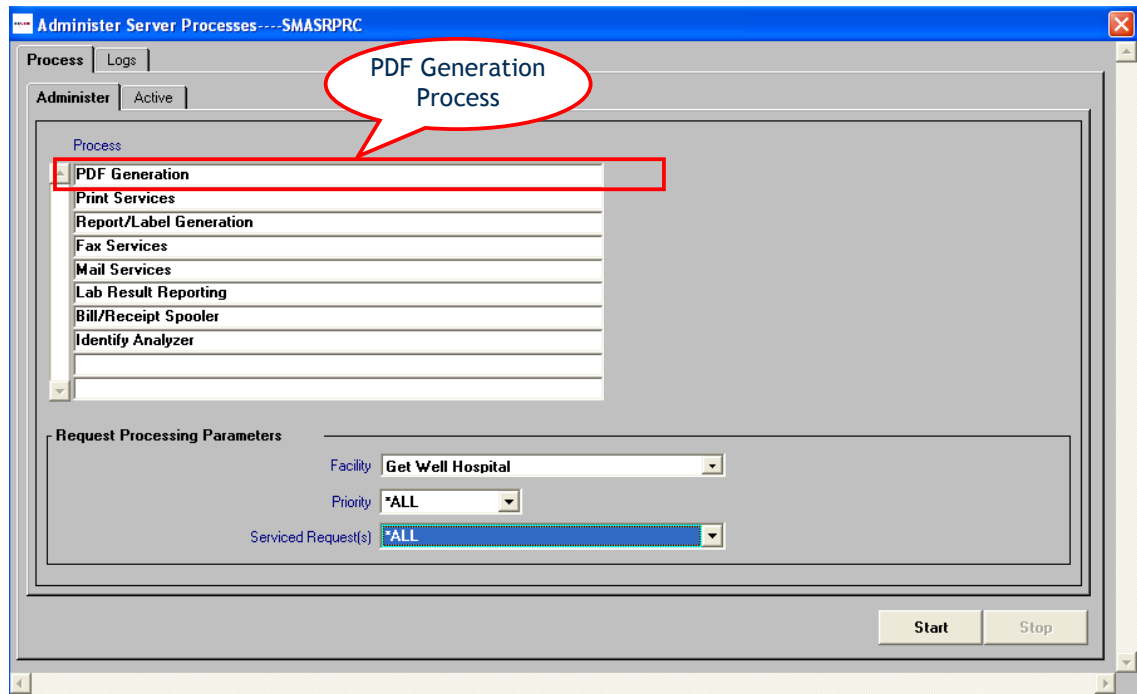
- Once the process is started it will invoke SMTFXPDF.EXE for processing the PDF request. This will be listed under the **Windows Task Manager → Process tab**
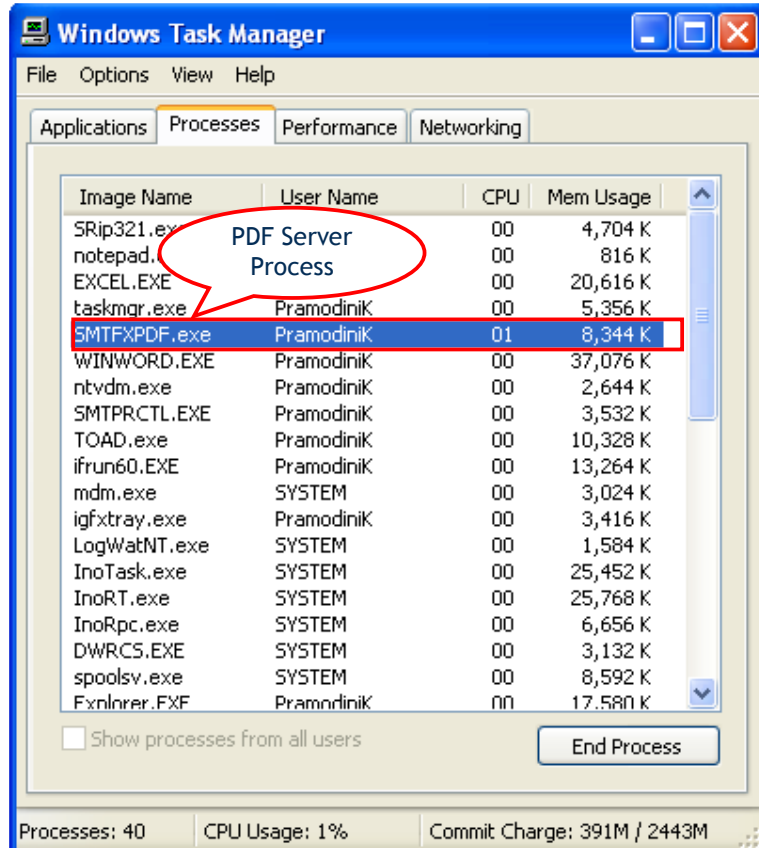
- Once the process is started it can be seen in Active tab of Administer Server Process; upon selecting the process from list item it will show the workstation in which this process is started and other details as shown in the below screen shot.
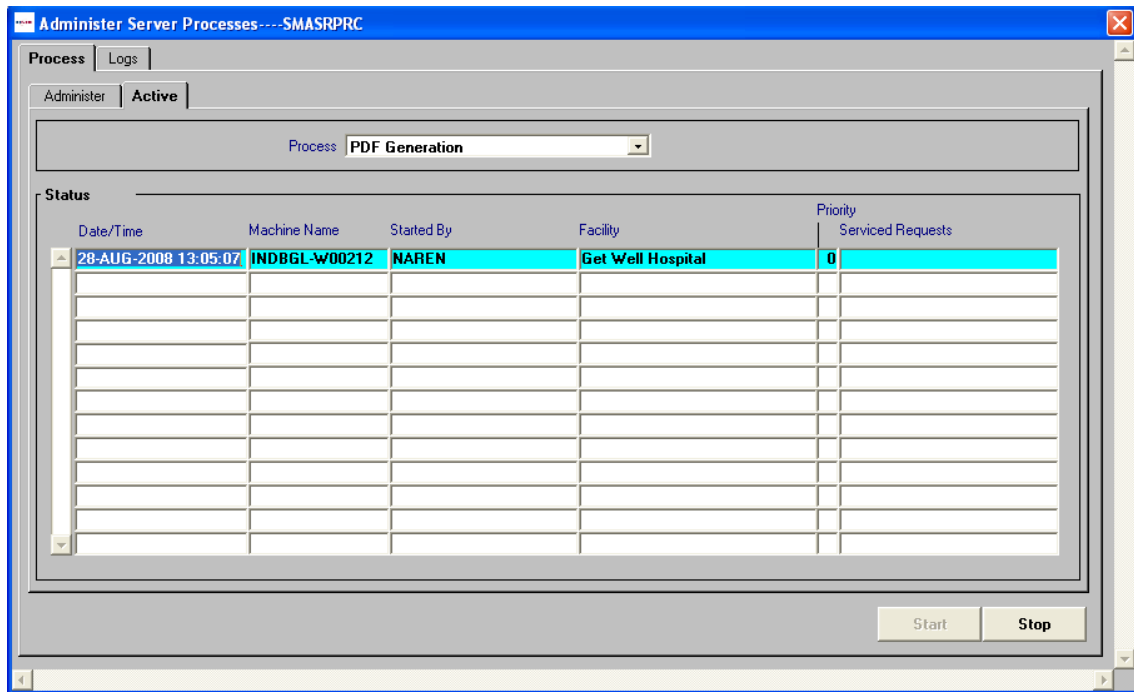
3.2.6. PDF Creation Utility Trouble Shooting

PDF Log file
- PDF server process will create a log file under the specified location for **PDFLOG_PATH** variable of environment variables
- Under the above **PDFLOG_PATH** file location, PDF utility will create a folder with name **PDFLOG**. This folder contains the log files created day wise. A text file with format **pdf_err_dd-mm-yyyy.txt** will be created. Ex: pdf_err_28-08-2008.txt
- This text file will give us the success/failure status of the PDF file creation. In case of failure, it logs the appropriate error messages for further analysis.
- Make sure the user has access privileges to create the files under the specified output directory for log file creation.

PDF Process Sleep time:
- The background process will continuously check for the pending requests by fetching the records from PDF Request table. A sleep time of 3 secs is defined for the PDF process.

Trouble shooting:
- As the PDF process is a continuous process, any interruption which causes the process to stop executing, should be taken care. If there is database / network connection failure/interruption, the process stops executing. In such cases once the connection is restored, the process should be restarted.
- PDF file creation will give 'ORA-01722: invalid number' error and the PDF file will not be created if the file name contains any 'blank spaces' in between. 'Blank spaces' in the file name should be avoided to overcome this error.