



MED-@BASE

Software Version 2.0

Rigel Asset Management Software

Instruction Manual

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Introduction

Rigel Med-eBase Version 2.0 is our latest software application dedicated to medical safety and functional testing. This software incorporates a number of special features not previously associated with the recording and management of electrical and functional safety testing data.

This new program facilitates the production of a comprehensive series of advanced results and data reports including comparison alert function. A unique option to store your data on a local or remote database structure and an exceptional layout makes the system easy to use, with very little training required.

The Med-eBase Software Version 2.0 can use both local and remote databases. A local database requires no database server to be installed while a remote database allows multiple users to access the same data simultaneously.

The program will run on all Windows XP, Vista or Windows 7 operating systems in both 32-Bit and 64-bit versions.

The new Med-eBase software is delivered in a DVD case and with a license agreement and serial number for activation.

1. Getting Started

1.1. Installing Med-eBase

Note: *Before installing Med-eBase ensure no other applications are running.*

Installing Med-eBase is easy. Simply insert the CD into your CD drive, the installation should start automatically.

If the CD does not automatically start up, then use Windows Explorer or another file management application. Select your CD drive; double click with the mouse on the setup.exe file to start the installation.

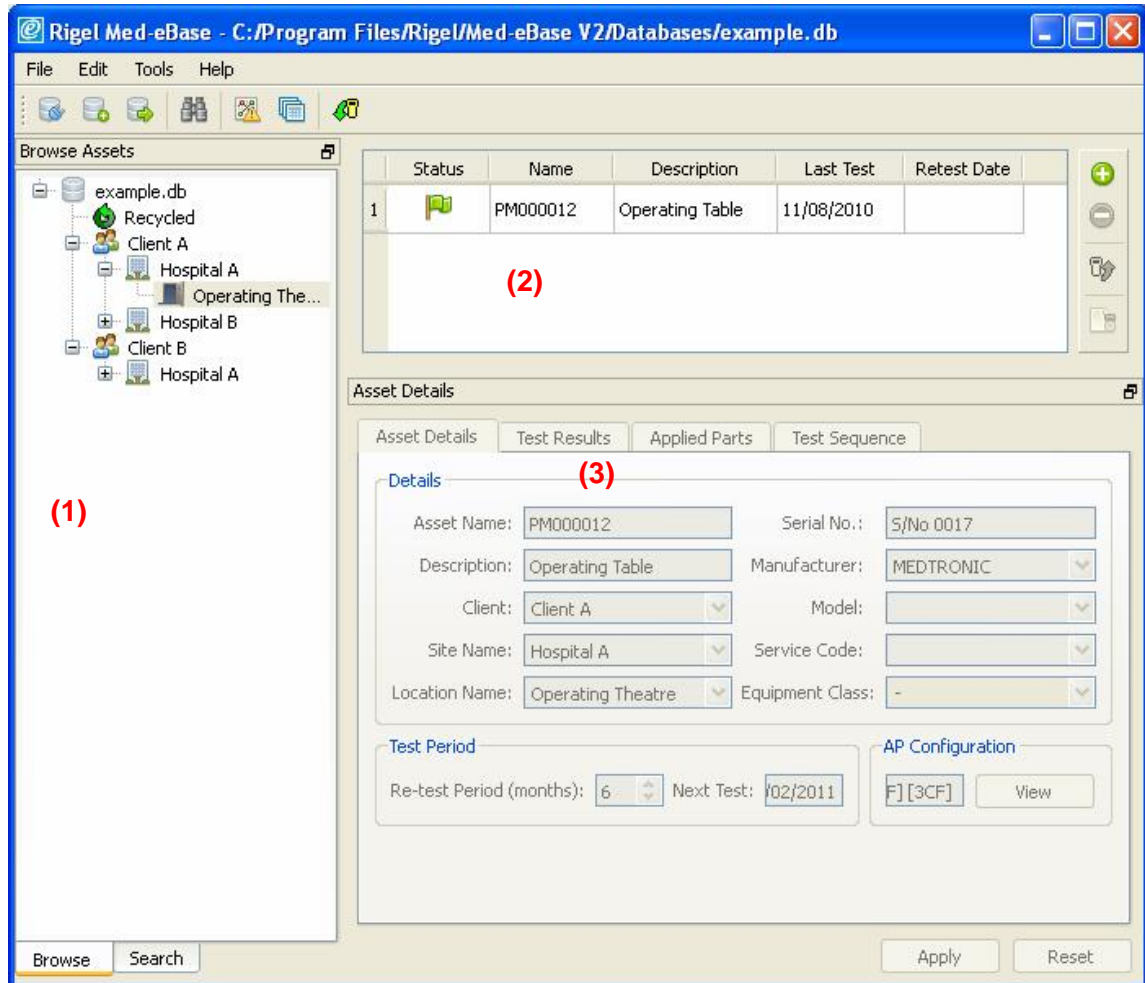
Follow the on-screen instructions.

Once the program is installed, a shortcut will be provided on the desktop. Double click the shortcut to open the program. A start up screen will appear until the full program is loaded.

The first time Med-eBase v2.0 is run it will require a Language selection. The language can also be changed later, as required, from within the program.

1.2. Navigating Med-eBase

Med-eBase main screen is divided into three main sections.



Explanation of the main screen:

1. The **Browse Assets** view – With the **Browse** tab selected, the tree view shows the Assets of the database, organized by Client, Site and Location. The **Search** tab provides a form to find Assets based on criteria such as name, description, serial number and dates.
2. The **Asset Table View** – displays the Assets for a particular item selected in the Asset tree view.
3. The **Asset Details View** – Displays Asset details, including test results, Applied Parts and Test Sequences.

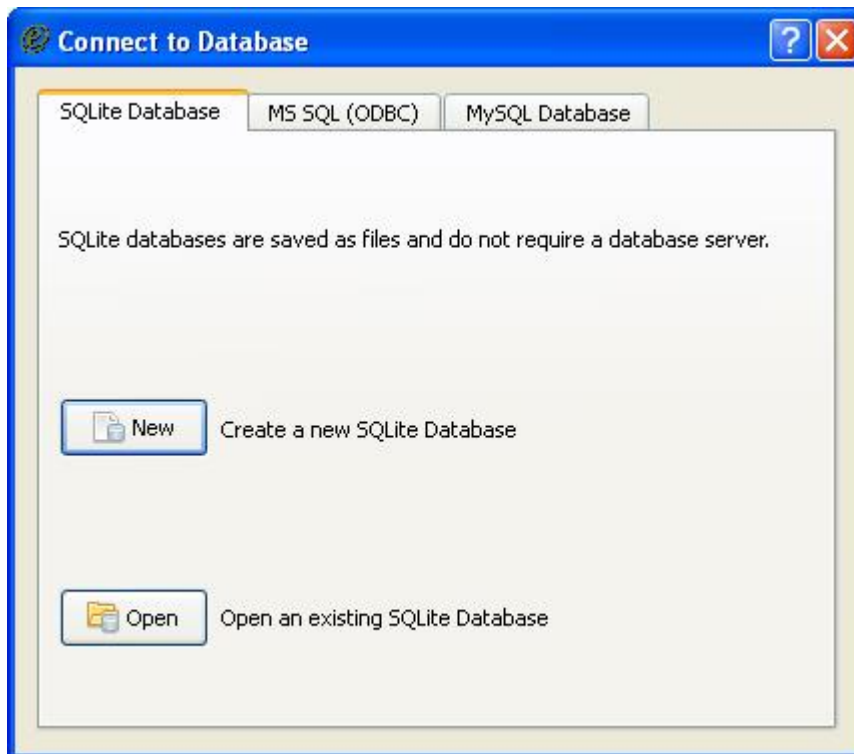
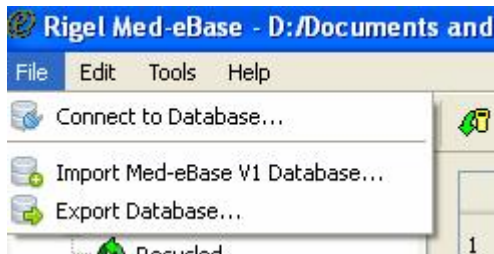
1.3. Creating a new Database

From the **File** drop down select **Connect to Database**, select the Database format required.

Provided with the install is SQLite Database format. To use this select **New**, Browse to the location you want the database, enter the name of the new database into the **File name** field and then click **Save** to complete the action.

The program allows choice between a:

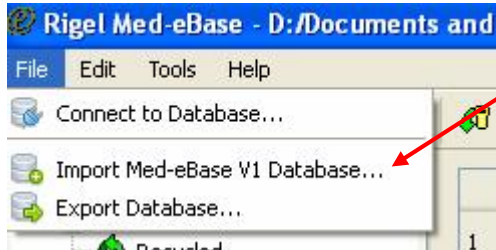
- Local Database which is fast, has no server, a single user access and no concurrency issues.
- Remote Database which has all the data stored at a centralised location, is accessed by many people concurrently, and can be used with other database tools



1.4. Import Med-eBase Version 1 Database

SQL Express (which is included with a Med-eBase V1.0 installation) is required on the local computer to allow importing of a Med-eBase V1.0 database.

From the **File** drop down menu select **Import Med-eBase V1 Database...**

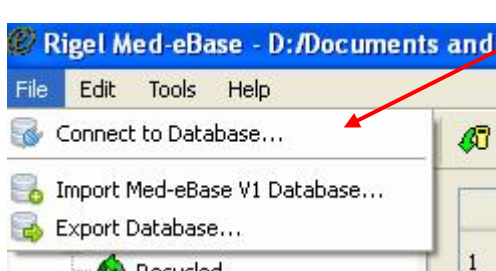


A dialogue box will appear (see below), after clicking on the **Browse** button select the location where the Med-eBase V1 database has been saved, click **OK** and the Med-eBase V1 data will appear in the new Med-eBase V2.0 database.

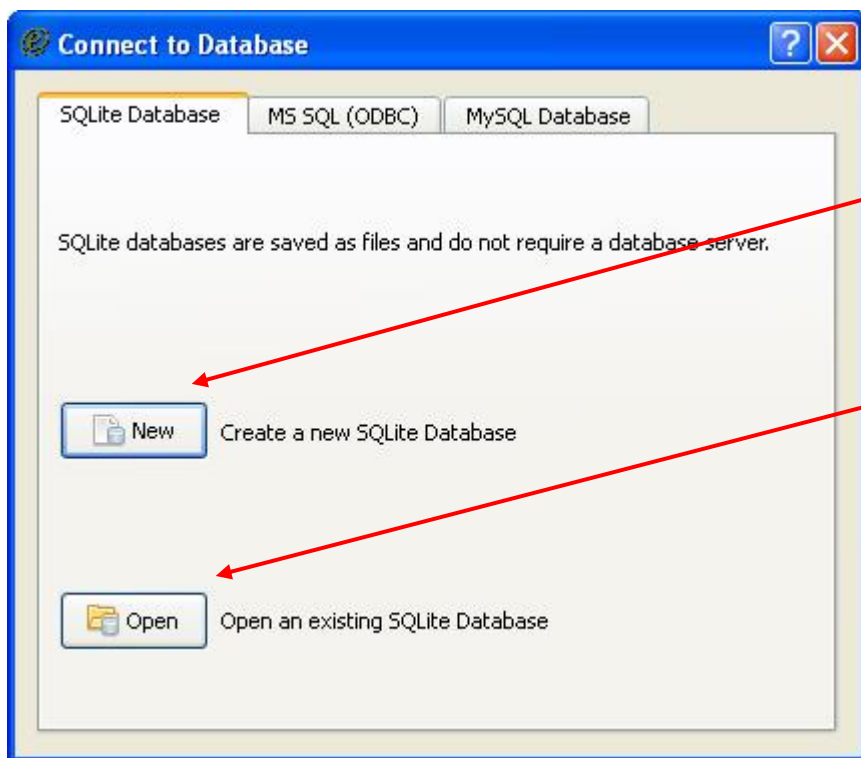


1.5. Connecting to a Database

From the **File** drop down select **Connect to Database...**



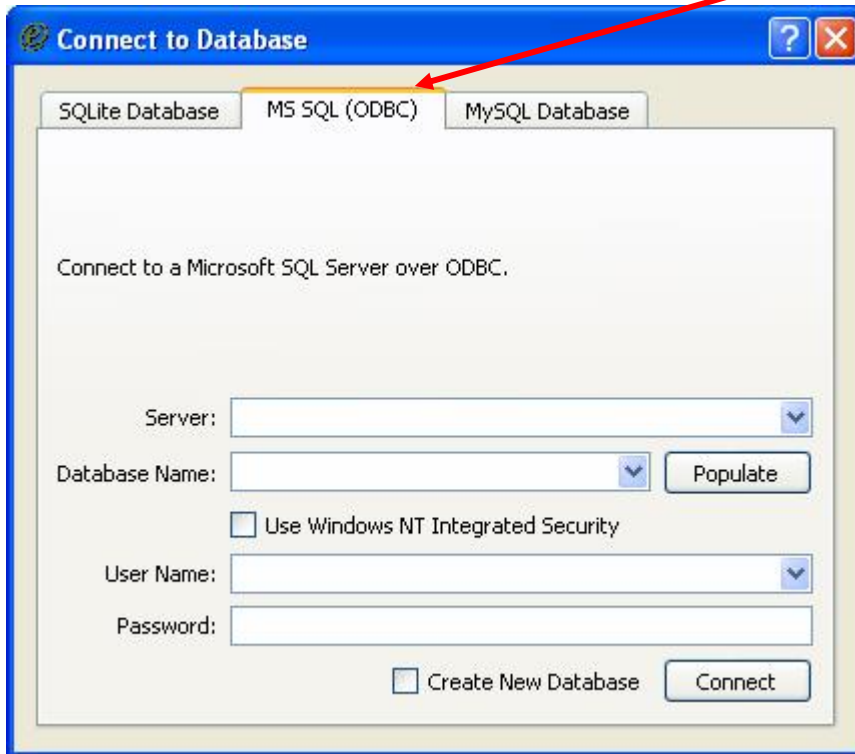
This will open a window to connect to a database.



Create New
SQLite
Database

Connect to an existing
SQLite Database

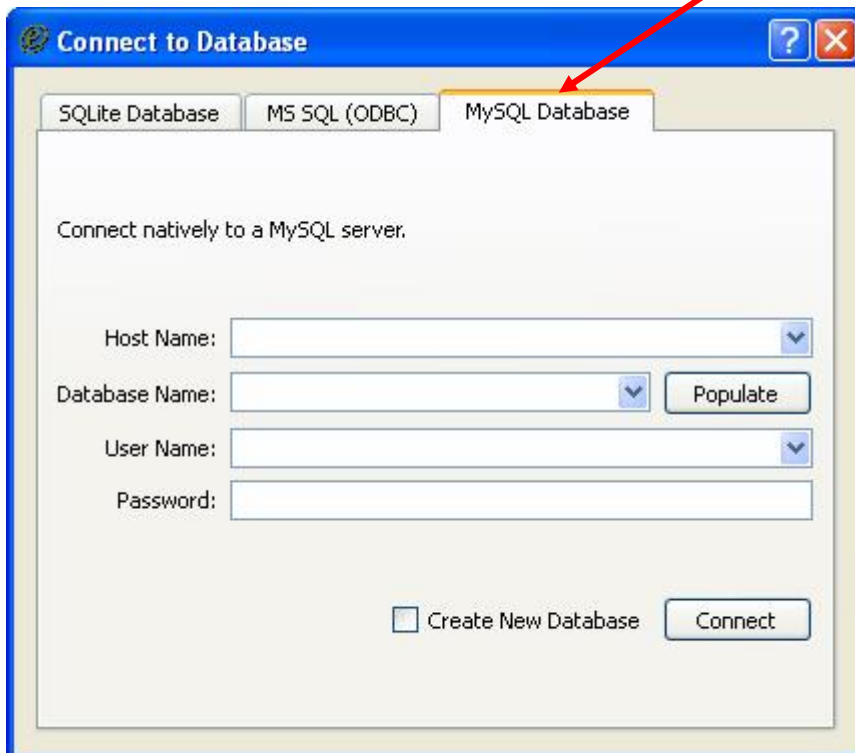
To connect to a Microsoft SQL Server over ODBC, click on the **MS SQL (ODBC)** tab. The connection details should be provided by the network administrator and will be retained for future use.



The screenshot shows the 'Connect to Database' dialog box with three tabs: 'SQLite Database', 'MS SQL (ODBC)', and 'MySQL Database'. The 'MS SQL (ODBC)' tab is selected and highlighted with a red arrow. The dialog contains the following fields and controls:

- Server: [Dropdown menu]
- Database Name: [Dropdown menu] [Populate button]
- Use Windows NT Integrated Security
- User Name: [Dropdown menu]
- Password: [Text field]
- Create New Database [Connect button]

To connect to a MySQL Database, select the **MySQL Database** tab. The connection details should be provided by the network administrator and will be retained for future use.



The screenshot shows the 'Connect to Database' dialog box with three tabs: 'SQLite Database', 'MS SQL (ODBC)', and 'MySQL Database'. The 'MySQL Database' tab is selected and highlighted with a red arrow. The dialog contains the following fields and controls:

- Host Name: [Dropdown menu]
- Database Name: [Dropdown menu] [Populate button]
- User Name: [Dropdown menu]
- Password: [Text field]
- Create New Database [Connect button]

1.6. Data Structure

Med-eBase can only display one database at any one time although a number of databases can be created and selected from.

The Med-eBase database is structured around the owner (Client) and physical location (Site & Location) of Assets (items requiring testing).



A Site may contain a number of locations, such as individual wards or departments. By selecting a Site or Location from within the **Browse Assets** tree the **Asset Table View** will display all the Assets within the selected Site or Location. The Client name, sites and locations come directly from the Rigel testers upon download and can be edited by clicking again on a highlighted name.

1.7. Deleting Clients, Sites, Locations or Assets

Clients, Sites, Location and Assets may be deleted by right-mouse clicking the relevant item and selecting **Delete Client**, **Delete Site**, **Delete Location** or **Delete Assets**. There is no limit to how long the Client tree is or how many Assets it contains.

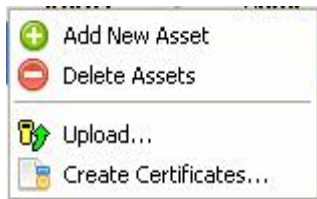
All deleted Assets are placed in the **Recycled** folder on the **Browse Assets** tree and can be displayed by selecting the folder. These Assets (and its tree structure, if necessary) can be restored by right-mouse clicking on the relevant Asset(s) within the **Recycled** folder and selecting **Restore Assets**. Similarly they can be permanently deleted, by selecting **Delete Assets** from this menu.

By holding Ctrl on the keyboard multiple assets can be selected and manipulated simultaneously in the **Asset Table View**.

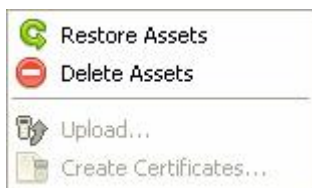
1.8. Context Menus

All Icons have a right mouse button action. The following actions can be initiated from the right mouse button:

The Asset context menu, from any Asset in the **Asset Table View**, has the following options:



The Asset context menu, from an Asset in the **Recycled** folder, has the following alternative options:

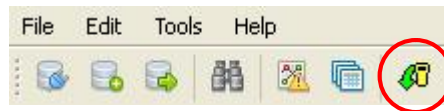


The Context menu from Clients, Sites and Locations in the **Browse Assets** tree view only has a relevant **Delete** option.

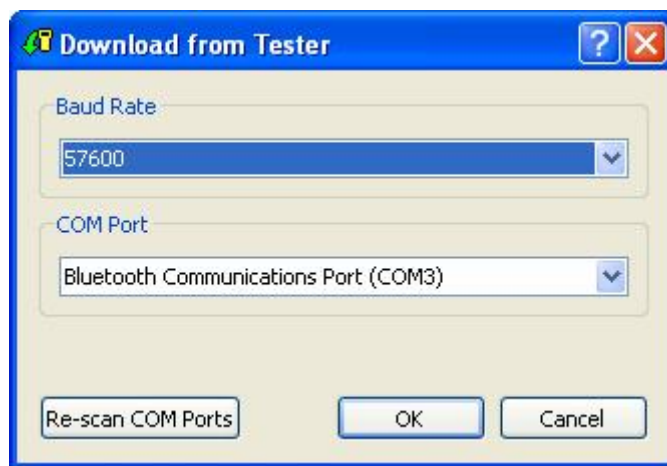
1.9. Download from a tester

(For more detail on connecting with a test instrument or connecting when using Windows 7 or Vista operating systems refer to the instruction manual provided with the test instrument.)

Download can be initiated from the **Download** option in the **Tools** menu or from the **Download** icon in the task bar.



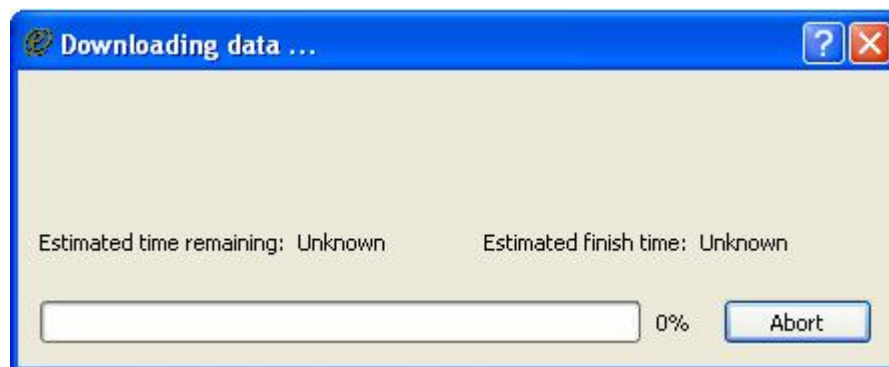
The **Download dialog box** will be displayed.



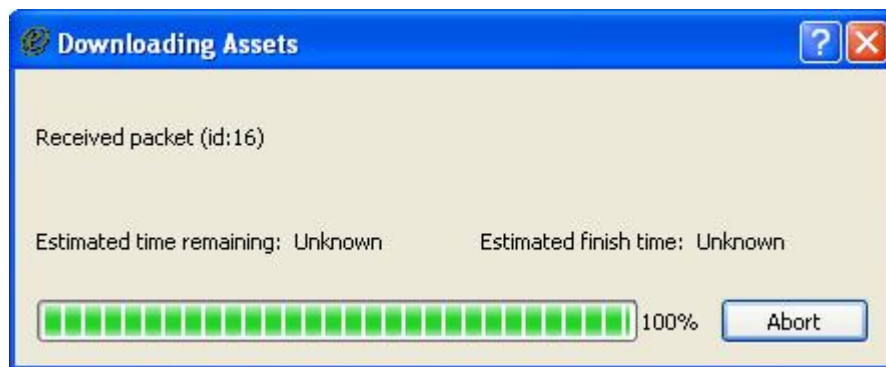
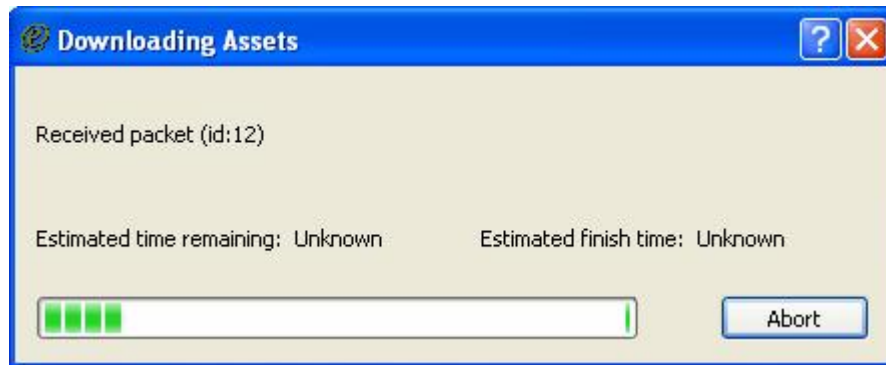
Select the relevant **Baud Rate** – this **MUST** match the option selected in the tester. Select the appropriate serial port from the **COM Port** drop down. The **Re-Scan COM Ports** button gives you the option to refresh the communications ports available prior to download.

With the tester connected to the appropriate COM Port, select **OK** on Med-eBase to commence the download. Then initiate the download on the tester. See the appropriate tester Instruction Manual on how to commence a download action.

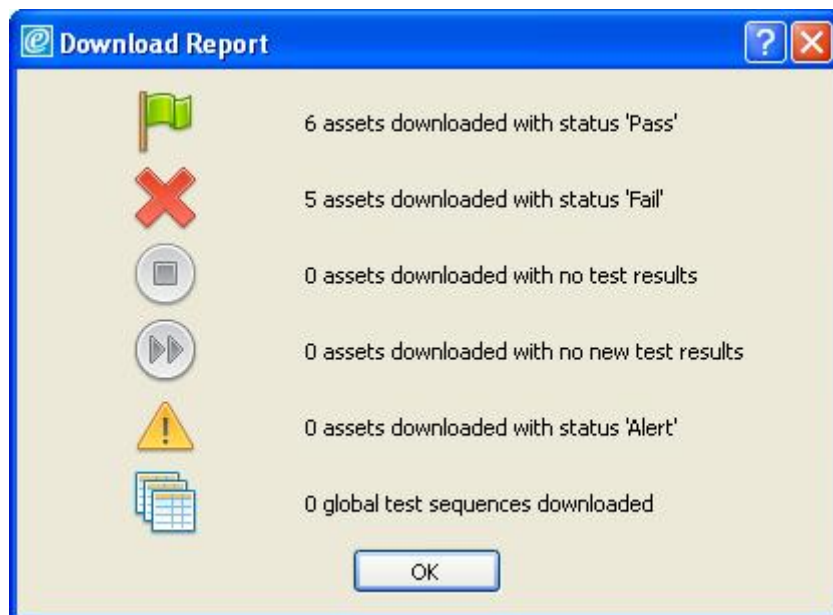
Start the download on the Rigel tester;




Once the download is underway, a progress bar will appear. Please note that with older firmware versions the time will be unknown.

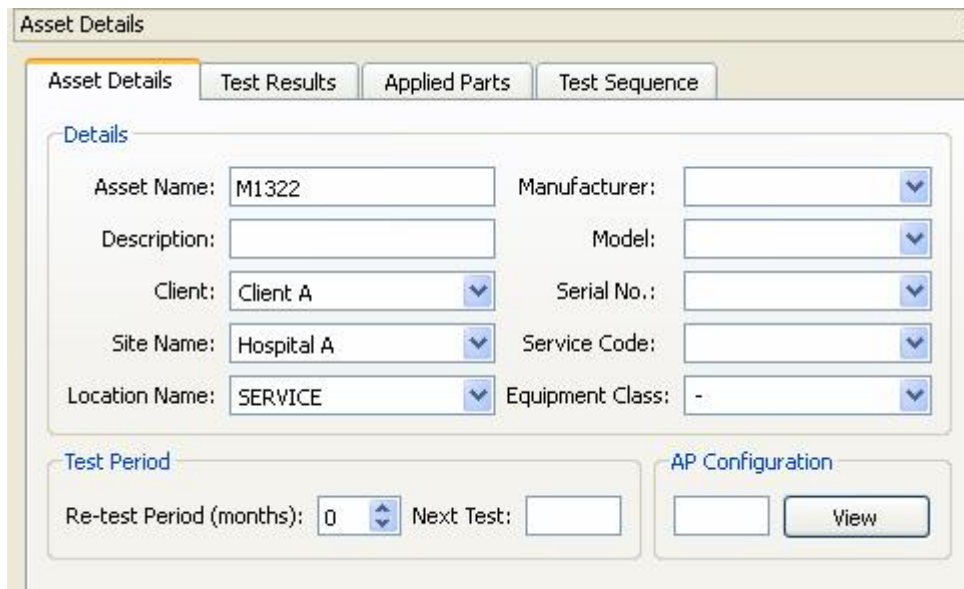
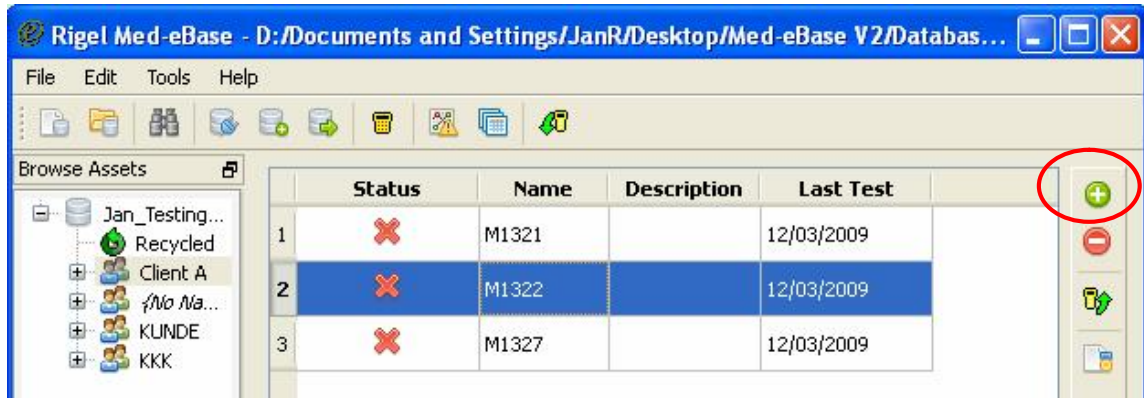


Upon completion of the download, the window will close and display the download report.



1.10. Creating a new Asset

New assets can be created by clicking the **Add Assets**  button in the main screen. This will enable an empty **Asset Details** panel pre-populated with the tree structure values as necessary.



The 'Asset Details' form is shown with tabs for 'Asset Details', 'Test Results', 'Applied Parts', and 'Test Sequence'. The 'Asset Details' tab is active, showing a 'Details' section with the following fields:

- Asset Name: M1322
- Description: (empty)
- Client: Client A
- Site Name: Hospital A
- Location Name: SERVICE
- Manufacturer: (dropdown)
- Model: (dropdown)
- Serial No.: (dropdown)
- Service Code: (dropdown)
- Equipment Class: -

Below the details are two sections: 'Test Period' with 'Re-test Period (months): 0' and 'Next Test: (empty)', and 'AP Configuration' with a 'View' button.

The maximum length of each field is 25 characters. **Asset Name is a mandatory field.** Each field's dropdown list holds the existing entries under its level. For example site name contains all the sites under the client selected in the Client field.

To save the entries click **Apply** button or discard the entered details by clicking the **Reset** button.

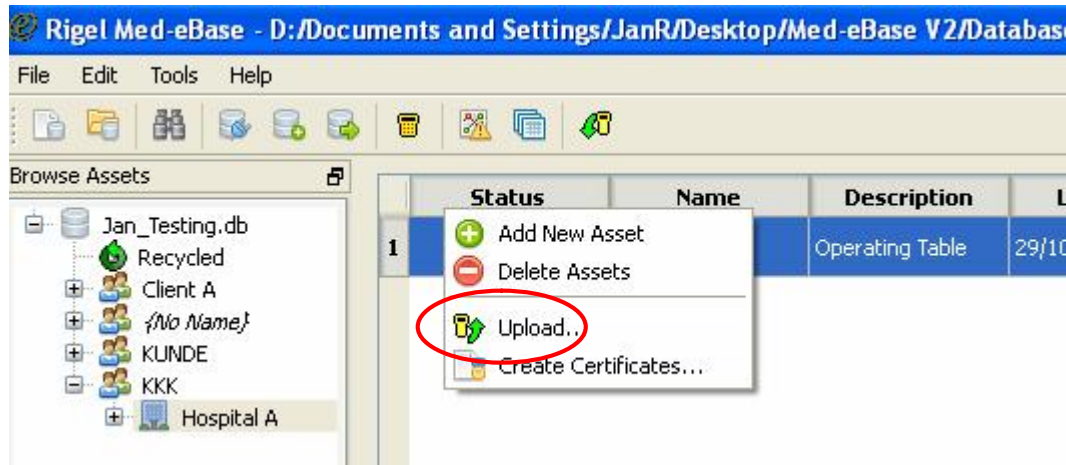
Asset Name and Serial Number combination must be unique across the database. If an Asset Name and Serial Number combination is entered which already exists, Med-eBase will display an error.

Retest period is configured in months and the **Next test date** will be automatically calculated based on the selection.

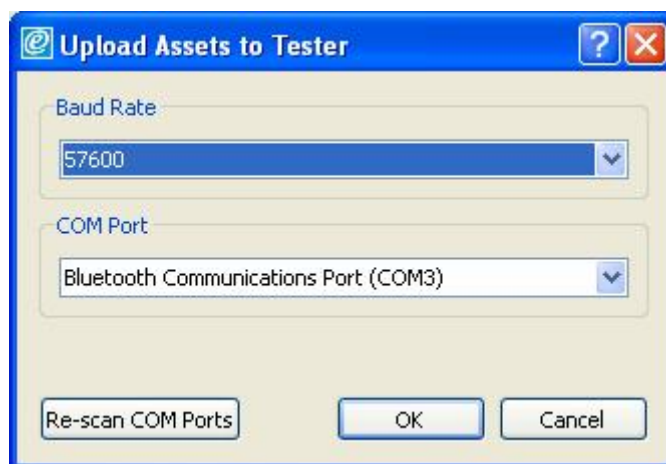
1.11. Uploading

Some Rigel testers have facilities for **Uploading Assets** and the last test routine back into the Rigel tester memory for re-test. (see application note nr. 13 on www.rigelmedical.com to activate the .sss format on the older Rigel testers)

To upload Assets to the tester, select the relevant Asset(s), then right click and select **Upload**.



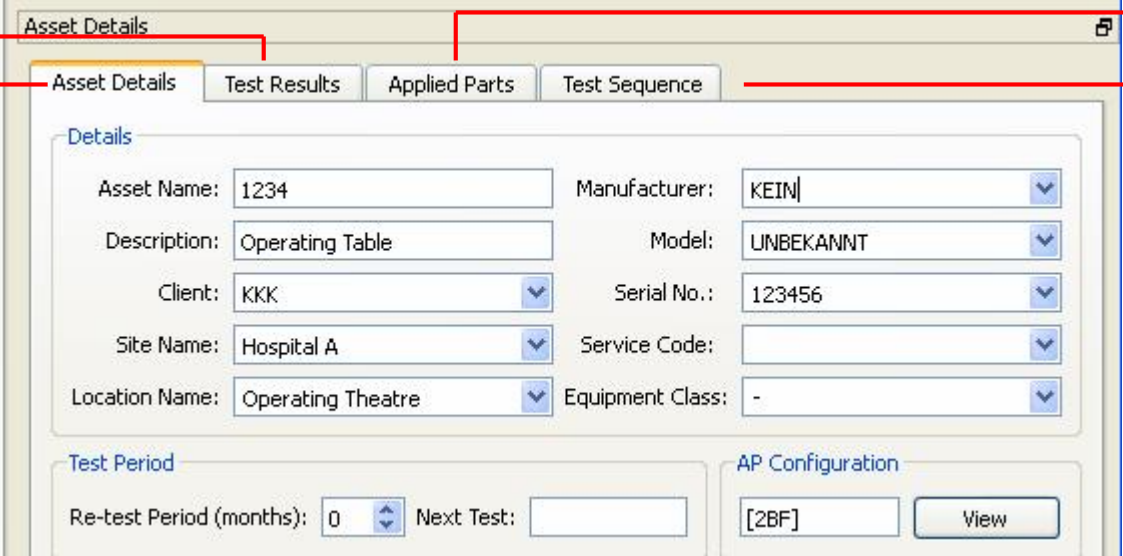
From the **Upload Assets to Tester** dialog box select the relevant Baud Rate and COM Port from the drop downs, and then select **OK** to commence the Upload action.



The program will then wait for the data to be sent (see Rigel tester Instruction Manual for setting the tester into Upload mode).

2. Asset Detail View

The Asset Details can be obtained by clicking on the Asset in the **Asset Table View**. The following information will appear in the **Asset Details** panel:



The screenshot shows the 'Asset Details' panel with the following fields:

- Asset Name: 1234
- Description: Operating Table
- Client: KKK
- Site Name: Hospital A
- Location Name: Operating Theatre
- Manufacturer: KEIN
- Model: UNBEKANNT
- Serial No.: 123456
- Service Code: [empty]
- Equipment Class: -

Below these fields are two sections:

- Test Period:** Re-test Period (months): 0, Next Test: [empty]
- AP Configuration:** [2BF], View

At the top, there are four tabs: Asset Details, Test Results, Applied Parts, and Test Sequence. Red arrows point from the 'Asset Details' tab to the list below, and from the 'Applied Parts' tab to the 'Applied Part Configuration' item in the list.

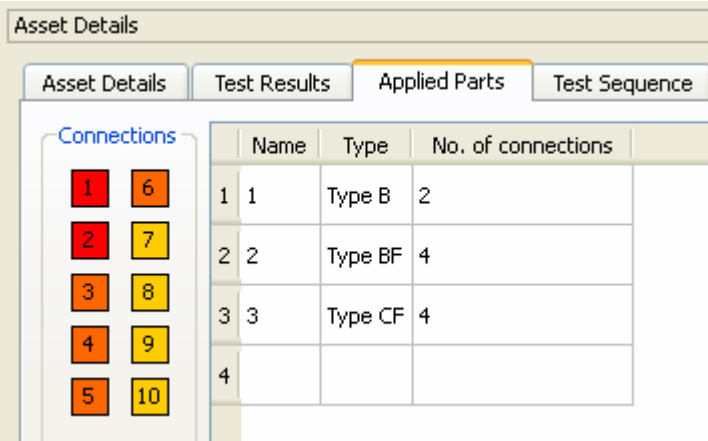
Via the following tabs:

- Asset Details
- Test Results
- Applied Part Configuration
- Test Sequence

Asset trace Variables are described in a later chapter.

The test period is downloaded from the Rigel tester however, it can be altered manually by altering the re-test period on the **Asset Details** tab.

The **Applied Part** tab provides the settings of the patient connections and applied parts. Each new Applied Part has a colour code so it can be distinguished from other Applied Parts in the **Connections** diagram.

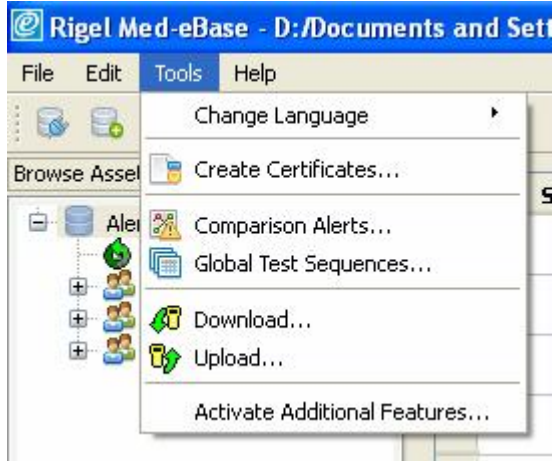


The screenshot shows the 'Applied Parts' tab selected. On the left, there is a 'Connections' diagram with 10 colored boxes (1-10) arranged in two columns. On the right, there is a table with the following data:

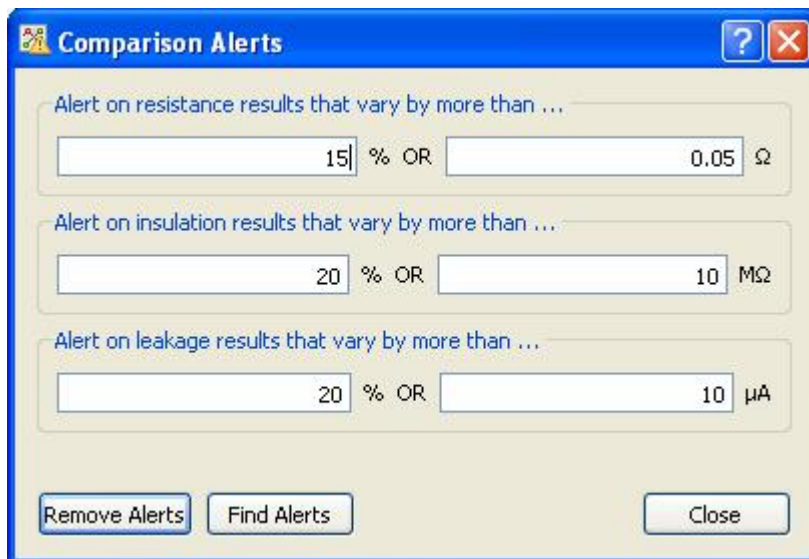
Name	Type	No. of connections
1 1	Type B	2
2 2	Type BF	4
3 3	Type CF	4
4		


2.1. Comparison Alerts

Under the **Tools** menu, there is an option to open the **Comparison Alerts** screen. This will allow users to compare new results with previously measured results.

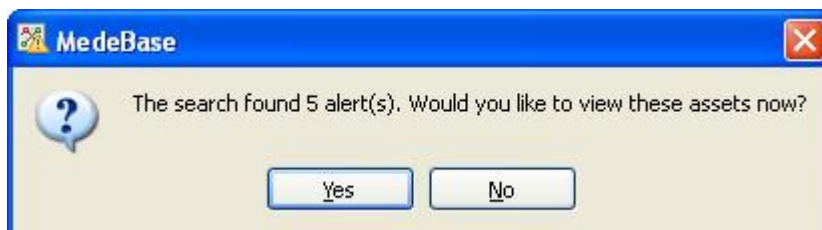


In the new dialog enter a number or percentage to search and the program will find results that vary accordingly.

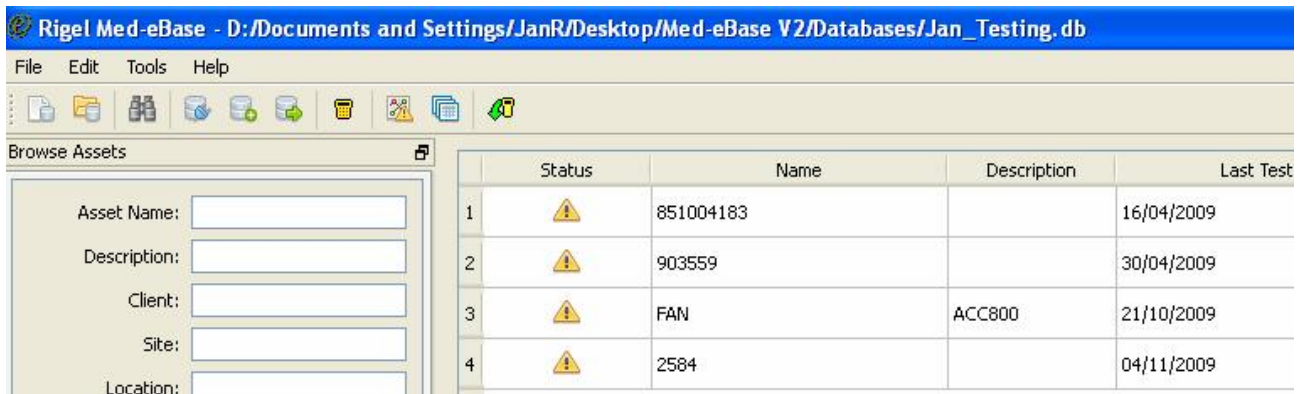






If any results change by an amount specified in the comparison alerts dialogue, then an  alert symbol will appear next to the test result.

Click **Find Alerts** to list all results sets that contain at least one result alert.

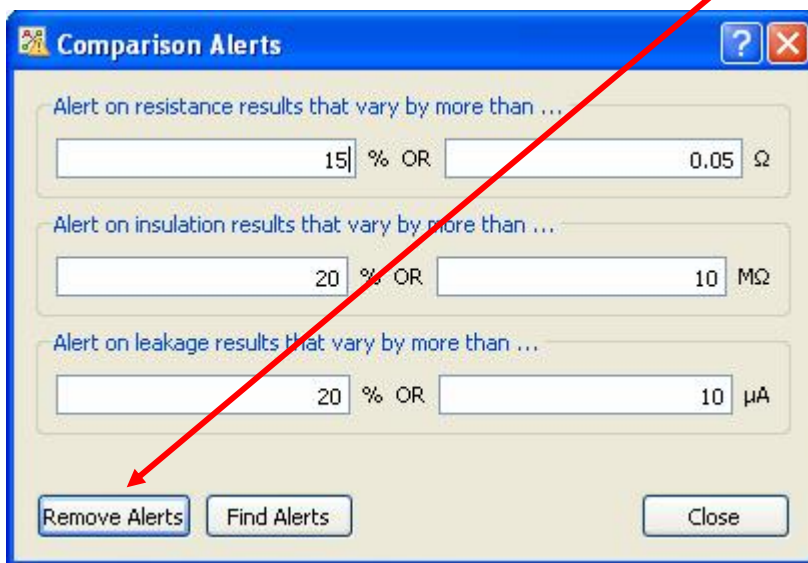


After clicking on **Yes**, the following screen appears, displaying the **Alerts** found.



Status	Name	Description	Last Test
1 	851004183		16/04/2009
2 	903559		30/04/2009
3 	FAN	ACC800	21/10/2009
4 	2584		04/11/2009

To **Remove** the **Alerts** found, click on the **Remove Alerts** button.

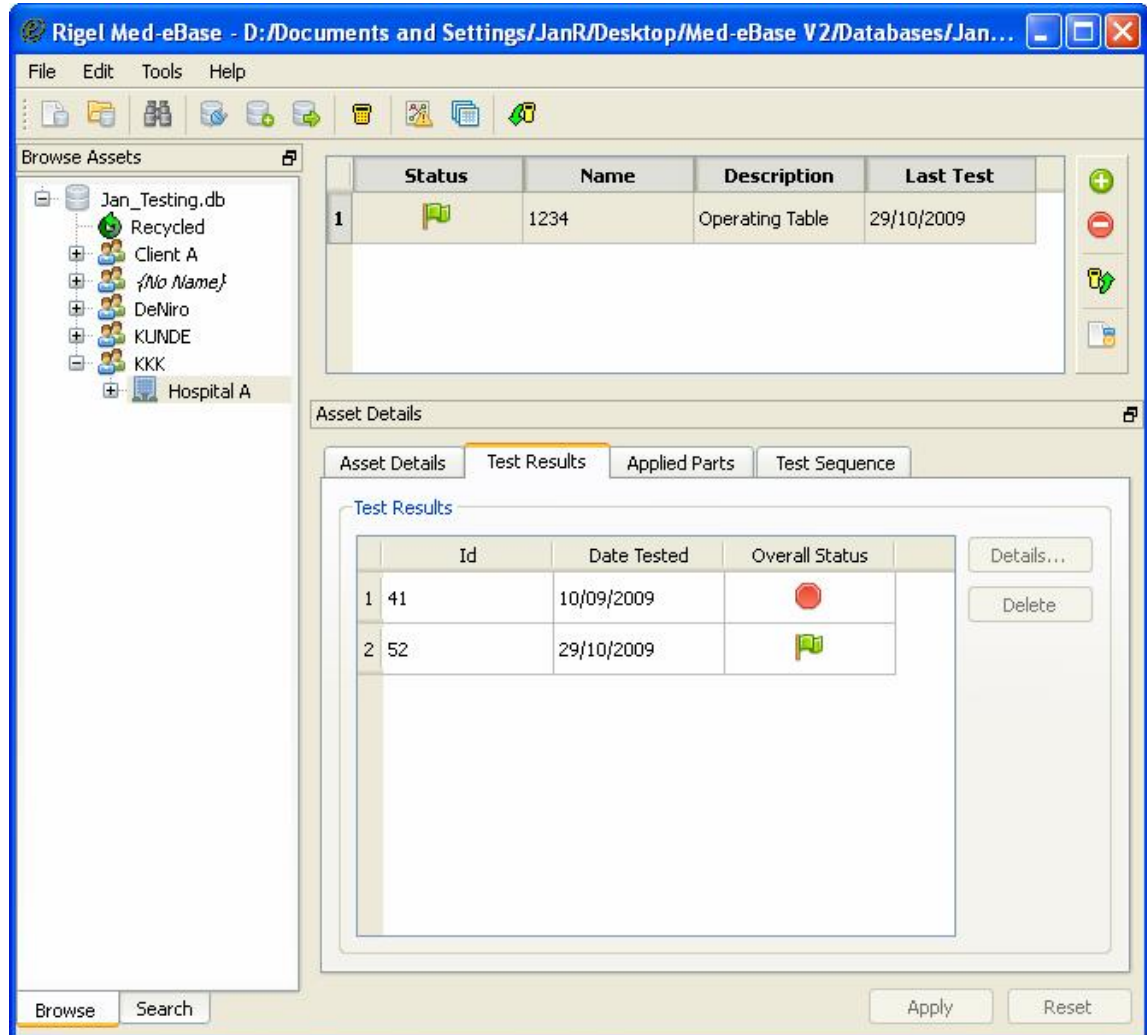


The icon below confirms that the Remove Alerts has been carried out.




2.2. Viewing Test Results

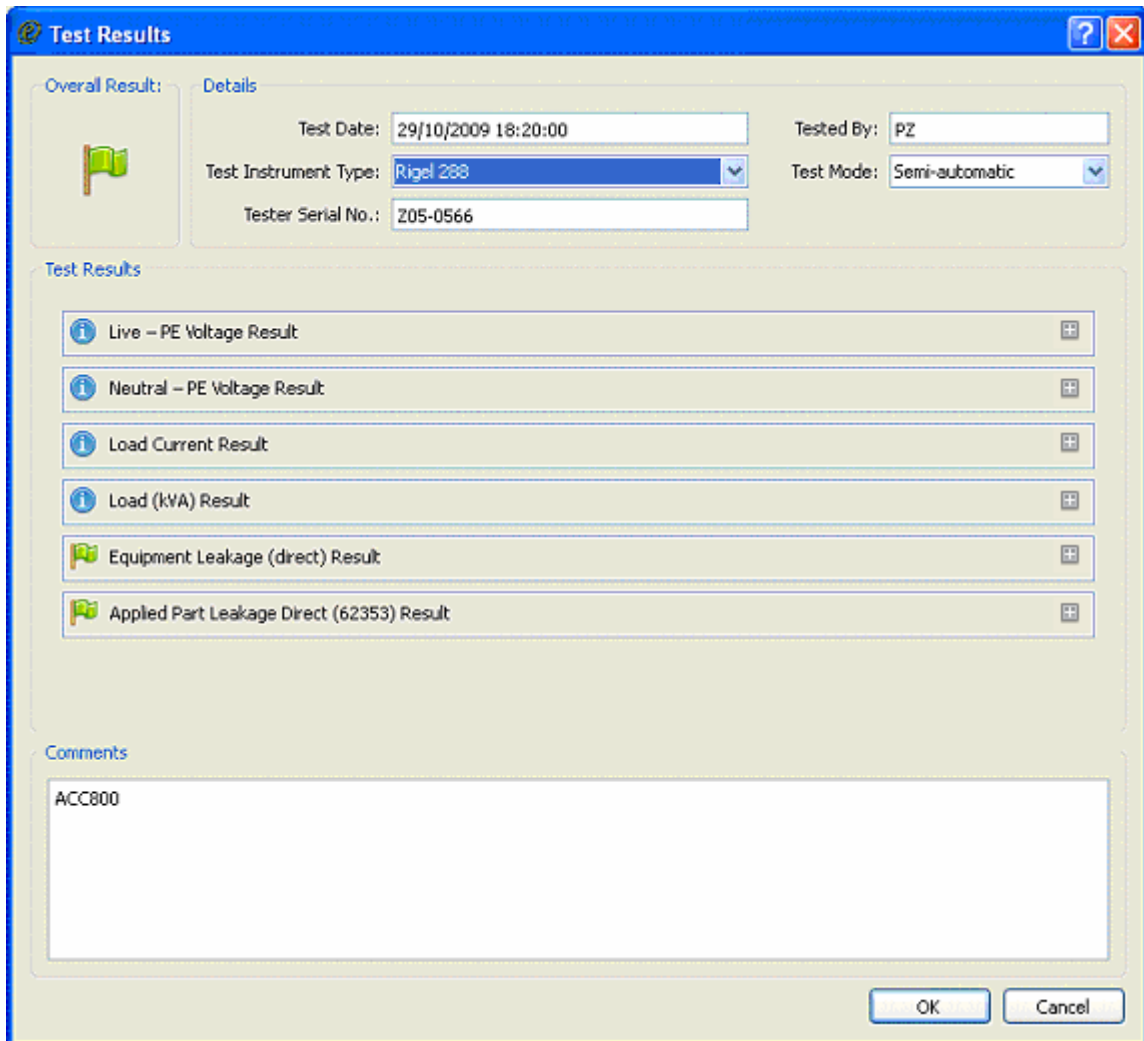
From the **Asset Details** panel, select the **Test Results** tab. This will display the Test Result history for that Asset.



Each complete Test Result set is shown as a single line. Use the **Details** button to display the detailed results for the selected test.

The grey symbol indicates that there are no test results saved.


For a detailed report, click on the result and select the **Details...** button. This opens a new window which shows the detailed test information. A **green flag** indicates that, these tests have passed. A **blue icon**  indicates that the result is information only and there is no Pass or Fail status.

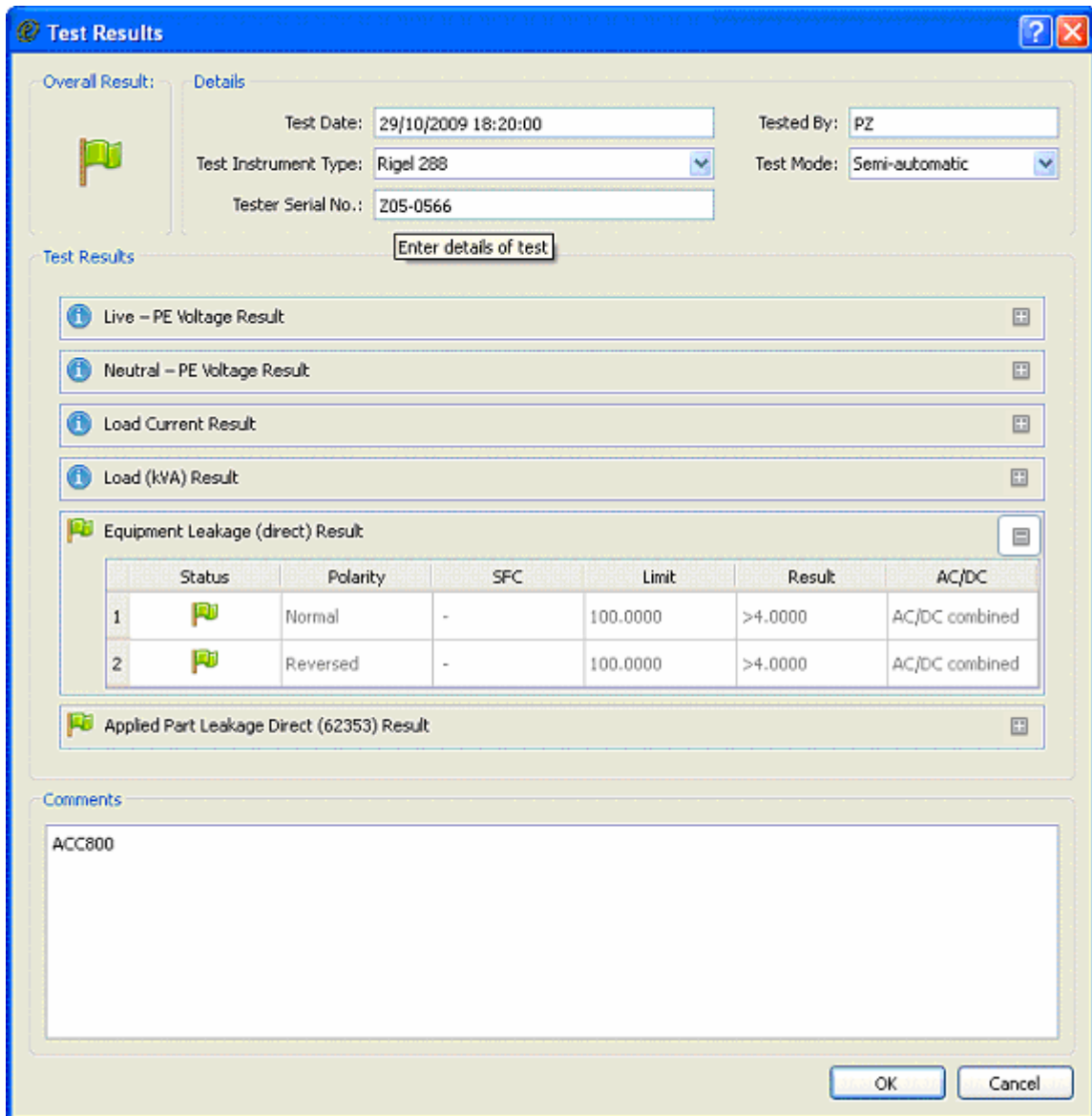


The screenshot shows a software window titled "Test Results". It is divided into several sections:


- Overall Result:** Displays a green flag icon, indicating a successful test.
- Details:** Contains fields for:
 - Test Date: 29/10/2009 18:20:00
 - Tested By: PZ
 - Test Instrument Type: Rigel 288 (selected from a dropdown menu)
 - Test Mode: Semi-automatic (selected from a dropdown menu)
 - Tester Serial No.: Z05-0566
- Test Results:** A list of test items, each with an information icon (blue 'i') and a plus sign icon (⊕):
 - Live – PE Voltage Result
 - Neutral – PE Voltage Result
 - Load Current Result
 - Load (kVA) Result
 - Equipment Leakage (direct) Result
 - Applied Part Leakage Direct (62353) Result
- Comments:** A text area containing the text "ACC800".

At the bottom right of the window are "OK" and "Cancel" buttons.

When clicking on the on the **plus icon**  for one of the test results will open the item to show more details.



Test Results

Overall Result:  Details

Test Date: 29/10/2009 18:20:00 Tested By: PZ

Test Instrument Type: Rigel 288 Test Mode: Semi-automatic

Tester Serial No.: Z05-0566

Enter details of test

Test Results

- Live - PE Voltage Result
- Neutral - PE Voltage Result
- Load Current Result
- Load (kVA) Result
- Equipment Leakage (direct) Result

Status	Polarity	SFC	Limit	Result	AC/DC
1	Normal	-	100.0000	>4.0000	AC/DC combined
2	Reversed	-	100.0000	>4.0000	AC/DC combined

Applied Part Leakage Direct (62353) Result

Comments

ACC800

OK Cancel

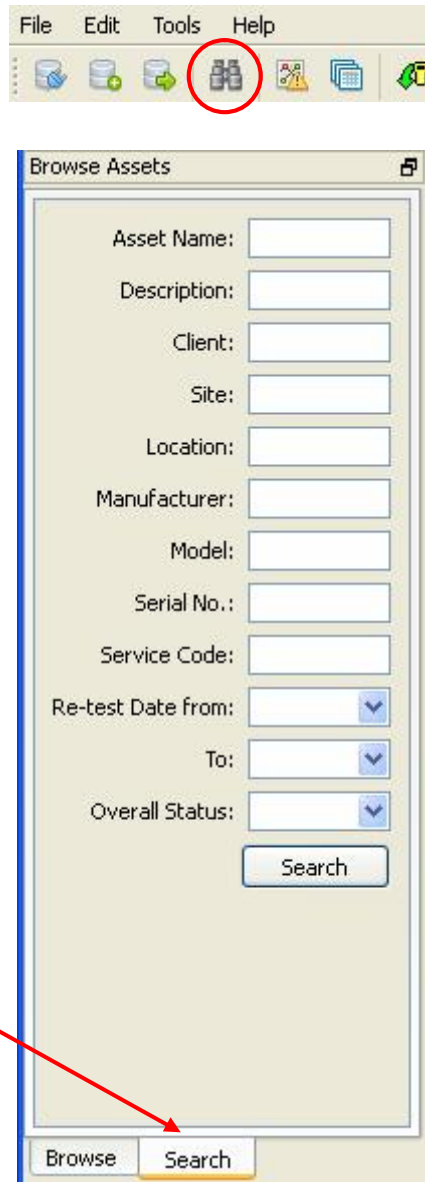
The Test Instrument, Serial Number, Test Mode and Tested By fields are derived from the downloaded data and automatically filled out.

The Test Result details will vary for different Test Types, possible values are Mains, SFC, AP, Type, Limit, Result, Unit and Status.

2.3. Finding Assets

To quickly find an Asset within the database the program contains a search facility that can be accessed via the **Search** option from the **Edit** menu.

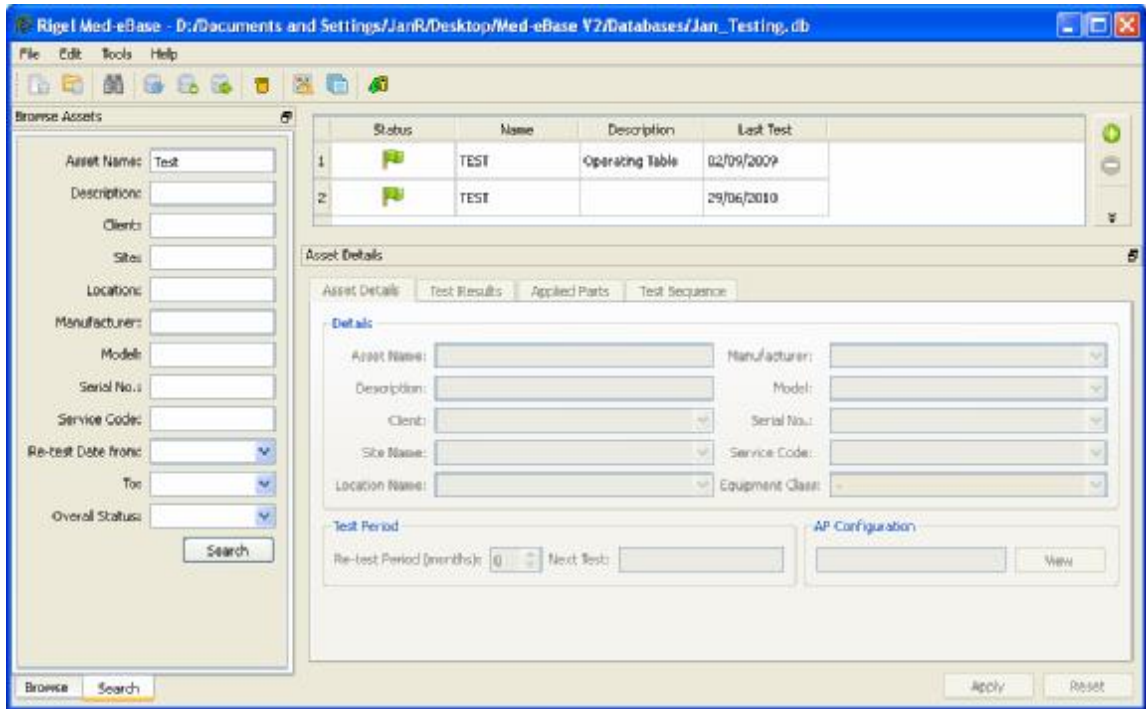
Alternatively, from the tool bar, select the **Search** icon;



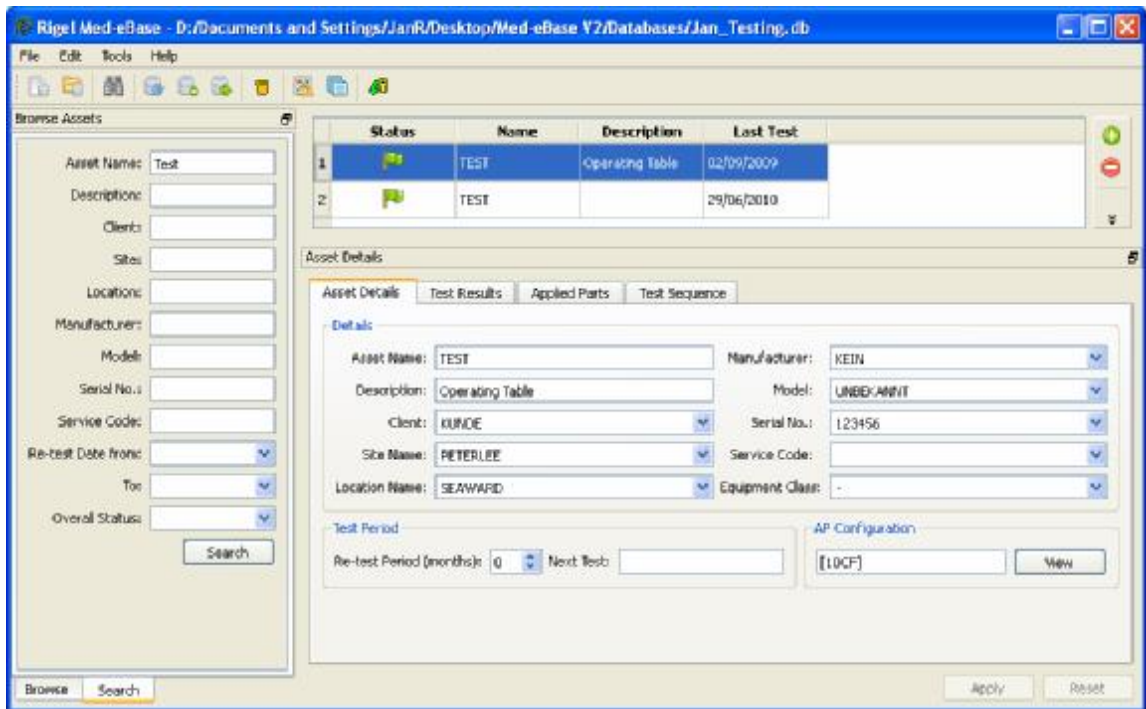
There is also a **Search** button in the bottom of the left corner next to the Browse button.

Enter the relevant search criteria then select **Search** to commence the search. The Results will be shown in the **Asset Table View** panel.

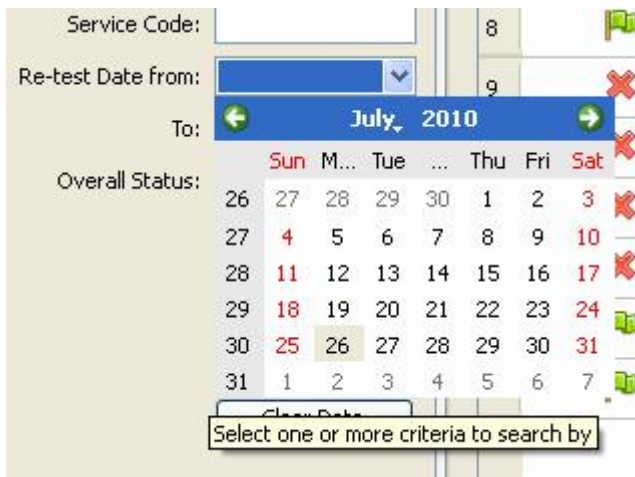
Please note the * character can be used as a wildcard character in the search fields. Ward12* in the Location field will find all Assets with a Location starting with Ward12 e.g. Ward12, Ward12A, Ward12B etc.



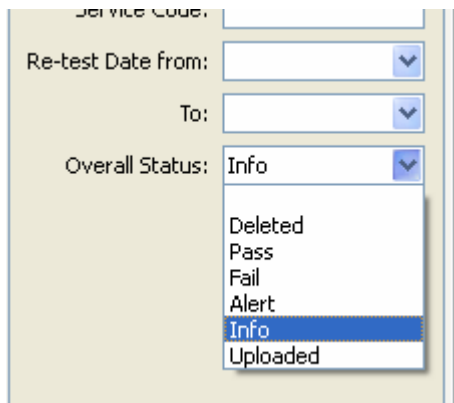
After selecting an Asset, the associated Asset Details, Test Results, Applied Parts, Test Sequences are shown in the **Asset Details** below.



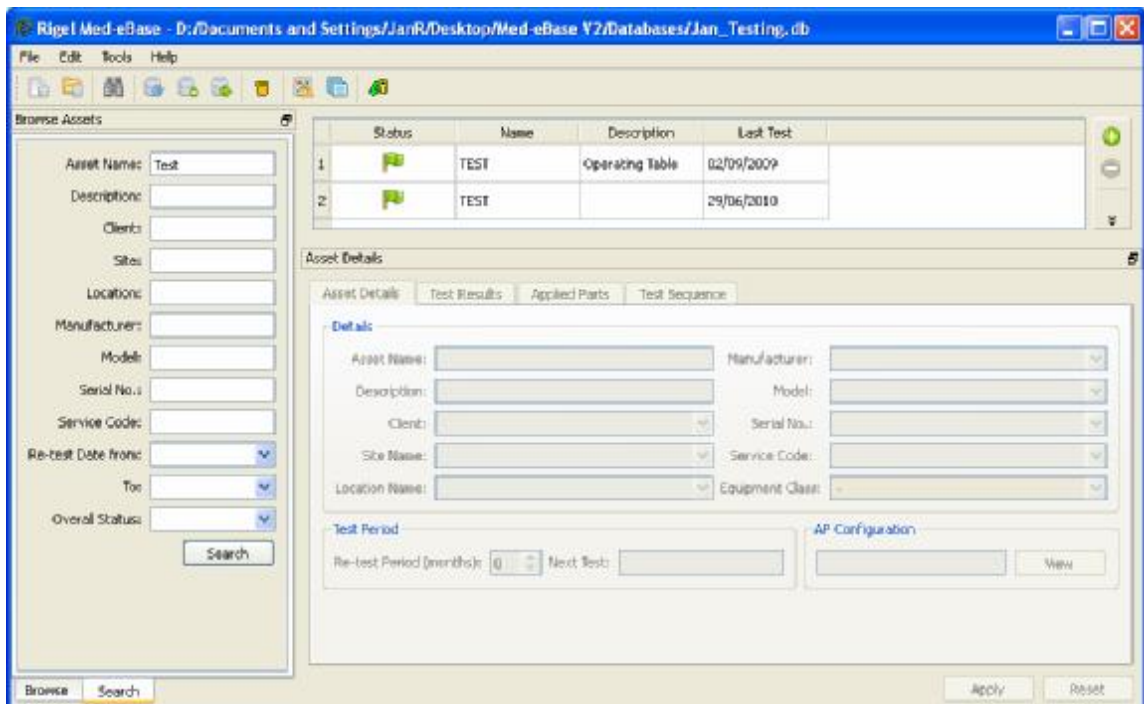
A useful search is the next re-test date.



Another search function is to filter failed, passed or uploaded tests.



Enter the required search parameters and select **Search** to begin the search. The results will be displayed in the **Asset table View**;



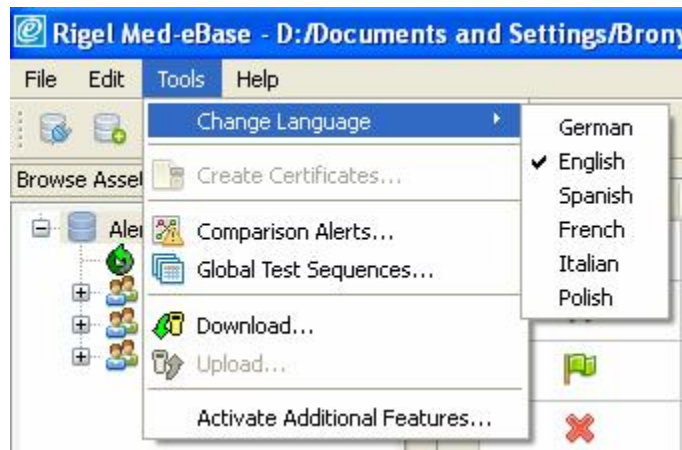
From this window, the user is able to **Upload** or **Generate Certificates** for the selection of Assets. Assets can also be sorted on the different Asset variables by entering additional search criteria into the schedule window.

4. Language Settings

The Med-eBase program can be used in a number of different languages. Due to the continuous development, additional languages are scheduled to be made available.

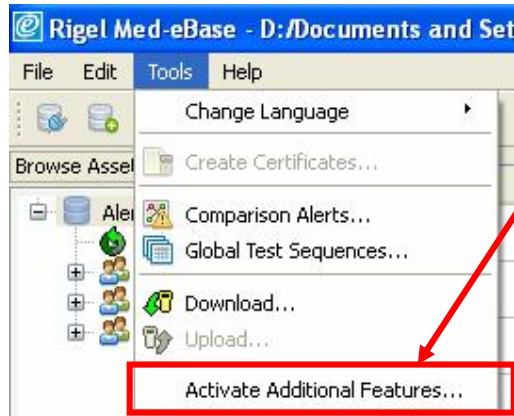
For availability of other languages, please contact Rigel Medical via email; info@rigelmedical.com

To change the language, select **Tools** then **Change Language** and select the required language.



5. License

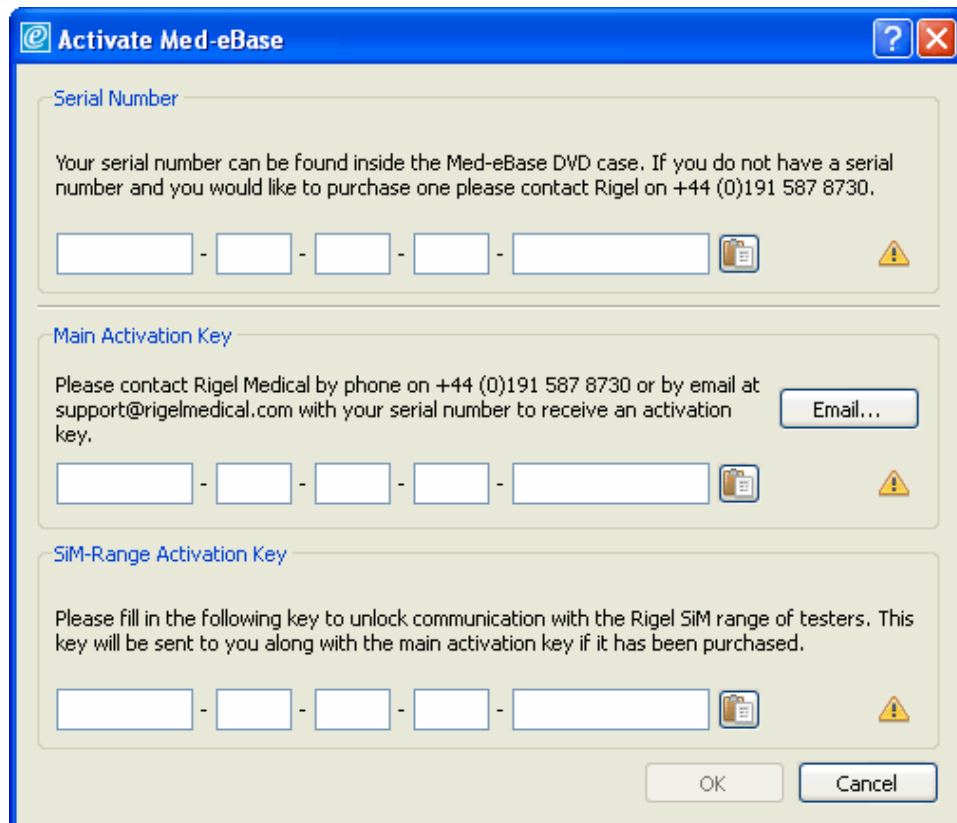
To activate additional Med-eBase features select **Tools** from the drop down menu and select **Activate Additional Features...**



5.1. Compatibility with Additional Testers

A standard Med-eBase License allows compatibility with Rigel 288 and Rigel 62353 testers. To use Med-eBase with additional testers, e.g. the SiM range, then you must **Activate Additional Features...** Selecting this option will open the Activation window. Activation keys are purchased from Rigel.

Please contact sales@rigelmedical.com for further details.

A screenshot of the 'Activate Med-eBase' dialog box. The window title is 'Activate Med-eBase'. It contains three sections for entering activation keys, each with a text area for instructions and a five-part input field with a clipboard icon and a warning icon to its right. The first section is 'Serial Number' with instructions: 'Your serial number can be found inside the Med-eBase DVD case. If you do not have a serial number and you would like to purchase one please contact Rigel on +44 (0)191 587 8730.' The second section is 'Main Activation Key' with instructions: 'Please contact Rigel Medical by phone on +44 (0)191 587 8730 or by email at support@rigelmedical.com with your serial number to receive an activation key.' and an 'Email...' button. The third section is 'SiM-Range Activation Key' with instructions: 'Please fill in the following key to unlock communication with the Rigel SiM range of testers. This key will be sent to you along with the main activation key if it has been purchased.' At the bottom are 'OK' and 'Cancel' buttons.

6. Troubleshooting

In the case of any problems occurring, find the error log in the Med-eBase V2 install directory. The error log file is called

debug_output.txt

Attach this to an email and send it to Rigel Medical for investigation. Please include a brief explanation of what caused the problem to enable us to resolve the matter as efficiently as possible:

support@rigelmedical.com

7. Specifications

7.1. Program Specification

The program group consists of:

- Data Transfer Utility
- User Manual
- Rigel Med-eBase
- Uninstall

The program can Upload to and receive Download data from the following test instruments:

- Rigel 288, 62353
- Rigel BP-SiM, SP-SiM, UNI-SiM

Providing they have been enabled within Med-eBase V2.

7.2. System Requirements

- IBM Compatible PC
- Processor Speed 1Ghz or higher
- Microsoft Windows XP SP2 / Vista / Windows 7
- 32-bit/64-bit Operating Systems
- 512Mb RAM
- 350Mb available hard disk space
- Colour monitor with 32 bit colour or greater video card
- CD ROM drive

8. Warranty and Support

Rigel Medical, part of the SEAWARD GROUP, provides warranty for this software package for a period of 1 year. This will be effective from the date of delivery.

For this and further information contact:

Rigel Medical
Bracken Hill
South West Industrial Estate
Peterlee
Co. Durham
SR8 2SW
England

www.rigelmedical.com

e-mail: support@rigelmedical.com

Telephone Support Helpline: +44 (0)191 5878730

Fax: +44 (0)191 5860227