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Instruction Manual 383A550 Version 2.6

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Introduction

First of all thank you for choosing Rigel's Med-eBase software as your product of choice. We trust this product meets your requirements however, as we value a close partnership with our clients, we welcome your feedback in order to improve features, usability and benefits to your organisation and that of others.

Med-eBase is a versatile database program aimed to centralise data from biomedical test equipment and in particular Rigel's electrical safety analysers, vital signs simulators and performance analysers.

Whether you prefer a local database or centralised network access, Med-eBase can be configured and adapted to suit any business criteria.

With Med-eBase you can now download your Rigel testers, analyse data by automatic comparison against previous results and create test protocols asset libraries. Use the scheduling and upload function to interrogate your database and configure your test devices for fast and effective retesting.

As Rigel's product range increases, regular product updates are expected and to ensure we can improve our products, do let us have your feedback. Please contact us at support@rigelmedical.com with your suggestions.

1. Installation

1.1. Installing Med-eBase

To install Med-eBase Asset Management software V2, you will need to meet the minimum system requirements listed below.

Hardware

- ✤ IBM compatible 1 GHz or higher processor
- ✤ 512 MB of RAM
- ✤ 350 MB available hard drive space
- Colour monitor with 32-bit colour capability
- CD ROM drive

Software

- Windows XP SP2 or later, Windows 7, 8 or 10
- ✤ 32-bit/64-bit Operating System
- Note: (a) Med-eBase will need to be installed. and the licence activated. by an Administrator.
 (b) make sure, before installing, Med-eBase ensure no other applications are running.
- 1. Insert the Med-eBase CD (if applicable) into your CD drive and the installation should begin automatically.
- 2. If Med-eBase does not automatically install then open My Computer or Windows Explorer and view the CD drive. Locate and RUN the file **setup.exe** to begin the installation.
- 3. If you are using the installer package downloaded from the rigelmedical.com website, open the Rigel Med-eBase Installer .exe file to begin the installation from:

http://www.rigelmedical.com/rigel-downloads?id=Software%20Download

4. Follow the onscreen instructions to complete the installation.

The language setting can be changed from the installation language once the software is fully installed.

Once the program is installed, a shortcut will be provided on your desktop. Double click the shortcut with your mouse to open Med-eBase V2.

Please refer to application note 0037 Installing Med-eBase onto a PC to aid in the installation process. <u>http://www.rigelmedical.com/downloads/0037-Installing-Med-eBase-on-PC.pdf</u>

1.2. Checking for Software Update

Med-eBase software has a built-in feature to automatically check for product updates and will notify the user when new features or versions are available.

The automatic update feature ensures that the user can benefit from the latest features and functions without having to actively search for new updates, giving you peace of mind.

To benefit from the automatic updates, the user must have an internet connection and **Administrator** rights on the PC. Updates can be checked manually by clicking on the HELP button in the tool bar and select "check for updates"

If an update is available you will be informed. User confirmation is required prior to installation of the updates.

1.3. Windows 7 Operating Systems (or later)

Enhanced security settings in Windows 7 require the user to register the product as an **Administrator**. To do so, right click on the Med-eBase icon on the desk top, and select **Run as administrator**. This will ensure that the license codes are written and stored in the Windows registry.



Please refer to application note 0032 Med-eBase V2 with Windows 7 for details of this process.

1.4. Med-eBase Licensing

When first running Med-eBase the licence activation screen will be displayed. Follow the on-screen instructions to activate the 30-day trial or full Med-eBase program.

The Full license of Med-eBase V2.6 Software comes with 1 license as standard. This license entitles 1 copy of Med-eBase to be installed on 1 PC with 1 device type unlocked either;

- Electrical Safety (Rigel 288/62353 / Rigel 288+/62353+)
- Sim range (Uni-Sim/BP-Sim/SP-Sim).
- Uni-Pulse (and Uni-Pulse 400)
- Uni-Therm (and ESA-377/377+)
- Multi-Flo

To activate other device types an additional license must be purchased via your Rigel Medical supplier.

The 30 day Trial license allows the user full functionality of all device types for a period of 30 days from activation.

NOTE: The activation screens may look slightly different depending on the operating system

Are y	ou using a p	ourchased v	ersion of M	led-eBase or a	trial version	7	
(f you've p	ourchased M	led-eBase p	lease enter	r your serial n	umber below	, your serial n	umber can
	-		-	-			
Alternat	Med-ebase ively to trial	Med-eBase	for 30 day	s please chec	k this box an	id you'll autom	atically
be alloca	ated a serial	number du	ring activat	ion			

To activate a trial version of Med-eBase

Select the Trial Med-eBase option on the initial activation wizard screen (shown above).

To activate a Full version of Med-eBase

To activate the full Med-eBase program, input the serial number provided on your copy of MedeBase into the Serial field.

If you have this in electronic format, you can use the paste icon ¹ to enter the Serial Number and then select NEXT.

If you do not have a serial number and have purchased a full license for Med-eBase please contact Support@rigelmedical.com indicating the Rigel device requiring Med-eBase, your company details and the purchase order number.

Activation continues from this point identically for both Trial and Full Med-eBase licenses and can be accessed via online or offline activation.

1.5. Online activation

Med-eBase is activated online by default. If an internet connection is not available select the Activate Offline option when prompted, and then select NEXT.

ALUY. Vi el	ation Method /hether you have purchased Med-eBase or want to evaluate it on a 30-day trial, Med- Base must first be activated.
💿 Ac	tivate Online
	This option requires an Internet connection but is the fastest way to activate.
O Ac	tivate Offline
	Use this option if you do not have a connection to the Internet.

When continuing with Activate Online follow the on-screen instructions.

The activation wizard will test the internet connection to the activation server.

NOTE: Your IT department may need to assist you with any proxy setting issues

1.6. Activate Offline

If Activate Offline is selected please contact Rigel Medical, indicating the Rigel device requiring Med-eBase, your company details and if applicable the Main Serial Number.

🖉 Med	eBase Licen	ce Activation	Wizard				?
Activ	vate Offline /ou have chosen	to activate Med-	eBase offline				
Pleas suppo advis	e contact Rigel N rt@rigelmedical e the team of yo	1edical by phone .com to activate 1 our serial number	on +44 (0) 19 Med-eBase, If and details,	1 587 8730 you've puri	or by e-mail a chased Med-el	t 3ase please	
				< Back	Finish	Car	ncel

Once the serial number and activation key have been entered select NEXT.

Enter your contact and company details.

Please enter you	ır contact details.		
Title:	Name:		
Title:			
Denotes a field tha	it is required		
		< Back Nex	t > Can
Med-eBase Licenc Company Details Please enter you	:e Activation Wizar rompany details.	d	t> Car
Med-eBase Licenc Company Details Please enter your Company Name:	:e Activation Wizar r company details.	d	t > Can
Med-eBase Licence Company Details Please enter you Company Name: NOTE: The company of	:e Activation Wizar r company details, etails will appear on all c	< Back Nex d	t > Can
Med-eBase Licence Company Details Please enter your Company Name: NOTE: The company correctly as it cannot l Addrese:	:e Activation Wizar r company details, etails will appear on all c be changed after a succe	d	t > Can
Med-eBase Licence Company Details Please enter your Company Name: NOTE: The company of correctly as it cannot l Address:	:e Activation Wizar r company details, etails will appear on all c pe changed after a succe	d	t > Can
Med-eBase Licence Company Details Please enter your Company Name: NOTE: The company of correctly as it cannot I Address;	:e Activation Wizar r company details, etails will appear on all c be changed after a succe	d ertificates. Please ensure that the compa ssful activation. Tel. Ext:	t > Can
Med-eBase Licence Company Details Please enter your Company Name: NOTE: The company correctly as it cannot I Address; Town/City:	company details , company details, letails will appear on all c changed after a succe	d ertificates. Please ensure that the compa sssful activation. Tel. Ext: Tel. Ext: Fax: Fax:	t > Can
Med-eBase Licence Company Details Please enter your Company Name: NOTE: The company of correctly as it cannot I Address: Town/City: County:	Company details, company details, letails will appear on all c changed after a succe	d ertificates. Please ensure that the compa sssful activation. Tel. Ext: Tel. Ext: Fex: Tel. Ext: Tel. Ext	t > Car
Med-eBase Licence Company Details Please enter your Company Name: NOTE: The company of correctly as it cannot I Address: Town/City: County: County:	e Activation Wizar	d ertificates. Please ensure that the compa ssful activation. Tel. Ext: Fax: Fax: Email:	t > Car
Med-eBase Licence Company Details Please enter your Company Name: NOTE: The company of correctly as it cannot I Address: Town/City: County: County: Postcode / ZIP Code:	e Activation Wizar	d erbficates. Please ensure that the compa essful activation. Tel: Tel. Ext: Fax: Fax: Email:	t > Car

NOTE: When providing contact details all required fields must be completed with the minimum character values for each field shown in the table below. If the NEXT icon is greyed out this indicates that a field does not meet the minimum requirement.

Minimum Characters for Med-eBase Activation

During activation the next button will only become available when all validation is satisfied: All required fields must be filled in

Field	Minimum Length
Company Details	
Company Name	6
Address 1	2
Country	2
Post Code	5
Email Address	@ and .XX (2 characters)
Contact Details	
Contact Name	4

NOTE: If the postcode does not meet the minimum requirement or the location does not have a postcode please enter 5 values

Once completed select NEXT to finalise the activation process and then select OK.

Activatio Your	on Successful! activation is complete!
P	Your activation has been successfully processed. When you close this wizard you will be able to see the features that have been unlocked.

For a Trial Version

Once the activation is complete you will be sent a confirmation email with the Main Serial number and Activation Key which you will need to enter into the Med-eBase screen shown below. You will have access to all device types and functionality of Med-eBase for 30 days from the date of activation.

A copy button allows users to copy their serial number and activation key(s) and paste them into the required fields from the confirmation email rather than copying and possibly failing to type the correct key.

Activate Med-eBase	?
Serial Number	
	Deactivate
Activation Keys	
	Add
Activation Wizard	

For a Full Version

You will have received one activation key for a Rigel device (e.g. Rigel 288). If you have purchased additional activation keys which unlock other Rigel device types then the Additional Activation Key(s) can be entered into the lower field under the activation key field, one at a time and then select ADD to activate each feature. The activated features will be listed in the large text box.

A copy button allows users to copy their serial number and activation key(s) and paste them into the required fields from the confirmation email rather than copying and possibly failing to type the correct key.

Activate Med-eBase			?
Serial Number	1.444 - 1937) - 1937) A. 1946.4		Deactivate
Activation Keys			
Rigel SiM range			
<			>
<		.	Add

2. Getting Started

2.1. Creating a new Med-eBase Database

Select File, Connect to Database using the top menu.



To create a local database using SQLite select **New**, and then choose a name for your new database with the extension .db and select **Save**.

SQLite Database	MS SQL (ODBC)	
SQLite <mark>databases a</mark>	re saved as files and do not requ	ire a database server.
New Cr	eate a new SQLite Database	
P Open Or	en an existing SOLite Database	

Med-eBase allows a choice of database formats:

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

An Example database is held within the install which demonstrates an example of how a database can look and function. This feature lets the user see how the assets are laid out and how test results and certificate look before creating their own database.

2.2. Connecting to an existing Med-eBase Database

Select File, Connect to Database using the top menu.

File	Edit Tools Help	
6	Connect to Database	
8	Import Med-eBase V1 Databa Export Database	se St
	Exit application	
	Morkshop	3

Select Open to open an existing SQLite Database. Locate the .db file and select Open.

SQLite Database	MS SQL (ODBC)	
SQLite <mark>databases a</mark>	re saved as files and do not require a database servi	er.
New Cr	eate a new SQLite Database	
Open Op	en an existing SQLite Database	

To connect to an MS SQL Server over Open Database Connectivity (ODBC), click on the **MS SQL (ODBC)** tab. The connection details will be issued by your network administrator.

Squit Dollaboat	MS SQL (ODBC)	
Connect to a Micro	soft SQL Server over ODBC.	
Server:	1	÷
Database Name:	Itee Windows NT Integrated Security	Populate
	ose whoms in integrated security	•
User Name:		

2.3. Importing a Med-eBase Version 1 Database

To convert a Version 1 database into Version 2.4. (or above) either SQL Express or SQL Server is required. Using either SQL Express or SQL Server the .mdf file on the V1 Database for MedeBase must be mounted.

When this has been done Med-eBase will then know what the .mdf file is and be able to read it as a database file:

- 1. Mount .mdf in SQL Express / Server
- 2. Start Med-eBase.
- 3. Create a new SQLite database or open an existing SQLite database.
- 4. Select File and then Import Med-eBase V1 Database.



5. Browse for the .mdf file of the V1 database.

	Brows
Import Assets	V Results

- 6. Click on OK and the import process will start.
- 7. The Med-eBase V1 Database data will be imported into the Med-eBase V2 Database.

NOTE: SQL Express or SQL Server is required on the local computer to allow importing of a Med-eBase V1 Database. The user may need the assistance of their IT department during this import.

2.4. Navigating Med-eBase

nta 🛃	1	Status	Name	Descontion	Last Text	Retect Date		
ample Database.db	1	1	125876	5 Lead ECG	11/92/2014	11/08/2014		
I EBME	2	P	65897	3 Lead ECG	20/09/2013	20/03/2014		
Micrishop	3	P	45287		25,09/2013	25/03/2014		
Theatre slepertm	4	×	51,47	18	21/0.0/2013	21/04/2014		
Oiert I	3	-	#d15		12/02/2014	12/02/2015	(2)	
Migred 1	6	P	8/07	OEFIB	19/11/2013	19/11/2013		
Wind 2	7	x	13786	MONITER	27/11/2013	27/11/2013		
E Vierd 4		pu -	25894	MONITER	27/11/2013	27/11/2013		
Migrid 1	9	-	258741	MONITER	27/11/2013	27/LL/2014		
Ward 2	10	P	411412	ESV	29/07/2013	29/94/2014		
EBME	11	14	01.234	ESU	30/07/2013	30/04/2014		
Werkshop	12	10	12548	E9U	30/07/2013	30/04/2034		
HOSPITAL 12	13	×	085123	ESU	29/48/2013	29/05/2014		
WARD'S	14	0	defitiz		08/01/2014	08/01/2015		
Recycled	15	-	125780		26/11/2013	26/05/2014		
	Arcent Day	tala						
(1)	Anet	fernie 1 m	allough Radellars 9	al Second S				
(1)	Deta	da .						
		eust fieres				Same/Hb.:		
	- 3	Description				Haufactions		
		Dett				re Pitzlał		
	100	Shi hami:				+ Sinitor Exter		
		accelo regima:				- +) contract case: (+		
	ीest	Period		100		AP Configuration		
		200	-and second function (0.2280) of	nur Hentr				- 98
					(*	3)		
					(•	<i>,</i>		

The main screen explained:

- 1. The **Browse Assets** view with the **Browse** tab selected, the tree view shows the Assets in the selected database. Assets are organised by Client, Site and Location. The **Search** tab provides a way to only display assets based on a certain criteria such as Name, Description, Serial No. and Re-test Date.
- 2. The **Asset Table** view this view displays all of the assets under a particular heading in the tree view.
- 3. The **Asset Details** view this shows the selected asset details, including test results, applied part set-up and test sequences.

2.5. Data Structure

The Med-eBase database is structured around the owner, Known as the Client and the physical location of Assets which is divided into Site & Location.

File Edit Tools Help						
5 🔂 🔂 👪 🗷 🗖 🗸	0					
Browse Assets 6		Status	Name	Description	Last Test	Retest Date
 Example Database.db Broomfield 	1		25456		15/01/2014	15/07/2014
A EBME	2		584563		15/01/2014	15/07/2014
Workshop	3	P	47851	PROBE 123	15/01/2014	15/07/2014
 Image: Image: Ima	4	P	56		10/02/2014	10/02/2015
Hospital 1	5		257	PROBE 123	05/02/2014	05/08/2014
Hospital 3	6		2536	PROBE 123	10/02/2014	10/08/2014
HOSPITAL 12 Site 1	7	P	125	PROBE 123	10/02/2014	10/08/2014
Recycled	8	100	236	PROBE 123	10/02/2014	10/08/2014
	9	×	3525	PROBE 123	10/02/2014	10/08/2014
	10		01928	Infusion pump	12/03/2014	12/12/2014
	11		Q123	Infusion device	01/05/2014	

A site may include a number of different locations, such as individual wards within a hospital or departments within a company. By selecting a Site or Location from within the **Browse Assets** tree, shown above on the left, the **Asset Table**, on the right, displays all assets in the selected site or location.

The client name, sites and locations either comes directly from the information entered into the Rigel safety testers or can be manually entering into Med-eBase and edited by selecting the asset and entering new details.

2.6. Language Settings

Med-eBase comes with a number of language options.

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



NOTE: There may be different language options, than shown above, during the continuous improvement and development of Med-eBase.

2.7. Activate Additional Devices

To access the licence screens at a later date, such as to enable other device types after the initial activation, once in the Med-eBase software select Tools and then Activate Additional Features...

Тоо	s Help
	Change Language
2	Comparison Alerts
l.	Global Test Sequences
	Reference Graphs
6 7	Download
7	Upload
	Activate Additional Features
	Settings
	Reset window locations

To install your Additional Activation Key, enter this in the bottom box and select ADD. This will allow access to the features associated with that device type.

A copy button allows users to copy their additional activation key(s) and paste them into the required fields.

2.8. Creating a new Asset

New assets can be created by clicking the **Add New Asset** button ¹ on the top right hand side of the main screen. This will create a blank asset on the **Asset Details** panel.

et Details						
Asset Details	Test Results	Applied Parts	Test Sequence			
Details						
Asset Name	:				Serial No.:	
Description	1:				Manufacturer:	
Client	t:			-	Model:	
Site Name	:			-	Service Code:	
Location Name				-	Equipment Class:	-
Test Period					AP Configuratio	in .
R	e-test Period (mo	onths): 0 🖨	Next Test:			View

The maximum length of each field is 25 characters.

Asset Name is a mandatory field.

Each field's dropdown list holds the existing entries associated with this field.

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

3. Asset Details

The Asset details can be obtained by clicking on the Asset in the Asset Table view. The following information is displayed in the Asset Details panel.

Asset Name:	65807	Serial No.:	102053
Description:	3 Lead ECG	Manufacturer:	DATEX OHMEDA
Client:	Clent 1	▼ Model:	55
Site Name:	Hospital 1	▼ Service Code:	
Location Name:	Ward 4	Equipment Class:	Class II
Test Period		AP Configurati	on
Re	-test Period (months): 6 🔹 Next Test: 20/03/2014	[3CF]	View

The following tabs are available in the **Asset Details** view:

- Asset Details
- Test Results
 Applied Part configuration (Electrical Safety)
- Test Sequence

Asset Details - This shows the basic description of the Asset. The details entered here make it easier to search for the Asset from a larger database.

Test Results - This shows the test result history for that Asset. From this menu it is also possible to print test certificates for any of the previous tests.

Applied Parts - This shows the Applied Part configuration used during the testing of this Asset for electrical safety.

Test Sequence - This shows the test sequence and individual test results for this Asset.

3.1. **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:

○	Add New Asset Delete Asset(s)
>>	Upload Export Asset(s) Print
	Display Columns

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



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



3.2. Deleting Clients, Sites, Locations or Assets

Clients, Sites, Locations and Assets may be deleted by right-mouse clicking the relevant item and selecting **Delete**, selecting **Edit**, **Delete Asset(s)** from the context menu (above), or by selecting the **Delete** icon on the right-hand tool bar.

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

By holding the CTRL key, multiple assets may be selected and manipulated simultaneously in the **Asset Table** view.

Once the asset is permanently removed from the recycled folder the asset ID, Serial Number etc. can be reused on another Asset.

3.3. Med-eBase V2 Settings

To open the Med-eBase V2 Settings menu, select Tools, Settings.

- File Settings Tick the Use Native File Dialogs checkbox to enable the use of standard Windows dialog boxes for opening and saving files.
- Log Settings In the event of a database issue, these options will enable extra information to be included in the debug file for diagnostic purposes. Use of this option will be advised by the Rigel Support team.
- Restore Factory Settings This will remove the Med-eBase registry settings and will return Med-eBase to its initial state. Window size and position and last opened database will all be reset.

3.4. Merging Assets

Conducting tests on one asset on multiple instrument tester types i.e. defibrillator will have an electrical safety test using the Rigel 288 (+) and then performance testing using the Uni-Pulse.

If the two set of tests have the same asset ID and same asset trace variable information when downloaded into Med-eBase the tests will merge into one asset as indicated in the image below.

Example Database.db		Statis		Marrie		Description	Last Test	Retect Date		
	2	P	65907			3 Lead ECG	20/05/2013	20/03/2014		
	3	P	43,287				25/09/2013	25/03/2014		
	4	×	5147			18	21/10/2013	21/04/2014		
	5	pu	2006				12/02/2014	12/02/2015		
	8	pa .	nd17			DEFIB	19/11/2013	19/11/2013		
	7	×	1,5795			MONITER	27/11/2013	27/11/2013		
	8	p.	25994			MONITER	27/11/2013	27/11/2013		
	9	ja.	25974			MONITER	27/11/2013	27/11/2014		
	10	19	01101			ESU	29/07/2013	29/04/2014		
	11	pu -	01234			ESU	30/07/2013	30/94/2014		
	32	14	12548			ESU	30/07/2013	30/04/2014		
	13	×	08512	6		ESN	29/08/2013	29/05/2034		
	14	6	10,502				100101/2014	inerecomus		
	15	140	12578	6			26/11/2013	26/05/2014		
	34	P	23430				15/01/2014	15/07/2014		
	Appet Des	ali i								
	Ameria	Intala Te	st.Res./to	Applied Parts	Test Sem	artale				
	Test	lamilte								
		Date Testa	ed (ast	rument Type	Overall Stal	nes -				Ransulta
	1.0	8.01/2014	Rige	t Uni-Pulse	0				Frie	Centifica
	3	6/0L/2014	Rige	9 288/62358	100				(Test	Sequenc
									1.40	and Party

4. Data Transfer

4.1. Downloading Data from a Rigel Device

The method to download data from the Rigel devices is dependent on which Rigel product you are using. The methods are divided for:

- Electrical Safety Analysers (288 (+), 62353 (+)), and Vital Signs Simulators (Uni- Sim , BP Sim and SP-Sim)
- Performance Analyser (Uni-Pulse, Uni-Pulse 400)
- Performance Analysers (377, 377+, Uni-Therm, Uni-Pulse and Multi-Flo)

Please refer to instrument manuals and / or additional application notes for help to aid in the download process.

4.1.1. Electrical Safety and Vital Sign Simulators

Electrical Safety (288 (+) and 62353 (+)) and Vital Sign Simulators (Uni-Sim, BP-Sim and SP-Sim) use the same method of downloading data from the Rigel devices into Med-eBase.

Results

Downloads can be selected from the **Download** option in the **Tools** menu or by using the **Download** icon on the taskbar.



After selecting the **Download** option, the **Download from Tester** dialogue box will be displayed.

🖉 Download from Tester	Download from Tester
Instrument Type	Instrument Type
Rigel ESA-377+ 🔹	Rigel 288/62353 👻
Rigel 288/62353 Rigel BP-SiM Rigel SP-SiM Rigel UNI-SiM Rigel ESA-377 Rigel ESA-377+ Rigel Uni-Therm Rigel Uni-Therm Rigel Uni-Thuse Rigel Multi-Flo	Baud Rate 57600 COM Port Standard Serial over Bluetooth link (COM5)
OK Cancel	Re-scan COM Ports OK Cancel

Select the relevant **Instrument Type** from the drop down list.

Ensure you have the correct **Baud Rate** (the default is 57600) and **COM Port** selected. The COM port is defined by your serial or Bluetooth connection. For a standard data cable connection (RS232) this will usually be COM1.

If you do not see the correct COM Port displayed in the drop down menu, select **Re-Scan COM Ports** to refresh the available COM Port list.

Select **OK** to begin the download from the software side.

Downloading	100.00	E-6	? X
Processing			
Estimated time remaining: Unknown	Estimated finish	time: Unk	nown

The software will stay in the download screen while the Rigel device is set up to transfer data.

The download is initiated by starting the download on the Rigel tester. Instructions on how to do this will be included in the Instruction Manual for each Rigel device.

You will need to enter the Data Menu and select download to PC and the format is Rigel - SSS.

Once the download has started, a progress bar will indicate downloading on Med-eBase.

Upon completion of the download, the download window will close and the Download Report will be displayed on Med-eBase.



NOTE: For detailed instructions on how to connect your Rigel device for Data Transfer, please see the instruction manual or application note for your device.

Test Sequences

Test Sequence can be created on Rigel devices and then downloaded into the Med-eBase software as a global test sequence.

Download can be started from the **Download** option in the **Tools** menu or by using the **Download** icon on the taskbar.



After selecting the **Download** option, the **Download from Tester** dialogue box will be displayed.

Select the relevant Instrument Type from the drop down list.

NOTE: For detailed instructions on how to connect your Rigel device for Data Transfer, please see the instrument instruction manual or application note for your device.

insu unienci type		
Rigel 288/62353		•
Baud Rate		
57600		+
COM Port		
Standard Serial ov	/er Bluetooth link	(COM5) 🔻

Select the relevant Instrument Type from the drop down list.

Ensure you have the correct **Baud Rate** (the default is 57600) and **COM Port** selected. The COM port is defined by your serial or Bluetooth connection. For a standard data cable connection (RS232) this will usually be COM1.

If you do not see the correct COM Port displayed in the drop down menu, select **Re-Scan COM Ports** to refresh the available COM Port list.

Select **OK** to begin the download from the software side.

Downloading	
Processing	
Estimated time remaining: Unknown	Estimated finish time: Unknown

The software will stay in the download screen while the Rigel device is set up to transfer data.

The download is initiated by starting the download on the Rigel tester. Instructions on how to do this will be included in the Instruction Manual or application note for each Rigel device.

You will need to enter the Data Menu and select download to PC to the format as Test Sequences.

Once the download has started, a progress bar will indicate downloading on Med-eBase.

Upon completion of the download, the download window will close and the **Download Report** will be displayed on Med-eBase.



The downloaded sequences can be viewed in Med-eBase in Tools and then Global Test Sequence or the icon on the top left hand side of the Med-eBase screen.

From this menu the test sequence can be viewed, edited and uploaded back into a Rigel Performance analyser (does not work with all analysers, refer to manuals / application notes).

Name	Class	Instrument Type	 New
1 60601 - ClassI	Class I	Rigel 288/62353	Edit
2 60601 - ClassII	Class II	Rigel 288/62353	Delete
3 62353 - Classl - Direct	Class I	Rigel 288/62353	Upload
4 62353 - Classl - Diff	Class I	Rigel 288/62353	Duplicat
5 62353 - Classi - Alt	Class I	Rigel 288/62353	
6 62353 - ClassII - Direct	Class II	Rigel 288/62353	
7 62353 - ClassII - Diff	Class II	Rigel 288/62353	
8 62353 - ClassII - Alt	Class II	Rigel 288/62353	
9 0701/0702 - Classl - Sub	Class I	Rigel 288/62353	
10 0701/0702 - ClassII - Sub	Class II	Rigel 288/62353	
11 0701/0702 - ClassI - Diff	Class I	Rigel 288/62353	
12 0701/0702 - ClassII - Diff	Class II	Rigel 288/62353	
13 61010 CLASS 1	Class I	Rigel 288/62353	

Please refer to application note 0038 Downloading from Rigel devices to Med-eBase to aid in the download process.

4.1.2. Performance Analyser Uni-Pulse

Downloading Results can be started from the **Download** option in the **Tools** menu or by using the icon on the taskbar.

B 6	1	Change Language
Browse Asse	ts 🎢 ar 💼	Comparison Alerts Global Test Sequences Reference Graphs
	<i>(</i> 7	Download
	7	Upload
		Activate Additional Features
		Settings
		Reset window locations

After selecting the **Download** option, the **Download from Tester** dialogue box will be displayed.

nstrument Type	Instrument Type
Rigel Uni-Pulse	Rigel Uni-Pulse
Rigel 288/62353 Rigel BP-SiM Rigel SP-SiM	Baud Rate
Rigel UNI-SiM Bigel ESA-377	57600
Rigel ESA-377+ Rigel Uni-Therm	COM Port
Communications Port (COM1)	USB Serial Port (COM7)
	Standard Serial over Bluetooth link (COM18) Standard Serial over Bluetooth link (COM14) Standard Serial over Bluetooth link (COM17)
	USB Serial Port (COM2) Communications Port (COM1) Standard Serial over Bluetooth link (COM21) Standard Serial over Bluetooth link (COM4)
	Standard Serial over Bluetooth link (COM19) Standard Serial over Bluetooth link (COM12)

Select the relevant Instrument Type from the drop down list.

Ensure you have the correct **Baud Rate** (the default is 57600) and **COM Port** selected. For the Uni-Pulse the COM port is indicated as a USB Serial Port connection.

If you do not see the correct COM Port displayed in the drop down menu, select **Re-Scan COM Ports** to refresh the available COM Port list.

Select **OK** to begin the download from the software side.

The software will stay in the download screen while the Rigel device is set up to transfer data.

The download is initiated by starting the download on the Rigel tester. Instructions on how to do this will be included in the Instruction Manual for each Rigel device.

You will need to enter the Data Menu and search for the required results. Select Download to PC and then either **Download selected item?** or **Download all search items?**

NOTE: Med-eBase Data Transfer can only be conducted via USB for the Uni-Pulse.

During the download a progress bar appears on both Med-eBase and the Uni-Pulse.



When the download is complete and summary box appears on Med-eBase to enable the user to view what has been downloaded successfully.



NOTE: For detailed instructions on how to connect your Rigel device for Data Transfer, please see the instruction manual. The download is always initiated by the Rigel tester.

Also see application note 0045 **Downloading from the Rigel Uni-Pulse to Med-eBase** to aid in the download process.

4.1.3. Performance Analyser Uni-Pulse 400

The download is initiated by Med-eBase, however, the Uni-Pulse 400 needs to be set-up first. Instructions on how to do this will be included in the Instruction Manual and / or corresponding Application note for each Rigel device.

On the instrument, you will need to enter the Data Menu (Select data) and search for the required results. Select the Download to PC icon and then either **Download selected items?** or Download all search items? The Uni-Pulse 400 will display a Sending screen until the MedeBase begins the download.

NOTE: Med-eBase Data Transfer can only be conducted via USB for the Uni-Pulse 400.

Downloading results can be started from the **Download** option in the **Tools** menu or by using the

icon on the taskbar.



After selecting the **Download** option, the **Download from Tester** dialogue box will be displayed.

C Download from Tester	🕫 Download from Tester
Instrument Type Rigel Uni-Pulse 400 Rigel BP-SiM Rigel SP-SiM Rigel SA-377 Rigel ESA-377 Rigel Uni-Pulse Rigel Uni-Pulse Rigel Uni-Pulse Rigel Uni-Pulse 400	Instrument Type Rigel Uni-Pulse 400 COM Port USB Serial Port (COM23) Set UP400 Clock using computer time
Re-scan COM Ports OK Cancel	Re-scan COM Ports OK Cancel

Select the relevant Instrument Type (Rigel Uni-Pulse 400) from the drop down list.

Ensure you have the correct **COM Port** selected. For the Uni-Pulse 400 the COM port is indicated as a **USB Serial Port** connection.

If you do not see the correct COM Port displayed in the drop down menu, select **Re-Scan COM Ports** to refresh the available COM Port list.

Note: the **UP 400 Clock using computer time** can be used to set the time on the Uni-Pulse 400 if required.

Select **OK** to begin the download from the instrument.

During the download a progress bar appears on both Med-eBase and the Uni-Pulse 400

@ UP400 Download Results	8 22
Processing	
Estimated time remaining: 1s	Estimated finish time: 09:29:09
	95% Abort

When the download is complete this is indicated on the Uni-Pulse 400 and **Download Report** appears on Med-eBase to enable the user to view what has been downloaded successfully and the status of these data.



NOTE: For detailed instructions on how to connect your Rigel device for Data Transfer, please see the instruction manual.

Also see application note 0074 Downloading from the Rigel Uni-Pulse 400 to Med-eBase (version 2.6) to aid in the download process.

4.1.4. Performance Analysers Uni-Therm and Multi-Flo

To transfer data from the Uni-Therm and Multi-Flo to Med-eBase on the Rigel device go to Menu and then Data and Data Transfer. This will take the user to the Data Transfer Screen

NOTE: For detailed instructions on how to connect your Rigel device for Data Transfer, please see the instruction manual for that device.

In the Data Transfer Menu the user must select which PORT for data transfer and the data format type using OPERATION required for the necessary data transfer.

OPERATION options are:

- Export Results
- Export Test Sequences
- Export CSV
- Import Results
- Import Test Sequences

PORT options are:

- USB Cable
- USB Memory Stick
- Bluetooth (Multi-Flo only)

Downloaded files can then be stored, transferred between Rigel devices of the same instrument type, PCs or to colleagues. It also is useful with any technical enquiries if the files can be sent with the enquiry.

Results

When downloading results into Med-eBase the Rigel device will act as a REMOVABLE DISC data storage device. The data file can be copied from the drive that appears in explorer or from the memory stick directly into Med-eBase.

NOTE: When using Med-eBase, the export of data will commence from the software once the Rigel device is in the TRANSFER READY state.

Start the download from the Rigel tester by pressing START F4. A Transfer Ready indication message appears on the Rigel unit with OK to select ONLY ONCE the transfer is complete from the PC.

NOTE: When using a USB memory stick the stick needs to be inserted into the Rigel device before selecting START F4 on the Data Transfer screen.

Transfe	er Ready	
Transfe	er Ready	
Results read Attach the unit to a Pc v the results file from th app	ly for copying. ia a USB cable e removable di ears.	and copy rive that
(

Download can be started from the **Download** option in the **Tools** menu or by using the **Download** icon on the taskbar.



After selecting the **Download** option, the **Download from Tester** dialogue box will be displayed.

Chose the correct instrument type and then select the file transfer icon

Instrument Type	Instrument Type
Rigel Uni-Therm 🔻	Rigel Multi-Flo 🔹
File Transfer	COM Port
	Standard Serial over Bluetooth link (COM9) 🔹
	Remote Mode Connect to COM port
	File Transfer
	Start File Transfer

Then the user must select the removal disc which is associated with the Rigel tester (for example removal disk E:) to allow the test results to be transferred from the Uni-Therm or Multi-Flo.

When downloading files from the Rigel Uni-Therm or Multi-Flo the latest file will contain all previous Sequences stored on the Rigel device and therefore only the last file needs to be used when transferring files between the Rigel device and Med-eBase. Select the appropriate file which should be in a format:

Results_DATE_TIME.sss in Format DDMMYYY and hhmmss

Then select OK. The file name should appear in the file transfer window and then select OK to transfer into Med-eBase.

Download from	n Tester	? ×
Instrument Type	÷	
Rigel Uni-Therm	17	•
File Transfer		
quences_13122	013_110307.sss	

A download report will appear when the transfer is complete to indicate what has been transferred. The downloaded results can be viewed in Med-eBase by looking for the Asset ID or date of test.

Download Report	8 ×
	0 assets downloaded with status 'Pass'
×	0 assets downloaded with status 'Fail'
	0 assets downloaded with status 'Info'
	0 assets downloaded with no test results
•	0 assets downloaded with no new test results
	0 assets downloaded with status 'Alert'
	1 global test sequences downloaded
	OK

NOTE: If other tests e.g. electrical safety has been performed on the same device and downloaded into Med-eBase, the Performance analyser test results can be merged into the same Asset ID provided that the asset trace details are identical E.g. Only the Asset ID is entered into the Asset details window. See chapter 3 for further information.

Test Sequences

Test Sequence can be created on the Rigel devices and then downloaded into the Med-eBase software as a global test sequence.

From the data transfer screen select Start and connect the USB memory stick or cable.

NOTE: For detailed instructions on how to connect your Rigel device for Data Transfer, please see the instruction manual for that device or corresponding application note. Download can be started from the **Download** option in the **Tools** menu or by using the **Download** icon on the taskbar.



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After selecting the **Download** option, the **Download from Tester** dialogue box will be displayed.

Chose the correct instrument type and then select the file transfer icon

Instrument Type	Instrument Type
Rigel Uni-Therm 💌	Rigel Multi-Flo 🔻
File Transfer	COM Port
	Standard Serial over Bluetooth link (COM9) 🔻
	Remote Mode Connect to COM port
	File Transfer
	Start File Transfer

Then the user must select the removal disc which is associated with the Rigel tester (for example removal disk E:) to allow the test results to be transferred from the Uni-Therm or Multi-Flo.

Select the appropriate file which should be in a format:

Sequences__DATE_TIME.sss in Format DDMMYYY and hhmmss

Then select OK. The file name should appear in the file transfer window and then select OK to transfer into Med-eBase

Download fro	m Tester	8 ×
Instrument Typ	e	
Rigel Uni-Therr	n	•
File Transfer		
quences_1312	2013_110307.sss	
	ок	Cancel

A download report will appear when the transfer is complete to indicate what has been transferred.



The downloaded sequences can be viewed in Med-eBase in Tools and then Global Test Sequence or the financial control of the Med-eBase screen

From this menu the test sequence can be viewed, edited and uploaded back into a Rigel Performance analyser.

Name	Class	Instrument Type	New
1 FX_POWERand_HF_L		Rigel Uni-Therm	Edit
			Delete
			Upload

When downloading files from the Rigel Uni-Therm or Multi-Flo the latest file will contain all previous Sequences stored on the Rigel device and therefore only the last file needs to be used when transferring files between the Rigel device and Med-eBase.

Sequence files should be in format **Sequences_DATE_TIME.sss** in Format DDMMYYY and hhmmss

Please refer to application note 0048 **Downloading from the Rigel Uni-Therm and 377+** or 0049 **Uploading and downloading Test Sequences from Uni-Therm and Med-eBase** to aid in these processes.
4.2. Uploading Data from Med-eBase to a Rigel device

Test sequences can be uploaded from Med-eBase into some Rigel devices, please check the instruction manual or application note to confirm this.

NOTE: Sequences can only be uploaded to the same specific instrument test type there are associated with e.g. electrical safety test only to a Rigel 288 (+) or Rigel 62353 (+) only.

4.2.1. Electrical Safety and Vital Sign Simulators

Electrical Safety (288 (+) and 62353 (+)) and Vital Sign Simulators (Uni-Sim, BP-Sim and SP-Sim) use the same method of uploading test sequences from Med-eBase into the Rigel devices.

Sequence which have been created on Med-eBase as a Global Test Sequence or transferred from another Rigel device can then be uploaded into a Rigel electrical safety tester or vital signs simulator from Med-eBase.

On the Rigel device select OK from the Data Transfer screen to upload.

The Import Complete screen should appear to indicate that the import is complete.

Go into the Global Test Sequence menu on Med-eBase from Tools and then Global Test

Sequence or the 🛄 icon on the top left hand side of the Med-eBase screen.

Highlight the test sequence(s) that are required to be uploaded and select UPLOAD from the right hand side of the screen.

NOTE: Multiple sequences can be uploaded simultaneously by holding CTRL and the selecting multiple sequences required. However they must all be the same instrument type.

	Name	Class	Instrument Type	Ner
1	60601 - Classi	Class I	Rigel 288/62353	Edi
2	60601 - ClassII	Class II	Rigel 288/62353	De
3	62353 - ClassI - Direct	Class I	Rigel 288/62353	Uplo
4	62353 - ClassI - Diff	Class I	Rigel 288/62353	Dupl
5	62353 - ClassI - Alt	Class I	Rigel 288/62353	
6	62353 - ClassII - Direct	Class II	Rigel 288/62353	
7	62353 - ClassII - Diff	Class II	Rigel 288/62353	н
8	62353 - ClassII - Alt	Class II	Rigel 288/62353	
9	0701/0702 - ClassI - Sub	Class I	Rigel 288/62353	
10	0701/0702 - ClassII - Sub	Class II	Rigel 288/62353	
11	0701/0702 - ClassI - Diff	Class I	Rigel 288/62353	
12	0701/0702 - ClassII -Diff	Class II	Rigel 288/62353	
13	61010 CLASS 1	Class I	Rigel 288/62353	
14	61010 CLASS 2	Class II	Rigel 288/62353	
15	Test Sequence 15	-	Rigel 288/62353	
16	6010 C1	Class I	Rigel 288/62353	
17	NEW	Class I	Rigel 288/62353	
18	62353	Class I	Rigel 288/62353	
19	TEST 505 EW	ClassI	Bigel 288/62353	-

insu unent Type	1
Rigel 288/6235	3 🔹
Baud Rate	
57600	•
COM Port	
Standard Serial	over Bluetooth link (COM5) 🔹

The upload global test sequence to test dialog box will appear and the user must confirm the Instrument type, correct Baud Rate and COM Port setting for the Data Transfer. Select **OK** to begin the transfer.

4.2.2. Performance Analysers Uni-Therm and Multi-Flo

The Rigel Uni-Therm and Multi-Flo use the same method of uploading test sequences from MedeBase into the Rigel devices.

Connect a USB memory stick or cable to the Rigel device. Enter the data transfer screen and select the required OPERATION and PORT. To upload the operation needs to be IMPORT

NOTE: For detailed instructions on how to connect your Rigel device for Data Transfer, please see the instruction manual that accompanied your device. The download is always initiated by the Rigel tester.

Sequences which have been created on Med-eBase as a Global Test Sequence or transferred from another Rigel device can then be uploaded into a Uni-Therm or Multi-Flo from Med-eBase.

On the Rigel device select OK from the Data Transfer screen to upload.

The Import Complete screen should appear to indicate that the import is complete.

Go into the Global Test Sequence menu on Med-eBase from Tools and then Global Test Sequence or the ficon on the top left hand side of the Med-eBase screen.

Highlight the test sequence(s) that are required to be uploaded and select UPLOAD from the right hand side of the screen.

NOTE: Multiple sequences can be uploaded simultaneously by holding CTRL and selecting the multiple sequences required. However they must all be the same instrument type.

Name	Class	Instrument Type	^ Ne
30 Conmed_7550_&_HF_leakage		Rigel Uni-Therm	Ed
31 Conmed_7550_Full	-	Rigel Uni-Therm	De
32 Conmed_copy	-	Rigel Uni-Therm	Uplo
33 Force_1	2	Rigel Uni-Therm	Dup
34 ForceTriad_Periodic_Test	-	Rigel Uni-Therm	
35 FX		Rigel Uni-Therm	
36 FX_8C	-	Rigel Uni-Therm	
37 FX_8C_demo		Rigel Uni-Therm	=
38 Triad HF leakage checks		Rigel Uni-Therm	
39 Triad_Bip_Low	¥2	Rigel Uni-Therm	
40 Triad_Bip_Macro	*	Rigel Uni-Therm	
41 Triad_Bip_Standard		Rigel Uni-Therm	
42 Triad_HF_Leakage_Current_		Rigel Uni-Therm	
43 Triad_initial_inspection	-	Rigel Uni-Therm	
44 Triad_LigaSure_Test	-	Rigel Uni-Therm	
45 Triad_Mono_Blend		Rigel Uni-Therm	
46 Triad_Mono_Fulg	1	Rigel Uni-Therm	
47 Triad_Mono_Pure		Rigel Uni-Therm	
48 Triad Mono Spray	-	Rigel Uni-Therm	-

The upload global test sequence menu will appear and the user must indicate the instrument

....

type. Then select the file transfer

Rigel Uni-Therm	Instrument Typ	e	
File Transfer	Rigel Uni-Ther	m	•
	File Transfer		

Then the user must select the removal disc which is the Rigel device memory (for example removal disk E:) to allow the test sequence to be saved onto the Uni-Therm or Multi-Flo.

a annon text sequences	-			Upload Glab	nd Tast Sm. 9 22			
Name	Gan	Instrument Type	. New	Instrument Tv	*			
2 Kate test sequence	-	Rigal Uni-Them	201	Rigel ESA-37				
10 FORCE_FX		Rigel Uni-Thom	Delete	Die Zamier	77			
11 IAN	÷	Rigel Uni-Thoms	. Lipland	1 of addie				
12 Pvv4	*	Rigel Uni-Thorn						
13 RILFORCE,FX		Rigel Uni-Therm	1					
14 TRIAD	=	Ragel Uni-Thierre			_			
13 TSEQ		TR Sect 54				100 C		and last
16 LABL	Class 1	COL	amuter + Pennis	shie flick (E)		-		0
17 LABJ	Gare 1	00-	angraar r Asaray	and printing [the second s	1.1 T		0
LB RATI	Clere 1	Organize - Te	ew former				300.4	
19 PAT2	ClearI	Videos			Martin.	Data modified	Type	208
20 377 a Darron Test	-	B. Kathenne So	TT TTHEFT.		Pesuits (99092011 100534.sss	03/00/2013 10:05	555 File	
10 10 10 10 10 10 10 10 10 10 10 10 10 1		🗸 , Witus Box			Results 09092013 104121 still	05/09/2013 10:41	553 File	
	13 Assert Dr Dan Tes	Downland Founteen Units Units My Docum My Dicken My Dicken My Dicken Southers Sou	e e e vMu Coak (E0) Coak (E0) Coak (E0) Coak (E0)	50R5) (H1	*	η.		
		Save as type	SSS Feemat (* aus)			-	5mm (
		in fade folders					Jame Con	10

The file must be named in the format **Sequences_DATE_TIME.sss** in Format DDMMYYY and hhmmss

Rigel Uni-Therm		
1663 B		•
File Transfer		
E:/Sequences_tseq.	SSS	

Then select OK to upload the sequence.

Go back onto the Rigel device and select OK from the Data Transfer screen,

The Import Complete screen should appear to indicate that the import is complete.

Please refer to application note 0049 Uploading and downloading Test Sequences from Uni-Therm and Med-eBase to aid in this process.

5. Asset Details Tabs

5.1. Test Results Tab

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

e Anesta 🛃		Status	Name	Description	Last Test	Retest Date	
Exemple Database.db Broomfield	1	pu -	125876	5 Lead ECG	31/92/2014	11/08/2014	
EBME	2	190	65807	HodIG.	2049172013	20.03/2004	
- S Cient 1	3	×	51.47	18	21/10/2013	21/04/2014	
Hospital 1	4	in .	011012	ESU	29/97/2013	29/94/2934	
Hospital 3	3	pu -	01.234	ESU	30/07/2013	30.04/2014	
Site 1	6	pu -	12548	ESU	30/97/2013	36/04/2014	
Recycled	7	×	0851,23	ESU	29/08/2013	25/05/2014	
		0	defib2		06/01/2014	06/01/2015	
	9	14	125786		26/11/2013	26/05/2014	
	10	P	25459		15/01/2014	15/07/2014	
	11	1	384903		15/91/2014	15/97/2014	
	12	PR-	47851	PROBE 123	15/01/2014	15/07/2014	
	33	in .	Bittun	infusion	12/02/2014	12/92/2014	
	14		12 LEAD ECG				
	15	pu.	56		10/02/2014	10/02/2015	
	Asset Des Asset Text	sly Dotala Te Ramita	st Results Applied Parts To	eet Securation .			
		Date Teste	al Brobument Type Over	al Ratus			(Teals
	1.1	0.09/2013	Rigel 288/62358	64			Print Centific
							Test Septe
							Aquited Fin
							Delarte

Each row of the table in the Test Results tab refers to a complete result set.

• Use the **Results** button to display the individual **Test Results** for each test.

overali Result		Details							
I			Test Date:	20/09/2013 11:03	:34	Tested By:	Admin		
ŀ	J	Test Inst	rument Type:	Rigel 288/62353		Test Mode: Automa	Automati	üc	
		Test	ter Serial No.:	Serial No.: X45-0450					
lest Re	sults								
	Neutrai	voitage						<u>ت</u>	
0	Load Cu	rrent						۵	
0	Load Te:	st							
			(ca.ca.i)					0	
100	Enclosure Leakage (60601)								
		Status	Polari	ty SFC	Limit (µA	k) Resu	lt (µA)	AC/DC	
	1	He o	Normal	2	100.0000	<4,000		AC/DC combi	
	2	P	Normal	Neutral O	/C 500.0000	<4,000		AC/DC combi	
	3	P	Reversed		100.0000	<4.000		AC/DC combi	
	4		Reversed	Neutral O	/C 500.0000	<4.000		AC/DC combi	
Comme	nts								

A green flag indicates the test result is a pass. The blue flag indicates the result is for information only. A red cross is a fail. Click on the **Plus** symbol to expand the test result information.

Note: Any additional user comments can be entered in the Comments field. These comments will appear on the test certificate.

- Use the Print Certificate button to create the test certificate for the highlighted test result.
- Use the Test Sequence button to view the Test Sequence used for this test.

Name: Instrument Type:	60601 - ClassII	
	Rigel 288/62353	;
quipment Class:	Class II	
est Sequence		
Endosure Lea	kage (60601)	۵
Patient Leaka	ge (60601)	۵
Patient Auxilia	ry Leakage (60601)	۵
Patient Leaka	ge F Type (60601)	

Use the Applied Parts button to display the Applied Part configuration for this test when testing using the Rigel 288/62353 (+).

	Name	Connection Class	Num Connections	Add
1 6	1	Type CF	3	Remove
	New Ap Module	Туре В	1	Move Us
	New Ap Module	Type B	1	Move Dov
3 8	New Ap Module	Type B	1	
4 9	New Ap Module	Туре В	1	
	New Ap Module	Type B	1	
b	New Ap Module	Type B	2	

• Use the **Delete** key to permanently delete a highlighted test result.

5.2. Applied Parts Tab for Rigel 288/62353 (+)

The **Applied Part** tab displays the settings of the patient connections and applied parts for electrical safety testing using the Rigel 288/62353 (+). Each new Applied Part type has a colour code so that it can be distinguished from other Applied Part types in the **Connections** diagram.

et Details Tes	t Results Applied Pa	Test Seque	ence		
Connections	Name	Connection Cla	55	Num Connections	Add
6	1	Type CF	1		Remove
	New Ap Module	Туре В	1		Move Lip
	New Ap Module	Type B	1		Move Dow
3 8	New Ap Module	Туре В	1		E
A B	New Ap Module	Type B	1		
	New Ap Module	Type B	1		
5 10	New Ap Module	Туре В	1		
	New Ap Module	Туре В	1		
	New Ap Module	Type B	1		
					*

The Applied Parts can be set-up for new Assets using this tab. For previous tests, the Applied Part fields are for information only and cannot be edited.

onnections	Name	Connection	Class	Num Connections	*	Add
1 6	1	Type CF	1			Remove
	EXAMPLE	Туре В	1			Move Up
	New Ap Module	Type B	1			Move Dow
3 8	New Ap Module	Туре В	1			
4 9	New Ap Module	Type B	1			
	New Ap Module	Type B	1			
	New Ap Module	Туре В	1			
	New Ap Module	Type B	1			
	New Ap Module	Type B	1			

5.3. Test Sequence Tab

The **Test Sequence** tab displays the test sequence and individual test settings for this Asset. From this screen you can customise the test sequence associated with this Asset.

et Details lest K	esults Applied Parts	Test Sequence			
trument Type: Rigel	UNE-SIM ·				
fo					
ame: "Default Adult	t				
est Sequence					
User Test				e î î	Add Delete
SP02 Test Settings					Move Down Move Up
				G	Import
Monitor Type:	Nellcor (Oximax)	•			
SP02:	95.0	%	Heart Rate: 90	bpm	
Perfusion:	5.0	%	Skin Colour: Medium	•	
	6 × 1			•	

Select the **Add** button to add a test above the selected line. Select **Delete** to remove the selected line from the Test Sequence. Select **Import** to insert a Global Test Sequence into the Test Sequence. Select **Move Up/Move Down** to move the selected test up or Down the Test Sequence. Use the Plus symbol to expand and view the details of an individual test.



Each asset has an editable test sequence for each instrument type. This can be accessed via the **Instrument Type** drop down menu.

5.4. Searching for an Asset

Med-eBase contains a search facility to quickly find an Asset within the database. This can be accessed either by clicking on the **Search** icon on the top menu bar, or by selecting the **Search** tab in the **Browse Assets** window.

Asset Name:	
Description:	
Client:	
Site:	
Location:	
Manufacturer:	
Model:	
Serial No.:	
Service Code:	
st Date from:	01/01/2000 -
lo: 🛄	01/01/2000 ~
Overall Status:	

Enter the relevant **Search** criteria to filter the search results.

The results will be shown in the **Asset Table** view panel.

More than one search criteria may be entered in order to narrow down the results even further.

Filtered search and finding assets in Med-eBase can be done by using the wildcard '*' in the search field. This will allow for various combinations to be searched for. For example to search for an asset ID which has '234' in the middle of its name you would enter into the Asset ID Search field '*234'. All assets with 234 in their name will be displayed. The position of the * indicate what the software will search for:

- ✤ *123 will look for assets with values before 123
- ✤ 123* will look for assets which start 123
- ✤ 1*3 will look for assets with 1 and 3 with some values in between.

To switch back to the **Browse Assets** view, select the **Browse** tab at the bottom of the window.

6. Comparison Alerts

The built-in **Comparison Alerts** feature can be activated to automatically warn users when test result values have deviated from a user-definable criteria or value. This provides peace of mind and avoids the user having to manually analyse their data. Test values can drift over time and whilst the latest values might still meet the PASS / FAIL criteria, a significant drift from previous or typical values could indicate a future problem or failure. Comparing data, will give you the assurance that your current downloaded data meets your expectation.

Select Tools, Comparison Alerts. This will open the Comparison Alerts window.



Specify a percentage or amount results change and Med-eBase will display assets where results vary accordingly.

5	% OR	Ω 0
Alert on insulation results that	vary by more than .	
20	% OR	10 MΩ
Alert on leakage results that v	ary by more than	
20	% OR	10 µA

Select **Find Alerts** to list all results sets that contain at least one result alert. Select **Yes** to view the Assets. To remove all active alerts, select **Remove Alerts**.

a Med	ebase	<u></u>
2	The search found 5 alert(s). Would you like to view	these assets now?
	Yes No	

If any results are identified by the **Comparison Alerts**, then they will be identified with a warning symbol for user attention.

Rigel Med-eBase - D:/Documents as	nd Setting	Jank/Desk	top/Med-eBase V2/Databa	ses/Jan_Testing.db	
File Edit Tools Help					
688888		8			
Browse Assets		Status	Name	Description	Last Tesi
Asset Name:	J	4	851004183		16/04/2009
Description:	z	AL.	903559		30/04/2009
Clevit:	3	4	FAN	ACC600	21/10/2009
Ske:	4	à	2584		04/11/2009

7. Creating Test Templates

Med-eBase contains a function to create your own custom Test Sequence which can be uploaded from Med-eBase to your Rigel device.

This function allows you to plan your Test Sequence while using your PC, as an alternative to creating the Test Sequence using your Rigel device.

Select Tools, Global Test Sequences or the global test sequence icon on the task bar.



This will open the Global Test Sequences window.

	Name	Class	Instrument Type	^	New
1	60601 Class 1		Rigel 288/62353		Edit
2	FORCE_FX	22	Rigel Uni-Therm		Delete
3	PVM	-	Rigel Uni-Therm		Upload
4	RLI_FORCE_FX		Rigel Uni-Therm		Duplicate
5	TRIAD		Rigel Uni-Therm		
6	TSEQ	127	Rigel Uni-Therm		
7	60601	Class I	Rigel 288/62353		
8	G400 model 777000		Rigel Uni-Therm		
9	G400 Electrical Safety	Class I	Rigel 288/62353		
10	1221	129	Rigel Uni-Therm		
11	1222	-	Rigel Uni-Therm		
12	1258		Rigel Uni-Therm		
13	288		Rigel Uni-Therm		
14	ammmmm	127	Rigel Uni-Therm		
15	CONMED_5000	*	Rigel Uni-Therm		
16	ESU2		Rigel Uni-Therm		
17	Force_2_Broomfield	-	Rigel Uni-Therm		

7.1. Creating a new Global Test Sequence

To create a new Global Test Sequence, select **New**. This will open a blank Test Sequence (note this function is not applicable to all instruments).

nfo				
Name:	1			
Instrument Type:	Rigel 288/62353			,
Equipment Class:	-			
est Sequence				
			Add	Delete
			Move Down	Move Up
			Import	

Enter the **Name** for your new Global Test Sequence. This should be something that is recognisable to yourself so you can easily identify the Global Test Sequence once it has been uploaded to your device.

Select the **Instrument Type** and **Equipment Class for Rigel 288 (+) ONLY** from the drop down menu. This will dictate which individual tests sequence elements are available for this Global Test Sequence.

Info			
Name:	example		
Instrument Type:	Rigel 288/62353		
Equipment Class:	Class I		,
Test Sequence			
		Add	Delete
		Move Down	Move Up
		Import	

To add a test, click Add

× 1
1
1
=
1

This will display the tests that re available for your device. Highlight the appropriate Test Sequence Element and select **OK**.

The selected Test Sequence Element will now appear as part of your new Global Test Sequence. You now have the option to edit the test parameters by selecting the + icon at the end of each individual test to open the test options. This allows you to change limits (if required), timings and number of tests etc.

Name:	example									
Instrument Tunar	Dicol 299/6	2252								
Equipment Class:	Class I	2335								•
Test Sequence Enclosure Leak Duration: Mains Pass Test Condi	kage (60601 - / Fail Limit: tions	2 100	s µA	SFC Pas	is / Fail Limit:	500	μA	н н	Add Move Down Import	Delete Move Up
📝 Ear	th Open ins Polarity F	veversed	Neutral C)pen	Source	Reversed		•		

To insert the Test Sequence Elements from another Global Test Sequence into your new Global Test Sequence, select **Import**. This will give you the option of importing an existing Test Sequence Element.

nfo			
Name:	example		
instrument Type:	Rigel 288/62353		
Equipment Class:	Class I		
Enclosure Lea	kage (60601)	0	Add Delete Move Down Move Up Import Import test sequences
			OK Cance

Highlight the Global Test Sequence and press the **Select** button.

Name	Class	Instrument Type	A New
1 60601 Class1		Rigel 288/62353	Edit
2 FORCE_FX		Rigel Uni-Therm	≘ Delete
3 PVM	-	Rigel Uni-Therm	Upload.
4 RLI_FORCE_FX		Rigel Uni-Therm	Duplica
5 TRIAD		Rigel Uni-Therm	
6 TSEQ	27	Rigel Uni-Therm	
7 60601	Class I	Rigel 288/62353	
8 G400 model 777000	12	Rigel Uni-Therm	
9 G400 Electrical Safety	Class I	Rigel 288/62353	
10 1221	27	Rigel Uni-Therm	
11 1222	-	Rigel Uni-Therm	
12 1258		Rigel Uni-Therm	
13 288		Rigel Uni-Therm	
14 arrrrrrrrrrrr	27	Rigel Uni-Therm	
15 CONMED_5000		Rigel Uni-Therm	
16 ESU2		Rigel Uni-Therm	
17 Force_2_Broomfield		Rigel Uni-Therm	
18 FX_POWERand_HF_Leakage	27	Rigel Uni-Therm	
19 KATE	-	Rigel Uni-Therm	+ Select

NOTE: The imported sequence must be the same instrument type.

To delete an individual Test Sequence Element from your Global Test Sequence, highlight the individual Test Sequence Element and select **Delete**.

To move an individual Test Sequence Element up or down the Global Test Sequence, highlight the individual Test Sequence Element and select **Move Up/Move Down**.

ino					
lame:	example				
instrument Type:	Rigel 288/62353				-
Equipment Class:	Class I				•
Endosure Lei	skage (60601)		•	Add	Delete
Visual Test				Move Down	Move Up
Earth Bond			ш	Import	
Patient Leaka	ge (60601)				
Patient Leaka	ge F Type (60601)	0			
Enclosure Lea	skage (60601)	E	÷		

Select **OK** to save your Global Test Sequence.

You will be redirected back to the **Global Test Sequence Menu** where you 'New' sequence should be located and is ready to be uploaded.

7.2. Editing a Global Test Sequence

To edit a Global Test Sequence, highlight the Test Sequence and select Edit.

Name	Class	Instrument Type	-	New
71 0701/0702 - ClassII - Sub	Class II	Rigel 288/62353		Edit
72 0701/0702 - ClassI - Diff	Class I	Rigel 288/62353		Delete
73 0701/0702 - ClassII -Diff	Class II	Rigel 288/62353		Upload.
74 61010 CLASS 1	Class I	Rigel 288/62353		Duplicat
75 61010 CLASS 2	Class II	Rigel 288/62353		
76 Test Sequence 15	27	Rigel 288/62353		
77 6010 C1	Class I	Rigel 288/62353		
78 NEW	Class I	Rigel 288/62353		
79 62353	Class I	Rigel 288/62353		
80 TEST 505 FW	Class I	Rigel 288/62353		
31 Test Sequence NOV2013	Class I	Rigel 288/62353		
32 Test Sequence 21	- .50	Rigel 288/62353		
33 1B01	Class I	Rigel 288/62353		
84 KATE TEST	Class I	Rigel 288/62353		
85 *60601 - ClassI	Class I	Rigel 288/62353		
86 *62353 - ClassII - Direct	Class II	Rigel 288/62353	Е	
87 example	Class I	Rigel 288/62353		

This will open the Global Test Sequence screen so that you can edit, add or remove any of the individual Test Sequence Elements in this Global Test Sequence.

lame:	evemple			
nstrument Type:	Rigel 288/62353			
Equipment Class:	Class I			•
Patient Leak	age (60601)		Add	Delete
			Move Down	Move Up
Patient Leak	age F Type (60601)	<u>ل</u>	Import	
Endosure Le	akage (60601)	8		
Earth Leakag	e (Direct)			
Patient Auxil	ary Leakage (60601)	8		

Click **OK** to save the changes or **Cancel** to exit without saving.

7.3. Duplicate a Global Test Sequence

To copy a **Global Test Sequence**, highlight the test sequence and select **Duplicate.** This will allow the user to copy an existing global test sequence. The new sequence will be assigned the name of the original sequence with an [X] where is X is the number of iterations with the same name. Once the sequence has been duplicated the user can then rename the sequence and edit the tests within the new sequence.

Name	Class	Instrument Type	 New.
71 0701/0702 - ClassII - Sub	Class II	Rigel 288/62353	Edit.
72 0701/0702 - ClassI - Diff	Class I	Rigel 288/62353	Delet
73 0701/0702 - ClassII -Diff	Class II	Rigel 288/62353	Upload
74 61010 CLASS 1	Class I	Rigel 288/62353	Duplica
75 61010 CLASS 2	Class II	Rigel 288/62353	
76 Test Sequence 15		Rigel 288/62353	
77 6010 C1	Class I	Rigel 288/62353	
78 NEW	Class I	Rigel 288/62353	
79 62353	Class I	Rigel 288/62353	
80 TEST 505 FW	Class I	Rigel 288/62353	
81 Test Sequence NOV2013	Class I	Rigel 288/62353	
82 Test Sequence 21	2	Rigel 288/62353	
83 1801	Class I	Rigel 288/62353	
B4 KATE TEST	Class I	Rigel 288/62353	
85 *60601 - ClassI	Class I	Rigel 288/62353	
86 *62353 - ClassII - Direct	Class II	Rigel 288/62353	E
87 example	Class I	Rigel 288/62353	
88 60601 Class I[1]	Class I	Rigel 288/62353	_

7.4. Deleting a Global Test Sequence

To delete a **Global Test Sequence**, highlight the test sequence and select **Delete**.

Note: You will not be prompted for confirmation. The Global Test Sequence cannot be recovered once deleted.

Name	Class	Instrument Type	-	New
1 60601 Class 1	Class I	Rigel 288/62353		Edit
2 FORCE_FX	27	Rigel Uni-Therm	н	Delete
3 PVM	-	Rigel Uni-Therm		Upload.
4 RLI_FORCE_FX	×.	Rigel Uni-Therm		Duplicat
5 TRIAD		Rigel Uni-Therm		
6 TSEQ		Rigel Uni-Therm		
7 60601	Class I	Rigel 288/62353		
8 G400 model 777000		Rigel Uni-Therm		
9 G400 Electrical Safety	Class I	Rigel 288/62353		
10 1221	127	Rigel Uni-Therm		
11 1222		Rigel Uni-Therm		
12 1258		Rigel Uni-Therm		
13 288	150	Rigel Uni-Therm		
14 ammmmmm	1 <u>11</u>	Rigel Uni-Therm		
15 CONMED_5000	-	Rigel Uni-Therm		
16 ESU2		Rigel Uni-Therm		
17 Force_2_Broomfield		Rigel Uni-Therm		
18 FX_POWERand_HF_Leakage	27	Rigel Uni-Therm	-	

7.5. Test Templates for the Rigel 288/62353 (+)

Templates can be created on Med-eBase for specific makes and models of devices to enable users and faster testing. The templates can be uploaded onto the Rigel 288 (+) and then the user can enter the device's serial number and run the test without requiring entering any other details as they are linked to the template.

Equipment required

- PC with Med-eBase software
- Rigel 288 (+) firmware version 5.00 or higher
- Required test sequence/user manuals for devices
- Bluetooth or serial communication between PC and Rigel 288 (+)

Creating the Template using Med-eBase

Firstly, the template needs to be created in Med-eBase. When Med-eBase is opened select either Edit and then Add New Asset or the ^① icon on the right hand side of the screen.

File	Edit] Tools Help	
1	0	Add New Asset	3
Browse	0	Delete Asset(s)	T
Þ	33	Delete Client	
	圆	Delete Site	
	匙	Delete Location	
	88	Search	
		Empty recycle bin	
	-		-

On the Asset details tab the Asset Name and Equipment class need to be entered. The Asset Name should be the name for the template e.g. 1BF1 or 12 lead ECG. The select Apply.

The description may also be filled in to describe the applied parts. All other fields are device specific and can therefore be added when the template is on the Rigel 288 (+) or after the results are downloaded back into Med-eBase after the testing is complete.

NOTE: The Asset ID field on the Rigel 288 (+) is case sensitive and therefore it is advised to keep names simple and to one case style.

sset Details	Test Results Applied Parts Test Sequence		
Details			
Asset Name:	18F1	Serial No.:	
Description:	NIEP	Manufacturer:	
Client:	-	Model:	
Site Name:	· · · · · · · · · · · · · · · · · · ·	Service Code:	
Location Name:	-	Equipment Class:	Class I .
lest Period		AP Configuration	an -
à	Re-test Period (months): 0 🛊 Next Test: No Test Scheduled	[1BF]	View

On the Applied Parts tab the Applied Parts need to be added by selecting the Add icon on the right hand side of the screen.

Once an Applied Part has been added double click on the required fields to change the Name, Connection Class and Number of Connections. E.g. For a 12 Lead ECG machine there are 10 CF APs. For defibrillators you will need to add another AP as defibrillators have both CF and BF APs; 2 BF for the paddles and 3 CF for 3 Lead ECG. Then select Apply.

t Details Tes	t Results Applied P	arts Test Sequ	ence		
Connections	Name	Connection CI	855	Num Connections	Add
	New Ap Module	Type BF	1		Remove
2 7					Move Up
					Move Down

On the Test Sequence tab make sure that the Instrument Type is Rigel 288/62353 (+). The test sequence to be performed needs to be added or imported in this tab.

ument Type: Rigel 288/62353 💌	
me:	
t Sequence	
	Add Delete
	Move Down Move Up
	Import

Global test sequences can be imported using the Import... icon which will open the global test sequence menu. The appropriate test sequence can be highlighted and then Select to import the sequences into the Asset Template.

	Name	Class	Instrument Type	- ^	New
27	force_1c	140	Rigel Uni-Therm		Edit
28	FORCE_2	2 3 8	Rigel Uni-Therm		Delete
29	Force_2_2graphs		Rigel Uni-Therm		Upload
30	Force_2a	- 10 10	Rigel Uni-Therm		
31	force_4		Rigel Uni-Therm		
32	FX	a - 3	Rigel Uni-Therm		
33	FX_2		Rigel Uni-Therm		
34	FX_3	-20 	Rigel Uni-Therm	-	
35	FX_4	840	Rigel Uni-Therm		
36	FX_POWERand_HF	3 4 8	Rigel Uni-Therm	E	
37	POWER_TEST	(3)	Rigel Uni-Therm		
38	60601 CLASS I	Class I	Rigel 288/62353		Select

Alternatively tests can be added to create a sequence using the Add... icon. Move down, Move Up and Delete allows the user to organise the test sequence as desired.

NOTE: Holding down Ctrl when selecting multiple tests allows them to be added simultaneously. The tests will be added in the order they were select and can therefore may creating a test sequence easier

e: 60601 Class I		
Sequence		
and and		Add Delete
cardh bong	L	Move Down Move Up
Earth Leakage (Direct)		Import
Endosure Leakage (60601)	۵	
Patient Leakage (60601)	۵	
Patient Auxiliary Leakage (6060 I)	8	
Patient Leakage F Type (60601)		

The Name selected in the Info field will be the test name given on PDF and certificates once the test results are downloaded. E.g. 60601 Class 1 or 12 lead ECG class 1.

When complete select Apply to save changes. Upload the template onto the Rigel 288 (+)

NOTE: This feature is only compatible with Rigel 288 (+) devices that have firmware Version 5 and higher.

Please see application note 0029 on how to upgrade Rigel 288 (+) Firmware for this feature to be available.

Firstly ensure that the PC and Rigel 288 (+) are connected either via RS 232 cable or Bluetooth.

Go to F4 > Data Transfer> Upload from PC> F4 tick to confirm

On Med-eBase select the Asset Template so that is it highlighted. Alternatively hold down Ctrl to add multiple assets or Ctrl A to select all.

	Status	Name	Description	Last Test	Retest Date
1	۲	1*AP-BF Cl2 Dir	NIBP/SPO2/Perf		
2	Θ	18F1	NIBP/SPO2/Perf		
3			ECG		
4	8				
5					
6	8				
7	۲				
8	0				
9	8	Multi PA-5*CF	3*ECG+NIBP+S		
10	8		NIBP/SPO2/Perf		
11	۲	1*AP-CF CI2 Dir	NIBP/SPO2/Perf		
12	0	2"AP-BF CEL Dir	Def/Perf		
13	Θ				
14	8		Def/Perf		
15	8				
16	8	Multi PA-5*CF	3*ECG+NIBP+S		
17	۵				

Right click and select upload or select the upload icon from the right hand side of the screen or go to Tools> Upload.



Select the correct Instrument Type from the drop down list. The Default baud rate for the Rigel 288 (+) is 57600. Select the correct COM port which is the Bluetooth connection (you may need to look at your Bluetooth properties to check the correct COM port) or COM 1 if using a RS 232 serial cable.

Select Ok and once the Bluetooth icon appears in the right corner of the Rigel 288 (+) select Ok to start the upload.

Instrument Type				
Rigel 288/62353	•			
Baud Rate		I Made	-B	5
57600	•	C Iviede	ebase 🧧	
COM Port			Press Ok when ready to s	en
Standard Serial over Bluetooth link (CC	OM18) 🔻			
			OK Cancel	

7.6. **Test Templates for the Rigel Uni-Sim**

To create a test sequence in Med-eBase select the Global Test Sequence icon or select Tools and then Global Test Sequence...

Select New

	Name	Class	Instrument Type	*	New
1	Aesculap_GN_60		Rigel Uni-Therm	(- 21)	Edit
2	Force_2	121	Rigel Uni-Therm	Ш	Delete
3	Force_EZ_8C		Rigel Uni-Therm	1000	Upload
4	Force_FX_8C		Rigel Uni-Therm		
5	Force_Triad	-38	Rigel Uni-Therm		
6	Olympus_UES-40	120	Rigel Uni-Therm		
7	ESG-100		Rigel Uni-Therm		
8	BIOMED CLASS 1	Class I	Rigel 288/62353		
9	LCD	Class I	Rigel 288/62353		
10	US	Class I	Rigel 288/62353		
11	TestCode-TC03	1990	Rigel 288/62353		
12	TestCode-TC01	-	Rigel 288/62353		

Enter the sequence name and also the instrument type.

NOTE: Test sequences are for one instrument type only and therefore Med-eBase will not allow the user to mix tests from different Rigel devices (e.g. electrical safety and Vital Sign Simulations).

Select Add to insert a test or import to import an already created global test sequence. For the Uni-Sim test option are shown in the image below.

	Listing all test sequence elements for Rigel UNI-Sim
Text Reports	NIBP Pop-off lest NIBP Test Settings SP02 Test Settings Patient Test Settings Start All Tests NIBP Static Pressure Test NIBP Stop Static Pressure Test IBP Static Test Performance Wave Test User Test
Covering Covering	OK Cancel

9 8

The user can select multiple tests by holding ctrl when selecting and the order of selection is remembered in the sequence when OK is selected.

Name:		Example Test Sequence			
Instrumer	nt Type:	Rigel UNI-SIM			٣
Equipmen	t Class:				÷
Test Sequ	ence				
NIRP	Test Set	tinos		Add	Delete
				Move Down	Move Up
SP02	Test Set	tings	0	Import	
Patie	nt Test S	ettings	0	Important	
Start	All Tests		8		

Select the Expand on each individual test to change the test setting and during of test in the start all tests field.

in e							
ine:	Example Test Sequence						
and a second second	Nope sea sen						_
st Sequence						444	Dariate
N25P That Set	Hgi.				E	March Down	- ministra
Honitor Ty	per Dates Oneda 55	•				avort	
Adult / 10	ant Adult	•	Systelic / Destelico	100/80 *	nineig .	second and	
HeartRate	50	toper	Alse Wares	Lovi ·			
		D-Carne Gri	eh 🛛				
GODERSE		_					
program parts					-		
Patient Test St	contra -						
4		17-1			1.1		

After each group of simulations the start all tests must be inserted so that each simulation or change of settings has a set time for the Uni-Sim to recognise.

utrument Type:	Rigel Lind-SM			
adment Gaus:				
st Sequence				
User Test		u.	Add	Delete
NEP Test Set	lings	0	MoreDown	(Hereite
SP02 Test Set		8	Irport	
Patient Test 5	ettinge	9		
Stert All Texts				
NDP Test Set	tras	a		
SP02 Test Set	ira			
Patient Test 5	ettings			
Shert All Texts		8		

Once the test sequence is complete select OK.

Please refer to application note 0057 Creating Test Sequences for Rigel Uni-Sim for further details of this process.

Creating and uploading 'O Curves' into Med-eBase

To add an 'O Curve' onto the Med-eBase V2 software you will need to add the 'O Curve' to a folder structure which is location outside of the Med-eBase program.

For Windows XP: Go to C:\Documents and Settings\All Users\Application Data\Rigel\Med-eBase V2\OCurves

For Windows 7: Go to C:\ProgramData\Rigel\Med-eBase V2\OCurves

NOTE: Program Data and Application Data may be hidden folders.

The original csv file used to download the 'O Curve' onto the Uni/BP Sim needs to be altered by erasing lines 1 to 4.

The CSV file needs to be saved in the follow folder structure which is critical for loading 'O Curves' onto Med-eBase:

<O Curves>

<Monitor Type name> e.g. Datascope Passport 2. These folder names will be shown in the Monitor Type drop down list in Med-eBase

<Adult>

<Infant> These folders will contain the csv file for Adult or Infant curves <CSV files> Each curve should be saved using the format of Systolic and Diastolic values as 3 digits e.g. 080_040.csv.

Re-open Med-eBase V2 and click on **Tools**, then **Global Test Sequences** and then **New**.

Then select **BP/Uni Sim** and enter the name of the new test sequence.

Select Add... then select 'NIBP Test Setting', click on the + and there will be a drop down list in

Monitor Type field where you can select your 'O Curve'.

Then in the **Adult/Infant** field select the type of patient and the chose the Systolic/Diastolic field to select the exact 'O Curve' you want to add to the test sequence.

et Details Test Re	sults Applied Parts Test Sequence				
ument Type: Rigel L	INI-SIM 👻				
,					
ne: Default Adult					
t Sequence					
					Add Delete
NIBP Test Settings					Move Down Move Up
Monitor Type:	Datex-Omeda S5	•			Import
Adult / Infant:	Datascope Accutor Plus Datascope Duo	Systolic / Diastolic:	120/80	▼ mmHg	1
Heart Rate:	Datascope Passport 2	bpm Pulse Volume:	Medium	- I	
	Default	O-Curve Graph			
	Irtegain Omron Intellisense				
15	Welch Allyn Propag				
75					
160					
100					

Please refer to application note 0040 Creating and uploading 'O Curves' on Uni-Sim and MedeBase for instructions on how to create O curve and further information on this feature.

Uploading 'R Curves' into Med-eBase

Manufacturers of SP02 monitors all use different algorithms to determine the R curves. By creating a custom 'R Curve' for a particular monitor or manufacturer types the UNI-SIM or SP-Sim can be made to match the SP02 Monitor more accurately.

The purpose of this document is to provide information on how to create 'R Curves' for an SP02 monitor and add them to part of a test sequence within Med-eBase.

NOTE: These 'R Curves' are for use with the optical finger adapter box only

Please refer to application note 0061 Creating and uploading 'R Curves' on Uni-Sim and MedeBase for steps on how to create R Curves and further information on this feature.

We strongly advise that the 'R Curves' are inserted into Med-eBase V2.4.1 and above R Curves data folder to enable users to create test sequences using the software which can then be uploaded to the UNI/SP-Sim.

The 'R Curve' data folder can be found in one of the following locations which Med-eBase has been installed on.

For Windows XP:

C:\Documents and Settings\All Users\Application Data\Rigel\Med-eBase V2\RCurves

For Windows 7:

C:\ProgramData\Rigel\Med-eBase V2\RCurves

NOTE: Program Data and Application Data may be hidden folders.

Creating Test Template using R Curves

Open Med-eBase and select Tools > Global Test Sequences > New.

Then select SP/Uni Sim and enter the name of the new test sequence.

Add... then select 'SP02 Test Setting', click on the + and there will be a drop down list in Monitor Type field where you can select your 'R Curve'.

Test Sequence			2 🛛
Tofo Name: UP Instrument Type: Ra Equipment Class: - Test Sequence SPCC Test Setting	991 pilologet		Add Delete
Monitor Typen SPO3 Perfusion LED Subtri	Takes (David) V Horn (David) N Horn (David)	bon	Interesting Provide
			OK Cancel

Any errors which have been detected in an R curve script file will be displayed in a dialogue box and the Curve will not be included in the drop down list. This was included so any errors can be caught with custom R curves which are user created.

Errors during	parsing of R-Curves
Masimo ; Nui	per of adaptors found do not match the counter value

Editing existing Test sequences

Existing test sequences can be downloaded from the UNI/SP-Sim into Med-eBase and will include a custom or existing R Curve data. If the data is a custom R curve which Med-eBase does not have in its R curve data folder, the R curve name from the test sequence will be included in the drop down list previously shown until another curve is selected.

Therefore it is strongly advises that all R Curves are not only stored within the R Curve data folder for Med-eBase but also on the UNI-SP-Sim itself to allow test sequences to be easily created and transferred between the Rigel unit and the software.

7.7. Test Templates for the Rigel Uni-Therm

To create a test sequence for the Uni-Therm in Med-eBase select the Global Test Sequence icon

or select Tools and then Global Test Sequence

Select New

	Name	Class	Instrument Type	1	New
1	Aesculap_GN_60	-	Rigel Uni-Therm		Edit
2	Force_2	121	Rigel Uni-Therm	111	Delete
3	Force_EZ_8C	-	Rigel Uni-Therm		Upload
4	Force_FX_8C		Rigel Uni-Therm		
5	Force_Triad	-23	Rigel Uni-Therm		
6	Olympus_UES-40	120	Rigel Uni-Therm		
7	ESG-100		Rigel Uni-Therm		
8	BIOMED CLASS 1	Class I	Rigel 288/62353		
9	LCD	Class I	Rigel 288/62353		
10	US	Class I	Rigel 288/62353		
11	TestCode-TC03		Rigel 288/62353		
12	TestCode-TC01		Rigel 288/62353		
	T 10 1 TC02		0: 1000/00070	-	

Enter the sequence name and also the instrument type.

NOTE: Test sequences are for one instrument type only and therefore Med-eBase will not allow the user to mix tests from different Rigel devices (e.g. electrical safety and Electrosurgical).

Select **Add** to insert a test or import to import an already created global test sequence into the new global test sequence. For the Uni-Therm test option are shown in the below image.



The user can select multiple tests by holding ctrl when selecting and the order of selection is remembered in the sequence when OK is selected.

	(2277		
Name:	ESU 1		
Instrument Type:	Rigel Uni-Therm		
Equipment Class:			
Test Sequence			
REM Test			Add Delete
		M	ove Down Move Up
HF Leakage	est		mport
Graph Power	Test	0	
HF Leakage 1	et	8	
User Test		B	

Select the Expand ¹⁰ on each individual test to change the test setting and during of test in the start all tests field.

ifo				
ane:	ESU 1			
nstrument Type	Rigel Uni-Therm			
quipment Class:				v
est Sequence				
REM Test			0	Add Delete
HF Leakage	Test	ſ		Move Down Move Up
				Import
ESU On 1	lime			
2		s		
ESU OIT	line			
ES I Pos	er	9		
100	-	W		
Test Time			8	
10		s		
Start De	ay			
200		ms		
Load Res	istance			
200		Ω 🗊		
Pass / Fa	il Linit			
200		mA		
Test Con	figuration			
[1111		•		
Graph Power	Test		8	
HELaskana	Tert		8	

After each group of simulations the start all tests must be inserted so that each simulation or change of settings has a set time for the Uni-Sim to recognise.

Once the test sequence is complete select OK.

To upload the test sequence into the Uni-Sim highlight sequence and select upload

Name	Class	Instrument Type	^	New
72 0701/0702 - ClassI - Diff	Class I	Rigel 288/62353		Edit
73 0701/0702 - ClassII -Diff	Class II	Rigel 288/62353		Delete
74 61010 CLASS 1	Class I	Rigel 288/62353		Upload
75 61010 CLASS 2	Class II	Rigel 288/62353		Duplcate
76 Test Sequence 15	*	Rigel 288/62353		
77 6010 C1	Class I	Rigel 288/62353		
78 NEW	Class I	Rigel 288/62353		
79 62353	Class I	Rigel 288/62353		
80 TEST 505 FW	Class I	Rigel 288/62353		
81 Test Sequence NOV2013	Class I	Rigel 288/62353		
82 Test Sequence 21	-	Rigel 288/62353		
83 1801	Class I	Rigel 288/62353		
B4 KATE TEST	Class I	Rigel 288/62353		
85 *60601 - ClassI	Class I	Rigel 288/62353		
86 *62353 - ClassII - Direct	Class II	Rigel 288/62353		
87 example	Class I	Rigel 288/62353	=	
88 60601 Class I[1]	Class I	Rigel 288/62353		
89 ESU1	-	Rigel Uni-Therm		

7.8. Test Templates for the Rigel Multi-Flo

Please refer to Chapter 10 on remote control Multi-Flo for information regarding test templates for the Rigel Multi-Flo.

8. Test Certificates

Med-eBase contains an automatic certificate generator which will produce either a paper certificate (print), or an HTML or PDF version for easy electronic storage and transfer.

Highlight the relevant Asset and select the Test Results tab in the Asset Details view. Select the **Print Certificate** button from the side menu to create the test certificate for the selected Test Result.

AUREN D		Status	Name	Description	Last Test	Refest flate	
Example Database.db	1	-	125676	5 Lead ECG	11/02/2014	11/06/2014	
> EBM€	z		ereer.	1 Lasteco	29/19/2013	20.0022011.0	
Cient 1	3	ж	5347	19	21/10/2013	21/04/2014	
 Hospital 1 Hospital 2 	4	-	011012	ESU	29/07/2013	29/04/2014	
Hospital 3	5	ĮU.	01234	ESU	30/07/2013	30/04/2014	
2 III Stal	4	kn	12548	ESU	30/07/2013	30/04/2014	
Recycled	Number Number Number Number Number 1 2 2 000-32 510 3680-2014 3680-2014 2 2 2 000-32 510 3680-2014 3680-2014 9 7 2 2006 2011/2013 3680-2014 10 7 2×06 2011/2013 3080-2014 10 7 2×06 2011/2013 3080-2014 11 7 960-50 15.100/2014 15.007/2014 12 7 400-50 15.100/2014 15.007/2014 13 7 808-50 15.007/2014 15.007/2014 13 7 96 36.00 12.007/2014 15.007/2014 13 7 96 36.00 15.007/2014 15.007/2014 13 7 36 36.00 15.007/2014 15.007/2014 14 60 37.104 15.007/2014 15.007/2014 15.007/2014						
	9	10	125786		20/11/2013	36/05/2014	
	10	10	25456		15/01/2014	15/07/2014	
	ш	PD	584563		13/01/2014	13/07/2014	
	12		47851	PROBE 123	15/01/2014	15/07/2014	
	II P SHARD L548,2014 L548,2014 IZ P ARDX PROM 220 L540,2014 L549,2014 IZ P PROM 200 D540,2014 L549,2014 L549,2014						
	14	100	12 LEAD ECG	1390,2014 L5902014 PROPEZ23 1590,2014 159072014 efficene 122002014 122002014 199002014 152002014 -			
	13	ha.	56		10/02/2014	10/02/2015	
	Amet	Dataih Te Results Date Test 20/09/2013	of Results Applied Party Ten d Instrument Type Overa Rigel 208/62333	at Sequence Al Statue Re			Sanda (Fort Centro Table Seguer

From here you can edit the Test Company and Client details before selecting either to **Print** or **Save**.



8.1. Med-eBase Multiple Print function

The print function can allow for an individual asset result or multiple result certificates to be printed. Results certificates must meet certain criteria to be able to print multiple certificates:

- ✤ The same Instrument Type (e.g. 288 (+))
- Assigned to the same client, in the asset browser,

Select the first asset from the main asset browse screen

*

ile Ede Tools Help							
6 6 6 6 8 8 0 A							
come Anesta		Status	None	Description	Last Test	Retest Date	2
 Example Database.db Brosmfield 		P	125676	5 Lead ECG	11/02/2014	11/06/2014	
EBME			0007	TUBERCO	25.080,2013	89/00/2014	1
- Si Chent 1	1	×	5]47	18	11/10/2013	21/04/2014	
Hospital 1 Hospital 2		P	011012	esu.	29/07/2013	25/04/2014	-
Hospital 3	,	i i i i i i i i i i i i i i i i i i i	01234	650	30/07/2013	30/04/2014	
> III Stal	1	-	12548	ESU	32/07/2013	30/04/2014	
Harythad	1	*	005123	850	29/06/2013	28/05/2014	
		0	defth2		08/01/2014	08/02/2015	
	1	P	125786		26/11/2013	35/05/2014	
	1	n 🏴	25656		15/01/2014	15/07/2014	
	1	1 📕	584563		15/01/2014	13/07/2014	
		2 🏴	47852	PROBE 123	15/01/2014	15/07/2014	
	1	a 🏴	BBraun	infusion	12/02/2014	12/02/2014	
	1	4 8	12 LEAD ECG				
	1	a 🍋	56		10/02/2014	10/02/2015	
	140	et Detaile					
		Asset Details To	et Romita Appled Parts Tes	t Seavence			
		Test Results					
		Date Test	ed Instrument Type Overal	I Status			Results
		1 20/06/2013	Figul 286/62353	80			Pred Cartificate
							Test Seaverice
							Applied Parts
							Defense

Press and hold ctrl to select additional assets. All selected assets should be highlighted.

sia Databasa dh		Status	Nane	Description	Last Test	Retest Date		
roomfield	1					15/07/2014		
 Scientification Sci	2					13/07/2014		
iert 1	3					13/07/2014		
Hospital 2	3	-			10.02.2014	10/02/2115		
Hospital 3 OSPITAL 12	5	iten .	257	PROBE 123	05/02/3014	05/06/2014		
Ste 1	4	iten .	2536	PROBE 123	10/02/2014	10/08/2014		
rycled	2	ha	125	PROBE 123	10/02/2014	10/06/2014		
	8	F M	236	PROBE 123	10/02/2014	10/06/2014		
Arryshel T P 10 P P 10 P P 10 P	9	×	35,25	FROBE 123	10/02/3014	10/08/2014		
	AssetDer	tais						
	AssetDet	tile Tatala (178	Chevill Applie Facts 16	of Salaria				
	Asset Det	tais Catali The Results	Chevalls Applied Party The	at Taparta 1				
	Asset Del Asset	tili faitais (178) Reads Data Second	Chronic Automatica Ta	at Salawan				(mad
And focial Main Facility (Section 1977) (Section 1977) Tel Could Dep Topolo (Section 1977) Dep Topolo (Section 1977)	Trail Protection							
	Aver fresh Name fresh Aver fresh Teal Coulds Date fresh Date fresh Date vert free	Con Basel						
	AssetDer	tais Catalan The Results Data Sectori	Chester Annua Parts 19	et fragera				Prote Cent The Least
	Asset Der	tais Canada Results Data Sectori	Charges Applied Party in the	(Saara)				Prote Contr The Day (Applied The Date
	Asset Det	tais Canada Data Teccal	ninati Anna i s	at Saawaa				C manifi Prior Court State Sease (Agains for Date
	Asset Der	tois Canain Trie Reads Date Sector	Thisty Animitary 1	and The game as a				T Bank Reference Gaussian Der
	Asset De	tain Tanàna I The Results Data Techni	Final Annufres 1 %					C Basili Red Card Gastion Red Red
	Asset De	tak Canada I the Results Date Techni	chosh, [aundrew [m]	at Names				i bash Riciotti Santasa Santasi Bari

Then select the Print icon on the right hand side and select the Device type - the generate certificate menu opens to allow you to scroll through the certificates, set the template and additional details etc. before printing or saving the certificates as PDF.

	н —
e Test Limited Federation Fe	Е
nee Cest Bifcate	Е
e Test Limited Performance Per	Е
ter Torun andara a andara andara andara Andara andara andar Andara andara andar	E
Tester Lane bear and	
ter Town ter	
analyze to severage former areases	
EINITE CONTRACTOR	
1ST	
Browse	
icorp Limited	
Vedicine Road	
Ical City	
Am	
1 IDM	
Help Brittel Brite Service	
Equipment Mintenance Certificate	
Browse Sumgature laster by September September	
1 4407448 0, 144544 Maciola Macion (0:13) 5:10*	
Poling 2/334 Median	
Conserve Bacey Polynowski Ginantia Strate Bacego Bacey Bacey Stratego Bacey Bacey Bacey	
Name Moder 4021-5au/17 Name Galitati Moder Name Report	
Ралинини/Пака Вили Осба Вилинини Унинининин Вилининин Осба Ралининин Унининин Вилинин Вилинин Ралинин Вилинининин Салан Вилинин Вилинин Вилинин Вилининин Вилинин Вилинин Вилинин Вилинин Вилинин Вилинин Вилинин Вилинин Вилинин Вилинин Вилинин Вилинин	

Please refer to application note 0051 Med-eBase and multiple print functions for further information of this process.

8.2. Changing the Certificate Template

To change the certificate template, open the drop down **Template** menu.

default (de)	-							
default (de)	10	1000					~	(
default (fr)				Equipment Ma	aintenance Certifica	ite		0
deFault (f) restard default (g) default (g			Auftraggeber:	hoogtailt rannsaite	Gepröft durch:	rigei Nadical Badian Hil Badhinan Hid asara adi Saw		٩

The default choices are either the plain certificate or a blue themes certificate. These are both available in a range of languages.

With a basic knowledge of HTML it is possible to further customise these test certificates. The certificate templates may be found in the Windows application data directory for all users (for example C:\ProgramData\Rigel\Med-eBase V2\Certificates).

The saved file will then appear as a usable option in the **Template** drop down menu.

Videos Katherine Summers Katherine Summers Computer System (C:) Dell Gladinet Gladinet Lotus	Date modified Type 19/03/2013 14:56 File folder 14/08/2013 12:15 File folder 19/03/2013 14:56 File folder	
Katherine Summers default (de) Computer default (de) System (C:) default (es) Dell default (fr) Gladinet default (pl) Intel Blue (de) Lotus Blue (en)	19/03/2013 14:56 File folder 14/08/2013 12:15 File folder 19/03/2013 14:56 File folder	
Computer Co	14/08/2013 12:15 File folder 19/03/2013 14:56 File folder	
System (C:)	19/03/2013 14:56 File folder 19/03/2013 14:56 File folder 19/03/2013 14:56 File folder 19/03/2013 14:56 File folder 19/03/2013 14:56 File folder	
apps	19/03/2013 14:56 File folder 19/03/2013 14:56 File folder 19/03/2013 14:56 File folder 19/03/2013 14:56 File folder	
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if b2ef2627ec54a66f632397f i default (p) Gladinet i default (p) Intel ii Blue (de) Lotus ii Blue (en)	19/03/2013 14:56 File folder 19/03/2013 14:56 File folder	
Gladinet Gladinet default (zh) Intel Blue (de) Lotus Blue (en)	19/03/2013 14:56 File folder	
Lotus	15/05/2025 21/50	
Lotus Blue (en)	19/03/2013 14-56 File folder	
DIDETER	19/03/2013 14:55 File folder	
Madics ATE Blue (er)	19/03/2013 14:56 File folder	
MSOCache Blue (fr)	19/03/2013 14:56 File folder	
PerfLogs	19/03/2013 14:56 File folder	
Program Files	19/03/2013 14:56 File folder	
ProgramData Blue (zh)	19/03/2013 14:56 File folder	
6F9E8B22-7CC3-43A0-A6E8-5F	14/08/2013 12:22 File folder	
Adobe		
🎍 Apple		
Apple Computer		
Bluetooth		
JE FLEXnet		
J GoldMine		
📕 GroupPolicy 🗸 🤘	.10	

8.3. Inserting a company logo

To insert your company/personal logo, select Browse. This will open a search window.



Locate the logo file and select **Open**.

	-	🔚 logo	03/07/2009 13:07	JPEG image
E Contacts	III	Rigel logo (CMYK)	03/07/2009 13:07	JPEG image
📔 Desktop		E Rigel logo	03/07/2009 13:07	JPEG image
뵳 Downloads				
🙀 Favorites				
🍺 Links				
My Documents				
🍌 Application Data				
📕 Bluetooth Exchange Fo	olde			
📕 Duncan P drive Feb M	ed-			
📕 kate PC	-	۰ [
File name:	Rigel lo	go (CMYK) - Copy	✓ Images (*.jpg *.j	peg *.png *.bm 🔻
			Onen la	Canaal

This will place your custom logo at the top of the test certificate.

Rigel 288/62353		^	Print Pr	eview						
_default (de)			10						-	0
Header				I	quipment	Maintenance Cer	ificate			e
Equipment Maintena	ance Certificate			Au fragge be r	houghairt resignatio	Gegenter dar ch		pe Nedcal advan 40		(
Test Company								sufferent fod entate 16 Daw		
Name: rige	el Medical			Prüfing	cua	Prifd au mi		5		
Address Line 1: bra	acken Hill	1		Beadveibung Ortansne: Standort	S Land BOS Dute 7	Nachana Prù fun Prùffinsar val t Base artsuno:	Croarete Page		E	
Address Line 2: sou	uthwest ind estate			Barlancumen Herstellen Modelt	100359 Do TRK 044/620 25	Profesore : Profesore :	each - 0	mat		
Address Line 3:				Parlan tenen ach Gas a: Dataichtung Tip	Webstage	Nodell Satenne ny Potbelche	Rost288 3x5-040 Junorale	10155		
Post Code: sr8	2sw			t toast	-4	an ana <u>st</u> i.		8		
Logo: Rige	el logo (CMYK).jpg Browse			Mittainit Sne Other Nacial Starp Lans Strait	- Minaming	et des manager på semant so	5 141 141 141			
Client Details		E		Balance annual (2017) Balance annual (2017) Balance annual (2017) Balance annual (2017)	200		41 41	HH H		
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Post Code:				Partie Carlier Landers (2001) Partie Carlier Landers (2001) Partie Carlier Landers (2001) Partie Carlier Landers (2001)				24.42) 24.42) 24.42) 24.42) 24.42)		
Date Formats				Non WANSE?						
Test Date:	Help			geputivos		Unterschr M	Det	um		
Re-test Date:										
Today's Date:				RIGEL	Quintes	na Garwanal by Roal Nad-aGasa (80010	Page 1		
Tester's Signature			1							
	Browse	ן 🗆							-	

8.4. Inserting an electronic signature

To insert your electronic signature block, select **Browse**. This will open the search window.

icst bote.	rielp	geputives	Uniteractive #	Deturn	
Re-test Date:					
Today's Date:		FIGEL	Carriedae Ganerande op Higa med-easte ditorts	regar)	
Tester's Signature	\sim				
	Browse	12			-
				345	

Identify the file containing your electronic signature and select **Open** to insert this into the test certificate.

Organize 🔻 🛛 New folder			III • 🔟 🌘
Desktop Downloads	* E	Pictures library Includes: 2 locations	Arrange by: Folder 🔻
A Recent fibres		📙 Sample Pictures	
📃 Desktop		20140210_125715	
词 Libraries		👧 example signature	
Documents		MULTI-FLO IMAGE	
My Documents		📭 signature	
퉳 Public Documents		🛼 signature2	
🎒 Music			
Pictures			
🛃 Videos	*		

The signature will now appear in the signature area of the test certificate.

gel 288/62353	 Print Preview 			
default (en)	Equipment Mai	ntenance Certificate	e ·	•
eader				
quipment Maintenance Certificate	hospital 1	Tests perform ed by:	ngel Medical braoken Hil	
est Company			Southwest ind	
Name: rigel Medical			sr8 2sw	
ddress Line 1: bracken Hill				
ddress Line 2: southwest ind estate	5147 1B	Test Date: Re-Test Date:		
ddress Line 3:	Hospital	Test interval:	6 m onths	
Post Code: sr8 2sw	014524	Overall Status:	Fail	
Logo: Rigel logo (CMYK).jpg Browse		Test Protocol:	TestCode-NEV/6	
ient Details	e	Model	Rigel 288/62353	
Name: bossital 1	Connection(s)	Serial No. Protocol	X 45-0 450 Semi-automatic	
ddress line 1: powcasto	1			
ddress line 1: Trewedsue				
ddress Line 2	Mains	FC AP Limit Resul - 0.200 +20	t Units 31 0.000 Ω /	
Post Code:				
, on cooci				
ate Formats		Signature	Date	
Test Date: Help	(
e-test Date:	٩)	XAMPLE		
oday's Date:				
ster's Signature				-
ineS/Pictures/example signature.png Browse		m		

8.5. Customising Certificate Templates

All certificates are located in:

C:\ProgramData\Rigel\Med-eBase V2\Certificates\Templates.

NOTE: Program Data may be a hidden folder and therefore you will need to go to 'Organize' and then to 'Folder and Search Options'. Select the 'View' tab and 'show hidden files and folders'. Click 'Apply' and then 'OK'. The program data folder should now be available to view.

Within the certificates Template folder all available Tester Type Folders can be selected and within each is the different certificate types and languages e.g. Rigel 288_62353 (+) inside this is all the default and blue certificates for the electrical safety testers.

The user can then copy a folder to customise or rename the certificate type most used so that it appears first in the list on Med-eBase. We advise that the new certificate needs to be renamed with a relevant name as this is what will appear on the dropdown list of certificate templates to choose from in Med-eBase E.g. Customised

NOTE: If the customised template folder is not renamed it could be overwritten when new versions of Med-eBase Software are installed in the future.



Select the copied folder and then open the file in either notepad or notepad++ to enable editing.

NOTE: Notepad ++ provides an easier layout to follow and is an open source program which can be download from the internet.

The ONLY words that can be customised are shown with the character string "label"> :. Select Ctrl F to find the title which you want to customise. E.g. Test Protocol and enter the new phase is in between the arrows. On Notepad ++ changeable words are indicated in black.

NOTICE: On notepad ++ do not change any words in GREEN as this is information that comes from the Rigel tester. If this is changed the information will not be transferred from the results onto the certificate

<pre><td< th=""><th></th></td<></pre>			
<	<pre>td width= 30% ></pre>		<pre>ctbs ctds ctbdtp=100*) ctbdtp-ttp> </pre>
<	/td> td width="50%"> <		<pre>content = interview = int</pre>
	/td>		<pre><d vidit="50%"></d></pre>
<	d> Overall Status: d> d>		
	<pre></pre>	Find	<pre>cp class="label">Overall Status:</pre>
<	td> <mark>Test Protocol</mark> : //td>	Figd what: test protocol End Next Direction Cancel	<pre>(/tc) (/tc) ('tc)</pre>
	###TEST_SEQUENCE_NAME### /td>	Match <u>c</u> ase O Lo @ Down	<pre><pre><cpre>cp class="label"test protocol </cpre></pre></pre>
<	<pre>td> Test Equipment: Model sensial No </pre>		(15) (15) (15) (15) (15)

Once completed make sure the certificate has been saved. Then open Med-eBase, select the test asset you want to print and then select the print certificate icon. This takes you to the certificate screen where the dropdown menu for templates should include your customised template.
Rigel 288/62353		Print Preview					
customised	•]		Nedical City			Tester Tow n	0
leader			MD1 1DM			Testershire TS1 1ST	e
Equipment Main	tenance Certificate						
Test Company		Asset:	201216150		Test Date:		
	The second second second	Des cription:			Re-Test Date:		
Name:	Acme Test Limited	Site:	Factory		Test interval:	12 months	
Address Line 1:	12 Tester Lane	Location:	Banddd		Overall Status:	Pass	
Address Line 2:	Tester Term	Serial No.:			Bendende	MARCHINE CHARLES FT	
NON COD CARE ET	Tester Tester	Manufacturer:	CI EADWAY		scandard.	02000-04664-11	
Address Line 3:	Testershire	NUCE.	GLERINAI		Test Equipment:		
Post Code:	TS1 1ST	100 M 10			Nodel	Rigel 288/62353	
		Patient Connections:	C1	Constanting	Serial No.	X45-0450	
Logo:	browse	010a03310000000000000000000	2	1-48	Hospoor	dem automatic	
lient Details		000000000000000000000000000000000000000	?	49-96			
active become		0000000	?	97-144			
Name:	Medicorp Limited						
Address Line 1.	34 Medicine Road						

Please refer to application note 0044 Customising Med-eBase certificate for further details of this process.

8.6. Certificate Template Preference

The latest certificate is remembered by Med-eBase the next time the user goes into the print certificate screen. However if the user does not have enough user admin rights this feature will not be able to write to the registry.

If the user does not have admin rights they can go into the certificates template folder (see 6.4) and remove the unnecessary languages or change the certificate name so that in alphabetical order it becomes first on the list in Med-eBase. There is also the option to customise certificates.

9. Data Export

9.1. Production of an Asset Report

The results stored in a database can be exported as a CSV file from Med-eBase. However, before creating the CSV file the data can be filtered, to do this, use the binoculars in the tools menu to display the search window. The **Browse Assets** window can be used to select a section of the database to be exported, for example assets by date tested or test date due:

File Edit Tools He	lp	
🗟 🗟 🗟 👪	🕺 💼 🛷	1
Browse Assets		8
Asset Name:		1
Description:		2
Client:		3
Site:		
Location:		4
Manufacturer:		5
Model:		6
Serial No.:		7
Service Code:		8
Re-test Date from:	01/01/2000	- 9
To: 🔲	01/01/2000	- 10
Overall Status:		•
Reset	Search	
		12

With your data filtered, if required, right mouse click on an asset and from the dropdown select **Display Columns**.

	Status	Name	Description	Last Test	Retest Date	Client	Site	Location	Manufacturer
1	P	125876	5 Lead ECG	11/02/2014	11/08/2014	Broomfield	EBME	Workshop	SP02
2	P	65807	3 Lead ECG	20/09/2013	20/03/2014	Client 1	Hospital 1	Ward 4	DATEX OHMEDA
3	P	45287		25/09/2013	25/03/2014	Client 1	Hospital 1	Ward 4	
4	×	5147	1B	21/10/2013	21/04/2014	Client 1	Hospital 2	Ward 1	
5	P	ad16		12/02/2014	12/02/2015	Client 1	Hospital 3	Workshop	
5	P	ad17	DEFIB	19/11/2013	19/11/2013	Client 1	Hospital 1	Ward 3	Mindray
1	×	15786	MONITER	Add New Ass	2013	Client 1	Hospital 1	Ward 2	DATEXOHMEDA
8	P	25894	MONITER	Delete Asset(s) 2013	Client 1	Hospital 1	Ward 1	DATEXOHMEDA
•	P	258741	MONITER	by Upload	2014	Client 1	Hospital 1	Ward 1	DATEXOHMEDA
10	P	011012	ESU	Export Asset(s) 2014	Client 1	Hospital 2	Ward 2	ConMed
1	P	01234	ESU	Print P	2014	Client 1	Hospital 2	Ward 1	Covidien
2	P	12548	ESU	Display Colun	nns 2014	Broomfield	Theatre depart	Theatre 1	Covidien
13	×	085123	ESU	29/08/2013	29/05/2014	Client 1	Hospital 3	EBME	AESCULAP

Selecting **Display Columns** produces a filter window which can be used to select the columns (data) that is required in the csv output. Select or deselect the options using the tick box and use the "Update and Close" button to save / close this window.

Show Status Column
Show Name Column
Show Description Column
Show Last Test Column
Show Retest Date Column
Show Client Column
Show Site Column
Show Location Column
Show Manufacturer Column
Show Model Column
Show Serial Number Column
Show Service Code Column
Show Deleted Location Column
Select All Select None
Update and Close

Selecting the **Export Table to CSV** icon (blue square with a green arrow) allows the **Asset List** to be saved as a CSV file.



The format of the filename to be exported is "AssetList_<DATE>.csv", however, this can be changed if necessary. Browse for an appropriate location to save the file.

1	Α	В	С	D	E	F	G	н	1	J	K	L	М
1	Status	Name	Descriptio	Last Test	Retest Dat	Client	Site	Location	Manufact	Model	Serial Nur	Service Co	de
2	Pass	125876	5 Lead ECO	*****	#########	Broomfiel	EBME	Workshop	SP02	S5	741256		
3	Pass	65807	3 Lead ECO	****	****	Client 1	Hospital 1	Ward 4	DATEX OH	S5	102053		
4	Pass	45287		*****	*****	Client 1	Hospital 1	Ward 4					
5	Fail	5147	1B	*****	#########	Client 1	Hospital 2	Ward 1			14524		
6	Pass	ad16		*****	#########	Client 1	Hospital 3	Workshop)				
7	Pass	ad17	DEFIB	****	*****	Client 1	Hospital 1	Ward 3	Mindray	Benehear	17		
8	Fail	15786	MONITER	*****	#########	Client 1	Hospital 1	Ward 2	DATEXOH	S5	25896		
9	Pass	25894	MONITER	*****	#########	Client 1	Hospital 1	Ward 1	DATEXOH	S5	25896		
10	Pass	258741	MONITER	****	*****	Client 1	Hospital 1	Ward 1	DATEXOH	S5	25896		
11	Pass	11012	ESU	****	****	Client 1	Hospital 2	Ward 2	ConMed	5000	10014		
12	Pass	1234	ESU	****	*****	Client 1	Hospital 2	Ward 1	Covidien	Force FX	102541		
13	Pass	12548	ESU	****	*****	Broomfiel	Theatre d	Theatre 1	Covidien	Force 2	123684		

Finally, the CSV file can be opened in a software programme, such as Microsoft Excel, to manipulate your data.

Note; if using large numbers, for example a serial number without letters, spaces or other characters, if this CSV file is opened in MS Excel this can change the way the data is displayed (for example, 1234567890123 can be displayed as 1.234567E+12). To revert this back to the original format, in MS Excel, right mouse click on the cell (or data cells) and using "Format Cells..." change the format to "Number" and "Decimal places: 0".

9.2. Exporting Multi-Flo Results

The results downloaded from the Rigel Multi-Flo can be exported as a CSV file from Med-eBase. This will enable the user to manipulate and create graphs and trumpet curves from the raw infusion data.

The format of the filename which is exported is "<ASSET ID>_<DATE>_<TIME>.csv".

It will export the last test result for the asset selected; this is because the export is located on the asset manager and not the result manager. The tests will be displayed horizontally with the data being displayed vertically.

When results have been saved in Med-eBase the asset can be selected and then the user can select to export the raw data file in CSV format for specific analysis.

		Status	Name	Description	Last Test	Retest Date							
ple Database.db	44	pe -	B Braun		12/05/2014	12/05/2014							
	45	pic .	00000		09/01/2000	09/10/2000							
	46	ptr units	00021		199/01/2000	09/10/2000							
	47	14	91		09/01/2000	09/10/2000							
	48	pu -	BEXXKX2		19/05/2014	19/12/2014	Espittan						
	40	pu -	BEXXXX		19/03/2014	19/12/2014							
	50	pe	KUHEAPO		19/03/2014	19/12/2014							
	51	pt.	RRYSOPP		18/03/2014	18/12/2014							
	52	P	10		28/05/2014	28/02/2015							
	52	14	3354400		28/05/2014	28/02/2015							
	54	14	33544		28/05/2014	28/02/2015							
	55	.8	Defibrillator										
	56	^{pu}	WOP		06/06/2014								
	57	in the	occlusion BBraun		13/06/2014								
	58	-	BERKIN PRODUCT		2106-0214								
	Acest Datel Acest Datel Acest Datel Sectional Sectional Technology Acest												
	Deta	8			6080141								
	- 8	ssetNore z	SERALIN INPLISONAT				Serial No.1						
	. 6	esciption					Randsturen						
		Clerk					• Model						
		Sterime					Service Cludes						
	LOCE	CON NORIC					taxonerroasi [
	Tert	Period					49 Configuration						
		Re	Hest Period (months):	2 Next Test	Na Test	t Scheduled							

Select a folder location to store the results.

G will Dealthup >	+ + Seanh Datition &
Organize + New folder	s:• 0
4 🔆 Fauntin	Libraries
Cestop	System Falder
A Downloads	
Secont Places	Katherine Summers
- E Desktop	Computer
A Lig Libraria	da System Falder
Documents	
Picture Dicture	Retwork Sectory Feider
Videos	
A A Katherine Summers	gadget_serial_driver
VetueBox	File fisialer
🕨 🎍 AppData	
an Contacta	illa folder
🖉 🚋 Desktop	
Downlaads	2
Folder: Desktop	

The CSV file can then be opened in Excel from the selected location.

1	100 100	une June	sent Page Legaul Parmular Delle Berlew View Nation (DP				1_04h	42014.3	00-1d-02	- Meross	ft Local					1			0		118				
ĩ	A CU		Content - 11 - A [*] A [*] = = - S [*] Wrop Test				spi Test		General ·					1	20 20 20			I AutoSun - M							
Pa	Ze Cos	H	8.7		5 - A		a ir	it:	and Mar	me fe Cerris		10.	4	24.01	Cunation	tat Fi	unat. Ce	Inter	Delete	Famat	圖科		Sort & Fin	a R.	
1.4	() Fill	wat Parotes	200		-				7			-		100	Fonteattin	H	Talzie - Style	£4 +.		1.141	20	188. T	Piller + Sel	astro-	
-	Ciperon	4	2	- (1) F		2		Inner	<u>.</u>		- 91	-	AURDER	-		304	6 ~~		280	_			ung .		-
_	A1			J- Mult	ti-Flo Flow	Volume																_			
	A.	ê	c	D	3	- 5	6		H	1		3			L	50	N	0	:0		0	天	5		
4	Multi-Flo	Flaw Volu	me																						
2																									-
2	PIDW Rate	100																							-17
7	Euromon	Informatic																							
4	Moan mil	003.49	()																						
5	Doak m1/1	134 3																							
i.	Instant m	1 59.09																							
9	Volumen	8,63																							
10	Min ml/h	96.02																							
11	Pressure	6 6																							
12	Error	Average																							
13		1000140																							
14	Time [Sec	Accumula	Instant E	I: Average F	Pressure [Y-Axis]																			
LS	1	0.05		5 0	-97																				
16	2	0.05	93,9	93,99	12																				
17	- 9	0.13	\$47.4	5 147.46	-4																				
18	- 4	0.14	126.0	3 126.09	1																				
29	5	0.19	134.9	1 134.94	3																				
20	6	0.23	137.9	1 137.93	2																				
21	- 7	0.29	150.5.	1 150.52	-24																				
22	8	0.34	153.7	5 153.76	-36																				
28	- 9	0.36	145.6	2 145.62																					
24	10	6,39	141.1	2. 141.12																					
22	11	0.43	140.90	1 140.90																					
렸	- 12	0,47	345.0	1 341.81	-20																				
25	13	0,49	155.6	153,69	a 																				
10	14	0.53	127.0	2 133.70	10																				
30	144	0.50	120.00	1 100.00																					
20	13	0.50	130.5	130.56																					
÷	10	0.62	110 5	4 112 54																					
33	19	0.68	129.6	1 129.68	5																				
34	20	0.73	129.5	3 129.58	0																				
35	21	0.77	132.0	5 132.05	-26																				
36	22	0.78	128.2	1 128.29	10																				
97	29	0.83	129	1 129.3	.9																				
38	24	0.87	130.1	1 130.14	-26																				
34		0.63	126.0	1 226.04																			_	_	-1
	ALC: NO	RUMIN_THE	TAPPOPE	04.002014	25-1 - 24										191	_	_	_		1000		-			43

Note; if using large numbers, for example a serial number without letters, spaces or other characters, if this CSV file is opened in MS Excel this can change the way the data is displayed (for example, 1234567890123 can be displayed as 1.234567E+12). To revert this back to the original format, in MS Excel, right mouse click on the cell (or data cells) and using "Format Cells..." change the format to "Number" and "Decimal places: 0".

10. Remote Control Rigel Multi-Flo

10.1. Gadget Serial

To use the remote control mode the user will need to install the Gadget Serial V2.4 Driver. The driver should have accompanied your upgrade package and therefore the user will need to save the gadget serial folder either on their desktop or in an easy to locate destination of their choosing.

Equipment required:

- Multi-Flo
- PC running Med-eBase V2.4.0 (or above)
- Gadget serial driver install files
- USB Serial cable

To install the gadget driver the Multi-Flo needs to be turned on and connected to the PC using the USB serial cable.

On the Multi-Flo menu scroll down and select Remote Control. The Multi-Flo will then try to connect with the PC.

The PC will attempt to download the install drivers for the gadget serial. As the driver are located on the PC and cannot be found on the internet this step is not required. Click on the icon when it appears as below.



Select "Skip obtaining driver software" which is blue and underlined to stop widows looking for the driver as the Rigel device won't be able to connect to the PC while the computer is performing this task. Select Yes on the driver software installation screen to skip the driver update.

	Driver Software Installation
Driver Software Installation	Do you want to skip getting driver software from Windows Update?
Installing device driver software Gadget Serial v2.4 Searching Windows Update Obtaining device driver software from Windows Update might take a while. Skip obtaining driver software from Windows Update	Windows Update provides the latest available driver software which may work better for your device. You can check Windows Update later for the latest driver software. If you skip your device may not function at all.
Close	Yes No

Once this is completed enter the Control Panel and go to 'Devices and Printers'. The gadget serial will be an classed as an Unspecified Device. Right click on the gadget serial V2.4.0 and select Properties.

00-m	Control Panel + All Cor	strol Papel Items • D	evices and Printers		Search Devices	and Drinters	x
Add a device	Add a printer	norrane nem y v			Y Dedicine criterie	E •	0
SELLT123							-
 Printers and I 	axes (10)						
Brother MFC-240C USB Printer	Brother MFC-8480DN Printer	Brother PC-FAX v.2.1	CutePDF Writer	DCP-7065DN	Fax	HL-2270DW	
HP Photosmart C5200 series	Microsoft XPS Document Writer	Send To OneNote 2010					Е
Gadget Serial v2.	4						
	2 items						

In the General Tab select Update Drivers and then choose 'Browse my computer for driver software'.



Select the folder where the gadget serial files are located. Select Ok to choose the folder and then Next.

earch for driver software in this location:	
C:\Users\JackB\Documents v Browse	
Include subfolders	Browse For Folder
 Let me pick from a list of device drivers on my computer This is will show installed driver software compatible with the device, and all drive software in the same category as the device. 	Competition Customer Customer Cutomer Cutomer Cutomer Discrete Distribution Discrete Cutomer C
Next	Folder: gadget_serial_driver

Once the driver is installed select Next and then close the Control Panel.



To confirm the gadget serial driver is installed correctly:

Open Med-eBase V2.4.0 (or above) making sure the Multi-Flo is connected and in Remote Control Mode.

On Med-eBase select 'Download from Tester' by either selecting Tools > Download or the download icon.

Choose Multi-Flo as the instrument type and then select Gadget serial as the COM port.

Instrument Type	
Rigel Multi-Flo	•
COM Port	
Gadget Serial (COM26)	*
Remote Mode Co	onnect to COM port
File Transfer	
Start Fil	le Transfer

NOTE: If Med-eBase was open while installing the gadget serial driver the user may be required to close Med-eBase and reopen it or Re-scan COM Ports to locate the gadget serial.

10.2. Creating Test Sequences

10.2.1. Create an Asset ID

Before connecting to the Remote control dashboard the user will need to create an Asset ID for the infusion device if there is not one already created.

On the main Med-eBase screen select 'Add New Asset' by either the ^Oicon on the right hand side or Edit > Add New Asset. The Asset details section will now be available to fill in.

ssets	8						121
Example Database.db	15	Status	47851	PROBE 123	Last lest 15/01/2014	15/07/2014	
Broomfield EBME	16		257	PROBE 123	05/02/2014	05/08/2014	
Direct 1	17	P	2536	PROBE 123	10/02/2014	10/08/2014	
Hospital 1	18	P	125	PROBE 123	10/02/2014	10/08/2014	
 Hospital 2 Hospital 3 	19	P	236	PROBE 123	10/02/2014	10/08/2014	
HOSPITAL 12	20	×	3525	PROBE 123	10/02/2014	10/08/2014	
WARD 5	21	P	125876	5 Lead ECG	11/02/2014	11/08/2014	
Recycled	22	×	45621		05/03/2014	05/09/2014	-
	23	P	CM123	CME pump	12/03/2014	12/12/2014	
	24	P	01928	Infusion pump	12/03/2014	12/12/2014	
	25	×	N0978	Infusion device	12/03/2014	12/12/2014	
	26		Q123	Infusion device	12/03/2014	12/12/2014	-
	27	×	N6474	Infuson	12/03/2014	12/12/2014	
	28	0	defib2		08/01/2014	08/01/2015	
	29	P	56		10/02/2014	10/02/2015	
	Asset Deta A	Details Te ils sset Name: Description: Client: Site Name:	st Results Applied Parts Tr	est Sequence	•	Serial No.: Manufacturer: Model: Service Code:	
	Loca	tion Name:			•	Equipment Class:	
	Test	Period				AP Configuration	
		Re-te	est Period (months): 0 🔅 Nex	rt Test:			View

10.2.2. Connecting the Multi-Flo to Med-eBase V 2.4 (or above)

Turn on the Rigel Multi-Flo and select Remote Control from the main menu.

Connect the Multi-Flo to the PC using a USB serial cable.

Then select the gadget serial as the COM port. If gadget serial port is not show you may need to rescan COM ports. Then select 'Remote Mode Connect to COM port'.

Instrument Type		
Rigel Multi-Flo		•
COM Port		
Gadget Serial (CC	DM26)	•
Remote Mo	ode Connect to	COM port
File Transfer		
St	art File Transfe	ŕ

The Multi-Flo dashboard window will appear with details of the Multi-Flo and available channels.



10.2.3. Creating a Test sequences

From the remote control dashboard the user can create Flow/Volume, Occlusion and PCA Tests on any available channel by firstly selecting the channel and then adding the appropriate test.

Multiple tests can be inserted by clicking on Add test and the sequence order can be moved by dragging the test tabs to the desired location.

Flow / Volume Test Add Occlusion Test Add PCA Test		Start Test Sequ	ence Close M
Channel 1 : 44E-0639 Channel 2 : 46E-0482 Channel 3 :	36E-0699 Channel 4 : 44E-0638		
quence Name			
🕞 Flow / Volume Test 🔀 🛛 🕞 Occlusion Test 🔝 🔹 🕞 PCA Test 🔀	Flow / Volume Test 🔝 📄 Flow / Volume T	est 🗵 📄 Occlusion Test 🗵	
5g		Test Name	1
Flow Rate 100.00 🚖 ml	/h Duration Type Time Based 💌	Start Te	est
8		Stop Te	est
Back Pressure 0.00	mHg 👻 hours 0 🌩		
Sampling Window 30 🗇 se	conds minutes 15		
Upper Limit % 0	seconds 0		
Lower Limit % 0			
Error Instant			
industria <u>Barriera a a a</u> go			
Test Results			
Elapsed Time 00:00:00	Remaining Time 00:00:00		
Mean ml/h 0.00	Peak ml/h 0.00	Instant Error % 0.00	
Instant Flow ml/h 0.00	Volume ml 0.00	Min ml/h 0.00	
Back Pressure mmHg 0.00			

NOTE: User Tests cannot be added to a sequence in the Multi-Flo Dashboard. This can only be inserted in the Global Test Sequence menu.

The context menu allows the user to select multiple options for individual tests and sequences within the test set up:

- Test Name' is a single test configuration.
- 'Sequence Name' is a list of test configurations.
- 'Import' will load the test or sequence into the channel.
- 'Export' will save the test or sequence from the channel.

To activate the context menu the user needs to be on the configuration test tab. Right click anywhere on this screen to show the context menu.

This allows the user to edit, and copy Test sequences and tests between channels.

lo S/N : •	me Test Add Occlusion	n Test Add PCA Tes	ī.			s	art Test Sequence Close I
Channel	1:44E-0639 DCH	nannel 2 : 46E-0482	Channel 3 : :	16E-0699 Dchannel 4 : 44E-	0638		
quence Na	me			No.			
Flow /	Volume Test 🔀 📃	Occlusion Test 🗵	PCA Test 🗵	Flow / Volume Test 🗵	Flow / Volume Te	est 🗵 📔 🕞 Occlusion Test 🗵	
tion						Te	it Name
nfigura	Sequence	Flow Rate	100.00 🔹 ml/	h Duration Type	Time Based 🔹		Start Test
8	Сору						Stop Test
raphs	Paste	Back Pressure	0.00 🛊 🕅	nHg 👻 hours	0		
Ø							
		Sampling Window	30 🔹 sec	onds minutes	15 🔹		
		Linner Limit %		earonde	0		
		opper clinic ve	0	accorda	U V		
		Lower Limit %	0				
		Error	Instant 💌				
Test	Results						
	Elapsed T	ime 00:00:00	R R	emaining Time 00:0	0:00		
	Mean n	nl/h 0.00		Peak ml/h 0.00		Instant Error % 0	.00
	Instant Flow n	nl/h 0.00		Volume ml 0.00		Min ml/h 0	.00
Bac	< Pressure mn	nHg 0.00					

Individual Tests

Each individual test configuration has a "Test Name" which can be overwritten to indicate the test name.

Individual tests can be copied and paste into different channels or to repeat similar test set ups on the same channel. The user will need to add a test and then right click to open the context menu and select copy and then paste into the desired location.

Individual tests can be removed by clicking on the [X] on the configuration tab.

Test Sequences

Test Sequence can be given unique names by entering the name in the "Sequence Name" field.

Test sequences can be exported into the main **Global Test Sequence** of Med-eBase. From here they can be used in the Multi-Flo dashboard, uploaded directly to a Multi-Flo unit or transferred to different PCs. The import function allows saved sequences from either the Multi-Flo dashboard or **Global Test Sequence** menu to be inserted into any channel.

NOTE: Only Multi-Flo test sequences can be imported into the remote control Multi-Flo dashboard

The user can also create test sequences from the main Med-eBase window as a **Global Test Sequence**. Please see Chapter 5 of for more details on creating sequence in this manner.

Flow/Volume Test

The Rigel Multi-Flo is capable of measuring the instantaneous flow at a resolution between 10μ L/hr to 1500ml/hr. In addition, the flow rate can be viewed based over an average period which is user selectable, as well as detecting peak and minimal flow rates on real time curves Instantaneous flow measurement gives the benefit of quicker test times at low flow rates with maintained accuracy.

w / Volume Test Add Occlusion Test Add PCA Test					Start Test Sequence Close /
hannel 1 : 44E-0639 Channel 2 : 46E-0482 Ch	annel 3 : 36E-0699	Channel 4 : 44E-0	638		
ience Name					
Flow / Volume Test 🔀					
5				1 cm	Tost Nome
Flow Rate 100.00	al min	Duration Type	Time Based		rescrivance
Contract 10000		bulbultipe	Time boocs		Start Test
Back Pressure 0.00	🗧 mmHg 🔻	hours	0		Stop lest
<u>8</u>					
Sampling Window 30	seconds	minutes	15		
Upper Limit % 0	A V	seconds	0		
Laured both BY	A				
LOWE LINE % 0	<u>.</u>				
Error Instant	•				
	_				
Test Results					
Elapsed Time 00:00:00	Remaini	na Time 00:0	0:00		
Mean ml/h 0.00	Pe	ak ml/h 0.00		Instant Error %	0.00
Instant Flow ml/h 0.00	Vo	lume ml 0.00		Min ml/h	0.00
Back Pressure mmHg 0.00					

The test configuration tab allows the user to set the flow rate, back pressure, sampling windows and also upper and lower limits for the test which are specified by the manufacturer. The test duration can be based on time, volume or manual stopped by selecting the appropriate option from the dropdown list.

The test can be given a memorable name in the 'Sequence Test' field so that it can be import or exported to create sequences.

During testing instantaneous results are shown in the lower half of the screen and graphs can be viewed in the 'Graphs' tabs including accumulated volume, instant flow, average flow, pressure and trumpet curve.



Occlusion Test

The Multi-Flo Occlusion test simulates an obstruction in the infusion process and monitors the variation in pressure due to the blockage. Most infusion devices have the ability to detect this obstruction and provide an occlusion alarm. The occlusion test is able to test this alarm feature in infusion devices.

Flow / Volume Test Add Occlus	on Test Add PCA Test				Start Test Sequence Close Mi
Channel 1 : 44E-0639	Channel 2 : 46E-0482 DChar	nel 3 : 36E-0699	Channel 4 : 44E-0638]	
quence Name					
Occlusion Test 🔀					
s				7.4	1
hratic				lest	vane
Config	5-6	and the second	-		Start Test
	Infusion Pump Ty	pe Manual			Stop Test
stides					
0	Expected Pu	np			
	Occlusion Pressu (alarm lin	re 0.00	🖈 mmHig 💌		
	Upper Li	nit 0.00	🔃 mmHg		
	Lower Li	nit 0.00	🗢 mmHg		
Test Results					
Infusion P	ump Type				
	ant mmHa 0.00			Peak mmHg 0.00	
Curre					

For the occlusion test the user must specify in the configuration tab whether the infusion pump has manual or auto rewind occlusion functionality.

Enter the excepted alarm value and also the acceptable limits for the device under test.

NOTE: There is a choice of units for pressure including mmHg, PSI, kPa and Bar.

The test can be given a memorable name in the 'Sequence Test' field so that it can be import or exported to create automated sequences.

During the test instantaneous results are shown in the lower half of the screen and graphs can be viewed in the 'Graphs' tabs including accumulated volume, pressure and also tabulated values. If the infusion pump is manual then the user must 'Stop' the test when the alarm sounds to record the occlusion pressure level.

For pumps which has auto rewind functionality when the alarm sounds the pump reverses the flow momentarily to relieve the occlusion and reduce the pressure. The test will stop and the results will display the maximum pressure at which the pump initiates the rewind function.

PCA Test

The PCA test determines the additional volume delivered on top of the basal flow rate set by the user. The additional volume or sometime referred to as BOLUS, is an indication of the correct safety settings of an infusion device. The user needs to enter the basal flow as the basal flow rate setting is used to determine the additional volume being delivered.

Flow / Volume Test Add	Occlusion Test Add PCA Test					Start	Test Sequence Close Ma
Channel 1 : 44E-0639	Channel 2 : 46E-0482	Channel 3 : 36E-06	99 DChannel	4:44E-0638		8	
quence Name							
uotte						Test Name	
outigue	Basal Flow Rat	e 30.00 🔄 mi/h	Duration Type	Time Based			Start Test
	Bolus Volum	e 0.10 😫	hours	0			Stop Test
Graph	Total Volum	e 0 🛊	minutes	15			
	Upper Limit 9	% 0 Ø	seconds	0			
	Lower Limit 9	No 🗘					
Test Results							
Test Results	Elapsed Time 0	0:00:00		Bolus	Volume	Flow	Duration
Test Results	Elapsed Time 0 Remaining Time 0	0:00:00		Bolus	Volume	Flow	Duration
Test Results	Elapsed Time 0 Remaining Time 0 nstant Flow ml/h 0	0:00:00 0:00:00 .00		Bolus	Volume	Flow	Duration

The test configuration tab allows the user to set the basal flow rate, bolus volume and total expected volume delivered during the test. The acceptable limits for the test will also need to be selected based on manufacturer's specification.

The test duration can be based on time, volume or manual stopped by selecting the appropriate option from the dropdown list.

The test can be given a memorable name in the 'Sequence Test' field so that it can be import or exported to create automated sequences.

During the test instantaneous results are shown in the lower half of the screen and graphs can be viewed in the 'Graphs' tabs including accumulated volume and instant flow. Tabulated results will be shown on the lower half of the screen following each bolus delivery and includes the bolus volume, the flow rate and the duration of the bolus and mean values for all bolus measurements.

The user can carry out tests individual or as a whole test sequence. When conducting a single test select 'Start Test' and then select the Asset ID associated with the device being tested. The search criteria can be used to find the correct Asset ID scroll to select the asset ID. If an asset have done been created for this device then the user will need to add an asset in the main Med- eBase menu. See Chapter 9.2.1 for more details of creating assets.

Search Criteria	Search Reset	
Name	Description	
2536	PROBE 123	
125	PROBE 123	
236	PROBE 123	
3525	PROBE 123	
keith		
10	Infusion	
CM123	CME pump	
01928	Infusion pump	
N0978	Infusion device	
N6474	Infuson	=
Q123	Infusion device	-
A14527	BBraun	
45621		-

Once a test has started the Multi-Flo device will go to the appropriate test screen: Flow/Volume, Occlusion or PCA and the Elapsed Time field will indicate 'Ready' until the fluid enters the unit.

NOTE: If an asset ID has not been created the user needs to go back into the Main MedeBase window and create an Asset ID for this test.

10.2.4. Running a Test Sequence

Once a test sequence has been created the user will select **Start Test Sequence**. When the sequence has started the screen with go to the first test in the sequence regardless of what screen the dashboard was in prior to starting the sequence.

NOTE: The infusion device will need to be set up with the flow rate, bolus delivery details etc. matching the appropriate test set up created on Med-eBase.

NOTE: The infusion device can be activated before or after the test is set up as the Multi-Flo will only start recording when fluid is delivered through to the device.

The active test is indicated with a blue circle and all other tests are greyed out and cannot be altered during a test sequence. Other channels are available to set-up edit and start testing while the Multi-Flo is testing on another channel.

Ho gell 1 - He Check Rose / Walking Text / Add/Certholine Text /	Dall PCA (Inc				Net bet Generice Onie H
Charrel 1: 48-0123	1. NE 0492	Channel 1: 300 0899	Channel 4: +€ 0638		
querice Name					
Plow / Kalunes Test	115 with	D scanet			
Ē					Techne
1 miles	Mow Rate	200.00 1 mith	Duration Type True Illine	d +	Tier Det:
8					Stop Test
and	Back Pressure	alas (i) (weeks =	hours in	101	a n an Marana a ta
54	ping Window	ili ili iscorda	rativutee []	30	
1	Joper Linkt %	1 (1)	seconds a	30	
	Lovier Linet %	9			
	Ever	Averlage =			
Test Results					
Elapsed Time	00:00:08	Remaini	ing Time 00:00:52		
Mean ml/h	89.80	P	eak ml/h 89.80	Average E	irror % -10.20
Instant Flow ml/h	89.80	Ve	olume ml 0.20	м	in ml/h 89.80
Back Pressure mmHo	-3.00				

The user can look at the real time graphs during each test. More detail is provided in Chapter 8.2.6.

Once a test has completed the Multi-Flo Dashboard will show a confirmation that the test has completed and gives the user the options to:

- Continue to the next test in the sequence
- Exit sequence

Ho SN 1 HE 0662	Contamin Test And PCA Test				Start Text Texamore Once Ha
Charmel 1 : 445-0539		el 1 : 36E 0899	Dramel 4: +€0638		
equence Name					
🏴 Plow / Volume Test	D courses D rea	2ett			
5					Tellime
duct	Play Rate (033,033 (2))	10	Ourston Type Timi Saves		Thirt Test
8					Atom Test
Orges	Badi Presaure (1.00	neelig 👘 🐖	hours [p	1	
	Sampling Window 👔	econsta	minutes (j.	10	
	Upper Linkt %		secondo in		Test Complete
	Lower Limit %				Start the next test in the sequence?
	Bror Average *				Res Na
Test Results					
Elaps	ed Time 00:01:00	Remai	ning Time 00:00:00		
Me	san ml/h 99.29		Peak ml/h 103.44	Ave	rage Error % -0.71
Instant F	low ml/h 100.32	1	Volume ml 1.65		Min ml/h 96.62
Back Pressur	e mmHg -15.00				

If the user chooses to continue to the next test the Manger will move to the next test tab and again all other test tabs are greyed out and unavailable to edit.

Contract of the second s	ocumentar parte Altar				2/4/	servenane (doer
Charmel 1: 442-0039	Channel 21 4E 0482 Channel 31 3	E-0iss Channel 41	+€0530			
Sequence Name						
In the fuller for	Procession of PCATeet					
E					1200022	
i.	Bosal Flow Rate micro III (nth	Duration Type Til	e ilwest 🔹		100.00	
10						Deri Teri
Tal	Holus Volume III. 18	theas II			1	Stop Test
(Jack)	the states of	and data Tim				
101	100 Marc (0	10000 [12				
	Upper Link % [1 1]	secondo II	31			
	Lower Link % [0 1]					
Test Results						
	El 00-00-01		Bolus	Volume	Flaw	Duration
	Elapsed Time 00:00:01		Mean			
	D					
	Kemaining Time 00:14:59					
	10.00					
	The second product of the second					
1	istant Plow myn 0.00					
I	Istant Plow myn 0.00					

If the user selects No, to end the test sequence that the test sequence will stop and all tests will again become available to change.

After the test sequence all tests will become available and each test tab will indicate whether the individual tests passed or failed.

Him / Ware Test Ad	6 Ocdusion Test	1				8	art Test Sequence	Oile H
Charmel 1: 442-0539	Channel 21 HE 0482	Channel 1 - Sec 039	∂ Danei+:+€	9638				
equence t								
Plow / Wei,me Test [🛛 💾 Occlusion Test 🔲	PICA Text 🔯						
-								
at a	Basal Flow Ru	Me mon in all	Duration Type Travelle	vied w		Theat Filler	ne	
alle alle							Teri Teri	
1.1	Holus Volu	re All 1	twias II			1	Stop Test	
13(1)	and the second second		and a la					
19	10(2) 40(0	re (0	anutes 2					
	Upper Linit	W 1 1	secondo il	- 31				
	LowerLinit	6 [1						
	Lower Lant	s <u>a</u>						
Test Results	LiverLint	s (a						
Test Results	imetint	s a		Bolus	Yolume	Flow	Duratic	n
Test Results	Elapsed Time (00;02:00	Ν	Bolus fean	Volume 2.87	_{Раж} 607.76	Duratio 17	n
Test Results	LowerLast Elapsed Time (00:02:00	N 1	Bolus fean	Witume 2.87 2.87	_{Наж} 607.76 607.76	Duration 17 17	n
Test Results	Elapsed Time (Remaining Time (00:02:00	N 1	Rolus fean	Volume 2.87 2.87	Flow 607.76 607.76	Ducote 17 17	n
Test Results	Elapsed Time (Remaining Time (00:02:00	N 1	Bolus Mean	Volume 2.87 2.87	How 607.76 607.76	Ducoto 17 17	9
Test Results	Elapsed Time (Remaining Time (Instant Flow ml/h 2	00:02:00 00:00:00 27.93	N 1	Bolus dean	Volume 2.87 2.87	How 607.76 607.76	Duote 17 17	n
Test Results	Elapsed Time (Remaining Time (Instant Flow mi/h 2	00:02:00 00:00:00 27:93	N 1	Bolus đean	Volume 2.87 2.87	Hew 607.76 607.76	Duote 17 17	23

10.3. During Testing

The user can move between the configuration and graph tabs and toggle between the various graphs and tabulated results depending on the type of test.

When a test is complete if it was time or volume based it will stop automatically

For manual stop tests the 'Stop Test' Button needs to be pressed to indicate the end of the test.

If a test is stopped before either the time or volume in the setup has completed the user has the option to save the incomplete test results.

Test Sto	pped	
The cur could co test resu	rent test has bee omplete, do you ilts?	n stopped before i want to save the

In case of an emergency all channels can be stopped by selecting the **RED** button on the Multi-Flo Infusion Analyser.

Flow/volume

The user can toggle between instantaneous and average flow vs time graphs, which show the acceptable limits; the pressure during the test and also the trumpet curve showing the percentage error for the 2^{nd} hour of testing.

The lower half of the test configuration screen shows the instantaneous results of instant, mean, min and peak flow (ml/h), total volume (ml), back pressure (mmHg) and error [instant or average flow or expected volume depending on set up choice],

10 5 (N)	*** 006	2 Antificitumen Test	ant PCA Test					Start Text Reserve
Charry	11:48-0	0139 D Crone	21-12-0412	tarnel 1 : 365-0699	Danet He	638		
aerice	Nanie							
) re	ev J Valurie	Test Dia	Ann St. D	PC4 Test				
-								
fund	14			Inst	ant Flow vs	Time		
2	mr.	200 -						- Expected
*	a .							- upper livit
3	14	5100-1						- Unser Init
	LE 3	5 100						
	17	Flo						
	1	20 -						
		0.1						
		00,01,00	00:01:10	10,01,00	1010102	00101100	0010100	
				т	ime [hh:mm:s	6]		
Te	st Resi	ults						
	E	Elapsed Time	00:01:58	Remaini	ng Time 00:0	3:02		
		Mean ml/h	99.96	Pe	ak ml/h 104.	72	Instant Error	% 0.65
	Insta	nt Flow ml/h	100.65	Vo	lume ml 3.28		Min m	nl/h 96.12
Ra	ck Pre	ssure mmHz	6.00					

Occlusion

The user can toggle between the pressure and the accumulated flow vs time graph, which shows the acceptable limit.

The lower half of the test configuration screen shows the type of occlusion test carried out (manual or auto rewind) and the instantaneous results of: current peak pressure and back off pressure (mmHg) and bolus volume delivered once the occlusion has stopped.



<u>PCA</u>

The user can toggle between the pressure and the accumulated and instant flow vs time graphs, which shows the acceptable limits. The bolus can be clearly shown on the instant flow vs time graphs

The lower half of the test configuration screen shows a bolus summary in tabulated format including average results of: mean volume, flow and duration as well as stats for each individual bolus measured. Test carried out (manual or auto rewind) and the instantaneous results of: current peak pressure and back off pressure (mmHg) and bolus volume delivered once the occlusion has stopped.

Test results information is also available including elapsed and remaining time, instant flow (ml/h) and total volume (ml).



Viewing graphs

The user can toggle a full graph and 60 second default view by selecting the graph by single left mouse button click and you can then press the spacebar to toggle between the two options.

The full data window will automatically scale the window using the full height of the graph to display the data.

The 60 second window will automatically scale the window to track the data and keep the data within the window; this also includes the expected, lower and upper limits.

On the graphs the user also has the options to do:

- Scroll by holding the left mouse button down on the graph and drag up, down, left and right to scroll the graph.
- **Zoom** in and out of the full data or a 60 second window:

Double left mouse button click will zoom in and double right click will zoom out on the mouse cursor point on the graph.

The user can draw around an area of interest and select CTRL and then hold the left mouse button down to create a range to zoom in.

Mouse wheel enables zoom in and out of the graph.

Hold the right mouse button down and push forward or pull back on the mouse to zoom in and out.

10.4. Reviewing Results

Once the test is complete the user may close the dashboard window or view the results within the dashboard

The test results can be view in the main Med-eBase software by selecting the Asset ID and then the **Test Result** tab.

Augusta 17				2.14.2	1.000	2.552557	
Example Database.db	10	Status	Name	Description	List fest	Refest Date	
	10	×	NERTE	Diffusion device	12/01/2014	12/12/2014	
	20		0121	Seturior device	01/01/2014	ALCONT.	
	21	P	01928	Infusion pump	12/03/2014	12/12/2984	
	77	×	186476	Infuson	12/03/2014	12/12/2014	
	23	10	47851	PROBE 123	15/91/2014	15/07/2014	
	24	-	257	PROBE 123	05/02/2014	05/98/2014	
	25	1	2536	PROBE 123	36/02/2014	10/08/2014	
	26	190	125	PRO6E 123	10/92/2014	10/98/2014	
	27.	PP I	236	PROBE L23	35/02/2014	15/08/2014	
	28	×	3525	PROSE 123	30/92/2014	10/08/2014	
	29	PD .	BRasun	infusion	12/02/2014	12/02/2034	
	Dises.	stational control	COULD - HOUSE AND	CON CONSTRUCTOR			
	Test	Ramits	CV/D	(COLORADOR			
	Test	Ramits Date Tested	I Instrument Type	Overall Status			Teniña
	Text 1	Ramits Date Tested 12/03/2014	Rigd Multi-Flo	Overall Status			Danuka Avet.Centifu
	Test 1	Results Date Tested 12/03/2014 01/05/2014	I Instrument Type Rigel Mutti-Fio Rigel Mutti-Fio	Overall Status			Tonsilan Print Constitu Text Secure
	1 2 3	Results Date Tested 12/03/2014 01/05/2014 01/05/2014	I Instrument Type Rigd Multi-Ho Rigd Multi-Ho Riget Multi-Ho	Overall Status			Finishin Frint Centrific Text Sequent Jopied Fort
	1 2 3 4	Ramilio Date Testeri 12/00/2014 01/05/2014 01/05/2014 01/05/2014	Rigel Mutte-Fig Rigel Mutte-Fig Rigel Mutte-Fig Rigel Mutte-Fig	Overal Status Sti Sti Sti Sti			Results. And Control Text Secure Applied Fort
	1 2 3 4 5	Results Date Tester 12/09/2014 01/05/2014 01/05/2014 01/05/2014 01/05/2014	Right Mutter Frank	Overal States			Rest Sec. And Sec. According According Dates
	1 2 3 4 5 6	Remits Date Tester 12/03/2014 01/05/2014 01/05/2014 01/05/2014 01/05/2014 01/05/2014 01/05/2014	Instrument Type Right Mutter Fo Right Mutter Fo Right Mutter Fo Right Mutter Fo Right Mutter Fo Right Mutter Fo Right Mutter Fo	Overall Status P P S F P S F P S S F P S S F F F F F F			Teachtr. Proc.Contin Total Search Robert Part
	Text 1 2 9 4 5 6 7 8	Remain Date Tester 12/03/2014 01/05/2014 01/05/2014 01/05/2014 01/05/2014 01/05/2014 01/05/2014 01/05/2014 01/05/2014	Right Mute Ho Right Mute Ho	Overall Status P P S F P S F F F F F F F F F F F F F F			/ Kunda / /rot General / Acaded Ford / Internet
	Text 1 2 3 4 5 6 7 8 9	Date Tester 12/03/2014 01/05/2014 01/05/2014 01/05/2014 01/05/2014 01/05/2014 01/05/2014 01/05/2014 01/05/2014 01/05/2014 01/05/2014 01/05/2014 01/05/2014 01/05/2014	Instrument Type Right Math-Ho Right Math-Ho Right Math-Ho Right Math-Ho Right Math-Ho Right Math-Ho Right Math-Ho Right Math-Ho Right Math-Ho	Orenal Status			Tauda Records Taul Searcy Record Series Bellew
	1 2 3 4 5 6 7 8 9 10	Ramitis Date Tester 12/03/2014 01/05/2014 01/05/2014 01/05/2014 01/05/2014 01/05/2014 01/05/2014 01/05/2014	Instrument Type Right Matterflo Right Matterflo Right Matterflo Right Matterflo Right Matterflo Right Matterflo Right Matterflo Right Matterflo Right Matterflo	Overal Status			Final Control Ministry Control Mathematical Control

Within the test results tab the sequence will be shown as one item with a pass or fail status. All tests or sequences carried out under that Asset ID will be shown in the results tab. All items will have the test date and instrument type shown to indicate the testing carried out.

To view a particular test or sequence either double clicks on the item or select **Results...** from the right hand side of the asset details window.

Overall Result	Details			
-	Test Date:	01/05/2014 15:09:41	Tested By:	
-0	Test Instrument Type:	Rigel Multi-Flo	Test Mode:	Semi-automatic
	Tester Serial No.:			
Test Results				
🔊 Volume				8
P Occlusio	n			0
PCA				8
-				
Comments				
Comments				
Comments				

A progress bar may appear while the test results are created depending on the amount of data and test length.

Expanding the test shows the summary of the test results, graphical results and when applicable tabulated data similar to the options available during testing. The pass or fail indication will be shown for each individual test within a sequence.



Pass / Fail

Once a test has completed the Med-eBase Multi-Flo Dashboard will indicate whether a test has passed or failed with a green flag icon or Red Cross in the tab for the specific test.

If no limits are set then the test will automatically pass. The pass fail logic for each test type is defined as:

Flow Volume

- * The Error in configuration can be setup for Instant, Average and Expected.
- Instant flow is checked all the time and when the data is outside of the limits for more than 3 consecutive seconds it will be a fail.
- Average and Expected are checked on the last data value and outside of the limits it will fail.

Occlusion

Performed on the peak of the test if it is outside of the limits it will be a fail.

PCA

Performed on all bolus peaks of the test and if any are outside of the limits it will be a fail.

10.5. Exporting Multi-Flo Results

The results downloaded from the Rigel Multi-Flo can be exported as a CSV file from Med-eBase. This will enable the user to manipulate and create graphs and trumpet curves from the raw infusion data.

The format of the filename which is exported is "<ASSET ID>_<DATE>_<TIME>.csv".

It will export the last test result for the asset selected; this is because the export is located on the asset manager and not the result manager. The tests will be displayed horizontally with the data being displayed vertically.

When results have been saved in Med-eBase the asset can be selected and then the user can select to export the raw data file in CSV format for specific analysis.

		Status	Name	Description	Last Test	Retest Date		
Exemple Database.db	44	P	B Braun		12/05/2014	12/05/2014		
	45	-	00000		09/01/2000	09/10/2000		
	46	pt.	00021		199/01/2000	09/10/2000		
	47	14	41		09/01/2000	09/10/2000		
	48	pu -	BEXXKX2		19/05/2014	19/12/2014		Espatt anal(a
	40	10	BEXXXX		19/03/2014	19/12/2014		
	50	释	KUHEAPO		19/03/2014	19/12/2014		
	51	pp.	RRYSOPP		18/03/2014	18/12/2014		
	52	10	10		28/05/2014	28/02/2015		
	53	pie -	3354400		28/05/2314	28/02/2015		
	54	100	33544		28/05/2014	28/02/2015		
	55	.8	Deficiellator					
	56	(PU	WOP		06/06/2014			
	57	10	sectuaien Băraun		23/06/2014			
	58		BERKAN WALLS					
	Actest Del	lafe:						
	Aspet	Details Te	stResults Appled Pa	rta Test Secur	ence			
	Deta	es -						
	3	asetNore a	BERALIN INPLISONAT				Serial No.1	
	1	besciption				Harufaduren		
		Clent				Midel		
	line	sternine:				Service Codes		
	-	Pendo	der Barad (months)	A Dist Test	A Congointen			
			- marit of the desired of the	(Intrastructure		ALC BOURD		

Select a folder location to store the results.



The CSV file can then be opened in Excel from the selected location.



11. Troubleshooting

Please ensure you have the latest version of Med-eBase V2 installed. The latest version is available to download from <u>www.rigelmedical.com</u>. This will install over your current version without affecting your data or license keys.

For technical queries, please email support@rigelmedical.com

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