

# R:Biometric X.5n



## Help Manual



# R:Biometric X.5n

**Manual**

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*by R:BASE Technologies, Inc.*

*Welcome to R:Biometric X.5n!*

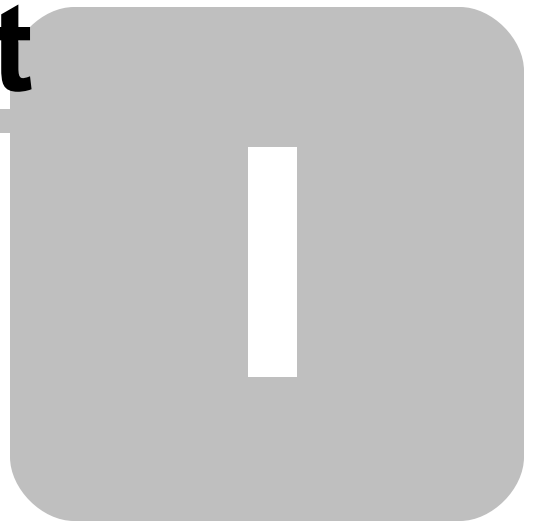
*R:Biometric X.5n is an R:BASE software program for secure fingerprint and facial recognition biometric scanner solutions.*

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**Part**



# 1 Introduction

## 1.1 Introducing R:Biometric X.5n

R:Biometric X.5n is an R:BASE software program for secure fingerprint and facial recognition biometric scanner solutions. R:Biometric allows the ability manage user information to and from biometric scanners for R:BASE application use. The "n" in R:Biometric X.5n represents network-supported environments for biometric security solutions.

R:Biometric connects to an R:BASE database to store defined biometric device users, and can be used to create new users. Once connected R:Biometric creates its required tables to store user information. The list of defined users can be reviewed in the editor window with various display options, and also within a Database Users window which provides the type of biometric information stored for each as a preview.

The R:Biometric interface allows for multiple devices to be connected to and reviewed simultaneously, displaying the users loaded onto each device, and what fingerprint/face template data is stored. R:Biometric is quick and easy to set up with the ability to connect the biometric scanner on a network by assigning an IP address to the device. Users can be loaded from a device to an R:BASE database, and loaded back to another device.

Additional features include the ability synchronize the time on scanner devices. For supported devices, company logo images can be upload to display on the scanner screen in sequence, and user pictures can be uploaded to display the person's photo when a scan is made.

R:Biometric includes a Plugin (.rbm) to integrate biometric security into R:BASE applications. When a verification transaction is processed, data can be captured from variables or a scan transaction log to match the local users with the value from the device. Transaction logs from devices may be viewed, downloaded to a CSV file, and if needed, the transaction logs can be cleared from scanner devices.

R:Biometric supported applications:

- R:TimeTrack
- R:JobTrack
- Any application which must verify a user's identity

**Note:** R:Biometric does not store fingerprints or facial patterns, nor supports the ability to print or make fingerprints available in any way.

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First Edition

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- To have the database(s) being converted, safely backed-up before attempting conversion process. RBTI will NOT be held responsible for lost data or corruption as a result of advice given.

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2. To have operating system, workstations, and local network installed and functional. R:BASE Technologies will NOT be responsible for resolving issues not pertaining to the software product.
3. Our support staff deals with advanced issues, therefore the person contacting R:BASE Technologies for assistance should be the system administrator or have other R:BASE/SQL experience and be able to understand and implement the advice given.
4. To have the database, application, and command files being reviewed, safely backed-up before attempting assistance. R:BASE Technologies will NOT be held responsible for lost data or corruption as a result of advice given.

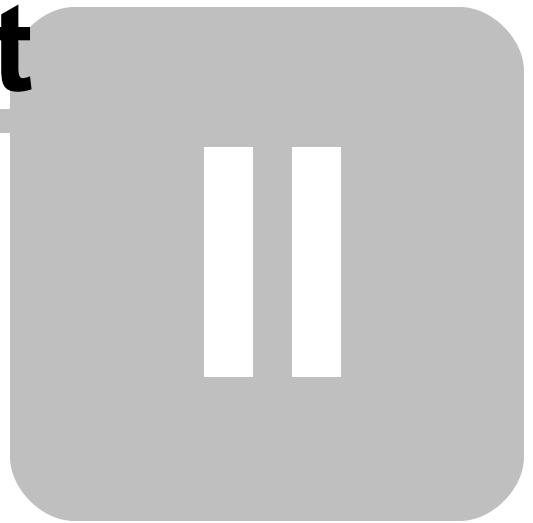
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1. To provide quality assistance in a timely manner to aid in the installation of the product and elementary conversion of database, application, and command files within 30 days of the date of purchase.
2. To provide a reasonable solution for any solvable issue. Not all issues may be solved, and therefore we will acknowledge the existence of known issues, or bugs, which we are presently aware of, that have no reasonable work-around.

R:BASE Technologies reserves the right to limit the amount of support time allotted to a maximum of 2 HOURS during the 30-Day Complimentary Technical Support period. We also reserve the right to limit the quantity of calls from a particular licensee to 30 MINUTES in a single day. Issues are dealt with on a case-by-case basis, and are handled at the discretion of the support agent assigned to the case. Complimentary Support is limited to INSTALLATION and ELEMENTARY CONVERSION related issues ONLY. Our support hours are Monday through Friday, from 10:00 AM to 6:00 PM (EST).

For application, design, or advanced conversion assistance, R:BASE Technologies offers Technical Support Plans of various types to meet your needs. Please visit the Support page at <https://www.rbase.com/support> for details and pricing.

**Part**



## 2 R:Biometric Installation

### 2.1 System Requirements

The following system specifications are recommended for the optimal use of R:BASE and R:BASE-related software.

#### Workstation Hardware

- 2-Core 2GHz+ CPU
- 2 GB of available RAM (4 GB recommended)
- 2 GB of available hard disk space
- 1024x768 or higher resolution video adapter and display
- Standard mouse or compatible pointing device
- Standard keyboard

#### Server Hardware

- 2-Core 2GHz+ CPU
- 6 GB of available RAM (8 GB recommended)

#### Operating System

- Microsoft Windows 11 (Professional)
- Microsoft Windows 10 (Professional)
- Microsoft Windows Server 2022
- Microsoft Windows Server 2019
- Microsoft Windows Server 2016
- Microsoft Windows Server 2012, 2012 R2

#### Network

- Ethernet infrastructure (Gigabyte recommended)
- Internet connection recommended, but not required, for license activation, software updates, and support
- Anti-virus programs should exclude the R:BASE program, and any add-on product, executable and database files

### 2.2 Things You Will Need

- License Key

Before launching the installer, it is recommended that you have your 32-character License Key readily available. The License Key is provided in a document, with the email message, when the software was originally purchased. If you have lost or misplaced your License Key, please contact our Support Staff by email at [support@rbase.com](mailto:support@rbase.com).

- Internet Access

The computer where the software will be launched should have access to the Internet for activation. The Internet access is used to visit the R:BASE Technologies Web site to provide your required Activation Key.

In instances where the software will be installed on a computer that is not connected to the Internet, you must then contact R:BASE Technologies to provide information displayed on the computer screen. Please contact our Product Activation Staff by email at [activationkey@rbase.com](mailto:activationkey@rbase.com). The Registration Number must be provided. The Registration Number is displayed on the invoice/order slip, and within the email, when the software was originally purchased.

## 2.3 Software Installation

The installation of R:Biometric is fully automated, and does not require user intervention for the initial configuration.

Run the installer ".exe", provided by download, while physically sitting at the workstation to begin the installation process, and read the installer screens for licensing and other information as the program installs.

### Installation Directory

C:\RBTI\RBiometricX5n

### Files Installed

RBiometricEditorX5E.exe  
 RBiometricEditorX5.exe  
 RBiometricX5n.rbm  
 RBiometricX5n.chm  
 RBiometricX5n.pdf  
 License.rtf  
 ReadMe.txt

### Requirements:

#### Plugin

The R:Biometric X.5n Plugin file (RBiometricX5n.rbm) must be placed in the R:BASE X.5 program directory or the runtime/compiled application directory.

R:BASE Version	Default Program Directory
X.5 (Version 10.5)	C:\RBTI\RBGX5
X.5 Enterprise (Version 10.5)	C:\RBTI\RBGX5E

#### Engine DLL

If the computer where R:Biometric is installed does not have R:BASE installed, the R:BASE Engine DLL must be copied from another computer to the System directory.

R:BASE Version	Default Program Directory
X.5 (Version 10.5)	RBENGINEX5.DLL
X.5 Enterprise (Version 10.5)	RBENGINEX5E.DLL

## 2.4 Plugin Activation

R:BASE Plugins can be used to enhance, or extend R:BASE operations. Current R:BASE Plugins use the .RBM file extension.

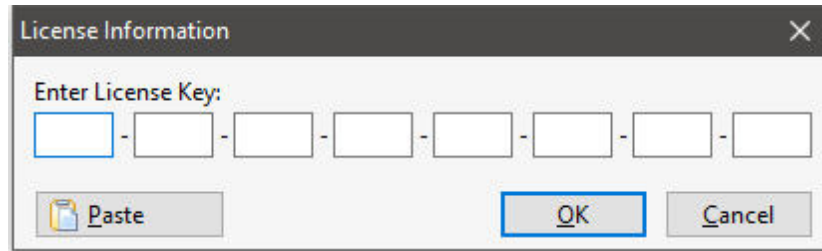
To begin using any plugin product, the plugin must be registered for use.

The license type for R:BASE and R:BASE plugin products must match. The license keys supplied with Single Seat and 5 Seat plugin products will only be accepted within Single Seat and 5 Seat versions of R:BASE, and are not accepted within R:Compiler for R:BASE or Runtime for R:BASE programs. The same license structure is also in place for Runtime License Keys for plugin products, where the key will not be accepted within Single Seat and 5 Seat Licenses R:BASE.

### 2.4.1 R:BASE

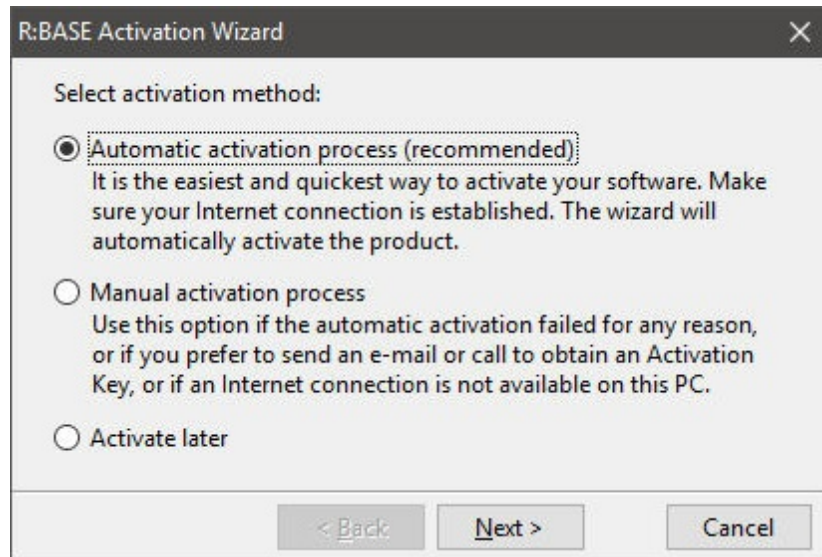
To begin using a plugin product, you must register the software within R:BASE by selecting "Help" > "Product Activation" from the main Menu Bar. In this window, select the "Add New" button where you can enter or copy and paste the License Key you received with your product.

Only "Per Seat" License Keys are valid for this entry screen. All "Runtime" License Keys must be registered within R:Compiler for R:BASE or within Runtime for R:BASE separately.



The "License Information" dialog box features a title bar with a close button (X). Below the title bar, the text "Enter License Key:" is followed by a series of eight empty text boxes, each separated by a hyphen. At the bottom left, there is a "Paste" button with a clipboard icon. At the bottom right, there are "OK" and "Cancel" buttons.

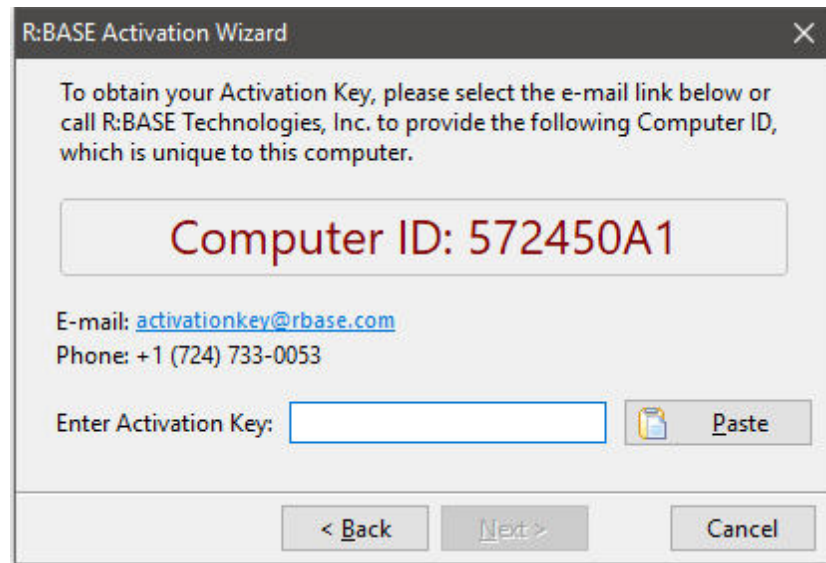
After entering the License Key, you will see a dialog to prompt for your activation method. The software can be activated automatically over the Internet, or manually by retrieving an Activation Key from R:BASE Technologies by email or over the phone. If you select "Later", you will be reminded each time R:BASE starts to activate your copy.



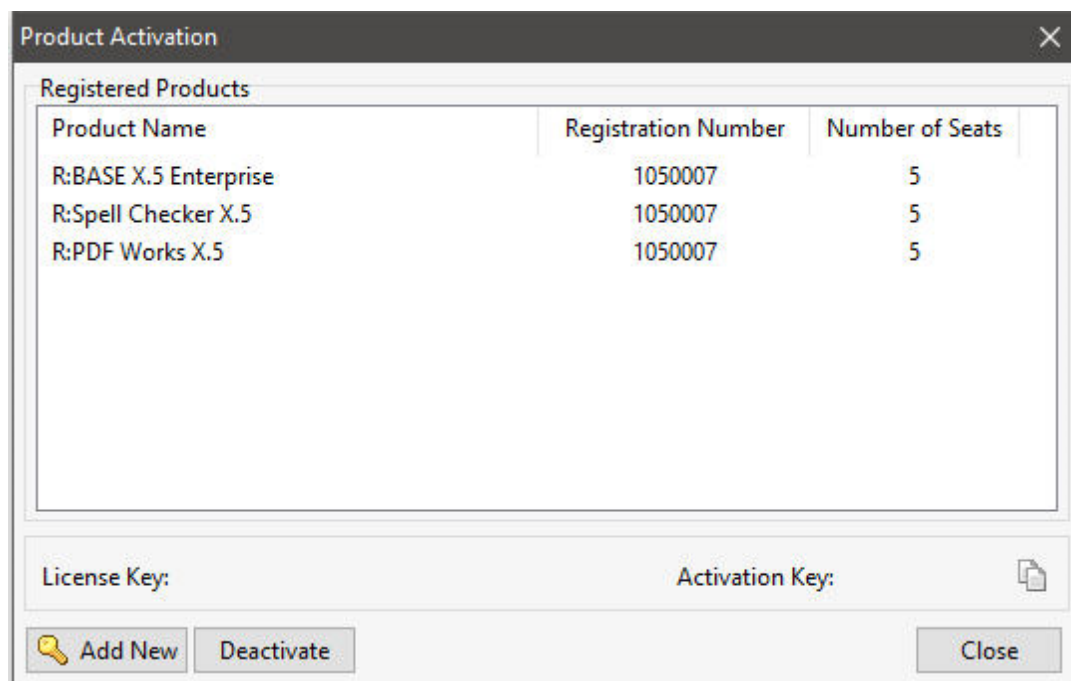
The "R:BASE Activation Wizard" dialog box has a title bar with a close button (X). The main content area is titled "Select activation method:" and contains three radio button options. The first option, "Automatic activation process (recommended)", is selected and includes the text: "It is the easiest and quickest way to activate your software. Make sure your Internet connection is established. The wizard will automatically activate the product." The second option is "Manual activation process" with the text: "Use this option if the automatic activation failed for any reason, or if you prefer to send an e-mail or call to obtain an Activation Key, or if an Internet connection is not available on this PC." The third option is "Activate later". At the bottom, there are three buttons: "< Back", "Next >", and "Cancel".

When activating the software manually, you select the e-mail link to launch your email client and send a pre-formatted message to R:BASE Technologies that will contain your License Key and the displayed Computer ID. You will need to provide your R:BASE Registration Number and Computer ID.





At any time, you can review your product information by starting R:BASE, and from the Menu Bar clicking on "Help" > "Product Activation". Your R:BASE Registration Number is displayed on the window. You can also enter additional License Keys for R:BASE add-on products.



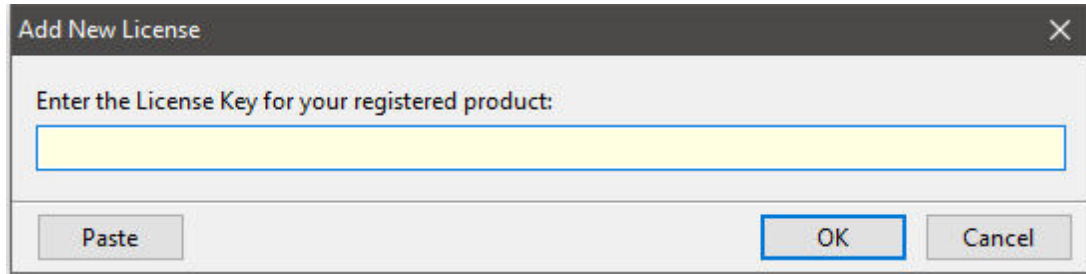
**Please be advised that if you are activating multiple workstations, it is highly recommended that you keep records of the computer name, Computer ID and Activation Key for future reference. Access to this information will prove convenient in the event of a hardware failure or license transfer when uninstalling R:BASE.**

**Please see:** [Uninstall/Reinstall](#)

## 2.4.2 R:Compiler for R:BASE

### Runtime License Key

Runtime license keys for an R:BASE Plugin must be stored within the compiled executable. A specific Runtime License Key would be provided after your purchase of the Runtime software product. Adding a Runtime License to your project can be done by selecting the "Add License" button, and pasting the appropriate Runtime License Key into the displayed dialog window.



After a Runtime License is added as a resource, it will be assigned a "Resource ID". This ID consists of the word "License" and an incrementing value for the number of licenses added to the executable.

### Plugin File (.RBM)

R:BASE Plugin files can be added and stored within the compiled executable or included within the R:BASE application directory. The Runtime license key pertaining to the R:BASE Plugin must be stored in the compiled executable.

Adding a Plugin to the list of resources can be performed by selecting the "Add Plugin" button on the Tool Bar. You will be prompted to locate the appropriate Plugin file with the .RBM file extension. After a Plugin file is added as a resource, it will be assigned a "Resource ID". This ID consists of the Plugin file name.

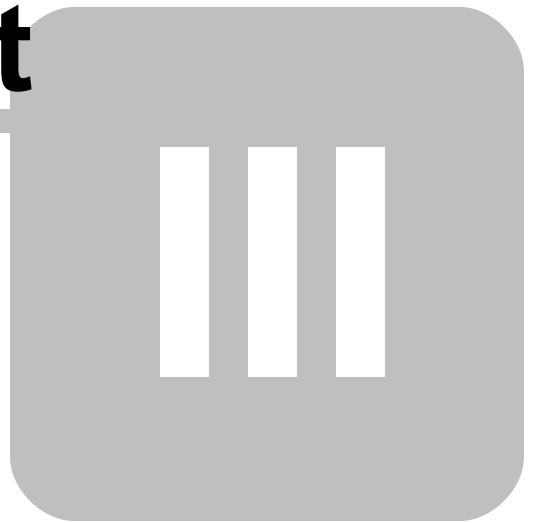
## 2.4.3 Runtime for R:BASE

After R:BASE Plugins are acquired for Runtime for R:BASE applications, the Plugin file must be included in the Runtime application folder, to be loaded when the Runtime application launches.

To load the Plugin, the License Key must be included into the Runtime for R:BASE session by adding the following PROPERTY command within the application startup file:

```
PROPERTY ADD_LICENSE #####-#####-#####-#####-#####-#####-#####-##### ' '
```

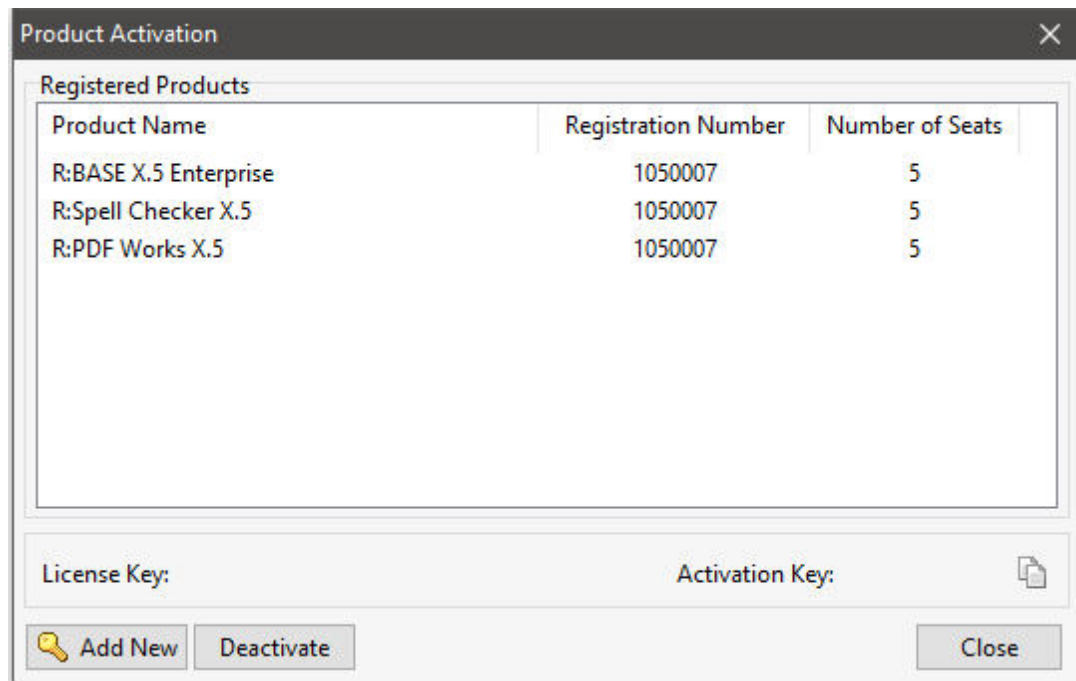
**Part**



### 3 Uninstall

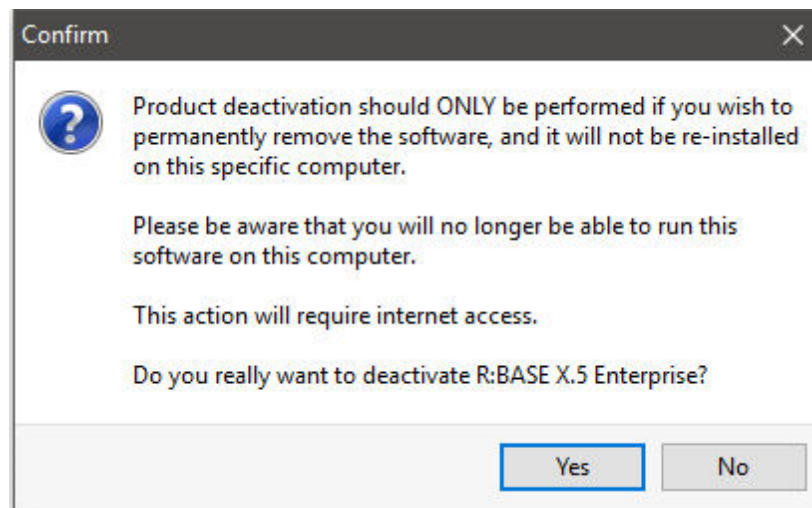
If a computer is no longer using R:Biometric, through license transfer or hardware failure, the Activation Key that was used on that computer must be submitted to R:BASE Technologies so we can then remove the Activation Key from our log. We will disable the Key, which will then free up that used activation. Once a key is reported to us as no longer in use and deactivated, it can no longer be used on that computer.

Product deactivation can be performed automatically from within R:BASE. To review your product information select "Help" > "Product Activation" from the Menu Bar. Here, the License Key and Activation Key for a selected product is available for review.



If the License Key for your product is not readily available for the license transfer, select the "Copy License Key" button to send your License Key to the clipboard.

To deactivate a listed product, select it and press the "Deactivate" button. The below confirmation dialog will appear. After selecting "Yes", the product will be removed from the list.



After completing the deactivation of the product, it can be successfully reinstalled and activated.

**Part**



## 4 Biometric Scanner Setup

The network biometric scanner devices must be set up correctly in order to be recognized by R:Biometric X.5n. As several devices may be used on a network, each device must be assigned its own IP address.

After powering up the device and connecting the unit to a network port/switch/hub, refer to the "Initial Set Up" chapter of the scanner help manual to set the local date/time.

Then, refer to the "Communication Connection" chapter of the scanner help manual to enter the desired IP Address and other network parameters.

Please be sure to explore all other settings for the scanner as some may be of use for different environments.

It is possible to add users and passwords directly from the scanner device, but it will be easier using R:Biometric X.5n. Biometric information, such as fingerprints or facial recognition patterns must be captured using the actual scanner device.

**Part**





## 5 Quick R:Biometric Setup

The following instructions can be used to quickly set up R:Biometric with biometric scanner devices. It would be ideal to have the scanner next to the computer where R:Biometric will be installed for the initial set up.

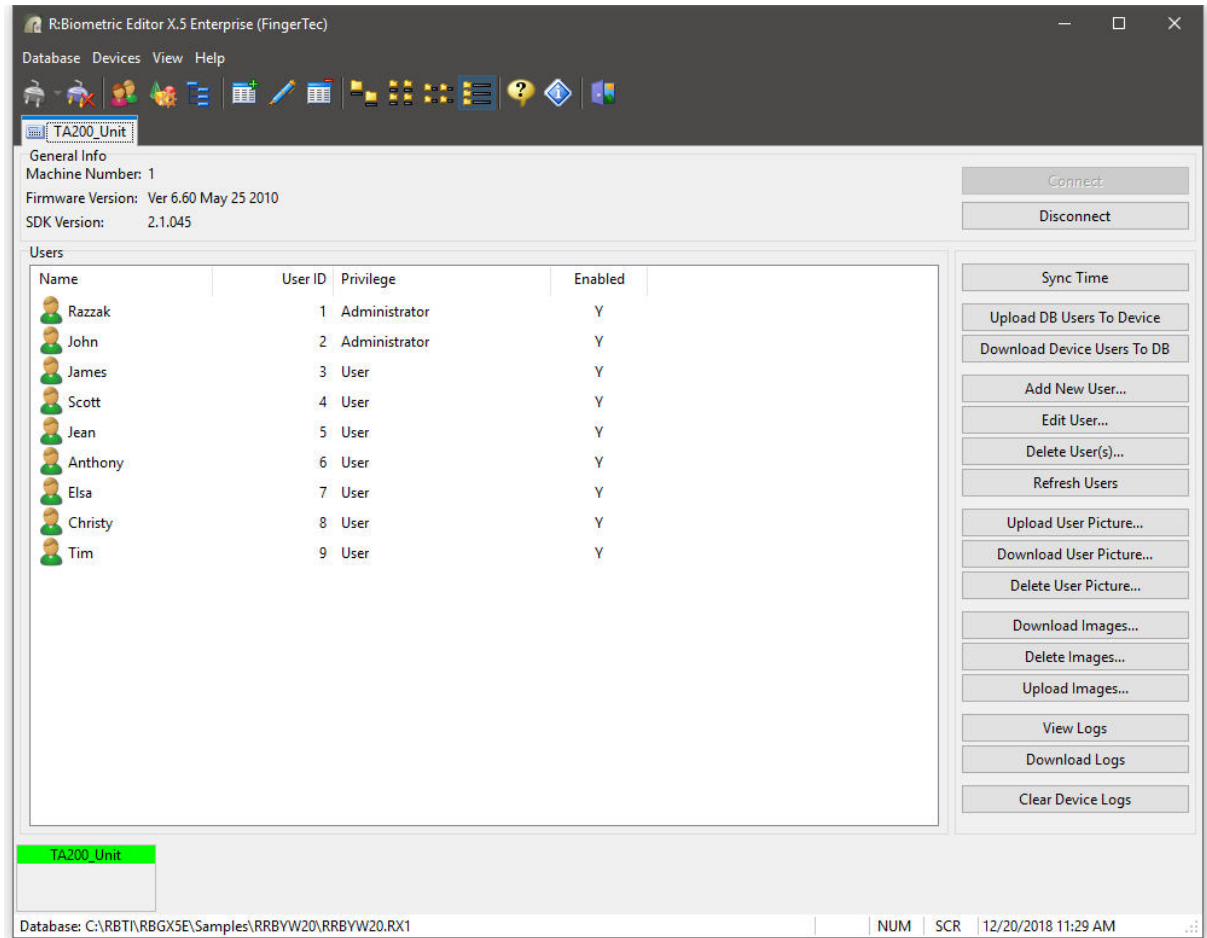
1. Attached the scanner device(s) to the network where the computer running R:Biometric will have access.
2. Turn on, and access the scanner(s) to assign a valid IP address for your network. You must refer to the scanner documentation for further details.
3. Install R:Biometric, if you have not done so already, and launch the software.
4. [Add the scanner device\(s\)](#) to the R:Biometric Editor.
5. On one of the devices, [create all users](#) that will access any of the devices.
6. Access the scanner device to enter biometric details for each of the defined users. You must refer to the scanner documentation for further details.
7. [Connect to the R:BASE database](#).
8. [Save the users to the database](#) from the scanner.
9. Select another device from the list of tabs, and then [load users to the device](#) from the database.

**Part**



## 6 R:Biometric Editor

The R:Biometric Editor is used for managing scanner devices and users that will access the devices.



### 6.1 Menu Bar

#### Database

- [Connect Database...](#) - connects to a database
- [Disconnect Database](#) - disconnects from a database
- [Connection History](#) - displays the database connection history
- [Database Users...](#) - displays the database users and the type of biometric information stored for each
- [Device Templates...](#) - displays the device templates for users
- [Multi-Device User Upload...](#) - allows for database users to be uploaded to multiple devices
- [Exit](#) - exits R:Biometric

#### Devices

- [Add Device...](#) - opens a dialog window to add a new device
- [Edit Device...](#) - opens a dialog window to edit a selected device
- [Remove Device](#) - deletes the selected device

#### View
















- [Large Icons](#) - displays the users as large icons

- [Small Icons](#) - displays the users as small icons
- [List](#) - displays the users as a list
- [Details](#) - displays the users with details

#### Help

- [Help](#) - displays the R:Biometric in-line help documentation
- [About](#) - displays current information about the product such as version

## 6.2 Tool Bar

Button	Name	Description
	Connect Database	Connects to a database
	Disconnect Database	Disconnects from a database
	<a href="#">Database Users</a>	Displays the database users
	<a href="#">Device Templates</a>	Displays the device templates for users
	<a href="#">Multi-Device User Upload</a>	Allows for database users to be uploaded to multiple devices
	Add Device	Adds a scanner device
	Edit Device	Edits the selected device
	Remove Device	Removes the selected device
	Large Icons	Displays users as large icons
	Small Icons	Displays users as small icons
	List	Displays users in a list
	Details	Displays users with details
	Help	Displays the R:Biometric in-line help documentation
	About	Displays current information about the product such as version
	Exit	Exits R:Biometric

## 6.3 Connecting to a Database

In order to manage the list of users that will access the scanner devices, a connection to a database must be made initially.

**IMPORTANT: Before you connect to the R:BASE database, make sure that no other users are connected! The initial connection will add four new tables to your database.**

#### Connecting to the Database

To connect to a database, select either of the available options:

- Choose "Database" > "Connect Database..." from the [Menu Bar](#)
- Select the "Connect Database..." button from the [Tool Bar](#)

In the displayed dialog, browse to the database folder and and connect to the R:BASE database. Once the connection is made, four new tables will be added to the database. If you launch the Database Explorer in R:BASE, you will see the following tables listed:

- RBIOFT\_Data

- RBIOFT\_DeviceUser
- RBIOFT\_Logs
- RBIOFT\_Types

>> There are now two different buttons to download logs -- "Download Logs To CSV" and "Download Logs To DB". A new table named RBIOFT\_Logs was added. It will be created if it doesn't exist.

## 6.4 Managing Scanner Devices

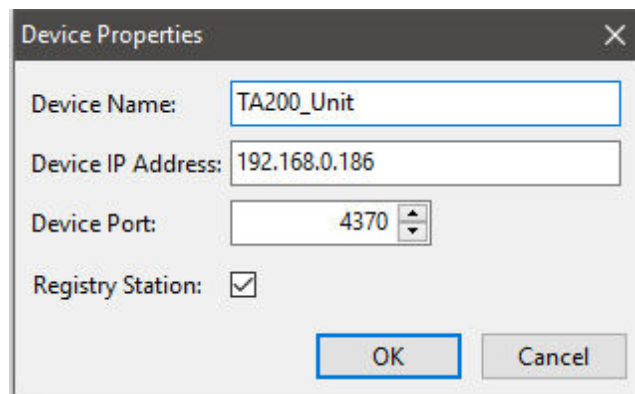
After scanner devices are attached to the network and [assigned IP addresses](#), they can now be added to the R:Biometric Editor.

### Adding Devices

To add a device, select either of the available options:

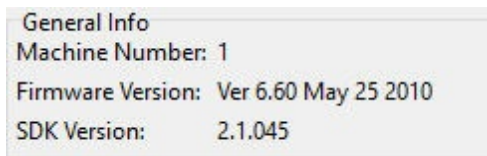
- Choose "Device" > "Add Device..." from the [Menu Bar](#)
- Select the "Add Device..." button from the [Tool Bar](#)

### Device Properties



- The **Device Name** is the value which will appear on the tabs within the user interface.
- The **IP Address** to specify must match the device which is physically placed is that location.
- The default **Device Port** number is 4370. FingerTec scanners use 4370 as the default port. If the port must be altered, a standalone software tool is needed.  
<https://s3.amazonaws.com/files.fingertec.com/Yusri+Tools/Tools/FTPPortChanger.zip>
- The **Registry Station** check box specifies the device is designated to upload database users to devices, in multi-device environments. A registry station may possibly be the device in the Human Resources office, where users are added/deleted/updated. For mixed facial recognition and fingerprint scanner environments, a single facial recognition scanner and single fingerprint scanner will be established as the Registry Station for other common scanners.

After added, a tab will be displayed for each device. When a device is selected, the "General Info" panel will display the Machine Number, Firmware Version, and SDK Version in use.



### Editing Devices

To edit a device, select the specific device listed by the Tab, and choose either of the available options:

- Choose "Device" > "Edit Device..." from the [Menu Bar](#)

- Select the "Edit Device..." button from the [Tool Bar](#)

The Device Properties dialog will be displayed to alter the values.

#### Removing Devices

To remove a device from the R:Biometric Editor, select the specific device listed by the Tab, and choose either of the available options:

- Choose "Device" > "Remove Device" from the [Menu Bar](#)
- Select the "Remove Device" button from the [Tool Bar](#)

A confirmation message will be displayed before the device is removed from the interface.

### 6.4.1 Connecting to Devices

After devices are added to R:Biometric, a tab will be displayed for each scanner. Use the "Connect" button, that is displayed along the right side of the user interface, to connect to an added devices.

After a connection to the device is made, the list of users that are stored on the device, if exist, will be displayed.

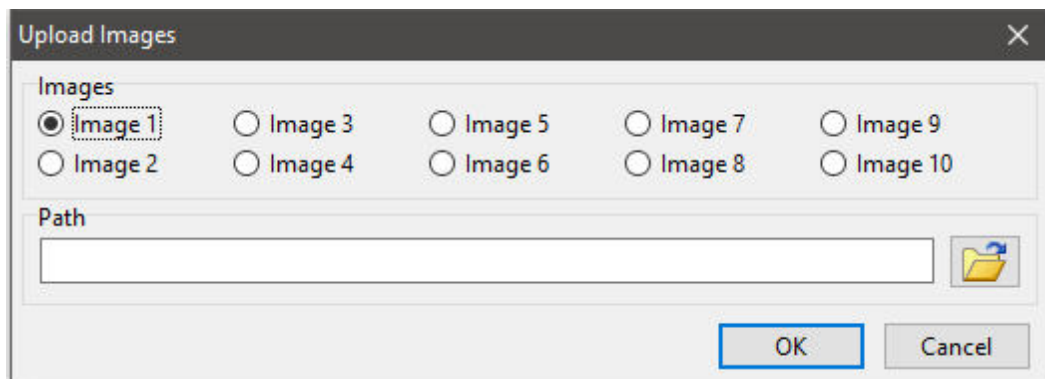
While connected to the device, the [managing of users](#) and [time synchronization](#) can be performed for the selected device.

### 6.4.2 Sync Time

After a device is added to the R:Biometric Editor, and a connection to a database has been made, a "Sync Time" button is displayed along the right side. The Sync Time option will synchronize the time on the device to the current time on the computer running the R:Biometric Editor interface.

### 6.4.3 Images

For supported biometric scanner devices, up to 10 images can be loaded to display in the specified sequence. Using the provided Download Images, Delete Images, and Upload Images buttons, images can be downloaded, deleted, uploaded for supported devices.



### 6.4.4 Device Logs

#### Download Logs

The "Download Logs to CSV" button is available to collect transactions from scanner devices. The log file is a CSV with the header: "Date,Time,DeviceName,DeviceNum,UserID,UserName,VerifyMode".

The "Download Logs to DB" button is available to collect transactions from scanner devices. The log is saved to the RBIOFT\_Logs table.

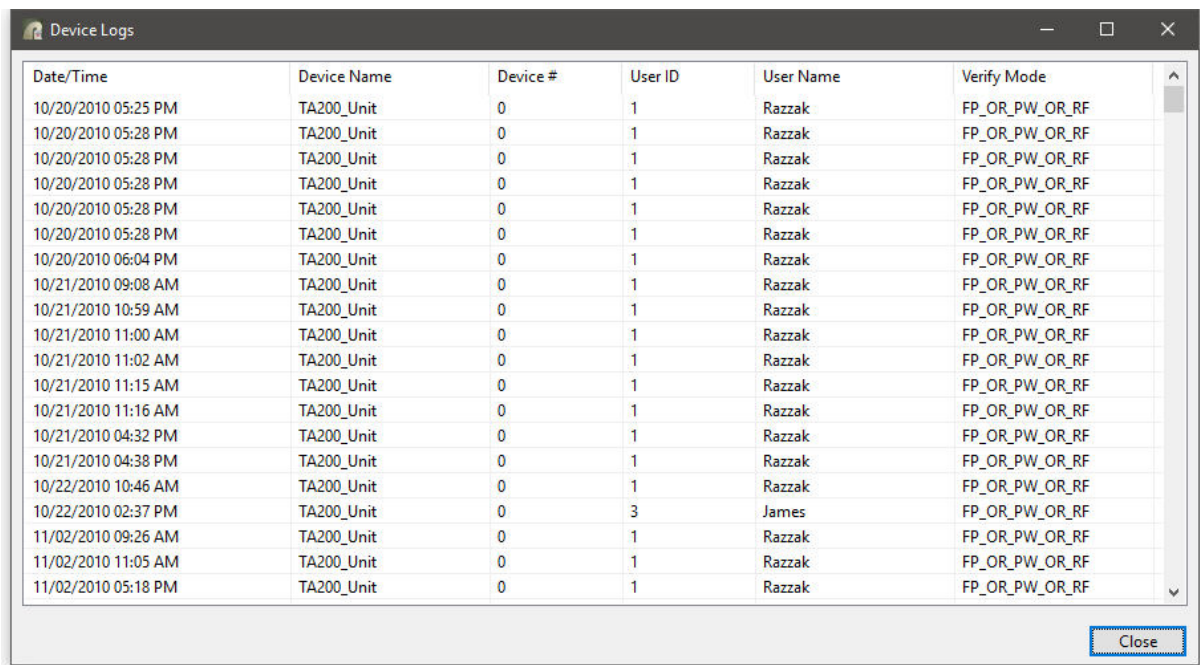
The following are the possible "Verify Mode" values, which are dependent to the device model:

- FP = Fingerprint
- PW = Password
- RF = RD Card or Access Card
- PIN = PIN
- FACE = Facial Recognition

**Note:** For devices with multiple verification capabilities, the device may not properly store the verification type (in its internal log). Thus, some codes have "OR" or "AND" in the verification mode value. For the "TA200 Plus" model, both key and finger are stored as the FP\_OR\_PW\_OR\_RF verification. In the plugin during real-time mode, R:BASE can distinguish a key from a finger.

### View Logs

The View Logs button is available to display the transactions on scanner devices.



Date/Time	Device Name	Device #	User ID	User Name	Verify Mode
10/20/2010 05:25 PM	TA200_Unit	0	1	Razzak	FP_OR_PW_OR_RF
10/20/2010 05:28 PM	TA200_Unit	0	1	Razzak	FP_OR_PW_OR_RF
10/20/2010 05:28 PM	TA200_Unit	0	1	Razzak	FP_OR_PW_OR_RF
10/20/2010 05:28 PM	TA200_Unit	0	1	Razzak	FP_OR_PW_OR_RF
10/20/2010 05:28 PM	TA200_Unit	0	1	Razzak	FP_OR_PW_OR_RF
10/20/2010 05:28 PM	TA200_Unit	0	1	Razzak	FP_OR_PW_OR_RF
10/20/2010 06:04 PM	TA200_Unit	0	1	Razzak	FP_OR_PW_OR_RF
10/21/2010 09:08 AM	TA200_Unit	0	1	Razzak	FP_OR_PW_OR_RF
10/21/2010 10:59 AM	TA200_Unit	0	1	Razzak	FP_OR_PW_OR_RF
10/21/2010 11:00 AM	TA200_Unit	0	1	Razzak	FP_OR_PW_OR_RF
10/21/2010 11:02 AM	TA200_Unit	0	1	Razzak	FP_OR_PW_OR_RF
10/21/2010 11:15 AM	TA200_Unit	0	1	Razzak	FP_OR_PW_OR_RF
10/21/2010 11:16 AM	TA200_Unit	0	1	Razzak	FP_OR_PW_OR_RF
10/21/2010 04:32 PM	TA200_Unit	0	1	Razzak	FP_OR_PW_OR_RF
10/21/2010 04:38 PM	TA200_Unit	0	1	Razzak	FP_OR_PW_OR_RF
10/22/2010 10:46 AM	TA200_Unit	0	1	Razzak	FP_OR_PW_OR_RF
10/22/2010 02:37 PM	TA200_Unit	0	3	James	FP_OR_PW_OR_RF
11/02/2010 09:26 AM	TA200_Unit	0	1	Razzak	FP_OR_PW_OR_RF
11/02/2010 11:05 AM	TA200_Unit	0	1	Razzak	FP_OR_PW_OR_RF
11/02/2010 05:18 PM	TA200_Unit	0	1	Razzak	FP_OR_PW_OR_RF

### Clear Device Logs

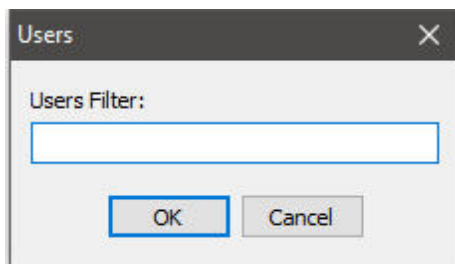
The Clear Device Logs button is available to clear the transaction logs from scanner devices.

## 6.5 Managing Users

After a device is added to the interface, users can now be added, or managed if existing users have already been loaded onto the device. Once connected to a device, the list of users which have been added to the device will be displayed.

### Filter Users

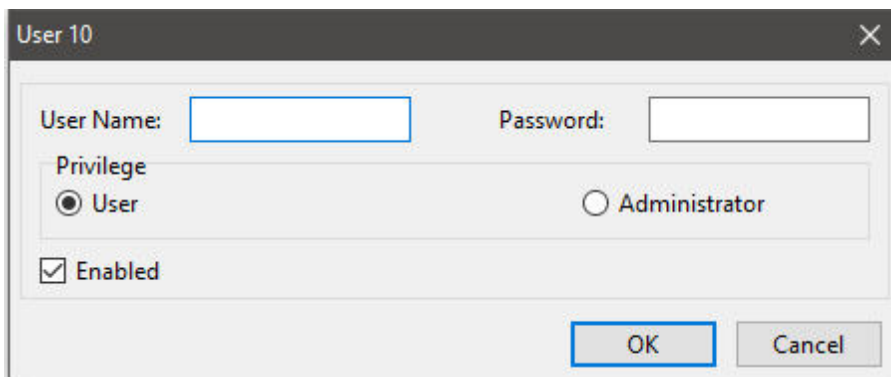
The list of displayed users may be filtered to a specific name criteria. Press [Ctrl+F] to filter the users list.



To clear the filter, press [Ctrl+F] again, and leave the entry box empty.

### Adding New Users

To add a user, select the "Add New User..." button from the panel on the right side of the user interface.



*User Name* - specifies the full name for the user

*Password* - specifies the numeric value a user can enter rather than using the biometric scanner. Letters are not accepted, only numbers.

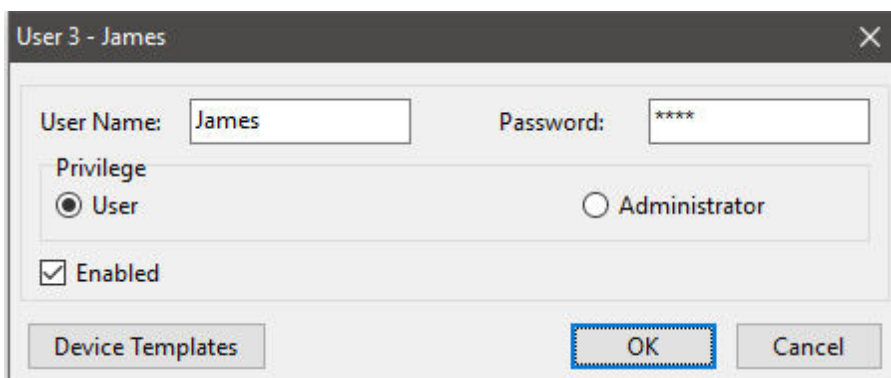
*Privilege* - specifies the rights that is granted to the user

- User - uses the device for identify verification
- Administrator - uses the device for verification and can manage user information

*Enabled* - specifies if the User will be recognized by the device

### Editing Users

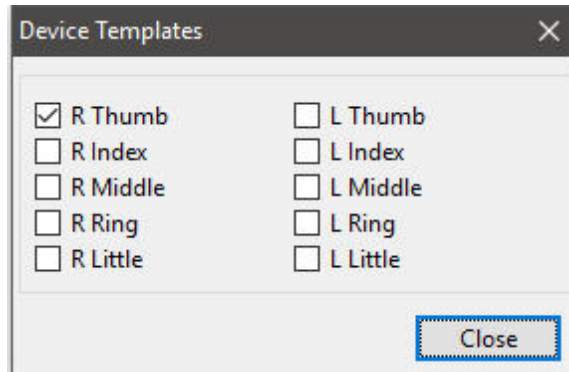
To edit a user, select the "Edit User..." button from the panel on the right side of the user interface. The User properties dialog will be displayed to alter any of the values. The "Device Templates" button is available to review if some aspect of fingerprint/face data is stored for the user. To review all templates for a device select [Device Templates](#).



The Device Templates is device specific, where facial recognition devices that can only store face data will display just that. And if a fingerprint device can only store fingerprints but not face data, the dialog



will reflect the same. The users in the database however supports aggregated templates for each user. See [Database Users](#).



### Deleting Users

To delete a user from the list, select the specific user, and select the "Delete User(s)..." button from the panel on the right side of the user interface. A confirmation message will be displayed before the user is deleted. Multiple users may be deleted at the same time.

### User Pictures

Pictures of individuals who will log onto devices may be uploaded and stored on supported scanners. In doing so, after a successful log in, the user's picture is displayed on the scanner screen. Using the provided Upload User Picture, Download User Picture, and Delete User Picture buttons, images can be uploaded, downloaded, and deleted for devices.

## 6.5.1 Database Users

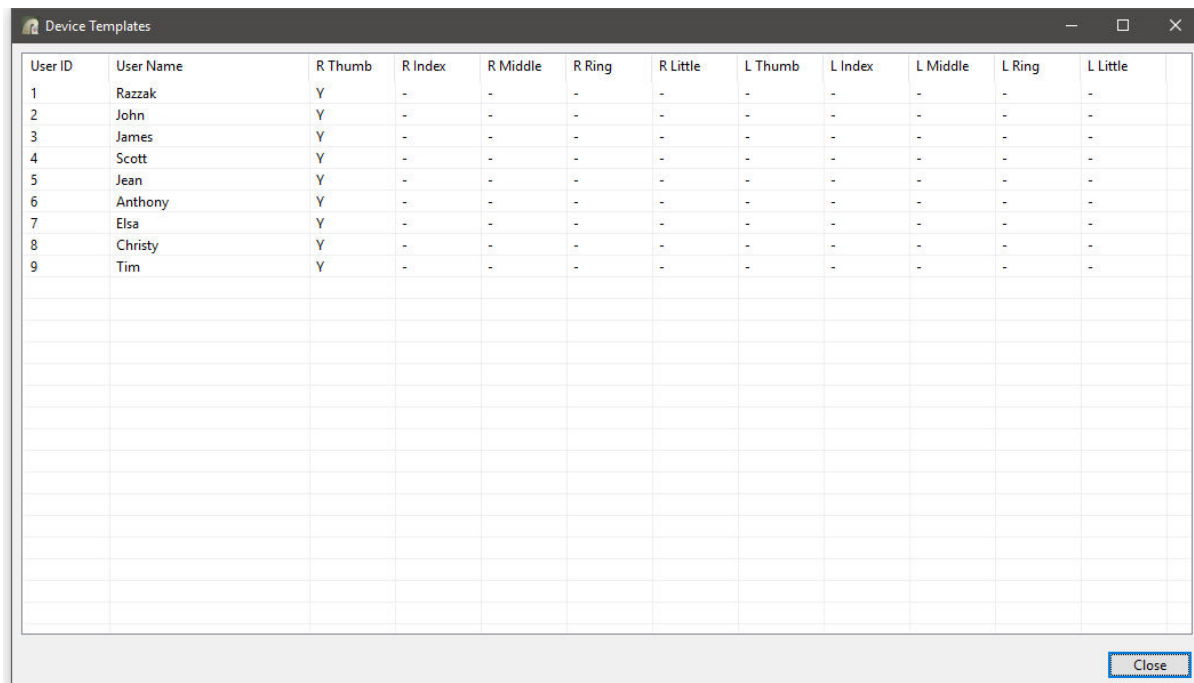
The Database Users menu option displays the type of biometric information stored for each user in the database.

The 'Database Users' window displays a table with the following data:

User ID	User Name	R Thumb	R Index	R Middle	R Ring	R Little	L Thumb	L Index	L Middle	L Ring	L Little	Face
1	Razzak	...	Y	-	-	-	-	-	-	-	-	-
2	John		Y	-	-	-	-	-	-	-	-	-
3	James	...	Y	-	-	-	-	-	-	-	-	-
4	Scott		Y	-	-	-	-	-	-	-	-	-
5	Jean		Y	-	-	-	-	-	-	-	-	-
6	Anthony	...	Y	-	-	-	-	-	-	-	-	-
7	Elsa		Y	-	-	-	-	-	-	-	-	-
8	Christy	...	Y	-	-	-	-	-	-	-	-	-
9	Tim		Y	-	-	-	-	-	-	-	-	-

## 6.5.2 Device Templates

The Device Templates displays what template (fingerprint/face) data is for users on the device. The display is device specific, where facial recognition devices that can only store face data will display just that. And if a fingerprint device can only store fingerprints but not face data, the dialog will reflect the same. The users in the database however supports aggregated templates for each user. See [Database Users](#).



User ID	User Name	R Thumb	R Index	R Middle	R Ring	R Little	L Thumb	L Index	L Middle	L Ring	L Little
1	Razzak	Y	-	-	-	-	-	-	-	-	-
2	John	Y	-	-	-	-	-	-	-	-	-
3	James	Y	-	-	-	-	-	-	-	-	-
4	Scott	Y	-	-	-	-	-	-	-	-	-
5	Jean	Y	-	-	-	-	-	-	-	-	-
6	Anthony	Y	-	-	-	-	-	-	-	-	-
7	Elsa	Y	-	-	-	-	-	-	-	-	-
8	Christy	Y	-	-	-	-	-	-	-	-	-
9	Tim	Y	-	-	-	-	-	-	-	-	-

## 6.5.3 Database/Devices User Transfers

When connected to an R:BASE database, the list of users that will be verified for identification can be loaded to the devices, and also to the database. It is best to maintain one master copy of users on a primary scanner, and a backup copy of the database if either would not be accessible.

Once users and the biometric data has been loaded onto the primary device, the users must then be saved to the database in order to load the same users from the database to each of the other scanner devices on the network.

### Uploading Users to a Device from the Database

User information can be uploaded from an R:BASE database to a selected device. When loading users, the process will load "all" users to the appropriate device.

**Make sure you have the appropriate tab selected before the users are loaded to the device.**

After selecting the tab for the specific device, select the "Upload DB Users To Device" button to load the list of users to the scanner device from the R:BASE database.

### Downloading Device Users to the Database

User information can be saved from the selected device to an R:BASE database. When saving users, the process will save "all" of the users from the device to the database.

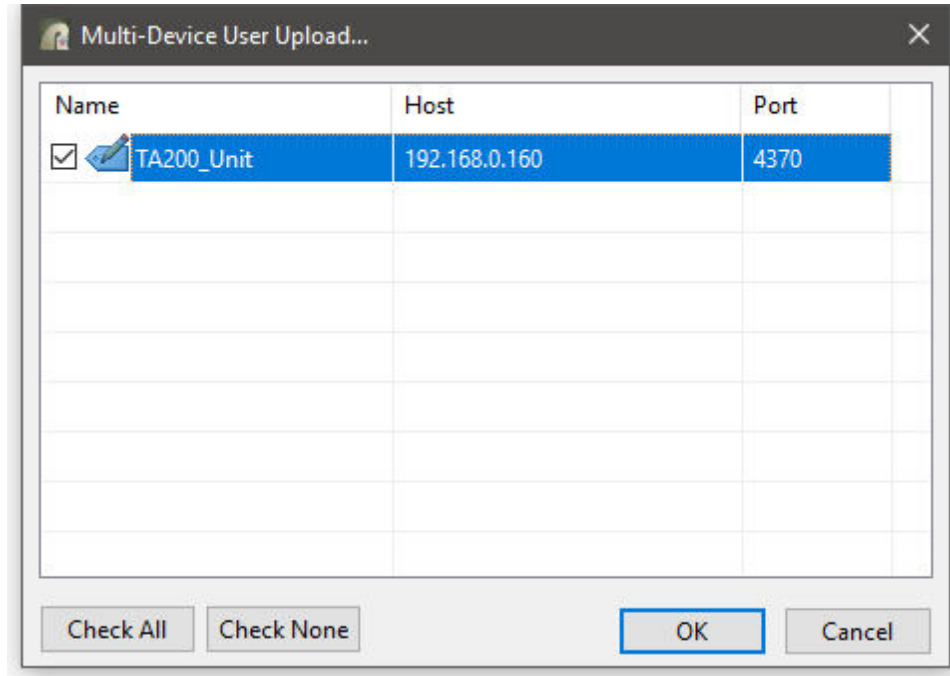
**Make sure you have the appropriate tab selected before the users are saved to the database.**

After selecting the tab for the specific device, select the "Download Device Users To DB" button to save the list of users to the R:BASE database from the scanner device.

### Upload DB Users to Multiple Devices

In instances where many devices are connected to a network, the ability to upload the database users to several devices is available using the "Multi-Device User Upload" option.

Using the available check boxes for the connected devices, users may be uploaded to several devices at once.



**Part**



## 7 Configuration File

After devices are configured within the R:Biometric Editor, changes will be saved to the BiometricDevices.cfg configuration file. The file will store the list of devices added to the editor, and the settings for each, as well as display settings. The file is located in the R:Biometric program folder, or with the R:Biometric Editor executable.

If the R:Biometric Editor installation will be moved from one computer to another, copy the configuration file to the new computer first, as this will prevent having to reconfigure the user interface to display the network devices.

**Part**



## 8 Command Syntax

R:Biometric includes a plugin file to interact with scanners within R:BASE applications.

### Syntax:

```
PLUGIN RBiometricN vResult|Parameters Value
```

### Where:

vResult is the text variable to return the status, such as 'OK' or the exact -ERROR- message.

### Note:

The variable and parameter(s) must be separated by a "|" pipe character.

### Parameters:

Parameter	Value	Description
CHECK_INSTALLATION		Checks whether the FingerTec ActiveX control is registered. If the ActiveX control is not registered, R:Biometric cannot be used.
ADD_DEVICE	value	Adds a scanner to the device list. The value must contain the IP address and port. An optional parameter can include a device name. Each must be separated by the pipe character. Examples:  192.168.0.102 4370  192.168.0.185 4373 FrontDoor
DEVICE_EXISTS	value	Checks if a device exists. Value can be an IP address or a defined device name. The returned value is YES or NO.
DEVICE_CONNECTED	value	Checks if a device is connected. Value can be an IP address or a defined device name. The returned value is YES or NO.
LIST_DEVICES		Returns a comma separated string of the devices that are connected within a RBIO_DEVICES variable
CONNECT	value	Connects to a device. Value can be an IP address or a defined device name.
DISCONNECT	value	Disconnects from a device. Value can be an IP address or a defined device name.
SYNC_TIME	value	Synchronizes the time on a device with the time on the computer. Value can be an IP Address or a specified device name. Device must be connected before use of this command.
SET_COMMAND_FILE	FileName	Specifies a command file name to be launched after a verification transaction (user logs onto a device by finger scan, face scan, or key code). Device must be connected before use of this command.  After logging onto a device, the following variables are generated:  RBIO_DATE - date of scan/transaction RBIO_TIME - time of scan/transaction RBIO_DEVICE_NAME - device name RBIO_DEVICE_NUM - device number RBIO_USER_ID - user ID RBIO_USER_NAME - user name RBIO_TYPE - scan type; F=finger, C=face, k=key code  Once the command is executed, the specified command file will be RUN for every verification transaction. The

		most important variable is RBIO_USER_ID, where an application would be developed to match your local users with the RBIO_USER_ID value from the device.
SAVE_LOGS_TO	filename.ext	When specified, the SET_COMMAND_FILE generated variables are in addition to saved to log files, in a comma separated list of values as follows:  Date,Time,DeviceName,DeviceNum,UserID,UserName,VerifyMode  Each verification transaction is saved to a separated log file. The log file name is automatically created with an inserted date and time stamp, where the "_YYYY-MM-DD_HH-MM-SS-ZZZ" format is placed between the specified file name and extension. For example, using ScanLogA.txt as the log file value, the create file name would be:  ScanLogA_2017-02-16_13-21-45-021.txt
DOWNLOAD_LOGS_TO	filename.csv	Save the transaction log from a device to a CSV file
CLEAR_DEVICE_LOGS	value	Clears the transaction logs from a device
ENABLE_CLOCK *	value	Enables the clock display on a device. Value can be an IP address or a defined device name. Device must be connected before use of this command.
DISABLE_CLOCK *	value	Disables the clock display on a device. Value can be an IP address or a defined device name. Device must be connected before use of this command.
CLEAR_LCD *	value	Clears the LCD screen display for a device, which works together with the DISABLE_CLOCK parameter. Value can be an IP address or a defined device name. Device must be connected before use of this command.
WRITE_TEXT *	value	Writes output text on a device's LCD screen. Value be an IP address or a defined device name, followed by the column and row number for the text, followed then by the text to display. Device must be connected before use of this command. Examples:  192.168.0.85 0 0 Hello!  FrontDoor 1 1 Greetings!

\* Parameters are model specific where an LCD screen is available.



**Part**



## 9 Examples

The following examples can be used for R:Biometric to work with scanner devices and the R:BASE database.

### Example 01:

```
--The following command is used to verify the R:Biometric ActiveX control is installed
PLUGIN RBiometricN vResult|CHECK_INSTALLATION
```

### Example 02:

```
-- The following examples add a scanner device
PLUGIN RBiometricN vResult|ADD_DEVICE 192.168.0.86|4370|Side_Entrance
PLUGIN RBiometricN vResult|ADD_DEVICE 192.168.0.88|4370
PLUGIN RBiometricN vResult|ADD_DEVICE 192.168.0.69|4370|Area_51
```

### Example 03:

```
-- The following examples connect to a scanner device
PLUGIN RBiometricN vResult|CONNECT 192.168.0.88
PLUGIN RBiometricN vResult|CONNECT Side_Entrance
```

### Example 04:

```
-- The following example disconnect from a scanner device
PLUGIN RBiometricN vResult|DISCONNECT 192.168.0.88
PLUGIN RBiometricN vResult|DISCONNECT Area_51
```

### Example 05:

```
-- The following examples synchronize the time on a scanner
PLUGIN RBiometricN vResult|SYNC_TIME 192.168.0.68
PLUGIN RBiometricN vResult|SYNC_TIME Area_51
```

### Example 06:

```
-- The following example checks if a scanner device exists
PLUGIN RBiometricN vResult|DEVICE_EXISTS Side_Entrance
```

The resulting variable value can be checked:

```
vResult          = YES          TEXT
```

### Example 07:

```
-- The following example checks if a scanner device is connected
PLUGIN RBiometricN vResult|DEVICE_CONNECTED Side_Entrance
```

The resulting variable value can be checked:

```
vResult          = YES          TEXT
```

### Example 08:

```
-- The following example lists the connected devices
PLUGIN RBiometricN vResult|LIST_DEVICES
```

The following variables are generated:

```
RBIO_DEVICES     = Finger,Face    TEXT
```

### Example 09:

```
-- The following example is used to execute a command file to capture scan transactions
PLUGIN RBiometricN vRunCmd|SET_COMMAND_FILE LogUser.RMD
```

The following variables are generated:

```
RBIO_DATE        = 02/14/2017    DATE
```

```
RBIO_TIME           = 10:10 AM           TIME
RBIO_DEVICE_NAME    = Finger             TEXT
RBIO_DEVICE_NUM     = 0                  INTEGER
RBIO_USER_ID        = 2                  INTEGER
RBIO_USER_NAME      = John               TEXT
RBIO_TYPE           = F                  TEXT
```

Once the command is executed, the specified command file will be RUN for every verification transaction. The most important variable is RBIO\_USER\_ID, where an application would be developed to match the local users with the RBIO\_USER\_ID value from the device.

**Example 10:**

```
-- The following example is used to execute a command file to capture scan events to log files
PLUGIN RBiometricN vRunCmd|SET_COMMAND_FILE LogUser.RMD
PLUGIN RBiometricN vLogScans|SAVE_LOGS_TO ScanLog.txt
```

The log file "ScanLog\_2017-05-24\_14-18-36-067.txt" will be created containing stored information in the below comma separated value format:

```
05/24/2017,2:18:36 PM,Finger,0,5,Jean,FP
```

The specified SET\_COMMAND\_FILE command file will be RUN for every verification transaction. The most important value is the fifth item in the comma separated string (RBIO\_USER\_ID), where an application would be developed to match the local users with the value from the device.

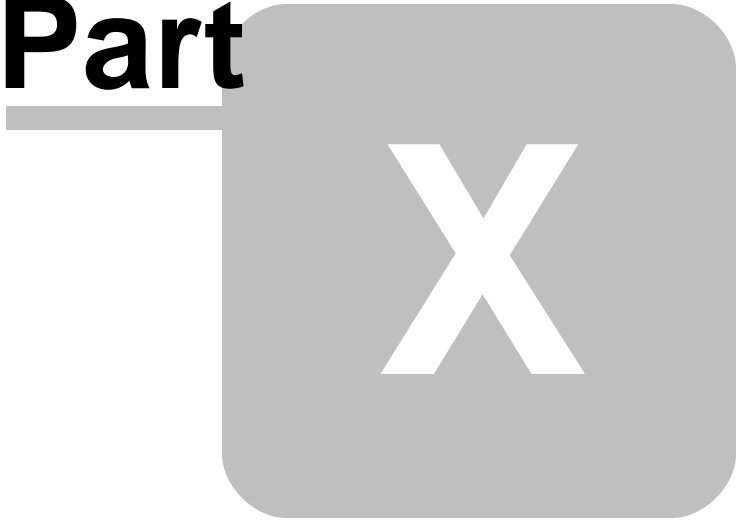
**Example 11:**

```
-- The following example saves a transaction log to a CSV file
PLUGIN RBiometricXn vResult|CONNECT VeriFinger4
PLUGIN RBiometricXn vResult|DOWNLOAD_LOGS_TO VeriFinger4|VeriFinger4Logs.csv
```

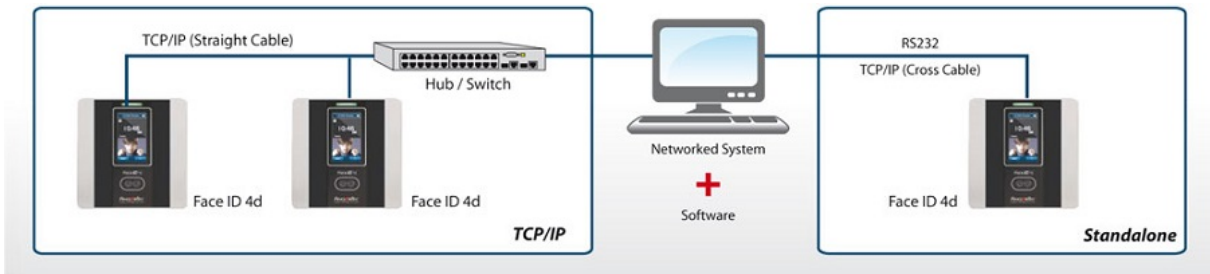
**Example 12:**

```
-- The following example clears the transaction log from the device
PLUGIN RBiometricXn vResult|CLEAR_DEVICE_LOGS VeriFinger4
```

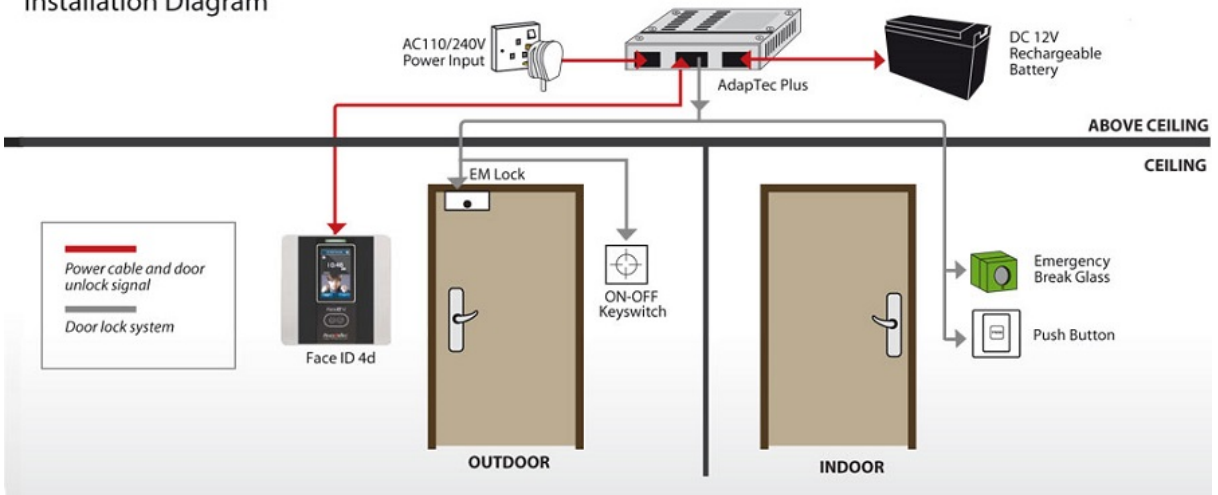
**Part**



# 10 Door Access Control Systems



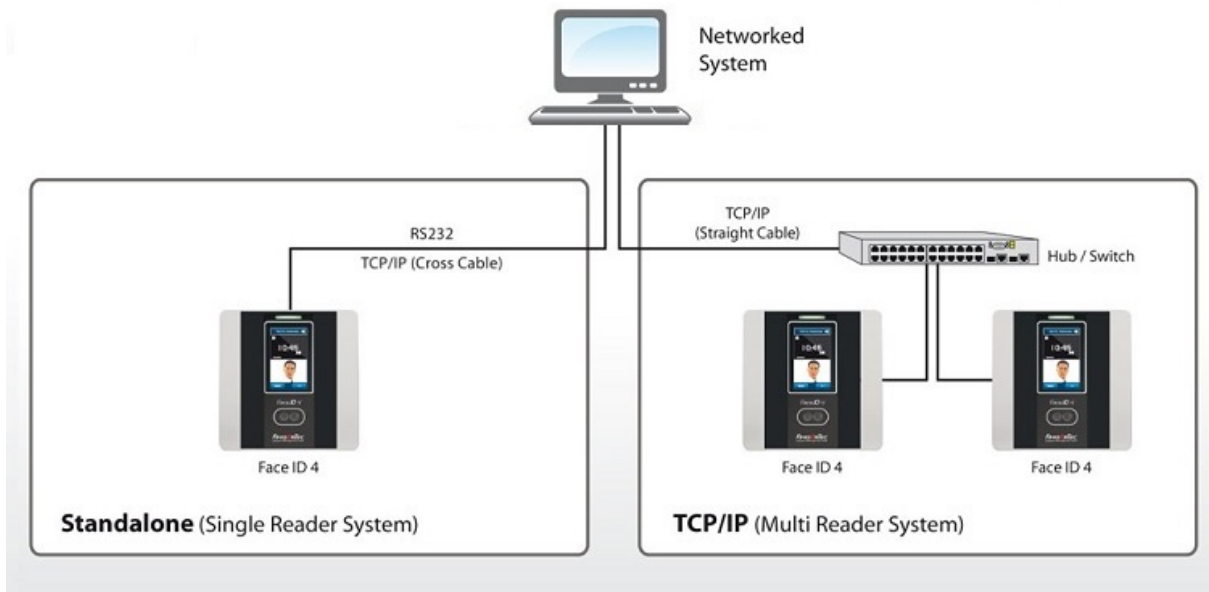
Installation Diagram



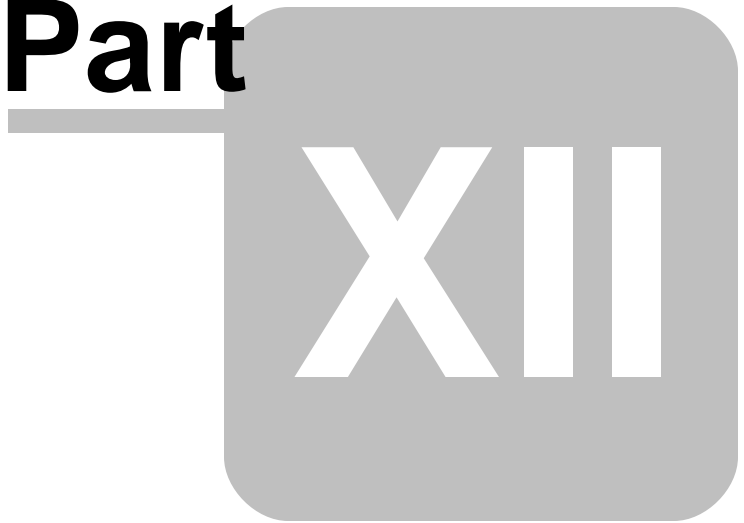
**Part**

**XI**

## 11 Face Recognition Networked System



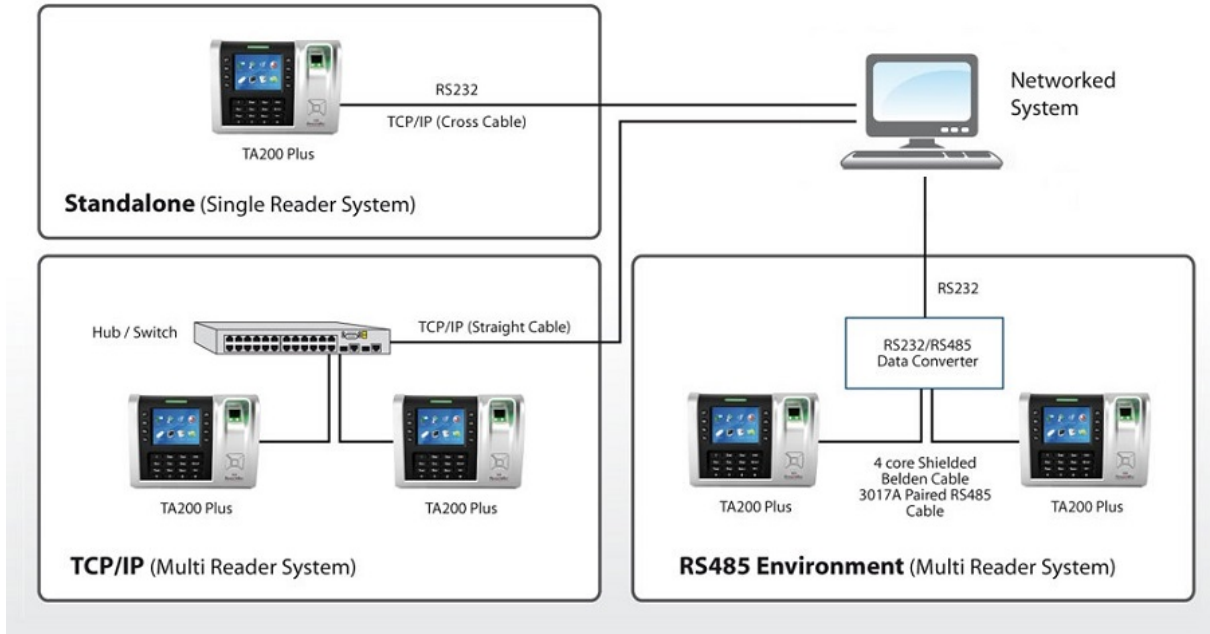
**Part**



**XII**



## 12 Fingerprint Scanner Networked System



**Part**



## 13 Technical Support

Please read over the help documentation at least once before seeking support. We have worked very hard to make the help documentation clear and useful, but concise. It is suggested that you reread these instructions once you have become accustomed to using the software, as new uses will become apparent.

If you have further questions, and cannot find the answers in the documentation, you can obtain information from the below sources:

- Email our Technical Support Staff at: [support@rbase.com](mailto:support@rbase.com)
- Access the R:BASE Technologies Support home page online at <https://www.rbase.com/support>

You may be required to purchase a technical support plan. Several support plans are available to suit the needs of all users. [Available Technical Support Plans](#)

Please be prepared to provide the following:

- The product registration number, which is located on the invoice/order slip for the purchased product
- The type of operating system and hardware in use
- Details regarding your operating environment; such as available memory, disk space, your version of R:BASE, local area network, special drivers, related database structures, application files, and other files that are used or accessed by your application

All provide information will be used to better assist you.

R:BASE Technologies has a number of different services available for R:BASE products. As a registered user, you will receive information about new features for R:BASE and other R:BASE Technologies products. Please remember to register your software. <https://www.rbase.com/register/>

**Part**

**XIV**

## 14 Useful Resources

- . R:BASE Home Page: <https://www.rbase.com>
- . Up-to-Date R:BASE Updates: <https://www.rbaseupdates.com>
- . Current Product Details and Documentation: <https://www.rbase.com/rbgx5>
- . Support Home Page: <https://www.rbase.com/support>
- . Product Registration: <https://www.rbase.com/register>
- . Official R:BASE Facebook Page: <https://www.facebook.com/rbase>
- . Sample Applications: <https://www.razzak.com/sampleapplications>
- . Technical Documents (From the Edge): <https://www.razzak.com/fte>
- . Education and Training: <https://www.rbase.com/training>
- . Product News: <https://www.rbase.com/news>
- . Upcoming Events: <https://www.rbase.com/events>
- . R:BASE Online Help Manual: <https://www.rbase.com/support/rsyntax>
- . Form Properties Documentation: <https://www.rbase.com/support/FormProperties.pdf>
- . R:BASE Beginners Tutorial: <https://www.rbase.com/support/rtutorial>
- . R:BASE Solutions (Vertical Market Applications): <https://www.rbase.com/products/rbasesolutions>

**Part**



## 15 Feedback

### **Suggestions and Enhancement Requests:**

From time to time, everyone comes up with an idea for something they'd like a software product to do differently.

If you come across an idea that you think might make a nice enhancement, your input is always welcome.

Please submit your suggestion and/or enhancement request to the R:BASE Developers' Corner Crew (R:DCC) and describe what you think might make an ideal enhancement. In R:BASE, the R:DCC Client is fully integrated to communicate with the R:BASE development team. From the main menu bar, choose "Help" > "R:DCC Client". If you do not have a login profile, select "New User" to create one.

If you have a sample you wish to provide, have the files prepared within a zip archive prior to initiating the request. You will be prompted to upload any attachments during the submission process.

Unless additional information is needed, you will not receive a direct response. You can periodically check the status of your submitted enhancement request.

If you are experiencing any difficulties with the R:DCC Client, please send an e-mail to [rdcc@rbase.com](mailto:rdcc@rbase.com).

### **Reporting Bugs:**

If you experience something you think might be a bug, please report it to the R:BASE Developers' Corner Crew. In R:BASE, the R:DCC Client is fully integrated to communicate with the R:BASE development team. From the main menu bar, choose "Help" > "R:DCC Client". If you do not have a login profile, select "New User" to create one.

You will need to describe:

- What you did, what happened, and what you expected to happen
- The product version and build
- Any error message displayed
- The operating system in use
- Anything else you think might be relevant

If you have a sample you wish to provide, have the files prepared within a zip archive prior to initiating the bug report. You will be prompted to upload any attachments during the submission process.

Unless additional information is needed, you will not receive a direct response. You can periodically check the status of your submitted bug.

If you are experiencing any difficulties with the R:DCC Client, please send an e-mail to [rdcc@rbase.com](mailto:rdcc@rbase.com).

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