

# Scan and Pin Biometric Solutions

User Manual Version 4

For additional help and guides, see our support pages at:support.scanandpin.com

Scan and Pin Manual v4 ©2003-2014 Scan and Pin Biometric Solutions

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# **Related Products**

- Scan and Pin Client
- Scan and Pin Add New User Wizard
- Scan and Pin Configuration Editor
- Activation Codes
- Fingerprint Scanners



#### **Scan and Pin Requirements**

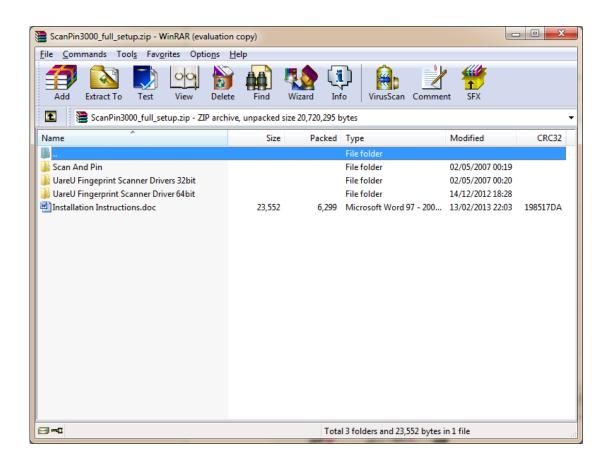
To use Scan and Pin on a Windows PC you need to have the following:

- Digital Persona UareU 4000/4500 series fingerprint scanner
- Windows drivers for Digital Persona UareU 4000/4500 series fingerprint scanner
- Fingerprint Client Activation Code (CAL)
- Scan and Pin Fingerprint Engine
- Scan and Pin Add New User Wizard
- Scan and Pin Configuration Editor



# Installation of Scan and Pin

- 1. Download the Scan and Pin package from <u>www.scanandpin.com/download</u> This file contains fingerprint scanner drivers and the Scan and Pin fingerprint software
- 2. Install the Digital Persona U.are.U fingerprint scanner using the drivers downloaded and not from the Digital Persona CD that came with your fingerprint scanner. Ensure to select the correct version for 32/64 bit PC's.
- 3. TIME SAVER: You do not have to restart the PC until all applications and drivers have been installed,
- 4. Run the Setup.exe file in the Scan and Pin directory to install the Scan and Pin software. Install as an administrator (Right Click Run As Administrator on the Setup.exe file)
- 5. To ensure correct operation after installation, it may be prudent to update security rights to the Scan and Pin folder at the install location. Security rights should allow USERS access to modify.





# Activate Scan and Pin

The first time you install and run Scan and Pin, you will be asked to enter a series of codes to activate the software.

You should have received these from your reseller either as individual codes or as a file named 'licence.txt'.

You can choose to either:-

- 1. Copy and paste the codes to each box or
- 2. Copy the licence.txt file to the Scan and Pin installation directory.

If you have problems activating your software, please visit <u>support.scanandpin.com</u> and visit the FAQ section or request support using the links online. Please enclose your serial number, licence code and activation code.

👩 Scan & Pin - Produc	t Activation	<b>×</b>
Produc	t Activation	SCAN & PEN
	oduct licensing details. You should have received this se contact your local reseller for further assistance.	s via email or in your
Serial Number:		Generate Scanner ID
Scanner ID:		
License Code:		
Activation Code:		
Import	<u>B</u>	egister Cancel



## **Configuration of Scan and Pin**

Scan and Pin has its own configuration editor.

Inside the "..\Program Files\Scan and Pin\" directory, run "Config.exe" (or from the Start Menu)

🧬 Scan and Pin - Confi	gure	×
	Profile Names	SCAN AND PIN BIOMETRIC SOLUTIONS
Profiles		
Field Names	Enter friendly names to each of your profiles. You may call each profile any name you wish a: helps you remember which profile stores which data for which application. You may have 'St Login' as profile 1 and 'Customer Loyalty Card' as profile 2 for example.	
Keystrokes		
Scanner	Profile 1: Default Profile 2:	

From here you can edit the 10 profile names.

They could be "Customer Loyalty Cards", "User EPOS Logins" or "Employee Discount Cards".

What ever you decide, please remember that each fingerprint can only be related to one profile. You employees may have to use three fingers – one for EPOS login when they are working, another for employee discount and a third for their loyalty card.

The default is "Membership". In the example we changed it to Websites.



You can add friendly names to each of the 6 user data fields assigned to each of the 10 profiles.

Scan and Pin - Configu	e 🗾	
	Data Fields SEAN AND PLAN	
Profiles Field Names Keystrokes	Enter friendly names to each of your profiles data fields. You may have a profile called 'Employee EPOS Login' and you would name the user field 'Usercode'.	
Scanner	Profile: Default	
Output	Field 1: Membership Number	
General	Field 2: <not defined=""> Field 3: <not defined=""></not></not>	
Save & Exit	Field 4: <a center;"="" href="https://www.not.ex/field-style=" text-align:="">field 4: <a center;"="" href="https://www.not.ex/field-style=" text-align:="">field 4: <a center;"="" href="https://www.not.ex/field-style=" text-align:="">(not defined&gt;</a> Field 6: <a center;"="" href="https://www.not.ex/field-style=" text-align:="">(not defined&gt;</a> Field 6: <a center;"="" href="https://www.not.ex/field-style=" text-align:="">(not defined&gt;</a></a></a>	

Select the profile you wish to configure and click in each field entering a friendly name.

- Example for a Web Portal login: Field 1 could be "Username" and Field 2 could be "Password"
- Example for employee EPOS login: Field 1 could be "Employee Login Number" and Field 2 could be "Password"

If you use the word "Password" or "password" [cAsE sensitive], then when a new user is added (using the "Add New User Wizard") then the characters entered will be blanked out.



You can send up to 20 different keystrokes after each user data has been sent.

For example, you may want to automate logon process for a website.

Normally you would enter "*USERNAME*" followed by [TAB] (for the password box), followed by "*PASSWORD*" then [TAB] and finally [ENTER] ([CR]).

🧬 Scan and Pin - Config	gure	X
	Keystroke Settings	SCAN AND FIN BIOMETRIC SOLUTIONS
Profiles		
Field Names	Configure the key strokes that will be sent after each string Username and Password to be entered into a web portal. Y in field 2. Press the [X] to clear the settings for each field.	has been sent. For example you may way a 'ou would enter [TAB] in field 1 and [TAB][CR]
Keystrokes		
Scanner	Profile: Default	•
Output	Field 1: [CR]	X TAB CR
General	Field 2:	
Save & Exit	Field 3:	TAB CR
	Field 4:	TAB CR
	Field 5:	TAB CR
	Field 6:	TAB CR

You can specify 20 keystrokes for each of the 6 different user data fields for each of the 10 profiles.

Click the "X" button to clear the options for that string. Click the "TAB" button to enter a TAB (move between text boxes for example) Click the "CR" button to enter a Carriage Return (Enter Key/Submit form for example)



The fingerprint scanner can be set to accept a minimum quality for fingerprint enrolment scanning. This is defined under Fingerprint Quality. The lower the level, the less points of reference the scan will require to save the fingerprint scan. The default is 40, but can be adjusted according to your requirements.

🧬 Scan and Pin - Config	
	Scanner Settings
Profiles Field Names	Fingerprint Quality This value is the minimum reference points the scanner has to read from your fingerprint scan
Keystrokes Scanner	when registereing. The default value is 40.
Output	- Threshold
General	Set the threshold for fingerprint retrieval. If you are receiving high FAR (false acceptance rates) then increase this value. If fingerprint scans yeild a FRR (false rejection rate), then lower this
Save & Exit	then increase this value is 100.

Additionally, when verifying a user after enrolment, a threshold value can be set to allow only fingerprint scans which reach this value in near match's are counted as a potential match. This value can be changed according to requirements.



On the Output settings page, you can choose to enable TTL for each fingerprint record. When the fingerprints for a user are taken during enrolment, the current date is recorded against the fingerprint scan. Enabling TTL will allow you to ignore fingerprint scans over a certain amount of days old. It is not enabled by default, but the recommended value is 720 days. You can turn this off and on as you require.

If a record is not found when a user scans their fingerprint, you can choose to send a default value back, for example "NOT FOUND" or "0000" as the user string. This data will be sent to the active window.

If the keyboard entry is too fast, you can slow this down for older systems. Default is 500ms.

You are now able to send the data to a window by name. You can get the actual name from the Task Manager. Paste it in here

🚜 Scan and Pin - Confi	gure
	Data Output Options
Profiles	Fingerprint Record Expiry Date
Field Names	Enable TTL (Time To Live)
Keystrokes	Speed up searching by ignoring registered fingeprints older than x days. Default value is 720 days.
Scanner	120 days
Output	Start of Output Stream
General	Send [*] before data field on successfull fingerprint scan.
Save & Exit	No Match         Send this string if no matching record found.         Output Delay         Delay between data fields sent to application.         500         window Name         Send the output of all fingerprint scans to the a window of this name.



Scan and Pin database can be the default MS Access DB, which can handle up to 20,000 fingerprint records, scanning in just under 7 seconds (i7 processor), or alternatively you can choose SQL server. The DSN name for SQL is "scanandpin" with a username and password of the same.

Enabling PIN number verification will ask for a PIN number during enrolment and during verification. If during verification the user forgets their PIN number, you can leave it blank to search all records. This option is useful for additional verification purposes and to reduce the records the database is scanned for, ensuring a more accurate match is made.

The PIN number can be up to 6 numbers long to incorporate Date of Birth if you so wish.

🧬 Scan and Pin - Config	gure	x
	General Settings	PIN RIC ONS
Profiles	Database Connectivity	
Field Names	Scan and Pin uses a direct connection to its own database in the default install location. Should you wish to connect to another database, please follow the instructions below.	
Keystrokes	You should be sure to call the ODBC system data source "scanandpin" and ensure that it is	
Scanner	connected to the correct database.	
Output	These ODBC settings will need to be configured for each PC client running Scan and Pin as these settings are not stored in the normal config file.	
General	Use ODBC	
Save & Exit		
	PIN Number Verification	
	Legacy Fingerprint Scanning (v3.x Migration)	_
	Scan v3.x fingerprint data for a match. Enable if v3.x fingerprint data migrated)	



## **Running Scan and Pin**

Double click "Program Files\Scan and Pin\Client.exe" to launch the Scan and Pin client. You may also add a shortcut to the start up menu.

The client will minimise itself to the system tray after 5 seconds. Right click on the icon for further options.

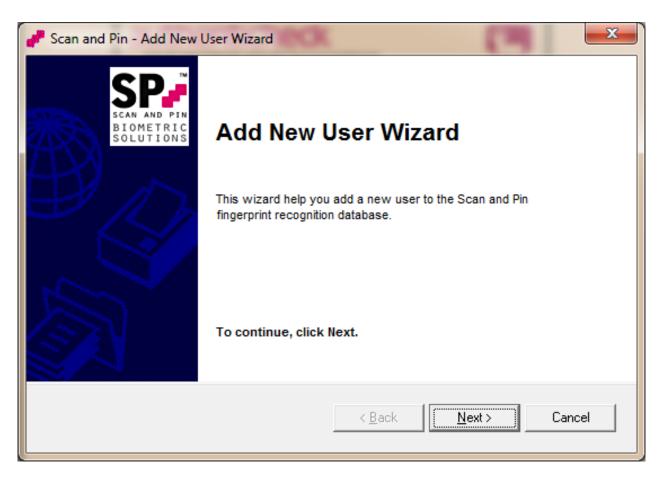
🧬 Scan and Pin	A summer of	
<u>F</u> ile <u>T</u> ools <u>H</u> elp		
21/01/2014 10:19:52 : Initialising Scan Manager 21/01/2014 10:19:52 : Finding Scanner 21/01/2014 10:19:52 : Found UareUV64C2A241-9537-96 21/01/2014 10:19:52 : Initialising UareUV64C2A241-9537 21/01/2014 10:19:52 : Initialised 21/01/2014 10:19:53 : Loading Config File 21/01/2014 10:19:53 : Standard Service In Use 21/01/2014 10:19:53 : Config File Loaded 21/01/2014 10:19:53 : 0 records are searchable in data 21/01/2014 10:19:53 : Scan & Pin v4.00 Ready	7-984C-A1BC-986AF	
[l		<b>T</b>



# Adding new users using Add New User Wizard

Adding a new user is simple using the included wizard.

Run Scan and Pin Add User from the Start menu, or (run the "Program Files\Scan and Pin\AddUser.exe" file.





Enter a username or login name into the user fields... In fact - anything you want [typed] in to the PC automatically when your finger is scanned.

If the field is left blank then the data will not be sent and that includes the extra keystrokes assigned in the configuration editor.

Scan and Pin - Add New User Wizard	((1)	×
Enter the data that will be sent from	m a successfull scan	SCAN AND PIN BIOMETRIC SOLUTIONS
Enter the users data in the fields below		
Login	<not defined=""></not>	
12345678		
Password	<not defined=""></not>	
<not defined=""></not>	<not defined=""></not>	
	< <u>B</u> ack <u>N</u> ext >	Cancel



Scan your finger on the fingerprint reader as instructed. The wizard requires 3 fingerprint scans from the same user's finger.

The minimum accepted level is set in the configuration editor (default 40). If lower than that, the message will show a poor scan was received and the user should scan their finger again.

During verification, the user will be required to scan their finger only once, not three times.





If PIN verification is enabled, you will be asked to enter a PIN number during enrolment and verification. If you choose to collect PIN numbers during enrolment but then change your mind, you can turn off the PIN number option in the configuration editor.

Scan and Pin - Add New User Wizard	×
Save the new users information	SCAN AND PIN BIOMETRIC SOLUTIONS
Please enter PIN number for additional verification (0-6 digits).	
PIN number	
To complete the wizard, click Next.	
< <u>B</u> ack <u>N</u> ext >	Cancel



You should now see this screen telling you that the user has been added to the database and prompts you to add another user.





During verification, if PIN number verify is enabled, you will see a PIN entry box like this show up. You can enter the PIN number using the keyboard or by pressing the buttons (usefully for touch screen).

Enter PIN number			
1	2	3	с
4	5	6	Del
7	8	9	Go



Testing Scan and Pin after a new user has been added is simple. You should only need to follow the directions below (opening notepad for testing) whilst you are configuring the system for your needs.

Restore the Scan and Pin client window (right click on icon and select "restore").

Using the finger that has just been edited press it down on the finger print scanner.

🧬 Scan and Pin	
<u>F</u> ile <u>T</u> ools <u>H</u> elp	
21/01/2014 10:24:25 : Initialising Scan Manager 21/01/2014 10:24:25 : Finding Scanner 21/01/2014 10:24:25 : Found UareUV64C2A241-9537-984C-A1BC-986AF5B44D34 21/01/2014 10:24:25 : Initialising UareUV64C2A241-9537-984C-A1BC-986AF5B44D34 21/01/2014 10:24:25 : Initialised 21/01/2014 10:24:25 : Finding Config File 21/01/2014 10:24:25 : Standard Service In Use 21/01/2014 10:24:25 : Standard Service In Use 21/01/2014 10:24:25 : Config File Loaded 21/01/2014 10:24:25 : Config File Loaded 21/01/2014 10:24:25 : Scan & Pin v4.00 Ready 21/01/2014 10:24:27 : Fingerprint Scan Accepted (Scan #1) 21/01/2014 10:24:27 : Scanning 1 record 21/01/2014 10:26:12 : Selecting Record 47/3 (105/100) as Best Match	*
,	



As a test, opening notepad and make it the focused window will allow output to this window. (Click on the top of the window with the mouse!)

Scan fingerprint once again and users details are automatically typed into notepad including the extra [TAB]'s and [CR]'s if applicable.

Untitled - Notepad				
<u>F</u> ile <u>E</u> dit	F <u>o</u> rmat	<u>V</u> iew	<u>H</u> elp	
12345678	90		A	
1				
			-	