

PROTECTOR SUITE QL

version 5.1

Touch**chip**

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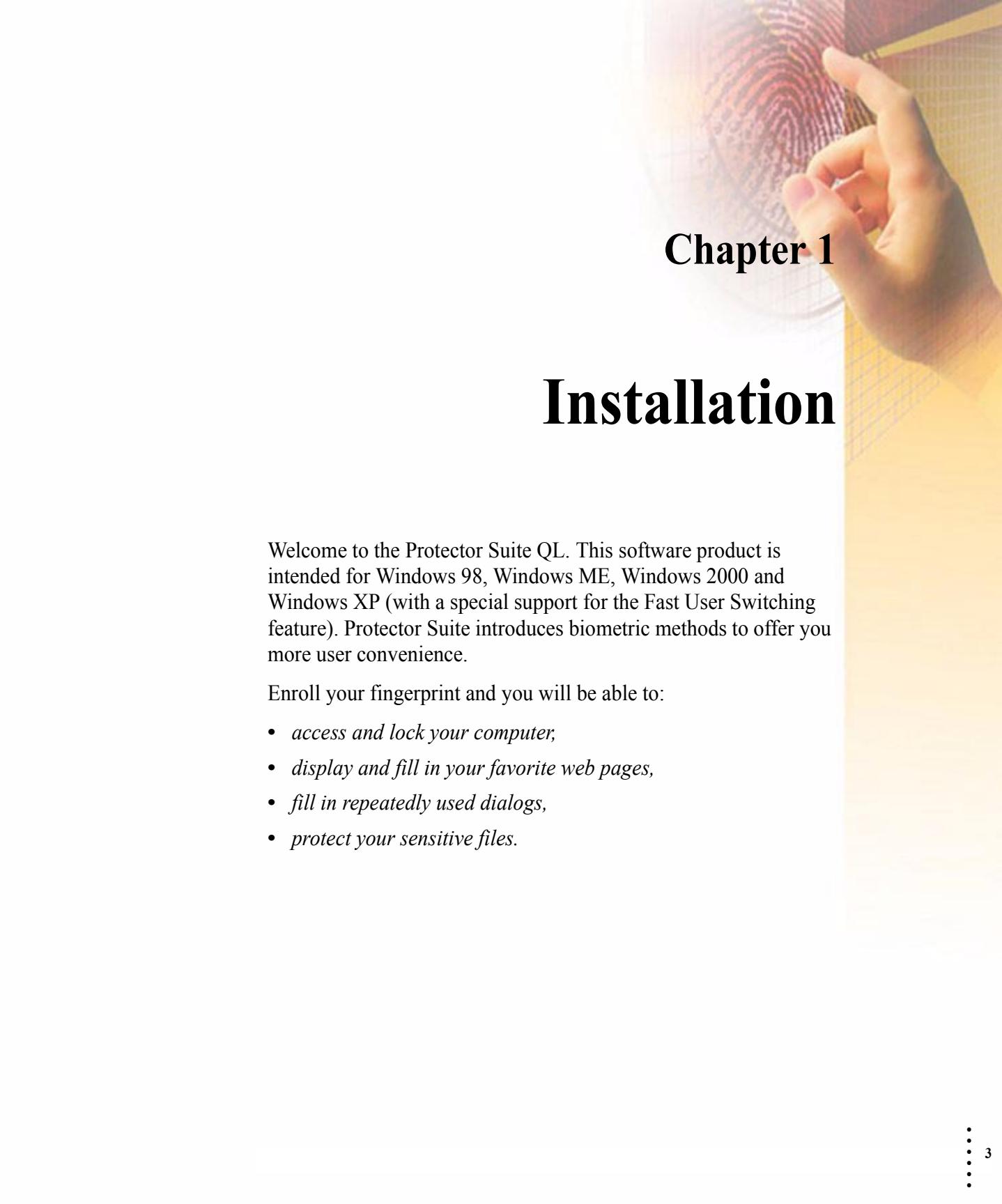
<http://www.upek.com>

This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit (<http://www.openssl.org/>).

This product includes cryptographic software written by Eric Young (eay@cryptsoft.com).

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Chapter 1

Installation

Welcome to the Protector Suite QL. This software product is intended for Windows 98, Windows ME, Windows 2000 and Windows XP (with a special support for the Fast User Switching feature). Protector Suite introduces biometric methods to offer you more user convenience.

Enroll your fingerprint and you will be able to:

- *access and lock your computer;*
- *display and fill in your favorite web pages,*
- *fill in repeatedly used dialogs,*
- *protect your sensitive files.*

Installation

Protector Suite QL can be installed on any computer with Windows 98, Windows ME, 2000 or Windows XP Home or Professional edition and a free USB port. Microsoft Internet Explorer 5.0 or higher must be installed on your computer. Administrator rights are necessary for installation.

To install the Protector Suite:

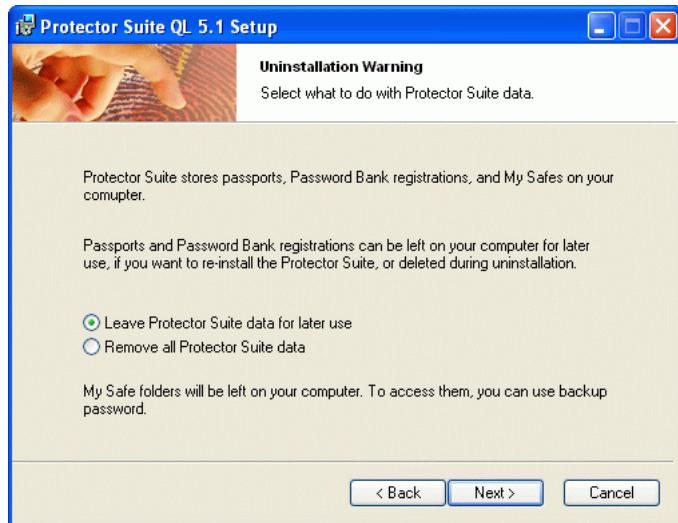
- 1 Insert your installation CD to your CD-ROM drive. Installation starts automatically if Autorun is active on your computer; if any problems, run Setup.exe from your installation CD. The installation wizard will guide you through the process.*
- 2 Read and confirm the license agreement. If you do not agree with the license conditions, the installation cannot proceed.*
- 3 Enter your user name and organization.*
- 4 Select Protector Suite's installation directory (the default is Program Files\Protector Suite QL).*
- 5 At the end of installation, you will be asked to reboot your computer. Protector Suite QL will be active only after reboot.*

During installation, necessary hardware drivers are pre-installed. Connect your hardware after reboot (if you use an external type) and you can start using the Protector Suite.

Removal

To uninstall the Protector Suite QL, select **Start - Settings - Control panel** and open **Add or Remove Programs**.

Select Protector Suite QL and click the **Change** button. Select the **Remove** option.



You will be asked what to do with Protector Suite's data stored on your computer.

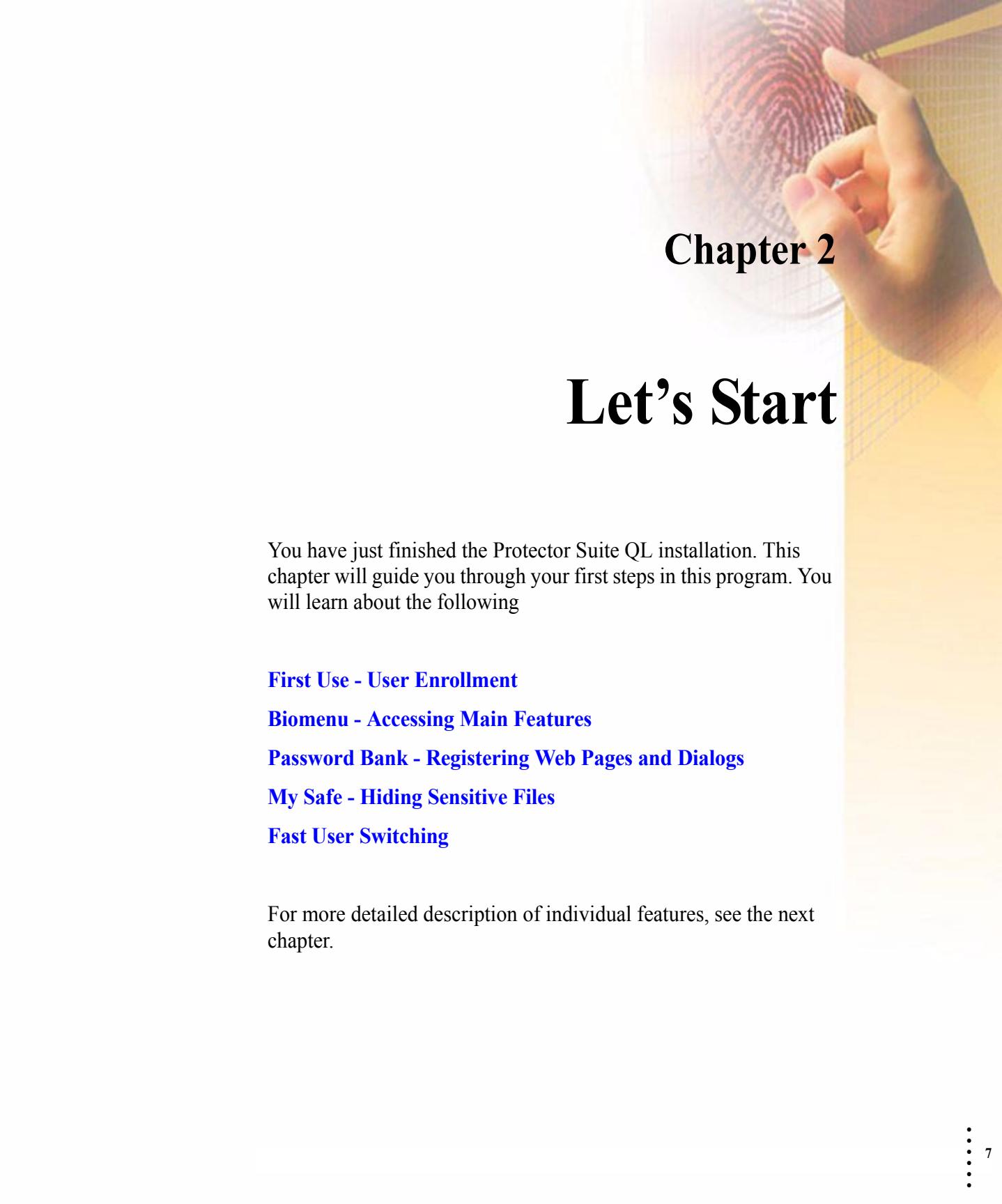
There are two possibilities:

You can leave all the data on your computer. This means that if you later re-install the Protector Suite, you can continue using the enrolled fingerprints and Password Bank registrations.

OR

You can remove the Protector Suite data from your computer. Enrolled fingerprints and Password Bank registrations will be permanently deleted.

My Safe folders are not deleted during uninstallation. You can use them later if you reinstall the Protector Suite. They can be accessed using the backup password entered when creating **My Safe**. However, if you (or some other user) have created a large **My Safe** folder and you do not plan to use it later, we recommend to delete it before you uninstall the product. (To delete **My Safe**, click the **Delete** button in the **Settings - My Safe** dialog.)



Chapter 2

Let's Start

You have just finished the Protector Suite QL installation. This chapter will guide you through your first steps in this program. You will learn about the following

First Use - User Enrollment

Biomenu - Accessing Main Features

Password Bank - Registering Web Pages and Dialogs

My Safe - Hiding Sensitive Files

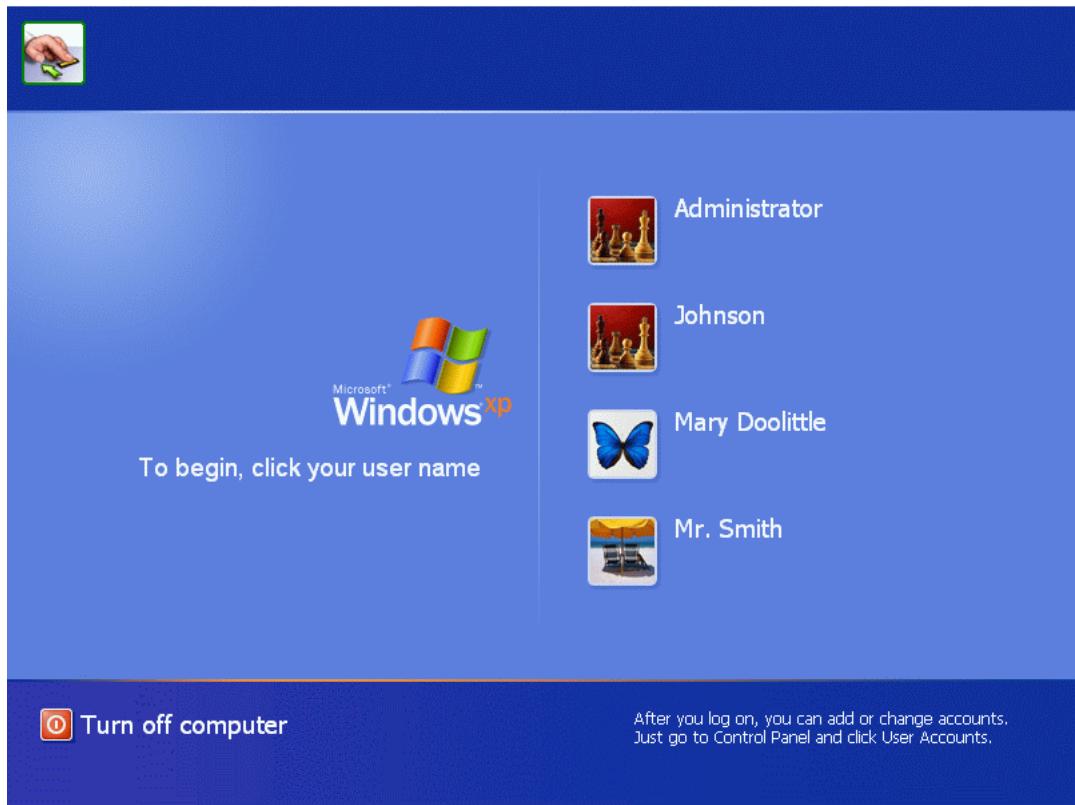
Fast User Switching

For more detailed description of individual features, see the next chapter.

First Use - User Enrollment

- 1 *The logon screen is displayed. As your fingerprints are not enrolled at this moment, log on using your user name and password - almost in the same way as you used to do before you installed the Protector Suite QL.*

Note: All the pictures used in this guide were created on Windows XP. If you use another version of Windows system, some dialogs may appear different.



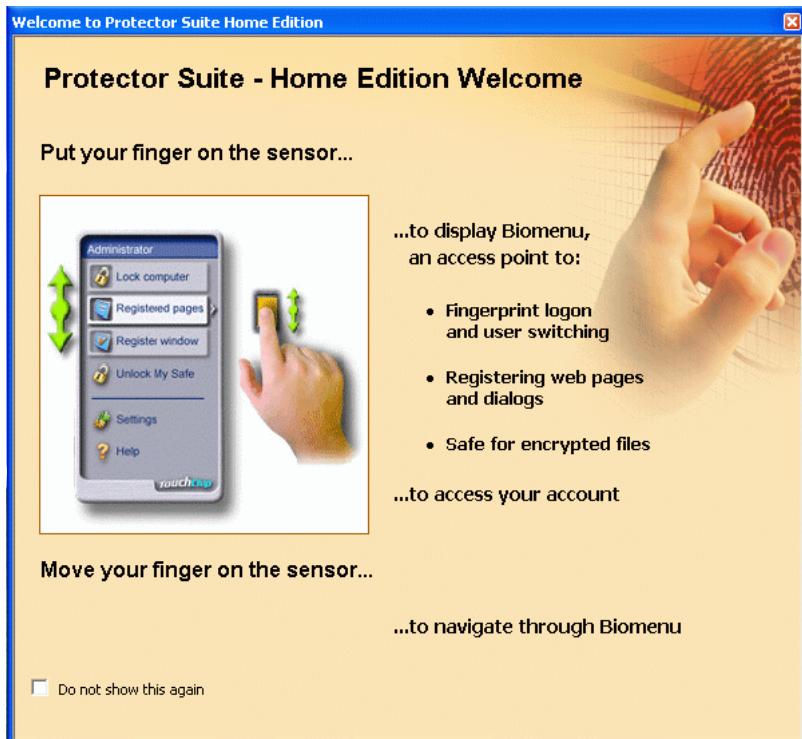
- 2 *If you want to use an external fingerprint sensor, connect your device now. All the necessary drivers are installed with the Protector Suite software. An information that the sensor was connected and is ready to use is displayed in the lower right corner. If you encounter any problems with your hardware, see the Troubleshooting chapter of this guide.*

3 A Welcome screen informs you about possible usage of fingerprints in the Protector Suite QL.

After you create your fingerprint sample, you can use your finger:

- to get access to your computer account,
- to display Biomenu with all its functions (locking computer, registering pages, dialogs, accessing My Safe folder etc.) Navigation in the Biomenu can be performed by moving your finger on the sensor.
- to fill in the registered web form.

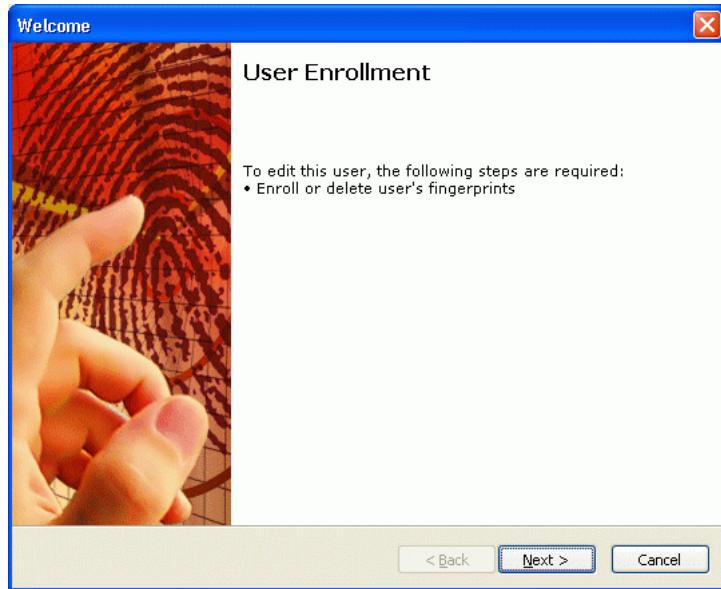
4



Begin with enrollment. Click the **Enroll User** button to start the enrollment wizard. Only after you enroll at least one your fingerprint, you can fully use all

the features of the Protector Suite.

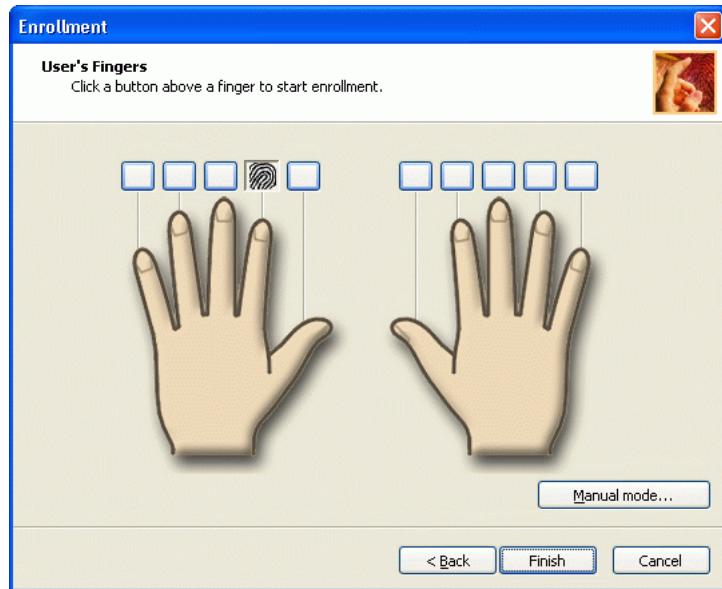
The wizard will guide you through the enrollment procedure.



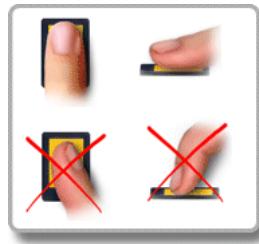
5 Enter your Windows password, the same one that you have just used for logon.



Click the button above the finger you want to enroll.



To achieve the best results during enrollment, position your finger approximately to the center on the sensor. Lay your finger flat on the sensor to get contact with a sufficient area of your finger. (Do not touch the sensor just by a finger-tip.)



6 Create a fingerprint sample.

- Put your finger on the sensor.

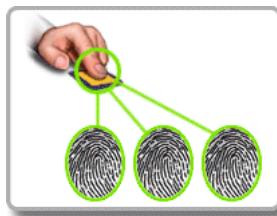


- Your finger is scanned. Wait until an image of a finger is displayed in the upper part.



- Lift your finger.

7 Repeat the previous step two more times (for the same finger). The final template is created from the three samples.



A warning is displayed in case that individual images cannot be matched. If you are sure that you put the same finger on the sensor in all cases, try to enroll another finger, and check whether the sensor is clean.



If this does not help, it is highly recommended to re-enroll the fingerprint using the manual method. If you decide to use the low-quality template, you will most probably later encounter problems with recognition and verification of your finger.

*Manual mode is started by clicking the **Manual mode** button. Manual mode gives you more control of the enrollment procedure. Description of the manual mode,*

instructions, and some more technical details about fingerprint enrollment can be found in the Troubleshooting chapter of this guide.

You can enroll up to 10 fingerprints.

8 Click the *Finish* button to close the wizard.

NOTE: Each user must have his own Windows user account. To create a user account, select **Start - Settings - Control Panel**, and click **User Accounts**. Follow the on-screen instructions.

Biomenu - Accessing Main Features

Now, your fingerprint is enrolled and you can start using your finger for initiating various actions in the program. Use the sensor to display the **Biomenu**.



Biomenu gives you access to the Protector Suite's features. To force displaying **Biomenu** in situations when putting your finger on the sensor defaults to another action (e.g. a registered window is active), hold the **Shift** key and put your finger on the sensor.

Biomenu supports bio-navigation. This means that you can use your sensor instead of your mouse. Move your finger to navigate through the **Biomenu** and tap the highlighted item to run the corresponding action.

Password Bank - Registering Web Pages and Dialogs

Many web pages and other applications require entering various data - user names, password, and other settings - each time you display them. Password Bank is the right solution for such situations. You fill in the information (or set necessary options) and register the window. When you access the page or the dialog later again, you can replay the stored information by putting your finger on the sensor.

Open your browser and go to the page you want to register (or display the dialog you want to register). Enter all the information you want to have in the registration. Put your finger on the sensor to display the **Biomenu**. Select **Register window**.



During the first registration, a wizard screen is displayed with instructions for creating a registration.



All your data is stored. A message is displayed informing that the registration was successfully created.

The registered web page can be accessed directly from **Biomenu - Registered pages**.



To replay a registered dialog, or in case you display a registered web page manually and want to replay the registration, use your finger. Data stored in the registration will be filled in the form automatically.

For more information about Password Bank and possible settings, see “Password Bank” on page 22 and “Settings” on page 25.

My Safe - Hiding Sensitive Files

If your computer can be accessed also by other users, maybe you would like to hide some of your files. My Safe is a place where you can store your sensitive files which are then accessible only by using your fingerprint.

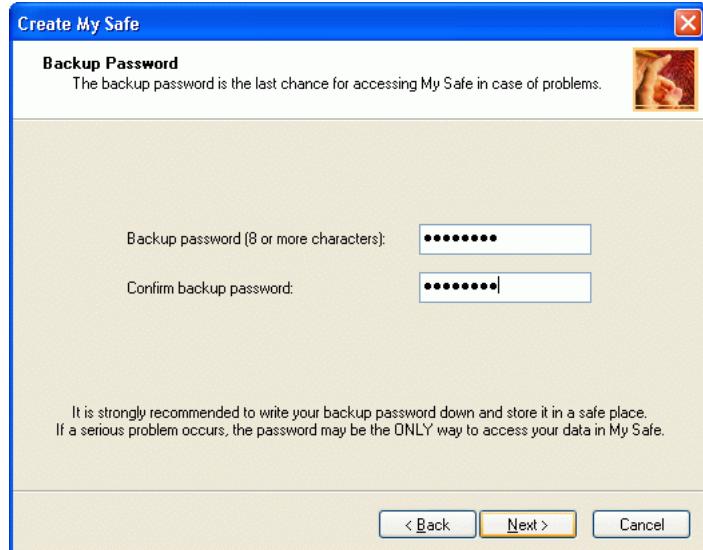
To start your work with My Safe, put your finger on the sensor and select **Unlock My Safe** from **Biomenu**.



Before the first use, **My Safe** must be created. A wizard will guide you through this process.



You will be asked to enter a backup password. This password can be used to open **My Safe** in case of failure of your biometric device, or in case you copy **My Safe** folder to another computer. The backup password must be at least 8 characters long.



Set a size of your safe. The default size is 50 MB. **My Safe** folder can be resized later.



You can place your private files in **My Safe** just as in any other folder. **My Safe** can be found under **My Documents**. After you finish your work, simply select **Lock My Safe** from **Biomenu** and your sensitive files will not be visible nor accessible for any other user.

To learn more about working with **My Safe**, see “**My Safe - Hiding Sensitive Files**” on [page 17](#).

Fast User Switching

The Fast User Switching feature of Windows XP is also supported. If user A is logged on and user B (who is already enrolled) puts a finger on the sensor, Protector Suite recognizes the fingerprints and switches the users.

To turn Fast User Switching support on, right-click the Protector Suite QL icon in the system tray, and select **Fast User Switching...** (This command is visible only if you use Windows XP. It is available only on the computer which is not a member of a domain.) If your system currently does not support FUS, please follow the on-screen instructions.

Chapter 3

Reference

This chapter describes all the features of the Protector Suite QL in detail.

[**Password Bank**](#)

[**My Safe**](#)

[**Settings**](#)

[**System Tray Icon**](#)

[**TouchChip Diagnostics Tool**](#)

Password Bank

Password Bank supports Internet Explorer 5.0 and higher, Mozilla 1.3, 1.4, 1.5, and Netscape 7.1 as web browsers.

Registering Pages

Open the web browser and go to the page you want to register. Enter all the information you want to have in the registration. Select **Register window** from the **Biomenu**. All your data will be stored. The registered page can be accessed directly from **Biomenu - Registered pages**.

Registrations of web pages use the same format for all supported browsers. Registration created in Internet Explorer can be later replayed in Mozilla (and vice versa).

Password Bank registers individual forms. If a page contains several forms, each form requires a separate registration. This means that only the active form is registered. If you use Internet Explorer 5.0 as your browser, cursor must be present in the form you want to register. To register a form on a page for which a registration already exists (a page with multiple forms), hold the **Shift** key and put your finger on the sensor to display the **Biomenu**. (If the page is already registered, putting your finger on the sensor without holding the **Shift** key replays the existing registration.)

When registering pages with multiple forms, the basic logic is the following:

- *An active form is registered.*
- *If no form is active, and Internet Explorer 5.5 or higher is used, user is prompted to select the form for registration.*
- *If none of the previous is true, no action is taken.*

Sample scenarios:

Suppose that there are no registrations for a page. The page contains form A and form B.

A. You have just filled in form A, and this form is still active. You put your finger on the sensor. Form A is registered.

B. You have just filled in form A and moved to form B so that form B is active. You put your finger on the sensor. Form B is registered (but still empty).

C. You have just filled in form A and clicked outside the form so that no form is active. You are using Internet Explorer 5.5 or higher. You put your finger on the sensor. You will be prompted to select the target form for registration.

D. The same situation as in C, but you are using a lower version of IE, Mozilla, or Netscape. No action is taken.

Replaying Web Page Registrations

An existing registration is replayed automatically if the page is displayed from **Biomenu - Registered pages**. If you displayed the page manually and now you want to replay the registration, put your finger on the sensor.

When replaying registrations of pages with multiple forms:

- *If there is only one registration for the page (regardless of the total number of existing forms), the registration is replayed.*
- *If there are multiple registered forms, and one from the registered forms is active, this form is replayed.*
- *If there is no active form, all the existing registrations for the page are offered for replaying.*

Registering and Replaying Dialogs

Password Bank is primarily intended for registering simple dialogs containing a user name and a password field, typically dialog for logging to various applications.

More complex dialogs may bring some problems. Text fields and password fields can be always registered. Registrations save controls which are not hidden, disabled, minimized etc. Radio buttons, check boxes, combo boxes, and selections in list boxes are registered for applications that are using standard Windows controls (e.g. system dialogs). Text boxes, text areas, password fields, check boxes, and radio buttons can be edited in the registration. Combo boxes and list boxes cannot be changed.

You can encounter problems with dialogs containing multiple pages. In some cases, all the pages are registered in one registration. Password Bank cannot correctly handle dialogs which do not create some controls before they are used, but only draw them. The typical example are some dialogs from Microsoft Office.

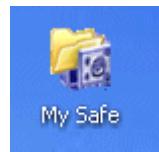
When replaying a registered dialog, if some control change invokes an action requiring user's reaction, Password Bank waits (with the dialog), and replaying is completed only after the action is finished.

All your registrations are visible in the **Settings - Registrations** dialog. You can change the contents of your registrations to reflect possible changes of your data, or of the registered pages. You can also turn on/off automatic submitting of replayed registration. The **Registrations** dialog is described later in this chapter in the **Settings** part.

My Safe

My Safe is stored under **My Documents** folder. Its contents are not visible to other users (including other logged users if you are using FUS).

For better accessibility, a shortcut is created on your desktop



and under **My Computer**. (This shortcut exists only on Windows 2000/XP.)

Lock/Unlock commands are accessible in the context menu **My Safe** (or its shortcut) and in the **Biomenu**.

Initial size of **My Safe** is selected during its creation. You can change it later. Maximum size of **My Safe** is 4 GB (2 GB on Windows 98).

To change the size of My Safe:

- 1 *Use the sensor to open the **Biomenu**.*
- 2 *Select **Settings**.*
- 3 *Select **My Safe**.*
- 4 *Click the **Change Size** button.*

Do not forget that all the files stored in **My Safe** are accessible if it remains unlocked and you are logged on. **My Safe** is locked automatically whenever you finish your session. In other cases, lock **My Safe** manually to secure your sensitive files.

Backup Password

When you created **My Safe**, you were asked to enter a backup password. This password can be used to access the data stored in **My Safe** in case of biometry failure or if enrolled fingerprint cannot be used. Try to access **My Safe** as you did before. A dialog will inform you about the problem and ask you to enter the backup password.

TIP: If you forgot your backup password, you can delete the old **My Safe** from this dialog and create a new one.

Settings

To display the **Settings** dialog, put your finger on the sensor to display **Biomenu**, and select **Settings**.

The **Settings** dialog consists of several pages.

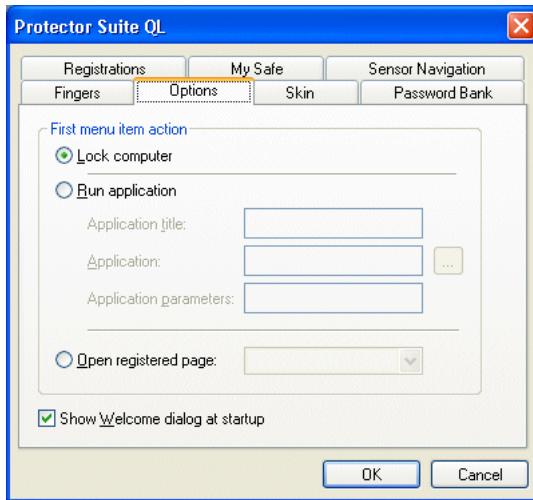
Fingers

Opens the fingerprint enrollment wizard to register additional finger(s). You can launch this wizard also from the system tray icon by selecting **User fingers....**



Options

The first item of the **Biomenu** can be customized. The default **Lock computer** command can be replaced to run any program on your computer or to open a registered page.



To set the program to be run:

- Select the **Run application** radio button.
- Type the text you want to display in the **Biomenu** to the **Application title** field.
- Select an executable file to be run in the **Application** field. You can use the browse button to locate the file.
- If your application requires additional parameters, type them into the **Application parameters** field.

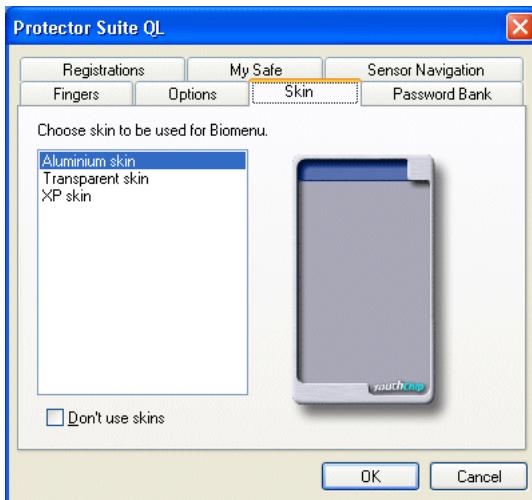
To set a registered page

- Select the **Open registered page** radio button.
- Select a page from the list.

Clear the **Show Welcome dialog at startup** check box if you do not want to display the **Welcome** dialog at computer startup.

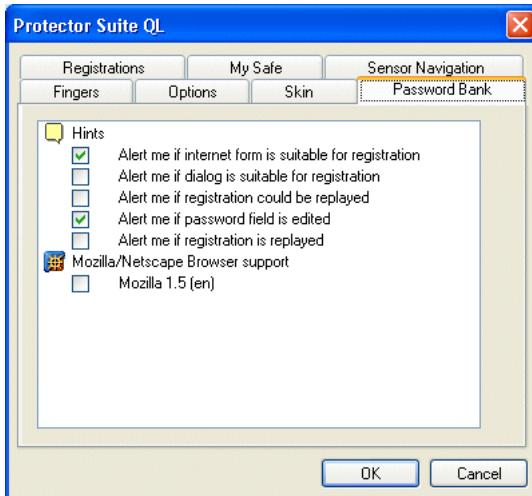
Skin

Biomenu can be displayed in several designs - skins. Select your favorite one



If you prefer the standard system design, check the **Don't use skins** check box.

Password Bank



This page consists of two parts.

The **Hints** part is visible to all users. It contains settings of hints displayed to inform a user about possible actions of the Password Bank. Select the hints you want to display.

- *Alert me if internet form is suitable for registration* - This alert informs user that the page contains a form with password field which can be registered.
- *Alert me if dialog is suitable for registration* - This alert informs user that the dialog contains a password field that can be registered.
- *Alert me if registration could be replayed* - This alert informs user that the registered dialog or form can be replayed. If this alert is off, the dialog border of the registered dialog blinks red.
- *Alert me if password field is edited* - Password field is displayed in plain text during editing. This alert warns user that the password will be displayed in a readable form.
- *Alert me if registration is replayed* - This alert informs user that replaying of the registration is about to be started. This alert is useful in cases you want to create more registrations of the same form or dialog and do not want to overwrite already entered data.

The second part is visible only to administrators. It is displayed in case you have installed Mozilla or Netscape. When Protector Suite detects Mozilla/Netscape, it prompts the user whether to turn the support on. Alternatively, the Mozilla/Netscape supports can be turned on here. If you want to enable Password Bank's support for a browser, check the corresponding check box..

Registrations

This dialog lists all your existing registrations. Both the registered pages and dialogs are displayed.



Select a registration you want to work with.

- Click the **Rename** button to change the name of registration displayed in **Registered pages**.
- Click the **Delete** button to delete the registration.
- Click the **Edit** button to change the data stored in registration. (E.g. your address has changed and you want to reflect this in existing registrations.)
- Select the **Auto submit** check box to submit the selected registration automatically after replaying the registration.

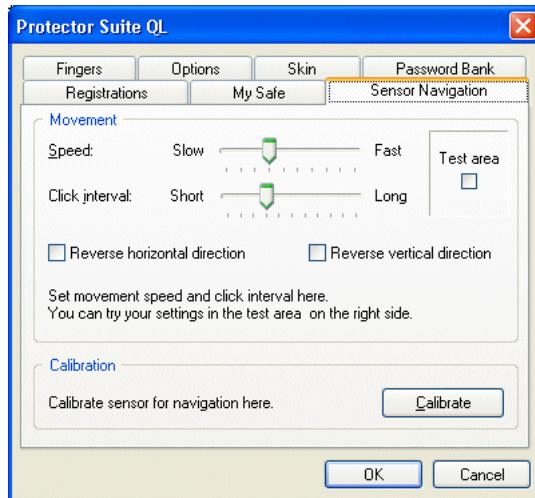


Your registrations can be exported for use on another computer, or imported to your computer.

- Click the **Export** button to export the selected registrations. You will be asked to select a destination file and to enter a password which will protect your registrations. A file extension of password bank files is **.pb**.
- Click the **Import** button to import registrations from a password bank file. You will be asked to select the source **.pb** file and enter the password (created during export).

Sensor Navigation

You can adjust the speed of navigation and the click interval. It is also possible to reverse vertical and/or horizontal direction. Sensor is normally calibrated automatically, however, if you encounter problems with navigation, you can try to re-calibrate the sensor manually.



My Safe

This page contains options for **My Safe** management. Information about **My Safe** status (locked/unlocked) and size (or free and used space, if **My Safe** is open) is displayed.



Some of the buttons are not available in all situations. Change **My Safe** status to make the other options available.

- Click the **Create** button to create **My Safe**. This button is available only when there is no **My Safe** folder.
- Click the **Unlock** button to unlock **My Safe**. This button is available only when **My Safe** is locked.
- Click the **Lock** button to lock **My Safe**. This button is available only when **My Safe** is unlocked.
- Click the **Delete** button to delete **My Safe**.
- Click the **Change Size** button to change the size of **My Safe**.

System Tray Icon

Protector Suite QL icon indicates that the program is running and gives access to functions that do not require fingerprint authentication

Edit Fingerprints...

Opens the fingerprint enrollment wizard to register additional fingers. You can launch this wizard also from the **Biomenu** by selecting **Settings - Fingers**.

Fast User Switching...

Turns Fast User Switching on and off. (This option is available only on Windows XP on computers which are not in a domain.) Use this item, do not switch FUS directly from Windows. Only administrators can turn FUS on/off.

Don't use sensor/Use sensor

Allows detaching your fingerprint device from the Protector Suite if necessary for another application. This command temporarily frees the device only for the current user session. (The device can be used only exclusively by one application at a time. This option is intended for cases when you plan to use other biometric application and do not want the Protector Suite to block the device.)

Help

Displays the help system.

About

Displays information about the program and its version.



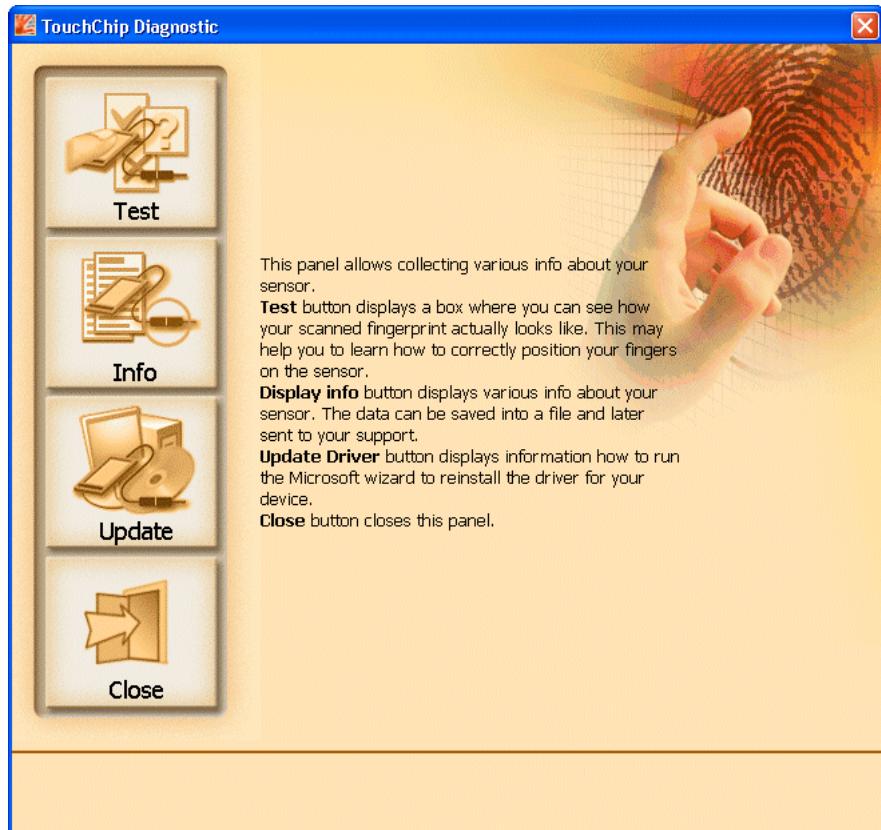
TouchChip Diagnostics Tool

TouchChip diagnostics control panel applet is a tool for troubleshooting your TouchChip sensor. Select **Start - Settings - Control Panel** and double-click the **TouchChip Sensor**. (This applet can be found under the **Printers and Other Hardware** category, if you use the Category view in Windows XP.)

Info displays information about your sensor. Detects whether the reader is connected and the sensor is in order. License validity is checked. Most of these items are rather technical and are intended for your technical support. If you experience problems with your biometric device, save the results into a file (click the link in the dialog) and send the file to your support department.

Test displays an image scanned by your sensor. You can use it to learn how to position your finger correctly on the sensor.

Update Driver displays steps necessary to update the driver for your biometric device.



Chapter 4

Troubleshooting

This chapter provides information for users who have some difficulties when using the Protector Suite QL.

Installation

User who installs the Protector Suite QL has not administrator privileges.
Only administrator can install the product.

Fingerprint Enrollment

My device does not work.

Check the device connection.

Check whether the driver is correctly installed. Drivers are normally installed during Protector Suite QL installation. However, if there are some problems, necessary drivers can be found in **Drivers** subfolder of your installation folder (or on your installation CD). For device-specific information for driver installation, consult Readme.txt in the **Drivers** folder. (To check the device status, right-click **My Computer**, select **Properties - Hardware**, and open the **Device Manager**.)

I cannot enroll my fingerprints.

My fingerprints are not correctly recognized.

From the statistical point of view, most people are able to create their fingerprint sample on the first attempt. However, it is known that some people may repeatedly encounter significant difficulties. The most common problems are caused by too wet or too dry fingers.

What to do:

- 1 **Clean your sensor.** Use a damp lint-free cloth (use water or fragrance-free moisturizing lotion), and gently rub the cloth across the sensor. Do not use any abrasive materials.
- 2 **Try to wipe your finger.** (Especially in hot weather.)
- 3 **Try to use another finger.** The index-finger is usually easier to enroll than your little-finger.

- 4 **Use the Manual enrollment mode.** This procedure was specially designed for cases when the standard automatic enrollment does not work. The procedure is slower and checks several times the quality of images. It usually gives acceptable results for problematic fingerprints. Manual enrollment alternatively allows accepting images of lower quality. This practice is generally not recommendable as problems with verification are highly probable for low quality images.

Enrollment in Manual Mode

Use the Manual Mode only in cases when the standard procedure does not work. In standard situations, the automatic procedure gives better results.

To enroll fingerprints in manual mode:

- 1 *Click the **Manual Mode** button. Select the **Use manual enrollment mode** check box.*
- 2 *Put your finger on the sensor. You can see the actual image scanned by the sensor. The evaluation of the sample starts. If the resulting image is evaluated as a good one, you will be asked to accept the sample by clicking the **Accept** button. Lift your finger from the sensor.*
- 3 *Create three fingerprints samples. If the samples are successfully matched, the final fingerprint template is created.*
- 4 *If you cannot create a good sample, you can select the **Accept low quality images** check box. This option allows accepting low quality images. Use this option only as the last possibility because the probability of problems during fingerprint recognition and verification is very high.*

Technical Details

Statistics acquired from usability testing says that usually the first sample is the best one. Therefore the matching algorithm (both in automatic and manual modes) takes the first sample and compares it with the second and the third ones. If no match, the first sample is used for the final template. However, the resulting image is considered to be low quality. (As matching fails in this case, it can fail later during any verification process). It is recommended to re-enroll the finger.

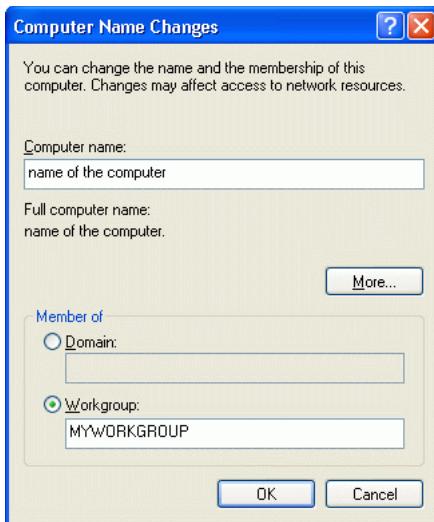
Fast User Switching

Fast User Switching command from the tray icon menu is not available.

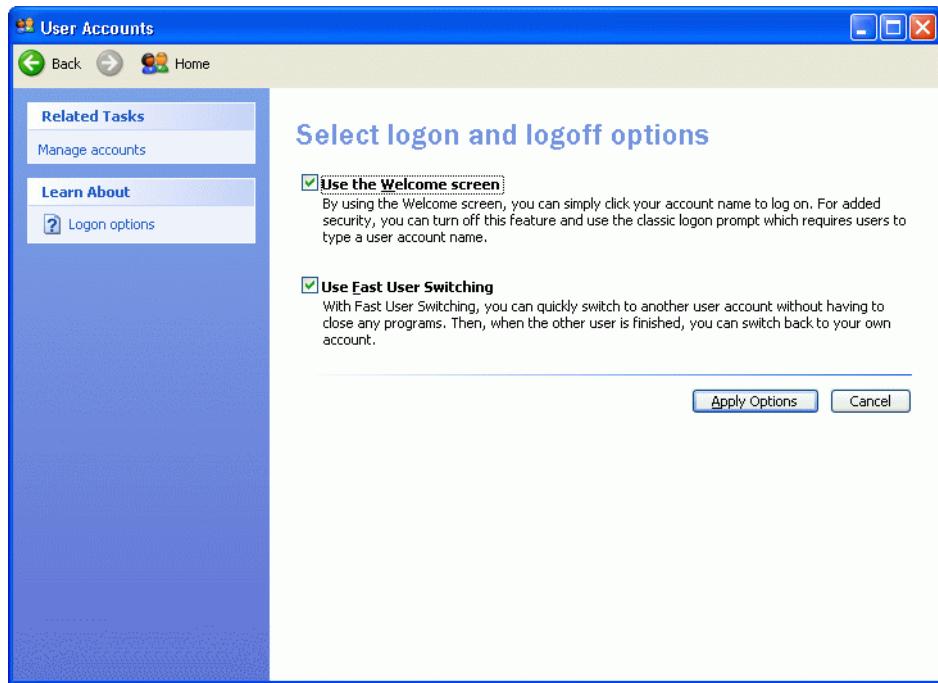
This command is visible only on computers running Windows XP system. Fast User Switching feature can be used only on computers which are not members of a domain.

To remove your computer from a domain:

- 1 *Check whether your computer is not in a domain. Right-click **My Computer**, select **Properties**. Select **Computer name**. Click the **Change** button. If your computer is a member of a domain, remove it from the domain, and select a workgroup.*



2 Select **Start - Settings - Control panel** and open **User Accounts**. Select **Change the way users log on or off**. Select **Use the Welcome screen** and **Use Fast User Switching**.



3 Click the **Apply Options** button. Reboot may be required to apply the changes.

WARNING: If you select only the **Use Welcome screen** option and do not select **Use Fast User Switching**, you will be informed that your computer will use classic logon after reboot. When no passport exists, you can set **Use Welcome screen** option without **Use Fast User Switching**.

Password Bank

Hints in Mozilla

It is not recommended to use Password Bank's hints together with tabs in Mozilla.

The logic is the following: pages are scanned for existing registrations and then for forms to be registered. Pages are scanned from the left to the right. The first appropriate hint found is displayed and the scanning is stopped. It means that if there is a registration for the first page, no hint is ever displayed for the second page. If there is no registration for the first page, the hint for registering the second page is displayed, but only after you make the second page active.

Delay in replaying pages in Internet Explorer

Registrations are replayed (and can be made) only after the page is fully loaded. Unfortunately, Internet Explorer sometimes incorrectly displays that the page is already loaded (the animation in the upper-right corner is stopped), although the page is not loaded yet. If the user presses Stop to finish loading, IE sometimes ignores the command and does not stop. In such situations, please wait until the loading is fully finished. The same problem may occur with pages where mouse over some active item (e.g. Flash animation) starts loading the object, although the page has already been loaded.

My Safe

Antivirus programs have problems with My Safe folder.

My Safe host files cannot be formatted and mounted when some antivirus programs are on. This problem exists e.g. with Norton AntiVirus, or Sophos. It is recommended to set your antivirus program to ignore **My Safe** folder. **My Safe** is stored in an encrypted form and therefore scanning its contents makes no sense.

CAUTION - No operator-serviceable parts inside unit.

WARNING - For reduced unwanted RF emissions, use a shielded power cord to connect AC power to the host computer.

FCC NOTICE

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

FCC

INFORMATION FOR THE USER

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- 1) Reorient or relocate the receiving antenna.
- 2) Increase the separation between the equipment and receiver.
- 3) Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- 4) Consult the dealer or an experienced radio/TV technician for help.

The user may find the following publication prepared by the Federal Communications Commission helpful:

"How to Identify and Resolve Radio-TV Interference Problems" (Stock Number 004-000-00345-4).

Available exclusively from the Superintendent of Documents, Government Printing Office, Washington, DC 20402 (telephone 202-512-1800).

FCC WARNING

Changes or modifications not expressly approved by the party responsible for compliance to Part 15 of the FCC Rules could void the user's authority to operate the equipment.

CE NOTICE**INFORMATION FOR THE USER**

This equipment has been tested and found to comply with the limits for a Class B or Class 2 digital device, pursuant to EN 55022 Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at the expense of the user.

The user may find the following publication prepared by the Federal Communications Commission helpful:

"How to Identify and Resolve Radio-TV Interference Problems" (Stock Number 004-000-00345-4).

Available exclusively from the Superintendent of Documents, Government Printing Office, Washington, DC 20402 (telephone 202-512-1800).

WARNING

Changes or modifications not expressly approved by the party responsible for compliance to EN 55022 Rules could void the user's authority to operate the equipment.

ICAN Class B Digital Equipment

This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

Cet appareil numérique de la classe B respecte toutes les exigences du Réglement sur le matériel brouilleur du Canada.

RegTP Declaration:

Pulver Laboratories Inc. and UPEK, Inc. hereby certify that the TouchStrip Professional Reader, TCRZ (Equipment, Type, Model Number) is in compliance with VFG 523/1969, DIN 57871 / VDE 0871 / 09.84, and DIN 57875 Part 1 A2 / 10.90 (product standards) and is RFI suppressed.

The marketing and sale of this equipment in Germany has been reported to the German Postal service. They have also been given the right to retest this equipment to verify compliance with product regulations.

Compliance with applicable regulations depends on the use of shielded cables. The user is responsible for procuring the appropriate cables.

This equipment has been tested concerning compliance with the relevant RFI protection requirements both individually and on a system level (to simulate normal operation conditions). However, it is possible that these RFI requirements are not met under certain unfavorable conditions in other installations. The user is responsible for compliance of his particular installation.

Pulver Laboratories Inc.

Testing and Certification Laboratories

UPEK, Inc.

Name of Manufacturer or Importer

Bescheinigung des Pulver Laboratories Inc. und UPEK, Inc. hiermit wird bescheinigt, dass die TouchStrip Professional Reader TCRZ in Übereinstimmung mit den Bestimmungen der VFG 523/1969, DIN 57871 / VDE 0871 / 09.84, und DIN 57875 Part 1 A2 / 10.90 (Amtsblattverfügung) funk-entstört ist.

Der Deutschen Bundespost wurde das Inverkehrbringen dieses Geräts angezeigt und die Berechtigung zur Überprüfung der Serie auf Einhaltung der Bestimmungen eingeräumt.

Einhalten mit betreffenden Bestimmungen kommt darauf an, dass geschirmte Ausführungen gebraucht werden. Für die Beschaffung richtiger Ausführungen ist der Betreiber Verantwortlich.

Dieses Gerät wurde sowohl einzeln als auch in einer Anlage, die einen normalen Anwendungsfall nachbildet, auf die Einhaltung der Funk-entstörbestimmungen geprüft. Es ist jedoch möglich, dass die Funk-entstörbestimmungen unter ungünstigen Umständen bei anderen Gerätekombinationen nicht eingehalten werden. Der Betreiber ist für die Einhaltung der funk-eutstörungsbestimmungen seiner gesamten Anlage verantwortlich, in der dieses Gerät betrieben wird.

Pulver Laboratories Inc.

Testing and Certification Laboratories

UPEK, Inc.

Name des Herstellers / Importeurs