



Protector Suite 2009



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Chapter 1. Installation

1.1. Installing Protector Suite 2009

Protector Suite 2009 can be installed on any computer with Windows XP or Windows Vista and Microsoft .NET 3.0 and higher. Administrator rights are required to install or uninstall Protector Suite 2009. If you have Protector Suite 2009 already preinstalled on your computer, you can skip this chapter.

To install Protector Suite 2009 :

1. When the Protector Suite 2009 autorun window is displayed, click on **Software Installation**. If this screen does not appear, run **Setup32.exe** or **Setup64.msi** from the installation folder manually.
2. Click **Next** to continue.
3. Confirm or click the **Browse** button to select another installation folder.
4. **Ready to Install the Application** dialog appears. Click **Next** to start the installation. During the Windows Vista installation, you may be prompted to confirm to continue with the installation.
5. When the installation has completed, click on the **Finish** button.
6. Click on **Yes** to restart your computer when prompted. You must reboot your computer before you begin to use Protector Suite 2009.

The installation is now completed. After you restart the computer, the fingerprint logon to Windows will be enabled. You must enroll your fingers to start using the software. See Fingerprint Enrollment.



Note

During installation, all necessary device drivers are installed. If you intend to use an external fingerprint sensor, we recommend that you connect it after completing the installation and restarting your computer.

1.2. Uninstalling Protector Suite 2009

To uninstall Protector Suite 2009:

1. Click **Start > Control Panel**.
2. Double-click the **Add or Remove Programs** icon (**Programs and Features** in Windows Vista).
3. Select Protector Suite 2009 and click the **Change** button.
4. Click the **Remove** button.
5. You will be asked what to do with Protector Suite 2009 data stored on your computer. There are two possibilities:
 - **Leave Protector Suite 2009 data for later use on your computer.**

This means that if you later re-install Protector Suite 2009, you can continue using the enrolled fingerprints for logging to your computer and accessing data of the fingerprint applications.
 - **Remove all Protector Suite 2009 data from your computer.**

Enrolled fingerprints and all data in fingerprint applications will be permanently deleted.

6. Click **Next** to continue.
7. Uninstall dialog is displayed, click on **Next** to confirm you want to continue with the uninstallation. Click **Cancel** to quit the uninstallation.
8. When uninstallation is completed, click on **Finish**.
9. Click **Yes** to reboot your computer.

Chapter 2. Introduction

Protector Suite 2009 is biometric software that protects the security of your data through the use of fingerprint authentication. For greater security, fingerprint authentication can be combined with different methods of user authentication (such as a smart card, PIN, TPM, fingerprint reader key or your Windows password). Fingerprint authentication is performed by swiping your finger over a fingerprint sensor.

After installing the software and restarting your computer you will need to enroll your fingerprints to create an association between your username, password and your fingerprints together with automatically generated security keys. All the data is stored in the user passport.

This procedure is called Fingerprint Enrollment. To learn how to enroll, see Fingerprint Enrollment.

After you enroll, you will be able to use your fingerprints to:

- replace your windows logon password (see Windows Logon)
- protect your computer at boot (see Power-on Security)
- launch favorite applications using your fingerprint sensor (see Application Launcher)
- replace passwords of your favorite web sites or applications by fingerprint (see Password Bank)
- generate strong and complex passwords (see Strong Password Generator)
- encrypt your files and folders (see Encrypted Archives)
- protect private information such as credit card details, account numbers etc.. (see E-Wallet)
- have a quick access to Protector Suite 2009's features through a pop-up menu (see Biomenu)

2.1. Fingerprint Enrollment

Each user identity in Protector Suite 2009 is represented by a user account or "passport", which contains biometric fingerprint data used to verify the identity of the user. Before using the software for the first time, fingerprint samples for your passport must be created. This process is called fingerprint enrollment.

To create a new user passport (enroll fingerprints):

1. Go to
 - **Start > All Programs > Protector Suite > Control Center**
 - or right-click on the tray icon and select **Start Control Center...**
 - or scan your finger and click on the **Enroll your fingers now** link in the Introduction Screen.
2. Authenticate (Windows password will be required, if you have one). For more detailed instructions, please refer to Fingerprint Enrollment.



Tip

If you experience problems with scanning your fingerprints, see Fingerprint Tutorial.

Chapter 3. Identity

In the Identity section you can work with your user account. You can enroll and delete your fingerprint templates, import, export or delete the complete user's account. The backup password can also be set here.

Before you can start using Protector Suite 2009 you must enroll your fingers, i.e. create your fingerprint templates. See Fingerprint Enrollment to get started.

3.1. Manage Fingerprints

Before you can start using Protector Suite 2009 you must enroll your fingers. Fingerprint enrollment is a process of creating correspondence between your username, password and your fingerprints (computerized so that reconstructing the original image is not possible) together with automatically generated security keys. All the data is stored in your fingerprint passport.

For greater security, fingerprint authentication can be combined with a smart card and PIN authentication or in combination with your Windows password. You will be able to select a method for authentication (e.g. fingerprint + a smart card, etc.) in the Multifactor page. See Multifactor for more information.

3.1.1. Fingerprint Enrollment

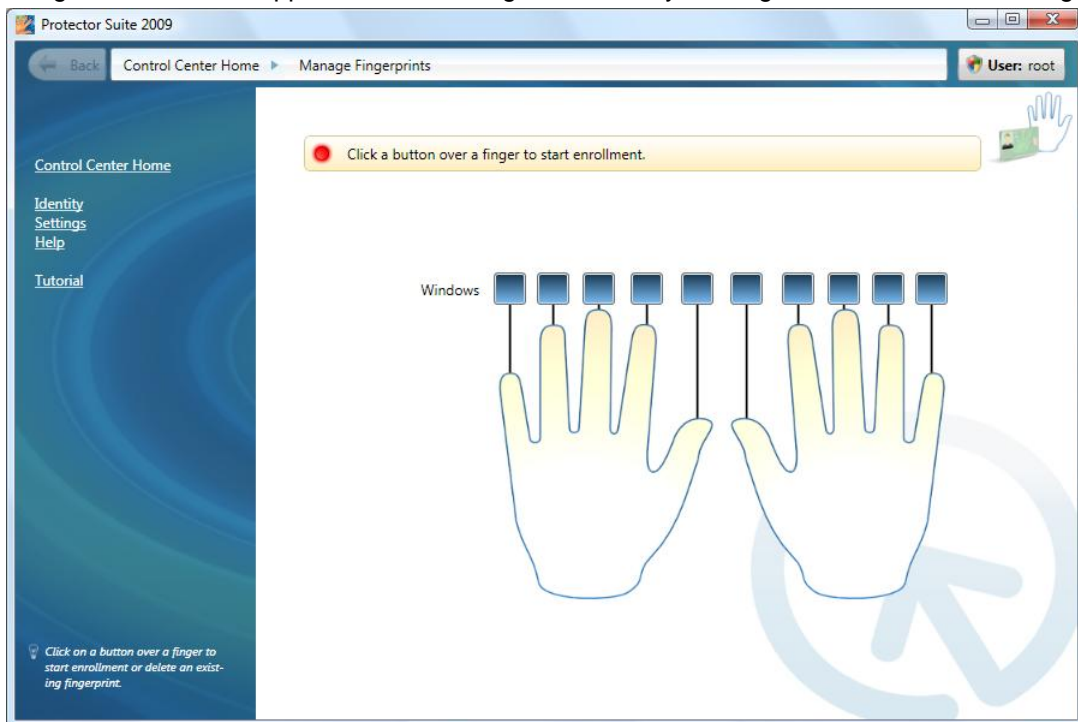
To create a new user passport (enroll fingerprints):

1. If you want to use an external fingerprint sensor, connect your device. All the necessary drivers are installed with Protector Suite 2009. An informational message that the sensor was connected and is ready to use is usually displayed in the lower right corner of your screen.
2. To launch Enrollment, go to
 - **Start > All Programs > Protector Suite > Control Center**
 - or right-click on the tray icon and select **Start Control Center...**
 - or scan your finger and click on the **Enroll your fingers now** link in the Introduction Screen.
3. The License Agreement is displayed. Read the License Agreement carefully. You must agree to the License Agreement to use this product. Click on **Accept** to continue or click **Do not accept** to close the application if you do not agree to the Licence Agreement.
4. If your device supports enrollment to the device memory, you can select whether to store your authentication data to the device memory, or to your hard disk. **Select an enrollment type:**
 - **Enrollment to the biometric device.** If you select enrollment to your device memory, your data cannot be accessed without the corresponding fingerprint device. Authentication information will be protected by a software encryption key generated by your fingerprint software together with a hardware encryption key obtained directly from your device. The only limitation is the number of fingerprints you can enroll because of the restricted size of the device memory.
 - **Enrollment to hard disk.** If you plan to enroll a larger number of fingerprints for several users, enrollment to the hard disk is necessary. If you select enrollment to your hard disk, data will be encrypted using a software key. Biometric authentication can be performed using any fingerprint reader.

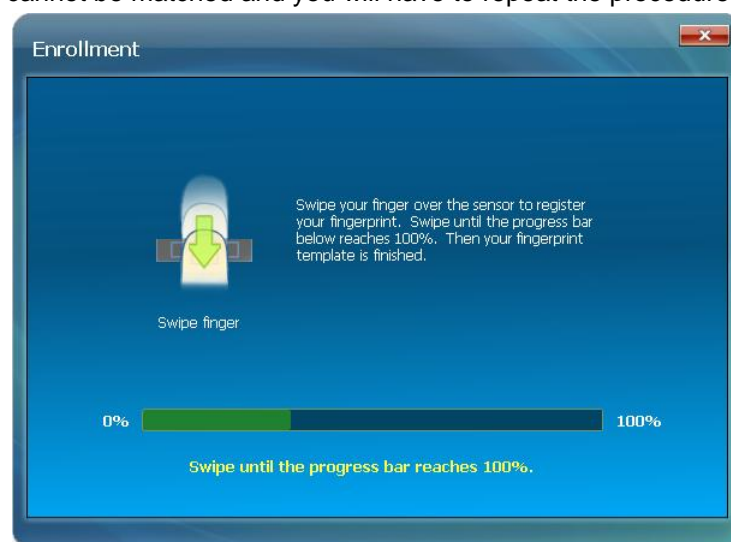
⚠ Important

Selected enrollment type cannot be changed later. The only way to change it is by uninstalling Protector Suite 2009 and reinstalling it again.

5. Click **Apply** to continue.
6. Enter your Windows password and click **Submit**.
7. A dialog with two hands appears. Select a finger to enroll by clicking the button above the finger.



8. Scan the selected finger over the fingerprint sensor. Good quality matching fingerprints are required. These samples will be combined into a single fingerprint passport. A warning is displayed if the created samples cannot be matched and you will have to repeat the procedure.



**Tip**

If you experience problems with scanning your fingerprints, see [Fingerprint Tutorial](#).

9. (Optional - only if supported by your computer) Once a finger is enrolled a **Power-on Security** button is displayed above each finger. The corresponding finger will be used to replace your power-on and/or hard drive passwords at system startup.
10. Select another finger to enroll. It is strongly recommended that you enroll more than one finger in the event of injury.
11. Click **Save and Continue** to finish creating the fingerprint templates.
12. A Status page appears where you can overview the current status of the fingerprint software. It is highly recommended to set a Backup Password. This password will be used throughout the fingerprint software as a backup for the fingerprint authentication in the event of injury or a problem with the biometric device.

**Note**

Each Windows user can have only one passport. To create a user account, select **Start > Control Panel**, and click **User Accounts**. Follow the on-screen instructions.

3.1.2. Add or Delete Fingerprints

You can add more fingers into your user account later. It is highly recommended to enroll more fingers in the event of injury. You can delete fingers one by one or delete the complete account (including all your application data).

Add or delete fingerprints of an existing user (manage fingerprints):

1. Go to
 - **Start > All Programs > Protector Suite > Control Center** .
 - or right-click on the tray icon and select **Start Control Center...**
 - or scan a finger to display the Biomenu and select **Control Center...** (skip the next step).
2. Authenticate (scan your finger or enter your password) and click **Submit**.
3. Go to **Identity > Manage Fingerprints**.
4. A dialog with two hands appears.
5. **To enroll a new fingerprint:**
 - Select a finger to enroll by clicking the button over the finger.
 - Scan the selected finger until a template is finished. Good quality matching fingerprints are required.

To delete a fingerprint:

- Select a finger to delete by clicking the button over the finger.
- Click **Yes**.

- Click **Save and Continue** to finish.

To delete an existing user account (all user's data):

⚠ Important

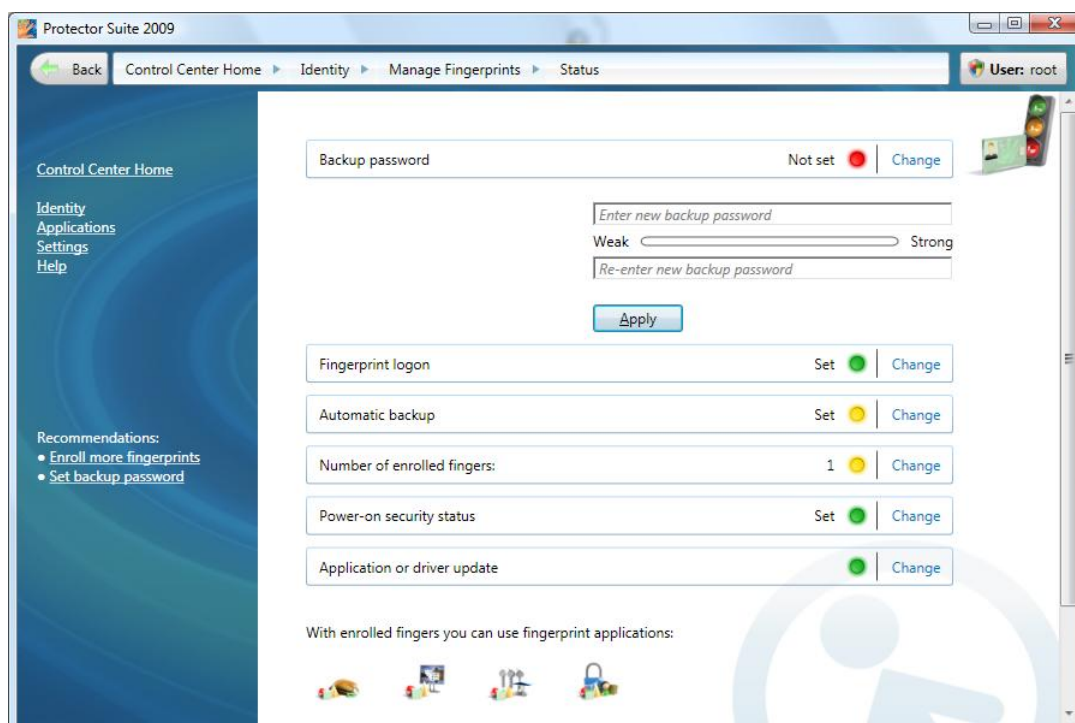
This will delete the complete user account at once including all user data, not just your fingerprints.

- Go to
 - Start > All Programs > Protector Suite > Control Center .**
 - or right-click on the tray icon and select **Start Control Center...**
 - or scan a finger to display the Biomenu and select **Control Center...** (skip the next step).
- Authenticate (scan your finger or enter your password) and click **Submit**.
- Go to **Identity > Account Operations > Delete User Data**.
- Click **Yes** to confirm.

3.2. Status

The status page gives you an overview of the software settings and informs you what fingerprint applications are available once you are enrolled.

Red icon signalize that a setting is not in an optimal state. Yellow indicates there is something to be done and green marks a correct setting.



- Backup password.** Set a backup password and click the **Apply** button. Learn more about Backup Password.

- **Fingerprint logon** will be automatically set after you enroll your fingerprints. When you restart your computer and wish to log on again, scan your finger and you will be logged on automatically. Click **Change** to go to the Windows Logon page and to edit logon settings.
- **Automatic backup** will be automatically set when you enroll your fingerprints and set up the backup password. Your data will be backed up each time you make any changes of your user passport. Click **Change** to go to the Export and set an export mode.
- **Number of enrolled fingers** shows you the number of fingerprints enrolled by the current user. It is recommended to enroll more fingers in the event of injury. Click **Change** to go to the Fingerprint Enrollment and enroll more fingers.
- **Application or driver update.** Will indicate whether an update is available. Click **Change** to go to the Update and download a new update or set automatic check for updates.

The second part of the summary page gives you information about applications that can be used when fingers are enrolled. If you mouse-over an application picture, you can see a description for each application. Click a picture to go to the application page.

3.3. Multifactor

Security of Protector Suite 2009 can be increased with additional encryption. The types of encryption available depend on your hardware.

Choose a method of authentication. Next time you are prompted for authentication, the selected method will be required (e.g. logging to your computer, registering web pages etc.). This will apply for all enrolled fingers.

To select a multifactor method:

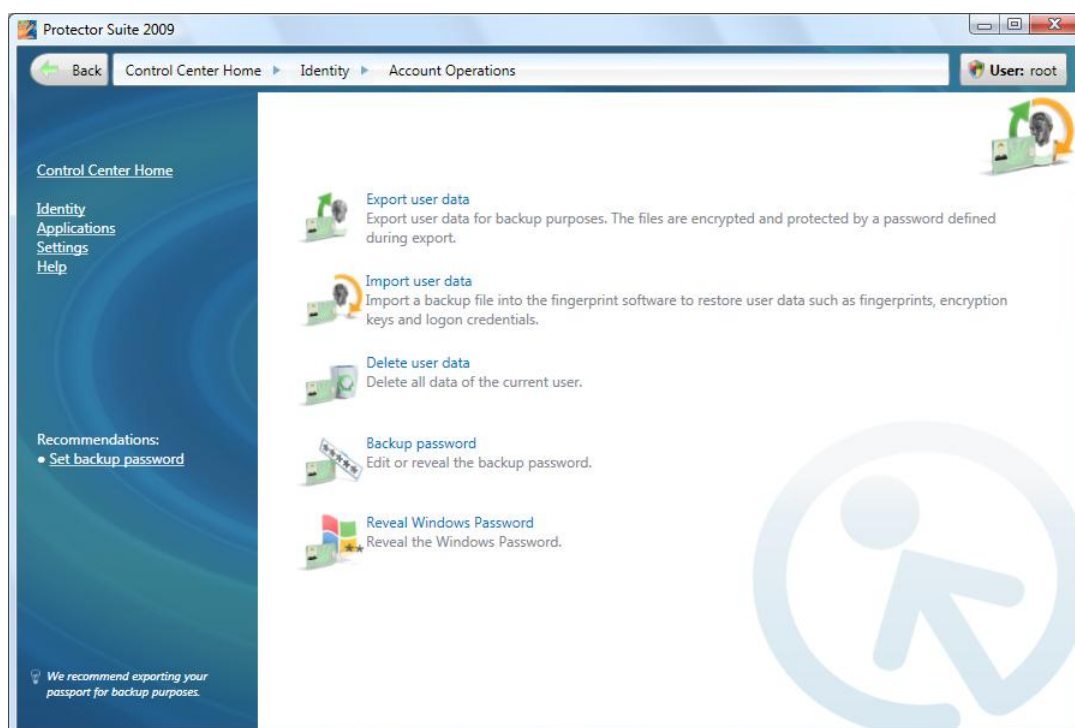
1. Go to
 - **Start > All Programs > Protector Suite > Control Center .**
 - or right-click on the tray icon and select **Start Control Center...**
 - or scan a finger to display the Biomenu and select **Control Center...** (skip the next step).
2. Authenticate (scan your finger or enter your password) and click **Submit**.
3. Go to **Identity > Multifactor**.
4. Select a multifactor method **Multifactor methods**
 - **Fingerprint:** Only fingerprint authentication will be required.
 - **Fingerprint + Fingerprint reader key:** User secret data is encrypted using a key stored in the fingerprint device and accessed only after successful fingerprint authentication. You may use the backup password in the event of injury or a device problem. If you do not define the backup password, you can lose your data in the event of authentication hardware failure.
 - **Fingerprint + Smart Card:** Both fingerprint authentication and insertion of the registered smart card are required. Use the backup password in the event of injury or a device problem. In the next dialog, select a smart card reader and insert the card. Enter a PIN that will be saved and automatically replayed during authentication.

- **Fingerprint + Smart Card + PIN:** This combination enhances security of the former method by prompting the user to enter their PIN each time authentication is required. use the backup password in the event of injury or a device problem.
 - **Fingerprint + Windows password:** Fingerprint authentication and entering the Windows password will be required for each authentication.
 - **Fingerprint + TPM with Fingerprint reader key:** Improved hardware-based security. Encrypted channel between TPM security chip and fingerprint reader further enhances security of user secret data. Recommended for highest security.
 - **Fingerprint + TPM Key:** User secret data will be protected by the TPM security chip. Recommended for higher convenience.
 - **Fingerprint + TPM Key with PIN:** User secret data will be protected by the TPM security chip with PIN. Requires the user to enter a PIN during every identity verification. Recommended for high security.
5. If you have not created a backup password it is highly recommended to create one now. Click on the link **Create backup password** to enter a new backup password. Enter and confirm a backup password. This password will be used throughout the fingerprint software as a backup for the fingerprint authentication in the event of injury or a problem with the biometric device. Learn more about Backup Password .
 6. Click **Apply** to save the changes.

3.4. Account Operations

Import, export or delete current user data.

These operation will affect the current user account (passport). To add or delete an individual fingerprint go to Fingerprint Enrollment.



3.4.1. Export

Existing user data (including fingerprints, encryption keys, logon credentials) can be exported to a file and imported back into your fingerprint software. The file is encrypted and protected by your backup password. Learn more about Backup Password.

To set an export mode:

1. Go to
 - **Start > All Programs > Protector Suite > Control Center .**
 - or right-click on the tray icon and select **Start Control Center...**
 - or scan a finger to display the Biomenu and select **Control Center...** (skip the next step).
2. Authenticate (scan your finger or enter your password) and click **Submit..**
3. Select **Identity > Account Operations > Export user data.**
4. If the backup password is not set, define a password now. Learn more about the Backup Password.
5. Choose a backup mode:
 - Click on the **Export Now** button and enter your Backup Password to perform the export immediately. Select a destination folder and set a file name.
 - Select **Automatic backup**. Automatic export will backup your passport (i.e. all your data including keys, passwords, enrolled fingers etc.) each time any changes are made to the passport. The default location of the backup file is C:\Users\your username\AppData\Local. After every ten automatic backups you will be required to enter the backup password. Click **Apply** to save the changes.

**Note**

Exporting your passport is highly recommended for backup purposes, e.g. in the event of system crash, reinstallation of your system or if you accidentally delete or loose your data.

3.4.2. Import**To import user data (user passport):**

1. Go to
 - **Start > All Programs > Protector Suite > Control Center .**
 - or right-click on the tray icon and select **Start Control Center...**
 - or scan a finger to display the Biomenu and select **Control Center...** (skip the next step).
2. Authenticate (scan your finger or enter your password) and click **Submit**.
3. Select **Identity > Account Operations > Import user data**.
4. Browse for the passport file (*.vtp).
5. Enter the Backup Password and click **OK**.

**Note**

You cannot import a passport of an enrolled user. If you want to plan to replace the passport with a backup, it is necessary to delete the current one first.

3.4.3. Delete**To delete all user data (an existing user passport):**

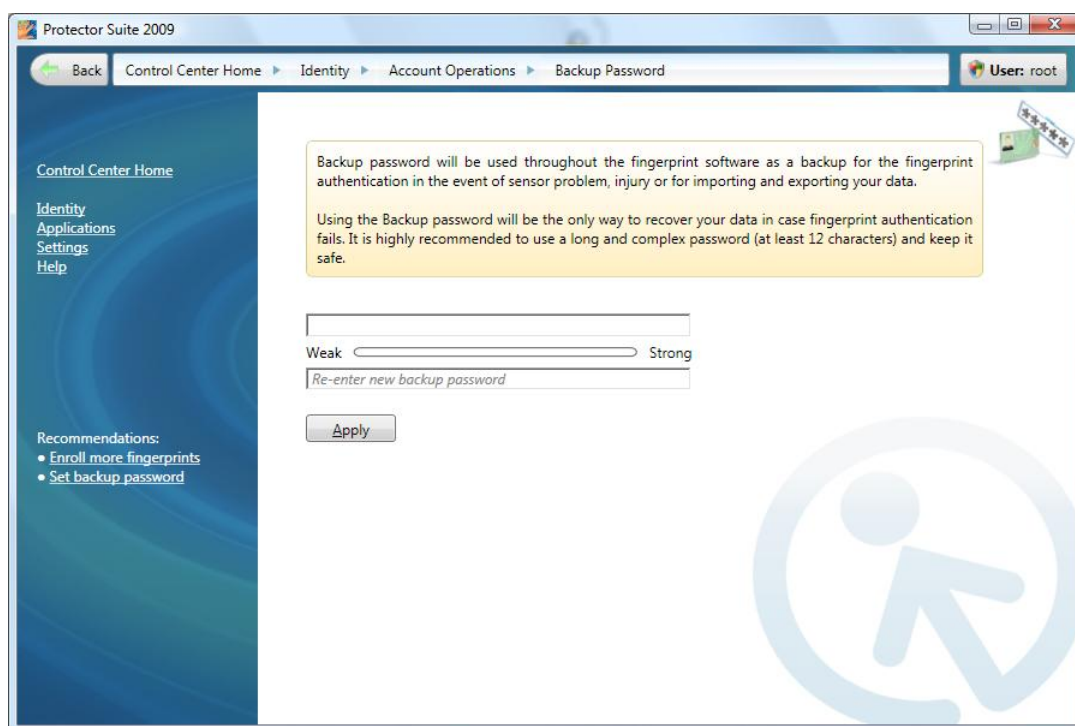
1. Go to
 - **Start > All Programs > Protector Suite > Control Center .**
 - or right-click on the tray icon and select **Start Control Center...**
 - or scan a finger to display the Biomenu and select **Control Center...** (skip the next step).
2. Authenticate (scan your finger or enter your password) and click **Submit**.
3. Go to **Identity > Account Operations > Delete user data**.
4. Click **Yes** to confirm.

**Important**

This will delete all data of the current users. Go to Export to backup your data for later use.

3.4.4. Backup Password

Here you can set or edit the backup password. This password will be used throughout the fingerprint software as a backup for the fingerprint authentication (e.g. for exported files).



⚠ Important

Backup password will allow access to your data in the event of a device problem. It is highly recommended to use a long and complex password (at least 12 characters) and keep it safe. A short password may compromise security.

To set the backup password:

1. Go to
 - **Start > All Programs > Protector Suite > Control Center .**
 - or right-click on the tray icon and select **Start Control Center...**
 - or scan a finger to display the Biomenu and select **Control Center...** (skip the next step).
2. Authenticate (scan your finger or enter your password) and click **Submit**.
3. Go to **Identity > Account Operations > Backup password**.
4. Enter and retype the backup password.
5. Click **Apply** to save the changes.
 - Click the **Reveal Backup Password** button to see the password in plain text. A dialog will pop-up, click **Reveal** and the password will be shown on your screen so make sure to keep it private and prevent its abuse.

3.4.5. Reveal Windows password

You can see your password after fingerprint authentication. Be aware that your password will be shown in plain text on the screen so make sure to prevent its abuse.

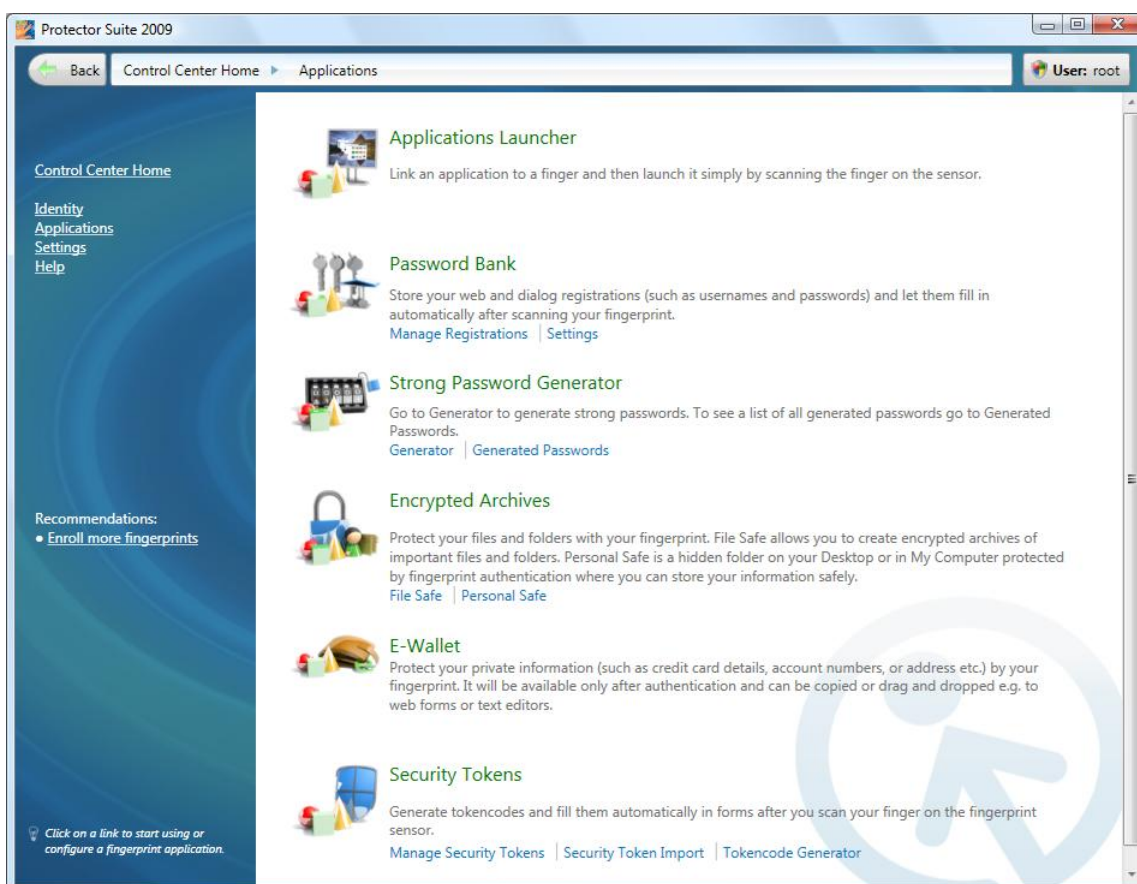
1. Go to
 - **Start > All Programs > Protector Suite > Control Center**
 - or right-click on the tray icon and select **Start Control Center...**
 - or scan a finger to display the Biomenu and select **Control Center...** (skip the next step).
2. Authenticate (scan your finger or enter your password) and click **Submit**.
3. Select **Identity > Account Operations > Reveal Windows password**.
4. Click the **Reveal** button to see the password in plain text.
5. Authenticate (scan your finger).

Chapter 4. Applications

Make most of your fingerprint sensor by using it for everyday work with your computer. You can make your data more secure and work faster by using fingerprint authentication. After you enroll your fingers, you will be able to use your fingerprint to replace passwords of frequently used web sites and dialogs, launch applications just by scanning your finger, create a secure, convenient storage for your credit cards, PINS and much more.

The fingerprint applications:

- Application Launcher: launch favorite applications simply with your fingerprint scan
- Password Bank: replace passwords of your favorite web sites or applications by a fingerprint scan
- Strong Password Generator: generate strong and complex passwords
- Encrypted Archives: create encrypted archives of your private files and folders
- E-Wallet: protect private information such as credit card details, account numbers etc. and used them to fill web forms more easily
- Biomenu: have a quick access to Protector Suite 2009's features through a pop-up menu



4.1. Application Launcher

The Application Launcher is an optional feature of Protector Suite 2009. When installed, it enables you to launch registered applications and files by simply scanning your finger. To link an application to a finger, drag and drop (or browse for) an application, a file, etc. and it will be launched next time you scan the assigned finger (e.g. drag and drop the file "document.txt" you have on your desktop, it will be opened in your text editor when you scan the assigned finger next time).



Note

You must enroll at least two fingerprints to be able to use Application Launcher. One enrolled finger is reserved to display the Biomenu.



4.1.1. Creating association between a fingerprint and an applications

To link an application to a finger:

1. Go to
 - **Start > All Programs > Protector Suite > Control Center**
 - or right-click on the tray icon and select **Start Control Center...**
 - or scan a finger to display the Biomenu and select **Control Center...** (skip the next step).
2. Authenticate (scan your finger or enter your password) and click **Submit**.
3. Select **Applications > Application Launcher**.
4. A dialog with two hands appears. There is a button above each enrolled finger.

**Note**

If there is no button available you must enroll your fingers first. If only one button is left it is reserved for the Biomenu and you must enroll more fingers. See Fingerprint Enrollment to learn how to enroll your fingers.

5. Drag and drop an application or a file to the button. The application icon will appear in the button. You can drag and drop the preset applications available from the menu, **Control Center** will launch Protector Suite 2009 **Lock** will lock the computer and **Log off** will log off the current user by scanning the assigned finger.

OR

Click a button over a finger. The application dialog opens. Enter a title of the application. Browse for a file you want to launch. This can be any executable file (e.g. calc.exe). Optionally, additional parameters may be entered in the **Advanced** options. See below for examples of application parameters.

6. Click **OK**.
7. The association has been created. Next time you scan the assigned finger, the application you linked to it will be launched.

**Note**

If you want to temporarily override launching the application (and invoke the Biomenu instead), hold the **Shift** key when scanning the finger.

Examples of Application Parameters

A web site can be opened when launching a web browser such as Internet Explorer. Type in a web site address (such as www.upek.com) into the application parameters field and the web site will be launched each time you scan your assigned finger.

A file may be opened by an application such as Microsoft Word documents. Type in a path to the file in quotes (e.g. "C:\Documents and Settings\your.account\My Documents\document.doc"). The file document.doc will be opened by Word each time you scan the assigned finger. More than one parameter can be used for one application.

4.1.2. Managing Associated Applications**To delete the fingerprint/application association:**

1. Go to
 - **Start > All Programs > Protector Suite > Control Center**
 - or right-click on the tray icon and select **Start Control Center...**
 - or scan a finger to display the Biomenu and select **Control Center...** (skip the next step).
2. Authenticate (scan your finger or enter your password) and click **Submit**.
3. Select **Applications > Application Launcher**.
4. Click on the application icon in the button above the assigned finger.

5. Click on **Delete...**
6. Click **Yes** to confirm deleting the association. The finger is now free for another application.

To edit the fingerprint/application association:

1. Go to
 - **Start > All Programs > Protector Suite > Control Center**
 - or right-click on the tray icon and select **Start Control Center...**
 - or scan a finger to display the Biomenu and select **Control Center...** (skip the next step).
2. Authenticate (scan your finger or enter your password) and click **Submit**.
3. Select **Applications > Application Launcher**.
4. Click on the application icon in the button above the assigned finger.
5. Make any desired changes.
6. Click **OK**.

4.2. Password Bank

When installed, the Password Bank stores registrations (usernames, passwords and other settings) of your web sites and application dialogs. You can access frequently visited web sites and applications (web mail, bank accounts, e-commerce, etc.) securely, without the hassle of re-entering passwords, usernames and form data. You enter the required information only once, during web page or password dialog registration. When the window is displayed again, you can replay the data by using the sensor. Registered web sites can also be accessed directly from the Biomenu.

Password Bank supports the following browsers: Internet Explorer 5.0 and higher, Firefox 1.0 - 3.0. Support for Internet Explorer is installed automatically. When Protector Suite 2009 is started for the first time or without any fingerprints enrolled, a prompt is shown whether to install a Firefox plug-in to turn the support on. Alternatively, the Firefox plug-in installation can be run from **Applications > Password Bank > Settings**.



Note

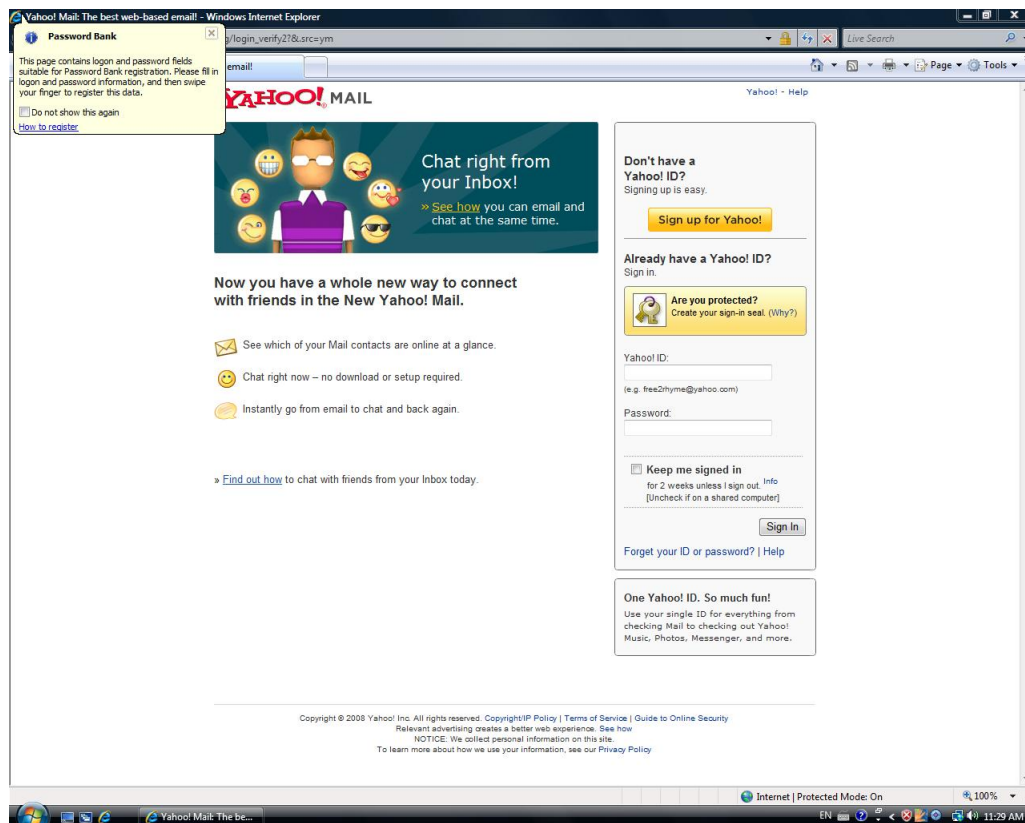
Password Bank is intended to store simpler web pages and dialogs (e.g. login credentials). To fill in more complex forms automatically, use the E-Wallet application.

4.2.1. Registering Web Pages and Dialogs

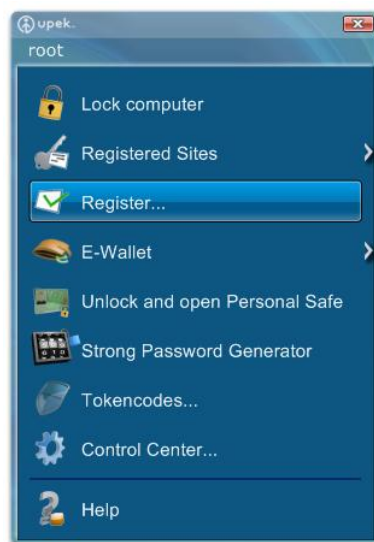
You must register a web site or a dialog to store your credentials (such as usernames and passwords) to replay it later, i.e. automatically fill it in after you authenticate (scan your finger).

To create a new registration:

1. Display a web page or a dialog you want to register.



2. Fill in the username, password, and any other necessary fields.
3. Scan an enrolled finger to display the Biomenu. Select **Register**.



OR

For Web pages containing a password field, a dialog appears automatically on submit asking you whether you want to register the entered data with Password Bank. Click **Yes**.



4. The **Registration Wizard** (see below) appears to guide you through the new registration. Click **Next** to review and edit your registration. You can also check the checkbox at the bottom of the dialog to store your registration as it is and click **Finish** to skip the wizard.

All your data is stored. After creating a registration, a hint is displayed in the corner of your browser confirming your registration has been created.

Note

If you would like to turn these hints on/off, or you have turned off the dialog promoting you for registration and would like to turn it back on, see Settings

4.2.1.1. Registration Wizard

The **Registration Wizard** appears to guide you through a new registration.

1. Click **Next** to review and edit your registration.
2. A dialog is shown with the web page name and address. If this is correct click **Next**. If this is not the page you want to register, click **Cancel** to quit the wizard and start a new registration.



3. **Form details** page is showing all the items that are to be registered.

Form details

Here is a list of all fields found in the form. You can customize field values, for example always prefiling your Windows password or your e-Wallet data.

Field name	Action	Filled value
.persistent	Set the control to	unchecked
login	Fill the field with	username
passwd	Fill the field with	*****

☒ Mask password fields
☐ Show field types

< Back Next > Cancel

You can change the value of the form fields that were registered. Select **Set the control to** to select from a list of predefined values or disable filling this field by selecting **Do not set this control**.

- **Fill the field with.** This will fill the field with the value you entered in the web browser. You can rewrite it now if required.
- **Do not fill this field.** This will not fill anything in this field automatically when replaying the registration.
- Use filling the Windows username, password or domain to be filled in this form filed when replaying the registration. This is convenient as if the credentials are changed, this value will be updated automatically and you do not have to change your registration.
- You can also use other fingerprint applications for filling the form fields such as Strong Password Generator for filling a password field with a strong password you generated. Select an application from the list. Only applications currently available will appear in the list.



Note

Unchecking the **Mask password** checkbox will show all passwords in plain text.

4. Click **Next** to continue.
5. In **Form submission method** page choose whether the registered form will be submitted after authentication. Uncheck the field to fill the form but not to submit it.

Click **Show advanced options** to select the way forms will be submitted. As default, Password Bank submits the form as if the the Enter key was pressed. If this does not work, select the option to choose a button manually. Drag and drop the pointer icon to a button on the page. This button will be used to submit the page instead.

6. In the next page test the registration. This will try to replay your new registration in the web browser. Check if everything works as expected. If there is a problem with the registration, go back and edit the registered fields or follow the troubleshoot steps.
7. Click **Next** to continue.
8. In the next page you can choose a registration name and folder as it will appear in the **Control Center** where you can manage your registrations later.

9. Click **Finish**.

4.2.2. Replaying Registrations

Replaying a registration will launch the registered web site and automatically log you on using the registered credentials.

To replay a registration:

1. Display the registered dialog or web site.
2. Authenticate yourself (scan your finger).
3. (Optional) A Password Bank dialog appears informing you that submitting the registration is available. Click **Yes** to replay the registration. Check **Do not show this again** to skip this step next time.
4. The registration is replayed.

To launch a registered web site, you can also use the Biomenu.

1. Scan your finger to display the Biomenu.
2. Select **Registered Sites**. A list of registered sites will display.
3. Select a page you want to display and replay.



Tip

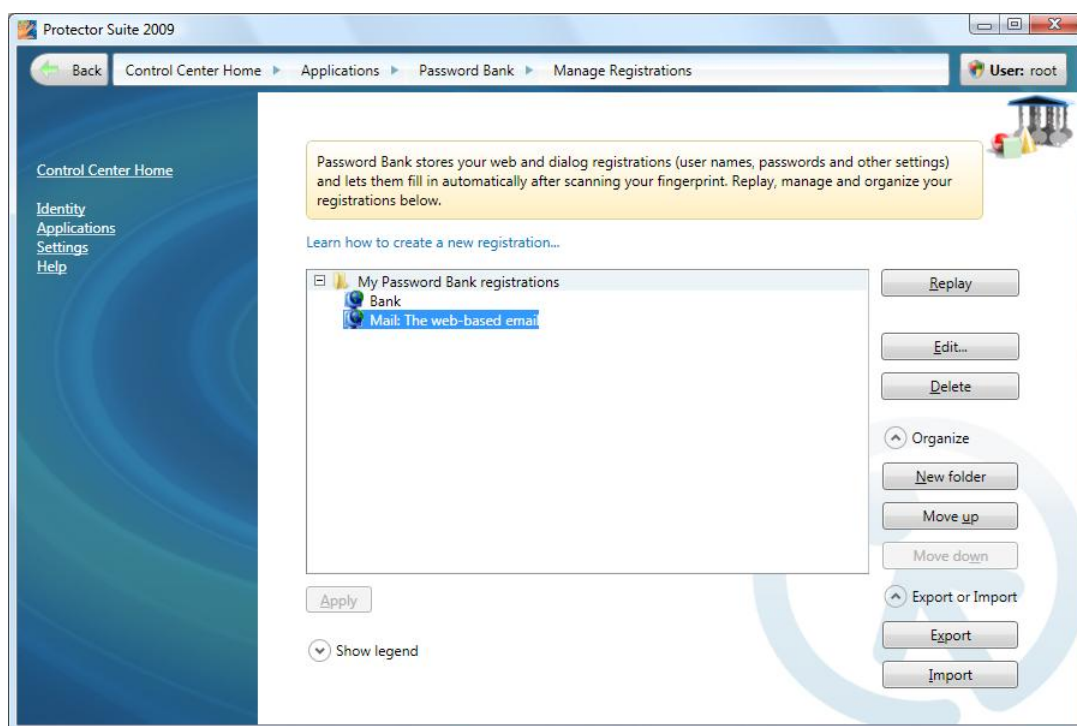
You can also replay registrations by selecting a registration and clicking on the **Replay** button in the **Control Center > Applications > Password Bank > Manage Registrations**. See Manage Registrations for more information.

4.2.3. Manage Registrations

It may be useful to edit your existing registration - e.g. if you changed the password of your mailbox. You can also delete your registrations, organize them into folders or turn on/off automatic submission of replayed registration. You can export your registration for use on another computer. An exported registration is a file with a *.pb or *.xml extension and can be imported later.

To manage registrations:

1. Go to
 - **Start > All Programs > Protector Suite > Control Center**
 - or right-click on the tray icon and select **Start Control Center...**
 - or scan a finger to display the Biomenu and select **Control Center...** (skip the next step).
2. Authenticate (scan your finger or enter your password) and click **Submit**.
3. Select **Applications > Password Bank > Manage Registrations**.



4. Select a registration you want to work with.

- Click the **Replay** button to replay the selected web registration. It will be launched in your default browser.
- Click the **Edit...** button to change the stored registration details (e.g. your username or password have changed and you want to reflect this in the existing registration.)

Here you can change the name of the registration as it appears in the registration list and the Biomenu. The **Auto submit form** check box controls automatic submission of the form after replaying the registration. If checked, the registration will be replayed automatically after you authenticate (scan your finger).

All fields registered can be edited and change the way registration will be replayed. To learn more about the fields see the Password Bank Registration Wizard.

Click **Apply** to save the changes.

- Click **Delete** to delete the registration completely.
- Click **Organize...** to organize the registrations into folders, move registrations up and down the list and create folders. The same structure will appear in the Biomenu web shortcuts.
- Click **Import or Export** to backup your registration or import saved registrations to the fingerprint software.

Click the **Export...** button to export your registration e.g. for use on another computer. Either the selected registrations will be exported or all existing registrations will be exported at once. To select more registrations, hold the **Ctrl** or **Shift** key when selecting registrations. Then select a destination file and enter a password. This password will be required when importing these registrations. The file extension of Password Bank files is ***.pb** or ***.xml**.

Click the **Import...** button to import registrations from a Password Bank file. Select the source *.pb or *.xml file. You can replace all existing registrations with imported ones, or you can append the imported ones. When appending a registration with the same name again, it will be automatically renamed so that both the old one and the imported one are preserved. Enter the password created during export.

- Click **Apply** to save the changes.

4.2.4. Settings

Password Bank lets you use the fingerprint authentication to access protected websites and dialogs.

Select what you want to use Password Bank for...

- Windows Dialogs** check box will enable using Password Bank for storing credentials of standard Windows applications.
- Internet Explorer** support is always present, the check box enables or disables using the browser.
- For **Firefox** browser, a plug-in installation is required. Click on the link to start the installation. Firefox must be set as your default browser. If you upgrade Firefox after the plug-in installation, Firefox informs you that the Password Bank plug-in is not compatible anymore and offers to find a current one. Confirm and install the new plug-in.

Password Bank displays hints for the user when an action like registering a dialog, replaying a dialog, etc. is possible. If the user logs into Windows using username and password, the hints are not active until a successful fingerprint authentication is performed.

To turn Password Bank hints on/off:

- Go to
 - Start > All Programs > Protector Suite > Control Center**
 - or right-click on the tray icon and select **Start Control Center...**
 - or scan a finger to display the Biomenu and select **Control Center...** (skip the next step).
- Authenticate (scan your finger or enter your password) and click **Submit**.
- Select **Applications > Password Bank > Settings**.
- Select the hint to be displayed to ask if:**
 - submitted form data should be remembered.** This will turn on/off the dialog prompting for Password Bank registration after a form (on a web page or a dialog) is submitted.

Select the hints to be displayed to alert you if:

- a registration is replayed.** This hint informs the user that replaying of the registration is about to begin. This alert is useful in cases where you want to create more registrations for the same form or dialog and do not want to overwrite already entered data.
- a dialog could be replayed.** This hint informs the user that replaying the registration is possible.
- a dialog is suitable for registration.** This hint informs the user that the dialog contains a password field that can be registered.

- **a web site could be replayed.** This hint informs the user that replaying the registration is possible.
- **a web site is suitable for registration.** This hint informs the user that the page contains a password field that can be registered.

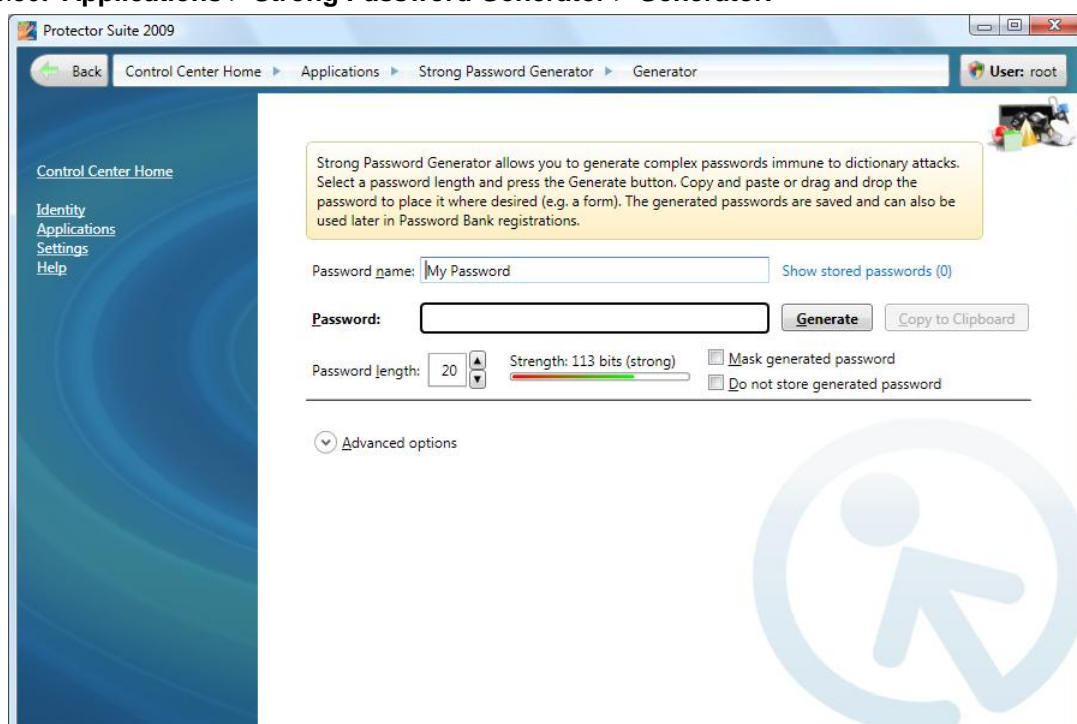
4.3. Strong Password Generator

Strong Password Generator allows you to generate complex passwords immune to dictionary attacks. Generated passwords are saved and used where needed. They can also be used when registering web forms using the fingerprint.

4.3.1. Generator

To generate a strong password:

1. Go to
 - **Start > All Programs > Protector Suite > Control Center**
 - or right-click on the tray icon and select **Start Control Center...**
 - or scan a finger to display the Biomenu and select **Control Center...** (skip the next step).
2. Authenticate (scan your finger or enter your password) and click **Submit**.
3. Select **Applications > Strong Password Generator > Generator**.



4. Enter a name into the **Password name** field.
5. Choose password length.

Check the **Mask generated password** checkbox if you do not want to show the generated password in plain text.

Check the **Do not store generated password** checkbox if you do not want to store the password in the Generated Passwords page. If not checked, all generated passwords will be listed there.

6. Click the **Generate** button.
7. Now you can drag and drop it, use the **Copy to clipboard** button or the right-click menu to copy the password to clipboard and paste it where desired.

Click **Advanced options** to generate passwords according to more detailed specifications, e.g. generate passwords composed from specific combinations of characters, hexadecimal passwords etc.



Note

The strength indicator shows you the strength of the password that will be generated. You can adjust the strength by changing password length or the advanced settings.

4.3.2. Generated Passwords

Review and manage your strong passwords. You can review the generation time, the related web site and find out whether the password is being used by any of your Password Bank registrations.

1. Go to
 - **Start > All Programs > Protector Suite > Control Center**
 - or right-click on the tray icon and select **Start Control Center...**
 - or scan a finger to display the Bi-menu and select **Control Center...** (skip the next step).
2. Authenticate (scan your finger or enter your password) and click **Submit**.
3. Select **Applications > Strong Password Generator > Generated Passwords**.
4. Select a password you want to work with. Click a button below:

Check the **Mask password fields** checkbox if you do not want to show the passwords in plain text.

Use the **Copy to clipboard** button or the right-click menu to copy the password to clipboard and paste it where desired.

Go to web site. Will launch the web site the password was generated for.

Delete. Will delete the selected password. Use **Ctrl+A** to select all passwords.
5. Click **Apply** to save the changes.

You can use generated complex passwords for web forms to increase the security of your credentials. You can use Password Bank to register your login credentials and replay it after fingerprint authentication. You will have a strong and complex password to make your registrations more secure without the hassle of remembering the complicated password. Just scan your finger and the registration will be replayed by Password Bank.

To register a strong password with Password Bank:

1. Generate a strong password. See Generator.

2. Display a web page you want to register.
3. Scan your finger to display the Biomenu.
4. Select **Register** from the menu.
5. Registration Wizard appears.
6. Existing generated passwords will be automatically detected. Choose a generated password or use the one that was detected as default.
7. Go through the rest of the registration with the Registration Wizard as usual. You can change the password in the **Form details** page when reviewing the registration.
8. Finish and test the registration.
9. The credentials are now registered and can be replayed automatically next time.

To replay a strong password registration with Password Bank:

1. Display a web page or application you have registered.
2. (Optional) A hint appears informing you about an existing registration.
3. Scan your finger.

4.4. Encrypted Archives

Encrypted Archives allows you to protect your private files and folders by fingerprint and backup password and keep them safe from an unauthorized access.

File Safe allows you to create encrypted archives of important files and folders that will be protected by your fingerprint and backup password. You can keep the files in their current location and by adding them to an File Safe archive protect them by fingerprint authentication.

Personal Safe is a protected folder on your Desktop or in My Computer where you can drop or copy your files and keep them conveniently in one place safely protected by fingerprint.



Note

You must enroll your fingerprints and setup the backup password before creating an archive. Otherwise, a warning that no users are selected will appear. See Fingerprint Enrollment to learn how to enroll your fingerprints.

4.4.1. File Safe

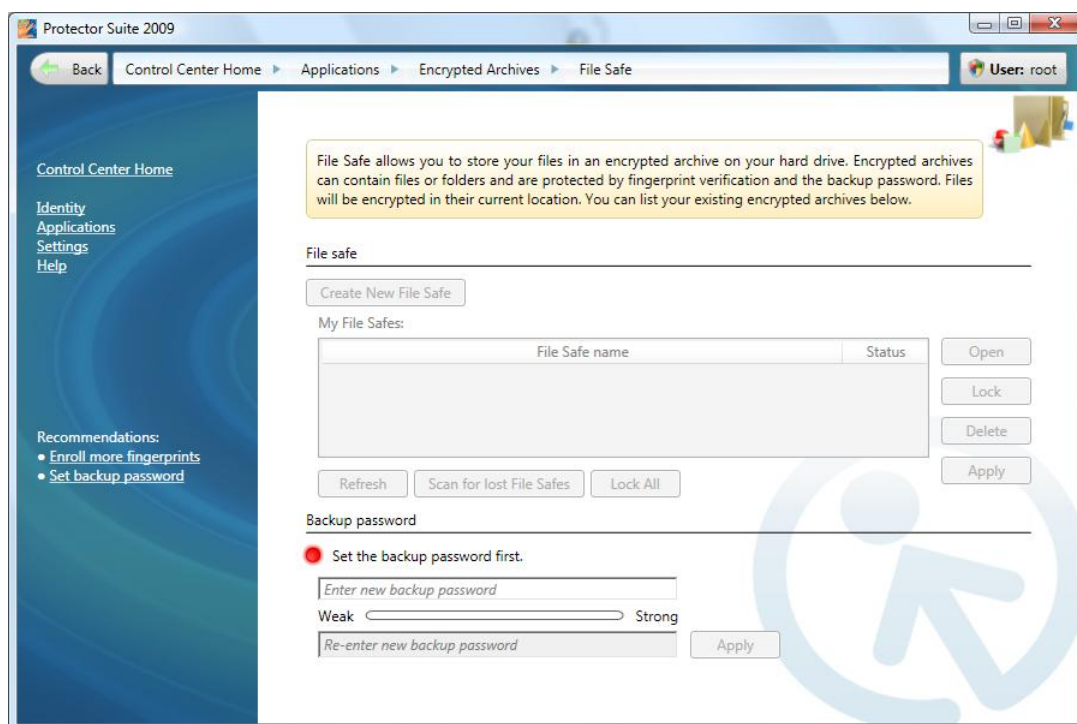
File Safe allows you to store your files in an encrypted archive on your hard drive. Encrypted archives can contain files or folders and are protected by fingerprint authentication and the backup password. When a File Safe archive is unlocked, you can work with the archive file as with a standard folder (delete, copy, or rename files, etc.). Drag and drop is also supported. You can simply copy and paste or drag your files to your unlocked archive and when you lock it again, your files will be encrypted. When only one file is encrypted in an archive and it is unlocked, clicking on the file will launch it.

4.4.1.1. Creating File Safe

To create a new File Safe:

1. Go to
 - **Start > All Programs > Protector Suite > Control Center**

- or right-click on the tray icon and select **Start Control Center...**
 - or scan a finger to display the Biomenu and select **Control Center...** (skip the next step).
2. Authenticate (scan your finger or enter your password) and click **Submit**.
 3. Select **Applications > Encrypted Archives > File Safe**.



4. If the backup password is not set, enter a password and click **Apply**. Learn more about the Backup Password.
5. Click the **Create New Archive** button.
6. Set a name for the new archive.
7. Now you can work with the archive file as with a standard folder (delete, copy, or rename files, etc.). Drag and drop is also supported. You can simply copy and paste or drag your files to your unlocked archive and when you lock it again, your files will be encrypted.
8. Click **Lock** to lock the archive.



Note

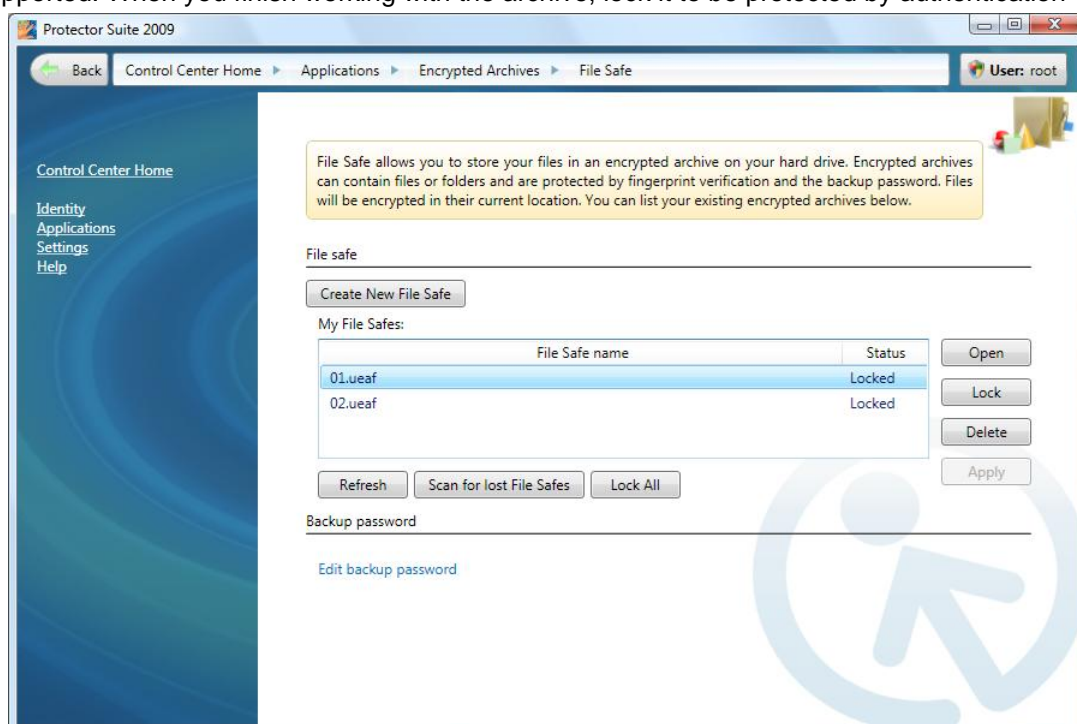
You can also create or manage archives from the context menu. Display the files or folders you would like to encrypt (using Windows Explorer or other Windows dialog and right-click to display the context menu). Select **Add to new encrypted archive...** to add the selected file or folder to a new archive.

4.4.1.2. Managing File Safe

To manage existing File Safe:

1. Go to

- **Start > All Programs > Protector Suite > Control Center**
 - or right-click on the tray icon and select **Start Control Center...**
 - or scan a finger to display the Biomenu and select **Control Center...** (skip the next step).
2. Authenticate (scan your finger or enter your password) and click **Submit**.
 3. Select **Applications > Encrypted Archives > File Safe**.
 4. Existing archives are listed. Select an archive or archives. Click a button to **Open**, **Lock**, or **Delete** the selected archive. You can also use the context menu. If an archive is opened, you can work with the archive as with a standard folder (delete, copy, or rename files, etc.). Drag and drop is also supported. When you finish working with the archive, lock it to be protected by authentication



To work with the list of File Safe archives, choose:

- **Refresh** to get an up to date list of all listed archives associated with your fingerprints.
 - **Scan for lost archives.** Choose this option to list all archives including those that are not associated with your fingerprints or those that were moved. You can still open the unassociated archives using your backup password. Use when you are not sure where are your archives or when you changed your fingerprint passport.
 - **Lock All.** Will lock all listed archives at once.
5. Click **Apply** to save the changes.



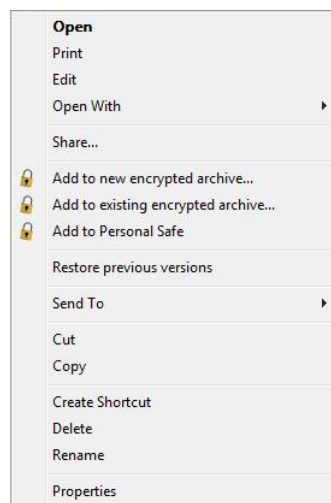
Tip

You can manage archives from the context menu, such as adding files or folder directly from your file manager. Display the files or folders you would like to encrypt (using Windows Explorer or other Windows dialog and right-click to display the context menu. Select **Add to existing**

encrypted archive... to add the selected file or folder to an existing archive. See below for detailed description.

To add files or folders to an existing File Safe:

1. Display the files or folders you would like to encrypt (using Windows Explorer or other Windows dialog).
2. Select the files and/or folders (using your mouse and **Shift** or **Ctrl** key) and right-click to display the context menu.
3. Select **Add to existing encrypted archive...**



4. Browse and select the archive you would like to save the files to (a file with ***.uea** or ***.ueaf** extension).
5. Select **Open**.
6. Authentication is required.
7. After encrypting the files a dialog will prompt you to choose what to do with the original files:
 - a. **Delete original files** will delete the original files and will keep the files just in the encrypted form in the archive.
 - b. Check the **Wipe files before deleting** check box to overwrite the files you are deleting with a random content and then delete them. This will prevent anybody from recovering the deleted files.
 - c. **Keep original files** will not delete the original files and they will be saved both in the encrypted archive and left unencrypted in their original location.
8. The files are now added to your encrypted File Safe archive.

4.4.1.3. Locking and Unlocking File Safe

To Lock or Unlock a File Safe:

1. Go to

- **Start > All Programs > Protector Suite > Control Center**
 - or right-click on the tray icon and select **Start Control Center...**
 - or scan a finger to display the Biomenu and select **Control Center...** (skip the next step).
2. Authenticate (scan your finger or enter your password) and click **Submit**.
 3. Select **Applications > Encrypted Archives > File Safe**.
 4. Existing archives are listed. Select an archive or archives. Click the **Lock** button to lock and archive or the **Open** button to unlock it.



Tip

You can also lock or unlock archives in their current location outside the Control Center. Display the archive you would like to lock or unlock (using Windows Explorer or other Windows dialog), select the archive file (*.uea or *.ueaf), right-click to display the context menu and select **Lock** or **Unlock**.

To lock all File Safe archives:

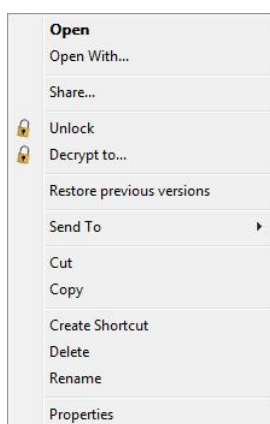
1. Scan your finger to display the Biomenu.
2. Select **Lock all archives** from the menu.
3. All your unlocked archives are now locked.

4.4.1.4. Decrypting Files from a File Safe

To remove a file or files from an encrypted archive, unlock the archive (see Locking and Unlocking File Safe) and then work with the files as if they were in a standard folder, you can delete, copy or drag them out of the archive. See below how to decrypt all files from the archive at once into a specified location.

To decrypt all files or folders in a File Safe at once

1. Select the archive file (*.uea or *.ueaf) you want to decrypt and right-click to display the context menu.
2. Choose **Decrypt to...**



3. Choose a destination location where the decrypted files will be saved.

4. Authentication is required.
5. Your files are now decrypted in the destination location.

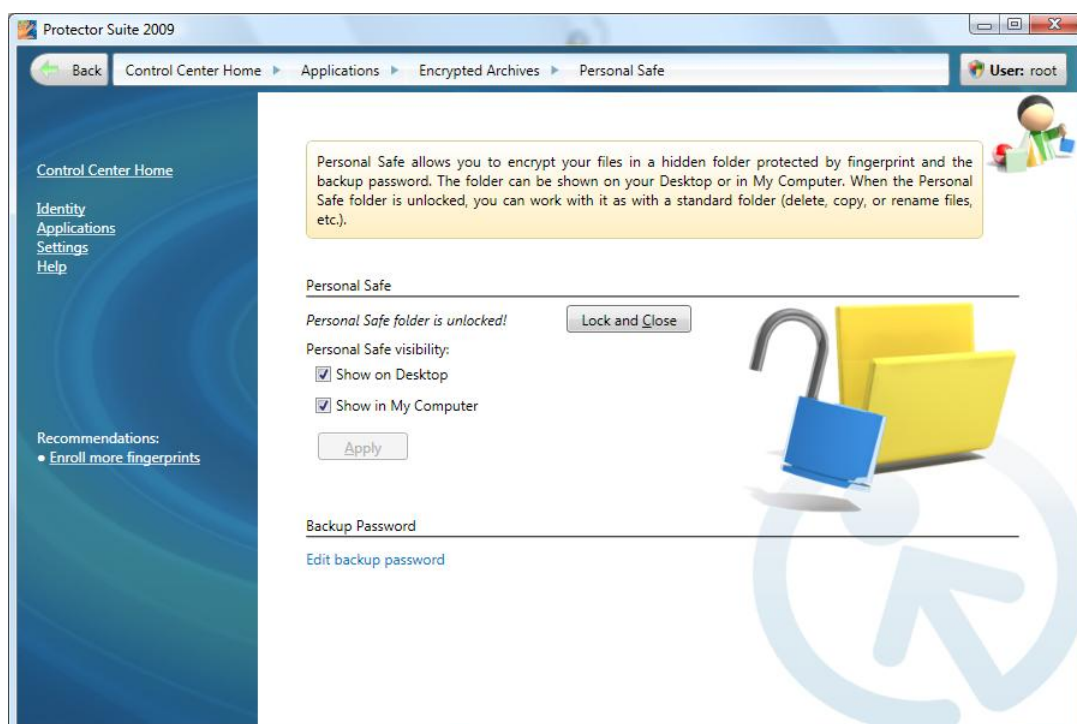
4.4.2. Personal Safe

Personal Safe allows you to encrypt your files in a protected folder. The folder can be shown on your Desktop or in My Computer. This folder will not be visible for other users sharing the computer.

When the Personal Safe folder is unlocked, you can work with it as with a standard folder (delete, copy, or rename files, etc.). It can be managed from the **Control Center** in **Applications > Encrypted Archives > Personal Safe** or through the context menu by right-clicking on the Personal Safe folder.

To lock/unlock Personal Safe

1. Go to
 - **Start > All Programs > Protector Suite > Control Center**
 - or right-click on the tray icon and select **Start Control Center...**
 - or scan a finger to display the Biomenu and select **Control Center...** (skip the next step).
2. Authenticate (scan your finger or enter your password) and click **Submit**.
3. Select **Applications > Encrypted Archives > Personal Safe**.



4. If the backup password is not set, enter a password and click **Apply**. Learn more about the Backup Password.
5. Click the **Unlock and Open** or **Lock and Close** button.



Tip

A status message is shown whether the Personal Safe is locked or unlocked.

To add files to Personal Safe

1. Open Personal Safe. Either from Control Center (see above) or select the folder and right-click to display the context menu and select **Lock** or **Unlock**.
2. Drag and drop or copy files into the folder or select the files (or folders) and right-click to display the context menu and choose **Add to Personal Safe**.

4.5. E-Wallet

Biometric E-Wallet offers you a safe and convenient way to store all your important information (such as credit card details, account numbers etc.).

Your private data will be always at hand and safely protected by the fingerprint authentication.

E-Wallet can also help you with filling complex forms by storing details you are using frequently, e.g. when shopping online. You can save your data into a fingerprint-protected profile (see Creating E-Wallet records and later drag and drop them where needed (e.g. into web forms).

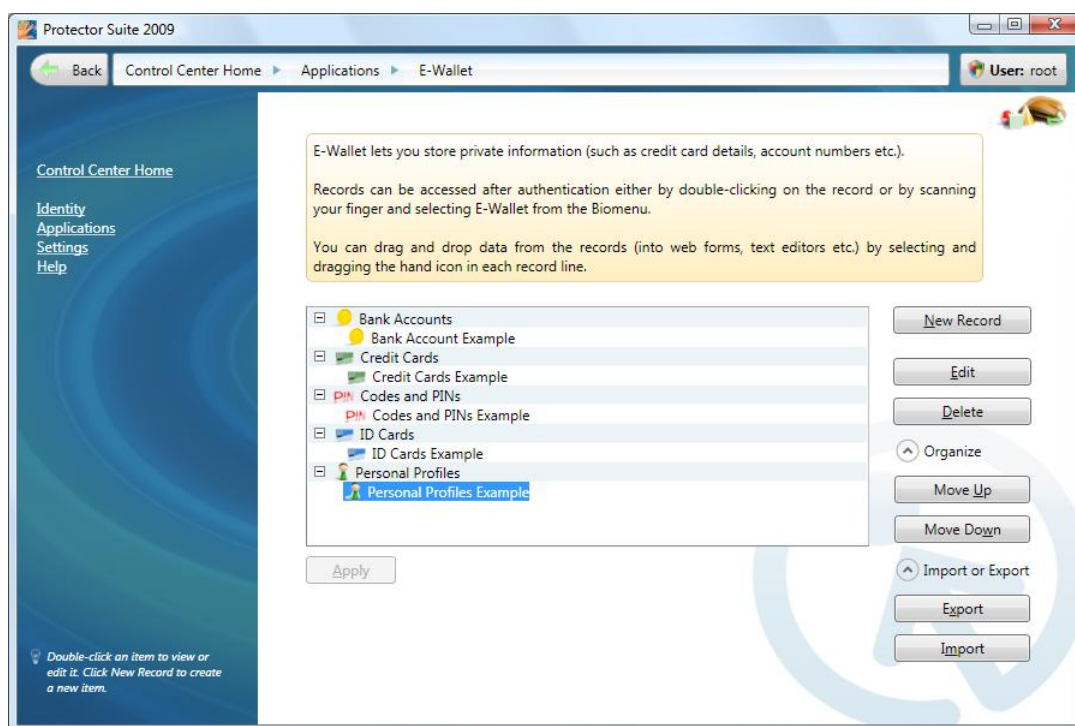
4.5.1. Creating E-Wallet records

Use predefined categories to organize your data into folders or create new custom ones. All predefined categories have an example available. You can either open and rewrite the example or create a new E-Wallet record (see below). Access records by double-clicking a record and authenticate by scanning your finger.



Tip

Use the **Personal Profiles** to create profiles to save information frequently used in complex web forms.



To create a new E-Wallet record

1. Go to
 - **Start > All Programs > Protector Suite > Control Center**
 - or right-click on the tray icon and select **Start Control Center...**
 - or scan a finger to display the Biomenu and select **Control Center...** (skip the next step).
2. Authenticate (scan your finger or enter your password) and click **Submit**.
3. Select **Applications > E-Wallet**.
4. Click the **New Record** button and select a predefined category from the drop down menu or select **New Category...** and choose a name and icon to create your own blank category.
5. **Enter or Edit your record data:**
 - Change the name of the record by retyping the **New Record** line.
 - To enter data, select the value and click the **Edit Value** button.
 - Click the **Rename** button to change the title.
 - Click the **Add** button to add a new line at the end of the list.
 - Click the **Delete** button to delete the selected line.
6. Click **Apply** to save the changes.



Note

You can access your records by scanning your finger, displaying the Biomenu and selecting **E-Wallet**.

4.5.2. Managing E-Wallet records

To manage an E-Wallet record

1. Go to
 - **Start > All Programs > Protector Suite > Control Center**
 - or right-click on the tray icon and select **Start Control Center...**
 - or scan a finger to display the Biomenu and select **Control Center...** (skip the next step).
2. Authenticate (scan your finger or enter your password) and click **Submit**.
3. Select **Applications > E-Wallet**.
4. Select the record you want to work with
 - To edit double-click it or click the **Edit** button. Authentication is required (scan your finger).

Enter or Edit your record data:

- To enter data, select the value and double-click or click the **Edit Value** button.
 - Click the **Rename** button to change the title.
 - Click the **Add** button to add a new line at the end of the list.
 - Click the **Delete** button to delete the selected line.
 - Click **Organize...** and the **Move Up** or **Move Down** buttons to move records up and down the list and organize them into the folders.
 - Click **Import or Export** to backup your records or import saved records to the fingerprint software.
 - Click the **Export...** button to export your records e.g. for use on another computer. Then select a destination file. The file extension of E-Wallet files is ***.xml**.
 - Click the **Import...** button to import registrations from an E-Wallet file.
5. Click **Apply** to save the changes.

4.5.3. Filling forms with E-Wallet

E-Wallet is designed to help you with filling complex forms by using data you saved in it. To register simple credentials, such as a name and password, use the Password Bank application. See Registering Web Pages and Dialogs how to register login credentials.

To create strong and complex password, consider using Strong Password Generator.

To fill a form using E-Wallet:

1. First you need to create an E-Wallet record containing your profile information in the **Control Center > Applications > E-Wallet**. For detailed instructions see Creating E-Wallet records.
2. Display a web page with a form to be registered (e.g. registration form for an online shop).
3. Scan a finger to display the Biomenu and select **E-Wallet**.
4. Select a record you want to use (e.g. Personal Profiles > My Bookstore Profile) or select **Show entire E-Wallet** to display the E-Wallet page.
5. A page with all the record details will be displayed. Now drag and drop the hand icon before each item into a form field or where desired.



Note

You can also use E-Wallet to fill a form field when you are going through the Registration Wizard .

Records can be accessed after authentication either by double-clicking on the record or by scanning your finger and selecting E-Wallet from the Biomenu.

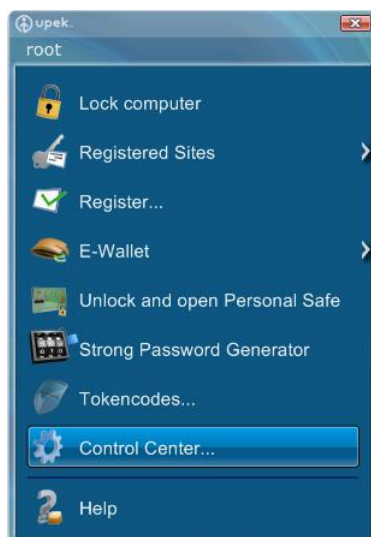


Tip

In the Biomenu select **E-Wallet > Show entire E-Wallet** to display the E-Wallet application as you can see it in the Control Center.

4.6. Biomenu

Biomenu is a pop-up menu that provides quick access to fingerprint software features and settings.



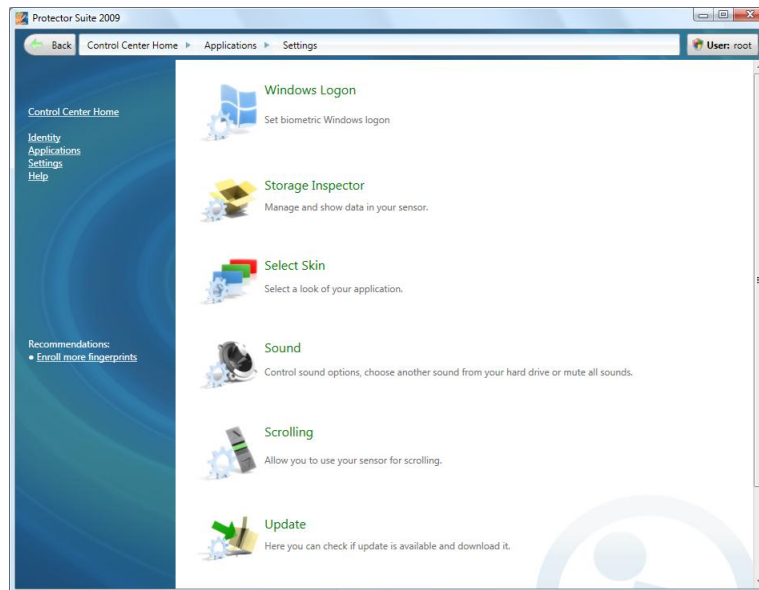
To display the Biomenu in a situation when finger authentication invokes another action (e.g. a registered page is replayed), hold the **Shift** key when scanning your finger.

Use your mouse or the sensor to navigate. If you use your sensor, move your finger to navigate through the Biomenu and tap the highlighted item to run the corresponding action.

- To display the Biomenu scan an enrolled finger.
- **Lock computer.** Provides a quick way to lock your computer. Scan your finger to unlock the computer again.
- **Registered Sites (optional).** Displays lists of your web pages registered by Password Bank. To display and fill in a registered page in your default web browser, click the web page name in the list. The appearance of the list can be edited in the Settings.
- **Register...(optional).** Registers a new window (a web page or dialog). To learn more about Password Bank registration, see Password Bank
- **E-Wallet.** Gives a quick access to E-Wallet records. Select a record you want to use (e.g. Personal Profiles > My Bookstore Profile) or select **Show entire E-Wallet** to display the E-Wallet page
- **Unlock and Open/Lock Personal Safe (optional).** Gives access to the Personal Safe folder.
- **Strong Password Generator.** Opens the Strong Password Generator page where you can create strong complex passwords and copy them to clipboard.
- **Lock all archives (optional).** Will lock all File Safe archives that are currently opened. This item will be displayed only when at least two archives are unlocked.
- **Token codes...(optional).** Displays the Token codes generator. The Token codes Generator is a simple dialog which allows you to select a security token and generate a token code using this token.
- **Control Center...** . Displays the Control Center.
- **Help.** displays the HTML help. To display context-sensitive HTML help, press F1 in the dialog box for which you need help.

Chapter 5. Settings

The Settings contain various options for setting up Protector Suite 2009. Not all the functions of the Settings described here may be visible, the available functions vary according to installed version of Protector Suite 2009 and administrative privileges of the current user. If the **Edit** button is visible on Windows Vista, you must click it and elevate before you start to make changes in the individual setting pages.



5.1. Windows Logon

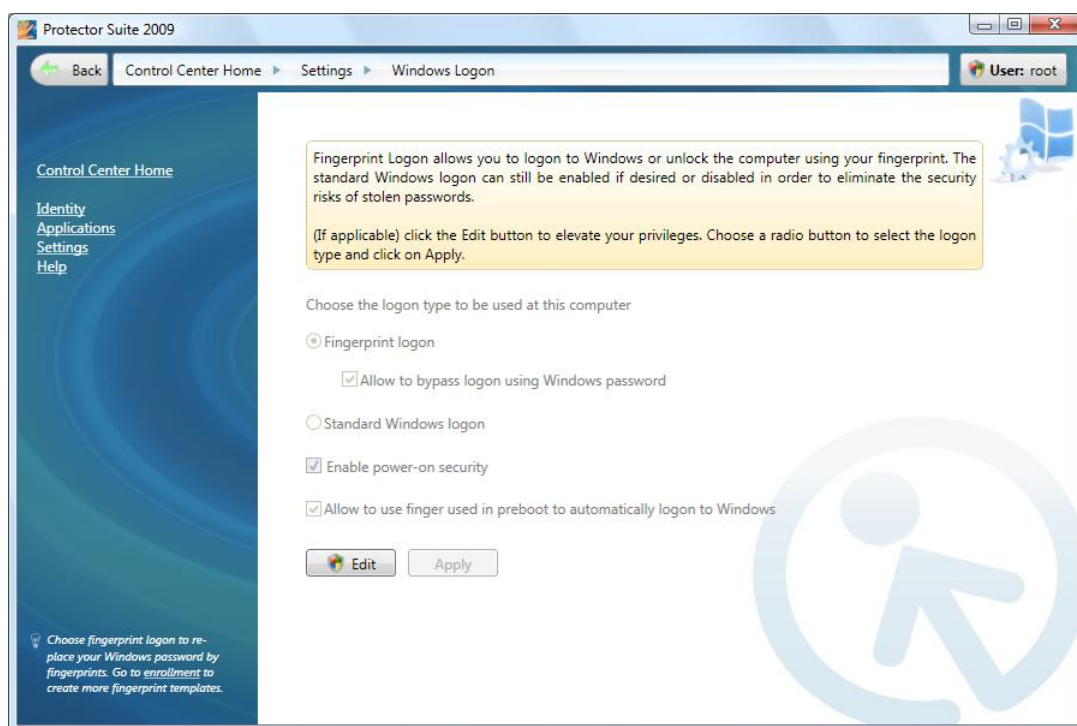
To enable fingerprint logon, you must enroll your fingerprints (see Fingerprint Enrollment). During user enrollment, fingerprint samples are scanned and the connection between fingerprint samples and the Windows user account is created. When you restart your computer and wish to log on again, scan your finger and you will be logon automatically.

Fingerprint logon will be automatically set when you enroll your fingerprints.

Biometric logon also protects your screensaver and wake-up from power-saving features (password protected resume from screensaver and standby must be set on your system).

To change logon settings:

1. Go to
 - **Start > All Programs > Protector Suite > Control Center**
 - or right-click on the tray icon and select **Start Control Center...**
 - or scan a finger to display the Biomenu and select **Control Center...** (skip the next step).
2. Authenticate (scan your finger or enter your password) and click **Submit**.
3. Select **Settings > Windows Logon**.



4. Choose the logon type:

Standard Windows logon. The fingerprint logon will be disabled and you will log on into your system using the standard Windows logon.

- **Fingerprint Logon.** The system logon using your fingerprint instead of the Windows password will be enabled.

Allow to bypass logon using Windows password. If this option is checked, the standard Windows logon can be used. If unchecked, only administrators can logon using username and password.

- (Windows XP only) **Enable Fast User Switching.** The Fast User Switching feature of Windows is also supported. You will be able to switch from a different user just by scanning your fingerprint.
- **Enable power-on security.** Check this to perform the authentication at the BIOS level by fingerprint. To learn more see Power-on Security .

Allow to use finger used in preboot to automatically logon to Windows. When checked, you will be logged in to Windows automatically after successful authentication at boot without the need to authenticate again at Windows logon.

5. Click **Apply** to save the changes.

5.1.1. Power-on Security

The Power-on Security feature prevents unauthorized access to the user's computer at the BIOS level. Computers with Power-on Security enabled will not load the operating system from the hard drive without successful fingerprint authentication.

During computer boot, you are asked for a fingerprint authentication. You have a limited time to swipe a finger over the sensor. The computer will boot only if the scanned fingerprint matches a sample stored in the memory of the device. After successful authentication, the boot process continues normally.

5.2. Storage Inspector

The fingerprint Storage Inspector is a tool for viewing and editing the contents of the storage in your fingerprint sensor device. All the records stored in your device are shown. Description is shown for each finger together with information about its usage in Protector Suite 2009.

To remove fingerprints from the device:

1. Go to
 - **Start > All Programs > Protector Suite > Control Center**
 - or right-click on the tray icon and select **Start Control Center...**
 - or scan a finger to display the Biomenu and select **Control Center...** (skip the next step).
2. Authenticate (scan your finger or enter your password) and click **Submit**.
3. Go to **Settings > Storage Inspector**.
4. Select the record you want to delete and click the **Remove finger** button. The list of records will be updated to reflect the change.
5. Click **Apply** to save the changes.



Note

The authorization to remove fingerprints is defined in the Security policies settings (see Policies). Some rights may be restricted to administrators only.

5.3. Select Skin

To select a look for Protector Suite 2009

Protector Suite 2009 will restart with the new skin. To change the skin back, repeat the steps and select the desired skin.

1. Go to
 - **Start > All Programs > Protector Suite > Control Center**
 - or right-click on the tray icon and select **Start Control Center...**
 - or scan a finger to display the Biomenu and select **Control Center...** (skip the next step).
2. Authenticate (scan your finger or enter your password) and click **Submit**.
3. Go to **Settings > Select Skin**.
4. Select a skin from the menu.
5. Click **Apply** to save the changes.

- Click **Yes** to restart the application. The application must be restarted to apply the new skin.

5.4. Sound

Selected sound is played when a fingerprint operation succeeds or fails. You can use your default system sounds, disable sounds, or browse for your favorite audio file (.wav format) .

To select sound for Protector Suite 2009.

- Go to
 - Start > All Programs > Protector Suite > Control Center**
 - or right-click on the tray icon and select **Start Control Center...**
 - or scan a finger to the Biomenu and select **Control Center...(skip the next step)**.
- Authenticate (scan your finger or enter your password) and click **Submit**.
- Go to **Settings > Sound**.
- Select **None** to switch off the sounds, **System default** to leave the default sounds for the operation or select **Custom** and browse for your own audio files (.wav format).
- Click **Apply** to save the changes.

5.5. Scrolling

You can use your fingerprint sensor for scrolling through the Biomenu and any Windows application instead of the mouse wheel.

Switch the scrolling on/off by checking the **Sensor Scrolling Feature** option in System Tray Icon or by pressing the **Scroll Switch Hotkey**.

When the Sensor Scrolling Feature is checked, the tray icon changes to indicate the scrolling feature is on. The hotkey is not defined by default after Protector Suite 2009 installation and if you plan to use it, it must be set (see below).

To set up scrolling and the Scroll Switch Hotkey:

- Go to
 - Start > All Programs > Protector Suite > Control Center**
 - or right-click on the tray icon and select **Start Control Center...**
 - or scan a finger to display the Biomenu and select **Control Center...** (skip the next step).
- Authenticate (scan your finger or enter your password) and click **Submit**.
- Go to **Settings > Scrolling**.
- Move the sliders to adjust the settings.
 - Speed.** Move the slider to adjust the scrolling speed. This sets how much will the cursor move when you move your finger over the sensor.

- **Acceleration.** Move the slider to set the scrolling acceleration. The faster you swipe over the sensor, the faster will be the scrolling.
 - To set the scroll switch hotkey, set focus to the **Scroll Switch Hotkey** field. Press the key(s) you want to use for turning the scroll feature on/off. The hotkey will appear in the field. To change it hit another key.
5. Click **Apply** to save the changes.

5.6. Update

When an update is available, click the Download button to get the latest version of the fingerprint software. When an automatic check for update is set, checking for a new update will be performed each time Control Center is started.

To set up Update:

1. Go to
 - **Start > All Programs > Protector Suite > Control Center**
 - or right-click on the tray icon and select **Start Control Center...**
 - or scan a finger to display the Biomenu and select **Control Center...** (skip the next step).
2. Authenticate (scan your finger or enter your password) and click **Submit**.
3. Go to **Settings > Update**.
4.
 - **Update status.** Informs you about the current state of the software. When a newer version of Protector Suite 2009 is available, click the **Download** button to get the update.
 - **Update check.** Check for current updates either manually by clicking the **Check for Update Now** button or check the **Check for updates automatically** checkbox to keep the status messages up to date. Checking for a new update will be performed each time Control Center is started. >
 - Click **Apply** to save the changes.

5.7. Advanced Settings

Set advanced options for security policies, biometry security and performance.

To open Advanced Settings:

1. Go to
 - **Start > All Programs > Protector Suite > Control Center**
 - or right-click on the tray icon and select **Start Control Center...**
 - or scan a finger to display the Biomenu and select **Control Center...** (skip the next step).
2. Authenticate (scan your finger or enter your password) and click **Submit**.

3. Go to **Settings > Advanced Settings**.

5.7.1. Policies

Policies settings can be set up differently for an administrator and limited users. Select and choose **Yes** or **No** to set a policy on or off.

Enrollment

- **Enroll self:** Allows the currently logged on user to enroll fingerprints.
- **Enroll other users:** Allows other users to enroll fingerprints. Only users with a valid Windows account can be enrolled.
- **Edit self:** Allows a fingerprint passport to be edited for the currently logged on user, e.g. adding or deleting enrolled fingerprints.
- **Edit other users:** Allows a fingerprint passport to be edited for any user enrolled on this computer, e.g. adding or deleting enrolled fingerprints.
- **Import self:** Allows a fingerprint passport to be imported for the currently logged on user.
- **Import other users:** Allows a fingerprint passport to be imported for any user enrolled on this computer.
- **Export self:** Allows a fingerprint passport to be exported for the currently logged on user.
- **Export other users:** Allows a fingerprint passport to be exported for any user enrolled on this computer.
- **Delete self:** After authentication allows a fingerprint passport to be deleted for the currently logged on user.
- **Delete other users:** Allows a fingerprint passport to be deleted for any user enrolled on this computer. No authentication is required before passports are deleted.
- **Reveal Windows password:** Allows the user's Windows password to be revealed.
- **Always verify user to access settings:** User is always asked to perform authentication when accessing settings in the Control Center.
- **Logon for self enroll:** Allow not enrolled limited users to logon using password when password logon is disabled for limited users.

Fingerprint Storage Inspector

- **Use Fingerprint Storage Inspector:** Allows use of the Fingerprint Storage Inspector, i.e. users can delete only their own fingerprints (except for the last one, i.e. at least one fingerprint must remain enrolled).
- **Delete any fingerprints:** Allows any fingerprints to be deleted from your device. (The Use Fingerprint Storage Inspector policy must be enabled for this policy to take effect.)
- **Delete unused fingerprints:** Allows fingerprint records that do not belong to any locally enrolled user to be deleted, e.g. from previous installation. (The Use Fingerprint Storage Inspector policy must be enabled for this policy to take effect.)

- **Delete other users' fingerprints:** Allows fingerprints of other users to be deleted. However, at least one fingerprint must remain enrolled for each user. (The Use Fingerprint Storage Inspector policy must be enabled for this policy to take effect.)

Power-on Security

- **Add fingerprints to Power-on security:** Allows fingerprints to be added to Power-on security during enrollment. If disabled, enrolled fingerprints cannot be used for Power-on security authentication.

5.7.2. Biometry Settings

Protector Suite 2009 can operate in two security levels. Choosing one will set up how accurately a fingerprint scan must match the enrolled samples.

- **Convenient Level.** The default biometric processing level which keeps security and convenience in balance.
- **Secure Level.** Use when security is more important than convenience. It provides the highest security, but please note that a perfect match with the enrolled sample is required, which may result in repeated unsuccessful authentications for authorized users.

5.7.3. Sensor Calibration (Optional)

This feature allows you to calibrate your fingerprint sensor. Use when you experience difficulties with scanning your finger. This will not affect your enrolled fingerprint samples or data of the applications.



Important

Do not touch the sensor during calibration.

If supported by your sensor, the **Calibrate Sensor...** button opens the calibration dialog. Click on the **Calibrate** button and wait until the calibration is finished. The calibration may be used in case you feel the sensor is not working properly.

5.7.4. Trusted Platform Module TPM (Optional)

This page is displayed when a third-party TPM management application is detected. TPM initialization enables usage of the TPM security module by the Multifactor feature. See Multifactor to learn more about the multifactor methods.

To initialize the TPM module:

1. Go to
 - **Start > All Programs > Protector Suite > Control Center**
 - or right-click on the tray icon and select **Start Control Center...**
 - or scan a finger to display the Biomenu and select **Control Center...** (skip the next step).
2. Authenticate (scan your finger or enter your password) and click **Submit**.
3. Go to **Settings > Advanced Settings > TPM**.
4. Click the **Initialize** button.
5. A dialog informing whether the operation was successful will appear.

6. Click **OK**.

Chapter 6. Other Tools

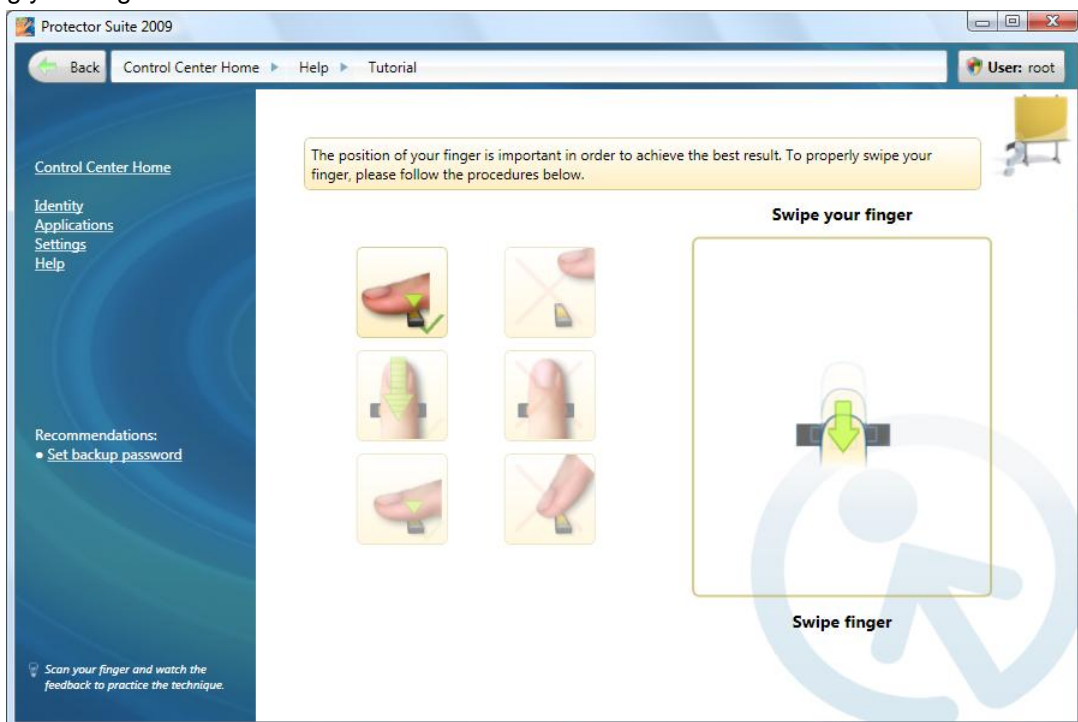
This section describes other tools that can help you with using the Protector Suite 2009 such as Fingerprint Tutorial .

6.1. Fingerprint Tutorial

It is highly recommended that you go through the fingerprint tutorial. The tutorial shows you short animations demonstrating correct and incorrect fingerprint scanning. You can try to create your fingerprint samples to practice the technique.

To run the tutorial:

1. Go to
 - **Start > All Programs > Protector Suite > Control Center**
 - or right-click on the tray icon and select **Start Control Center...**
 - or scan a finger to display the Biomenu and select **Control Center...** (skip the next step).
2. Click the **Tutorial** link or authenticate (scan your finger or enter your password), click **Submit** and go to **Help > Tutorial**.
3. See animations to follow the correct scanning procedure. On the right side you can practice scanning your finger.

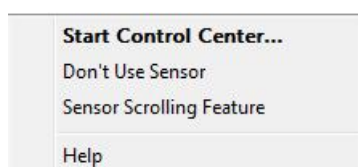


4. To achieve correct fingerprint scans:
 - Position the last knuckle joint over the center of the sensor.

- Lay your finger flat on the sensor.
- Do not lift your finger as you swipe over the sensor.
- Do not swing your finger sideways at the end of the movement.
- Try creating samples of your fingerprint.

6.2. System Tray Icon

The Protector Suite 2009 icon in the system tray indicates that the program is running and gives access to functions that do not require fingerprint authentication. Right-click on the icon to display the menu:



Tray icon items:

- **Start Control Center...** Starts the main dialog of Protector Suite 2009, where you can manage most features and applications and change the software settings.
- **Don't use sensor/Use sensor.** Allows you to temporarily detach your fingerprint device from Protector Suite 2009 for use by another application. This command frees the device for the current user session. (The device can be used only by one application at a time.)
- **Sensor Scrolling Feature.** When the Sensor Scrolling Feature is checked, the tray icon changes to indicate the scrolling feature is on. The Scroll Switch Hotkey is not defined by default after Protector Suite 2009 installation and must be set in the Scrolling settings. Uncheck to disable the scrolling.
- **Help.** Displays the complete help for Protector Suite 2009. To display context-sensitive help for a specific page, press F1 in the page for which you need help.



Important

If you select the **Don't use sensor option**, no fingerprint authentication is performed. This feature is only for advanced users; e.g. developers of other biometric applications.

6.3. Using Help

Protector Suite 2009 contains an HTML-based help system.



Tip

You can also right-click on the tray icon and select **Help** or scan a finger to display the Biomenu and select **Help**.

To display context-sensitive help:

- Press F1 to display the help in the page for which you need help.
1. Go to **Start > All Programs > Protector Suite > Control Center**

2. Click the **Help** link or authenticate (scan your finger or enter your password), click **Submit** and go to **Help > Help**.

6.4. Introduction Screen

The Introduction Screen is shown when you touch the sensor when no fingerprints are enrolled. It contains a link to the Protector Suite 2009 Product Tour and a link to fingerprint enrollment.

To access Product Tour later:

- Go to
 - **Start > All Programs > Protector Suite > Control Center**
 - or right-click on the tray icon and select **Start Control Center...**
 - or scan a finger to display the Biomenu and select **Control Center...** (skip the next step).
- Authenticate (scan your finger or enter your password) and click **Submit**.
- Go to **Help > Product Tour**.

6.5. Fingerprint Reader Infopanel

The fingerprint reader info panel contains information about your sensor and a test window for fingerprint scanning. You can use this dialog to get details about your sensor in the event of a hardware problem for communication with the technical support etc.

To display the Fingerprint Reader Infopanel:

1. Select **Start > Control Panel**.
2. Click on **Fingerprint Sensor**. Fingerprint Reader Infopanel dialog will appear.
 - Select the **Version** tab to display information about your sensor (such as device type, name, version etc.) . To export the information to a text file click on **Save** and choose a location where the file will be saved (FingerprintSensorVersion.txt by default).
 - Select the **Finger Test** tab to see test images when you try to scan a finger.
3. Click **Close** to close the dialog window.

6.6. Managing other users

As an administrator you can manage other users in Protector Suite 2009. You can set or delete a new user, users' data can be deleted, imported or exported.

To manage other users:

1. Go to
 - **Start > All Programs > Protector Suite > Control Center**
 - or right-click on the tray icon and select **Start Control Center...**
 - or scan a finger to display the Biomenu and select **Control Center...** (skip the next step).

2. Authenticate (scan your finger or enter your password) and click **Submit**.
3. Go to **Identity** and click on the **Manage other users...** link.

OR

Click on the user button next to the navigation bar.

4. Select a user and choose an action using the buttons from the menu.