Quick Start Guide: Tytransfer

Software Installation Instructions:

The Tytransfer software consists of two components:

- Tytransfer ("Client")
  - Application widget used to scan, save, and emulate Member ID's to a desired target application on your local PC. This application uses a local Access Database.
- Digital Persona RTE Setup
  - Contains all drivers necessary to use the U.are.U 4500 fingerprint scanner, or other supported fingerprint devices.

*Note: Both the Fingerprint Snapshot client and Digital Persona RTE must be installed on the same computer

Basic Operation:

The Tytransfer software is designed to be very simple, there are three main forms within the application, which will be explained in detail in this quick start guide.

Home – The default form when the application is started for the first time. Once users are enrolled to a unique ID and the Destination (Target) application has been set, the Home form will return a result of a success or unknown scan and emulate the ID of the scanned print to the target application. Please note the default password to access Settings or Biometric Ops is '*admin'*. This default password can be changed in Settings.
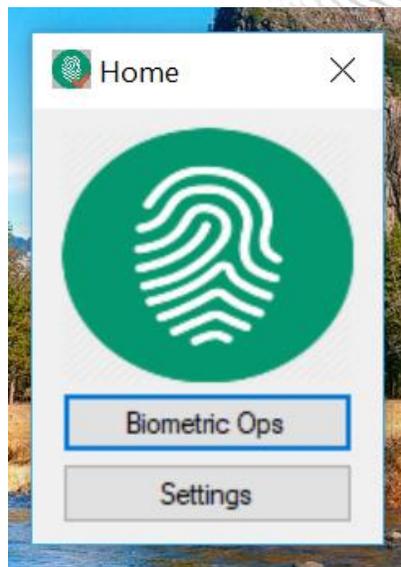

Figure 1: The home window view of the application upon start-up.

The application shows a still image of the Tytransfer software by default until the finger has been scanned. The result will return either an orange check mark (success) or a red 'x' (failure).
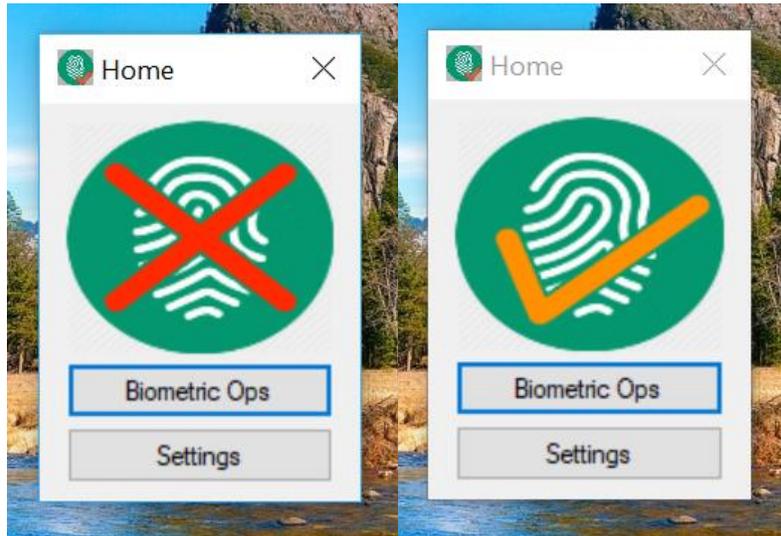
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Figure 2: View of a successful scan (*orange* check) and failure to identify (*red* 'x').

Note: If device is disconnected, you must plug it in then close the application and open it again.

The user will also be notified of the result via pop up notification in the bottom right corner of the screen.

Biometric Ops – This form is accessible via the Home form by selecting the Biometric Ops button. This as the name suggests serves as the primary biometric administration. Here the admin can enroll users, delete them, update fingerprints, and change the ID's of the currently enrolled users. It is up to the administrator of the application to track and record the enrolled ID's.

1. *Add New User* – This function is where the admin can enroll user's fingerprints to their unique ID.

2. *Delete Existing User* – This function allows the admin to delete users that are currently enrolled into the system.

3. *Update Fingerprint* – This allows the admin to update an enrolled users fingerprint. This is rarely used but usually in the case of younger children as they grow the size and geometry of the fingerprint grows as well. It is normally recommended for schools to update user fingerprints once every year.

4. *Change Member ID* – This function allows the admin to simply edit or change a currently enrolled Member ID without having to re-scan any new templates.
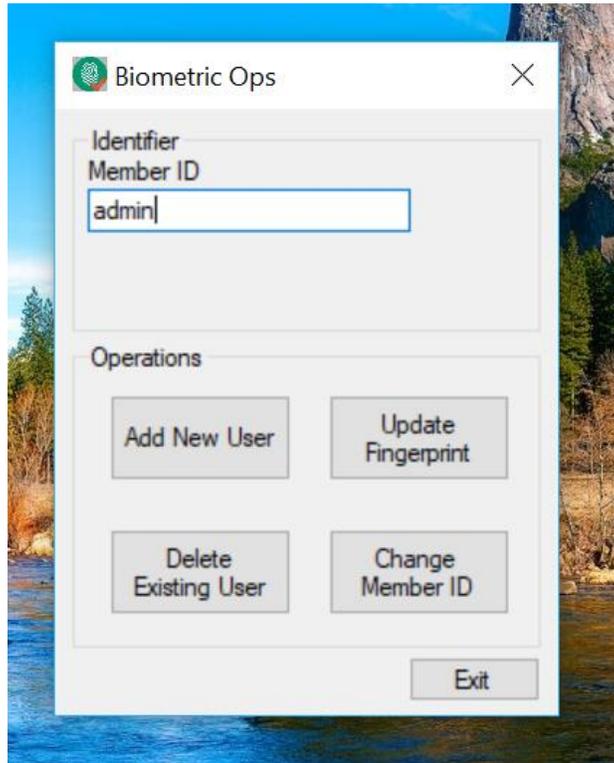
Figure 3: View of the Biometric Ops window.

Settings – This form is accessible via the Home form by selecting the 'Settings' button. This as the name suggests serves as the configuration administration. Here the admin can set emulation settings, view enrolled users, change the admin password, and set the destination window. Settings is organized under three main tabs: General, Access Control, and Destination Window.
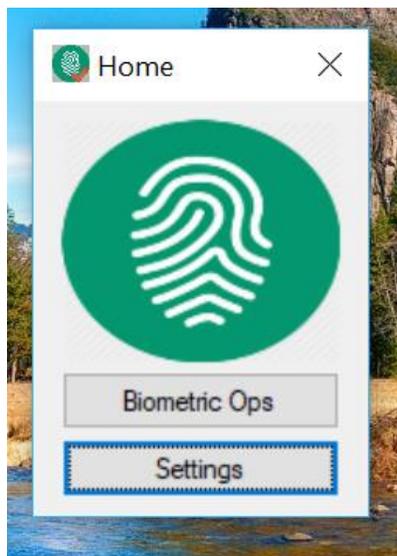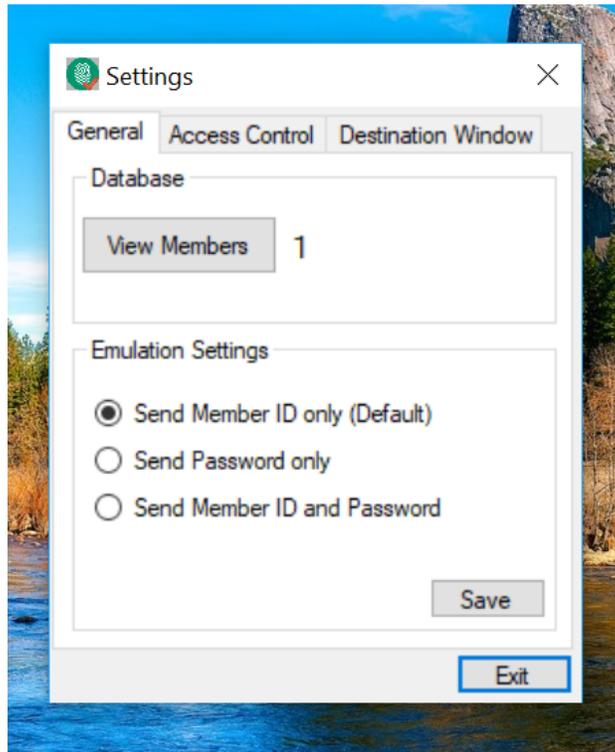
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Figure 4: View of the 'Settings' window.

1. General
   a. Database (View Members) – Displays the current number of enrolled members. By clicking on the 'View Members' button you can get a preview of currently enrolled members, which also features a quick search option.

   b. Emulation Settings – Configures which field will be sent for emulation upon a fingerprint scan. The default option will send the Member ID the user was enrolled under.

2. Access Control – By default the Biometric Ops and Settings will be restricted by an administrator password, '***admin***'. This tab allows you to disable this feature or change it to whatever password you prefer.

3. Destination Window – This tab features the ability to edit/select the target application you wish to emulate the Member ID's to. This feature will allow one application at a time and works for both desktop application as well as web browsers.

Destination Window

In the Settings form, the third tab features the Destination Window feature which allows the users to select a target window to emulate scanned member ID's. The emulation feature works like a keyboard pin pad or a barcode scanner.

When attempting to setup the target window it is important to note that the title of the application or webpage is typed as it is written. For example, if you are attempting to send scanned ID's into a new Notepad, you would save the title in the textbox as "Untitled – Notepad".

Again, this must be the *exact* title name of the desired application. This is how Tytransfer locates the target application where you would like to send the scanned member ID's to.
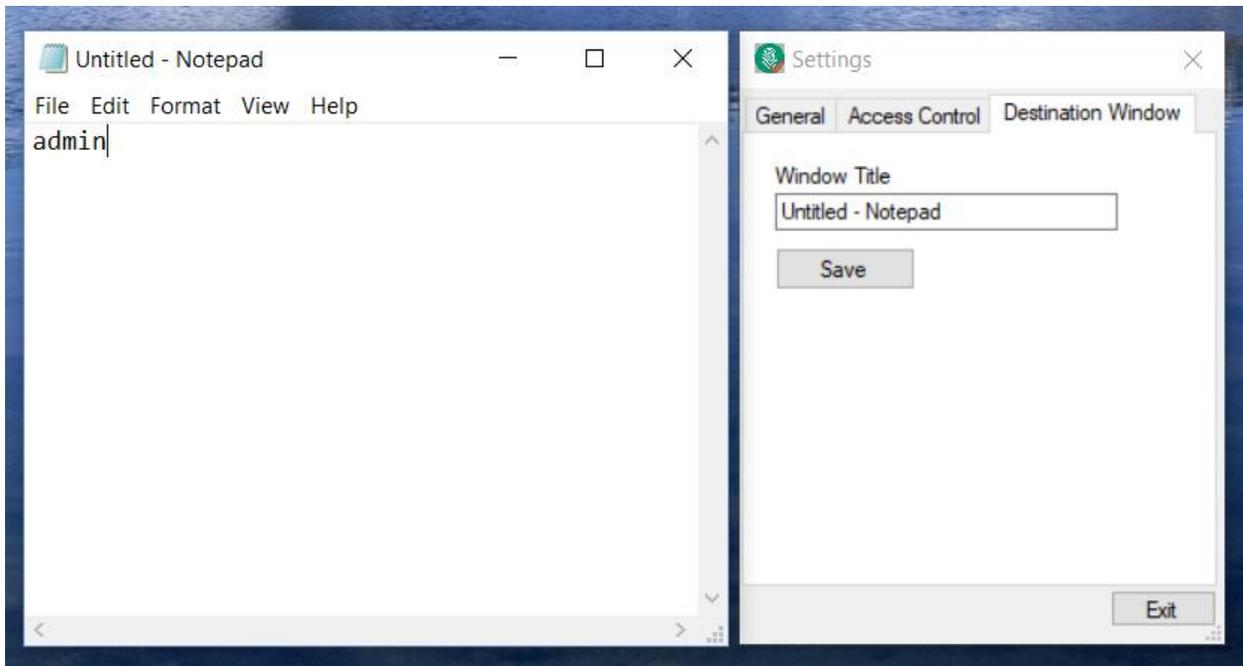

Figure 5: Example of setting the target destination to 'Untitled – Notepad'

Once you have typed in a title name into the Window Title text box, select the 'Save' button. This will then prompt you to confirm the name of the target window you would like to use. You can then start testing by exiting out of the Settings window and scanning fingerprints on the Home window.

Note: Each scan will auto-locate and emulate the scanned finger's Member ID into the first available text box and follow with a *TAB* and *ENTER* key.
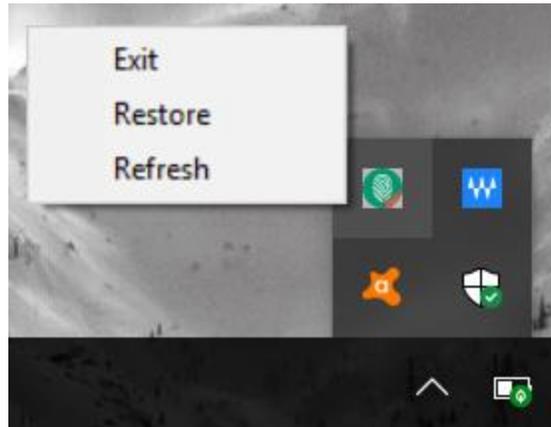
Figure 6: Application minimized to the system tray, showing selectable options.

When the user closes the application, by default it will automatically minimize to the system tray. This logic is made to run the application as it is intended to run out of the view of the user. While the application is minimized it will still be able to accept fingerprint scans and emulate IDs to the desired window. There are three options when rick-clicking on the Tytransfer icon, 'Exit', 'Restore', and 'Refresh'.

These options perform as you might expect. 'Exit' will completely close the application when it is no longer in use. 'Restore' will allow the user to open the application back onto the desktop. The 'Refresh' option allows a quick reboot of the application. This is primarily used if the application ever seems to be running slower than usual.

Logging

Tytransfer also gives users the ability to record & view basic log events. These include:
1. Added users
2. Deleted users
3. Updated user ID
4. Every user that is scanned
5. Unrecognized scan/finger

Note: In addition, each event will also be logged with a date & time stamp. The log folder is set to a default folder called 'Tytransfer' that is in the user's Documents folder.

If you have any questions regarding the functionalities or use of the Tytransfer software, please do not hesitate to reach out to our support team at *support@tytechnique.com*. Once again thank you for your business!

TY TECHNIQUES
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Basic Troubleshooting:

"Application does not scan my fingerprint"

- *Check that the scanner is plugged in. You can normally check this by seeing a blue light on the scanner itself. You can also confirm this by checking the Device Manager on your computer. (Listed under the control panel). Once scanner is connected you will need to close the application and restart it.*

"Missing .NET framework"

- *If application does not download the target .NET framework (4.6.1) during installation you will need to do so manually. Here is the link:*

  https://www.microsoft.com/en-us/download/details.aspx?id=49981

"Installer rolls back during installation"

- *If something occurs during installation this could be due to a variety of things, most likely an error in the windows registry. Please download the following Microsoft Diagnostic Tool to troubleshoot the error. If the issue persists, please immediately contact support@tytechnique.com*

  https://support.microsoft.com/en-us/help/17588/fix-problems-that-block-programs-from-being-installed-or-removed

"Missing Database/Operation must use updateable query" or Tytransfer does not launch from the Desktop Icon

- *If an oledb error occurs during a biometric operation such as an enrollment, you may need to set the application to always run as an administrator or your PC may be missing the Access database engine.*
- *Check Windows Event Viewer if the application does not launch from the Desktop.*
- *Please use the following link to download the database engine from Microsoft.*

  https://www.microsoft.com/en-us/download/details.aspx?id=23734