



## Evaluate Biometrics Fingerprint Recognition

created by: Rainer Bemsel - Version 1.0 - Dated: Feb/01/2004

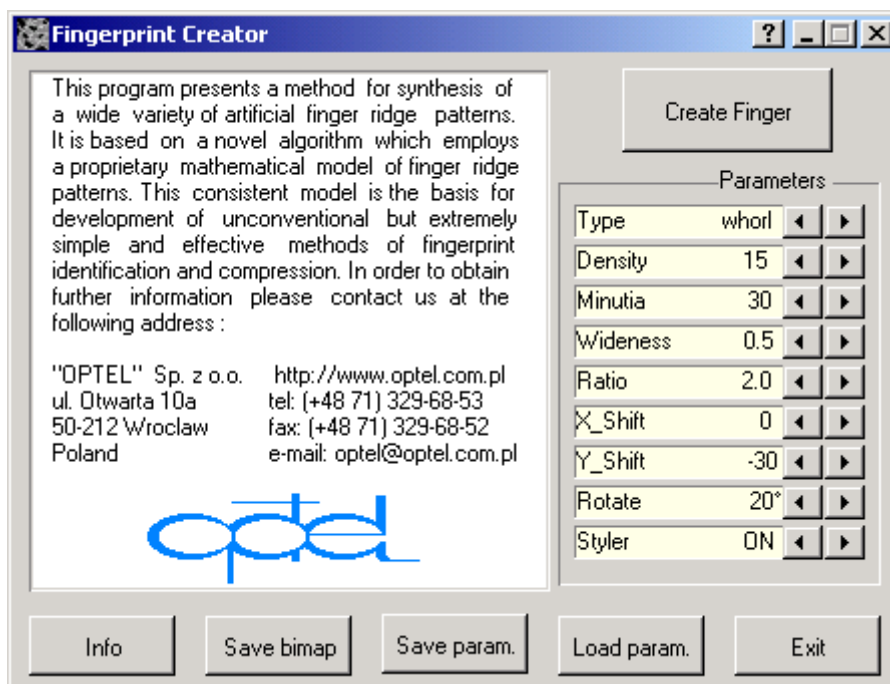
The purpose of this document is to evaluate Fingerprint Recognition for Biometrics Physical Access. I came across this two software packages, when studying for CompTia Security+ Certification.

Optel Ltd. Specializes in the research and development of ultrasound devices. One of their biometric projects is a fingerprint recognition device, that would enable identification based on finger ridge patterns.

Because I do not have a fingerprint scan device I was using Optel to create Fingerprint examples and was using another software to run the actual identification.

Following steps will outline the installation steps and walk through.

First, download from [www.optel.com.pl](http://www.optel.com.pl) the program FINGERPRINT SYNTHESIS from their website and install it on your computer. It's a very simple program.



Secondly, create some Finger Prints and save them a bitmaps on your hard disk. I used this program, to get some fingerprint examples for further identification, with a separate application, as I do not have a fingerprint scanner available.

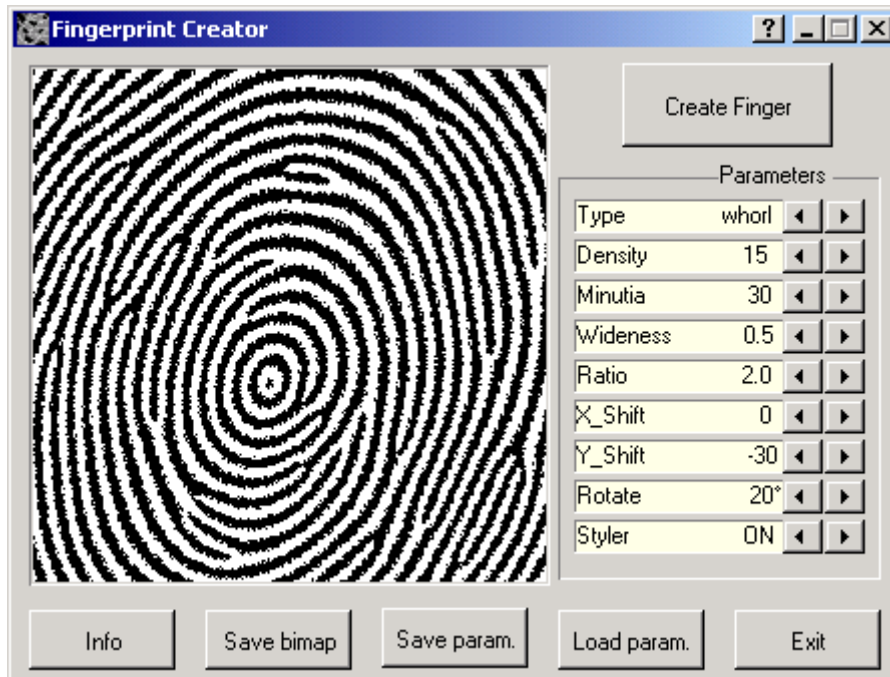
**Click** on Create Finger.



### DISCLAIMER

*This Technical Tip or TechNote is provided as information only. I cannot make any guarantee, either explicit or implied, as to its accuracy to specific system installations / configurations. Readers should consult each Vendor for further information or support.*

*Although I believe the information provided in this document to be accurate at the time of writing, I reserve the right to modify, update, retract or otherwise change the information contained within for any reason and without notice. This technote has been created after studying the material and / or practical evaluation by myself. All liability for use of the information presented here remains with the user.*

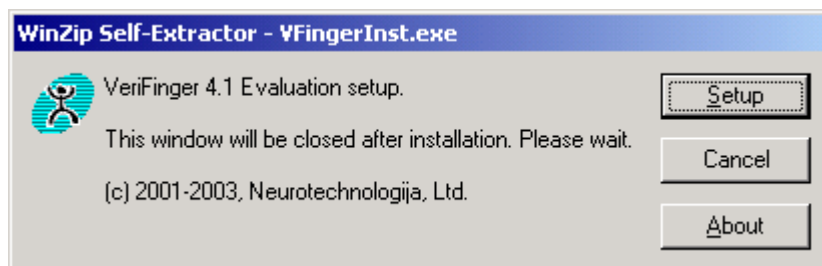


Save bitmap on your local hard disk. Create some more fingerprints.

Next, you have to download another application from Neurotechnology. It's called VeriFinger 4.1 (on time of writing this document). Once you have downloaded the program, install it on your computer.

<http://www.neurotechnologija.com/download.html>

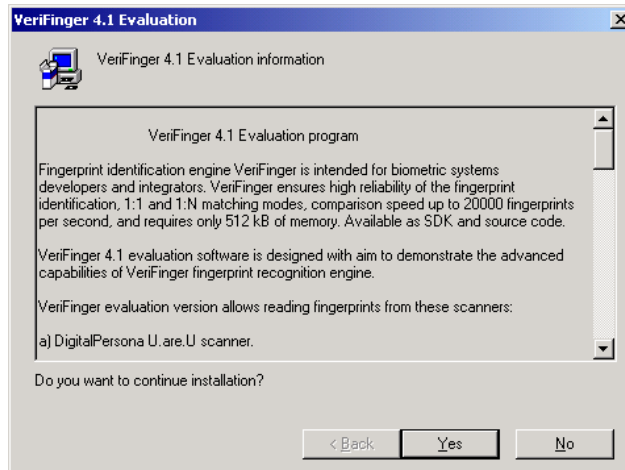
Run the installation by double clicking on VFingerInst.exe



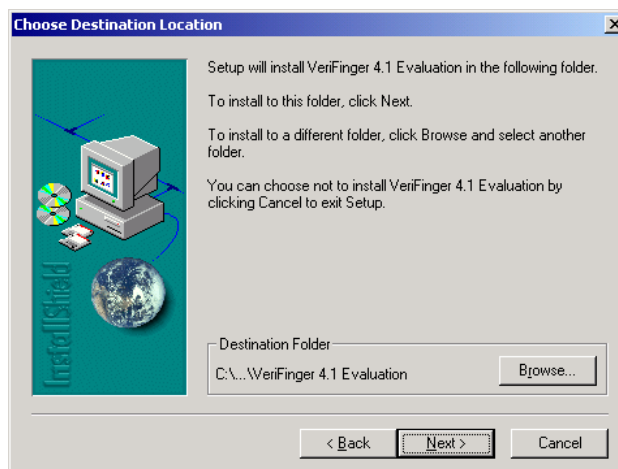
Click on **SETUP**

A couple of files will be extracted and installation should start automatically.

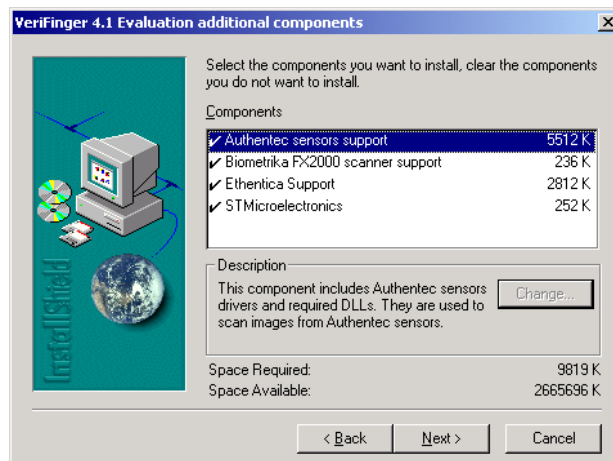




Read VeriFinger Evaluation Information and click on **YES** in order to continue the installation



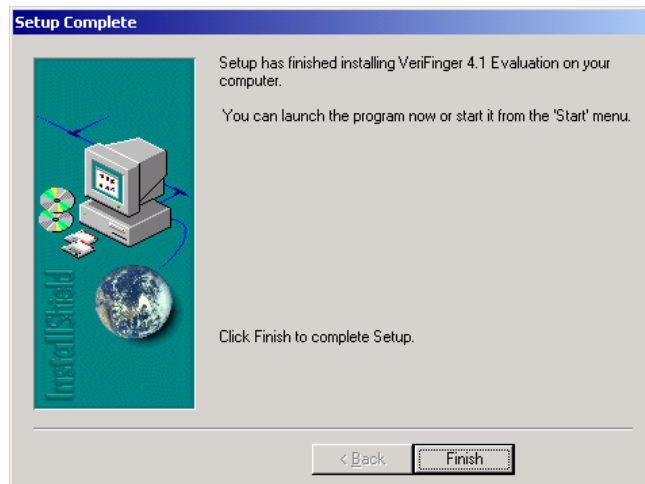
Keep default setting of destination folder and click on **NEXT**



Click on **NEXT**



The installation will start.

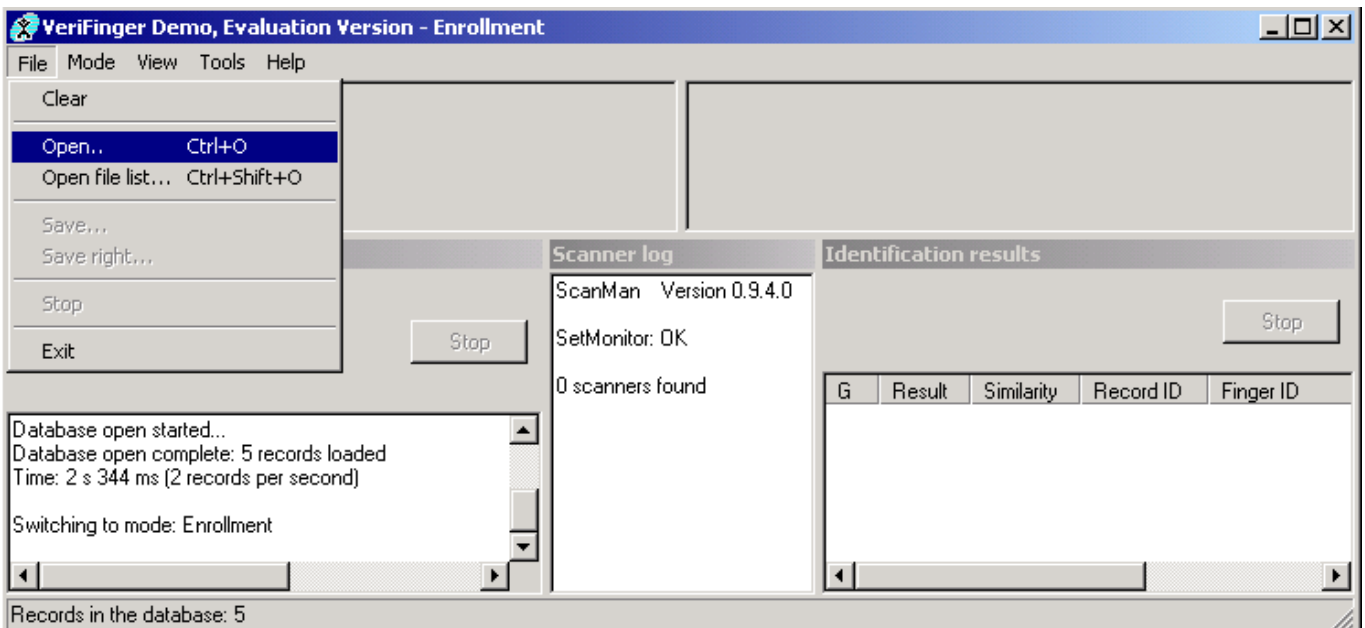


Click on **FINISH**

Launch the application and load your sample fingerprints into the database.

VeriFinger should start in Enrollment Mode.

Click on **File – Open** and load the Bitmaps.

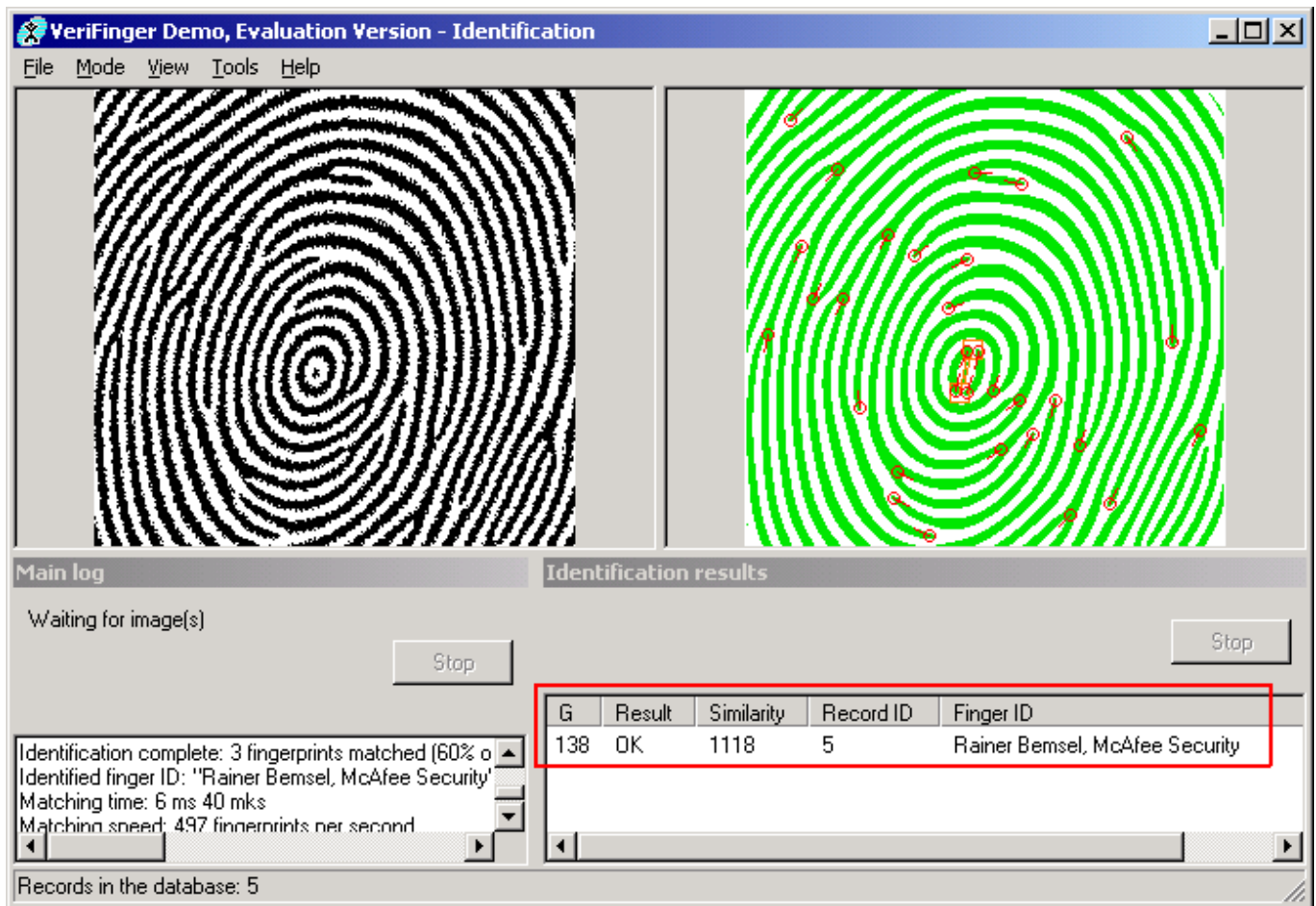


Repeat the task for a couple of Bitmaps.

Once you have finished, click on **Mode – Identification**.



Finally, open a bitmap by clicking on FILE – OPEN. The fingerprint will be compared with the database and the result can be found on IDENTIFICATION WINDOW



Biometrics verify a user's identity by a unique personal characteristic. I verified a fingerprint (I've created with Optel Software (it's not my real fingerprint) which is saved onto the database. After successful identification, the file shows the proper identity.

Some examples of fingerprint hardware can be found here:

[www.biometrika.it/eng/fx2000html](http://www.biometrika.it/eng/fx2000html)

[www.st.com](http://www.st.com)

[www.securityfirstcorp.com](http://www.securityfirstcorp.com)

I hope this short outline was useful to you.

