NLock0.9

Product documentation
(Draft v0.1)
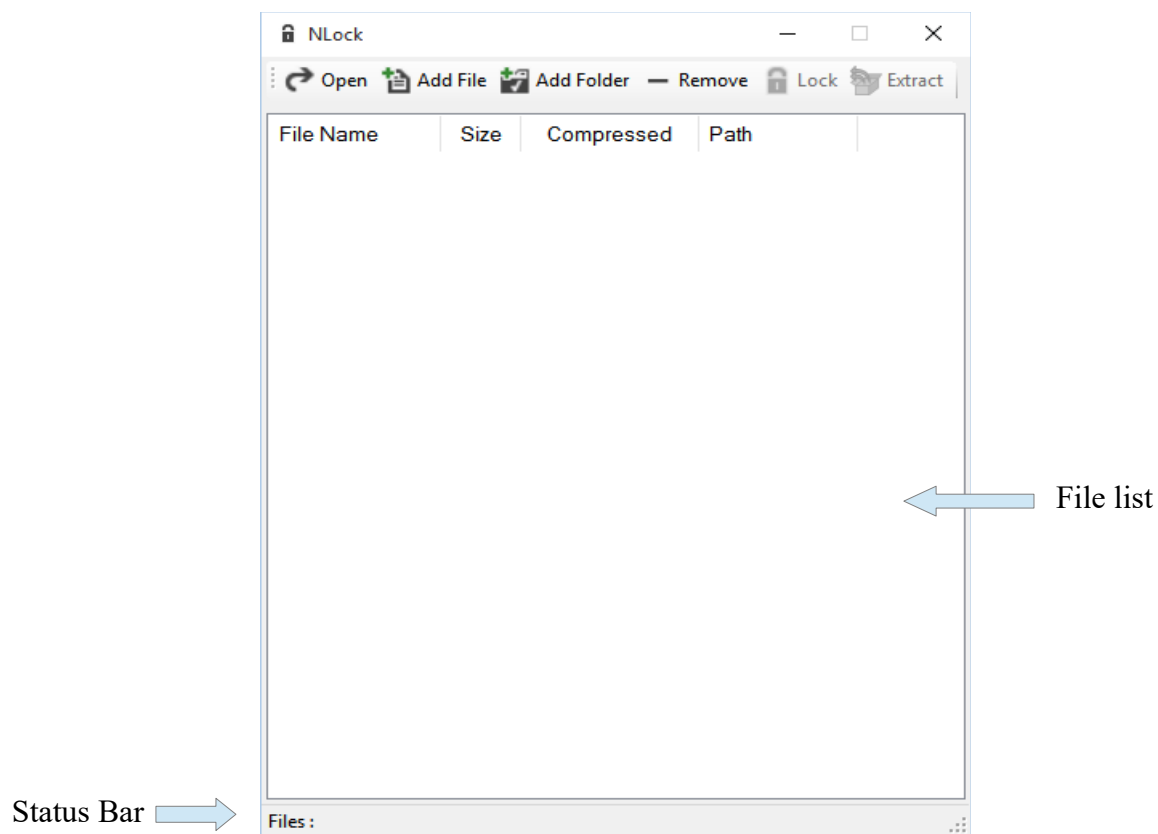
Introduction

NLock is a experimental software which tries to bridge the gap between bioemetric modalities and encryption and as a result NLock software can lock your files using a conventional PC webcam. You can lock files and using NLock application you can unlock your NLock files from anywhere.

When not to use

Don't lock your important files using NLock for still the application is in beta version and security of the NLock application is not yet strong
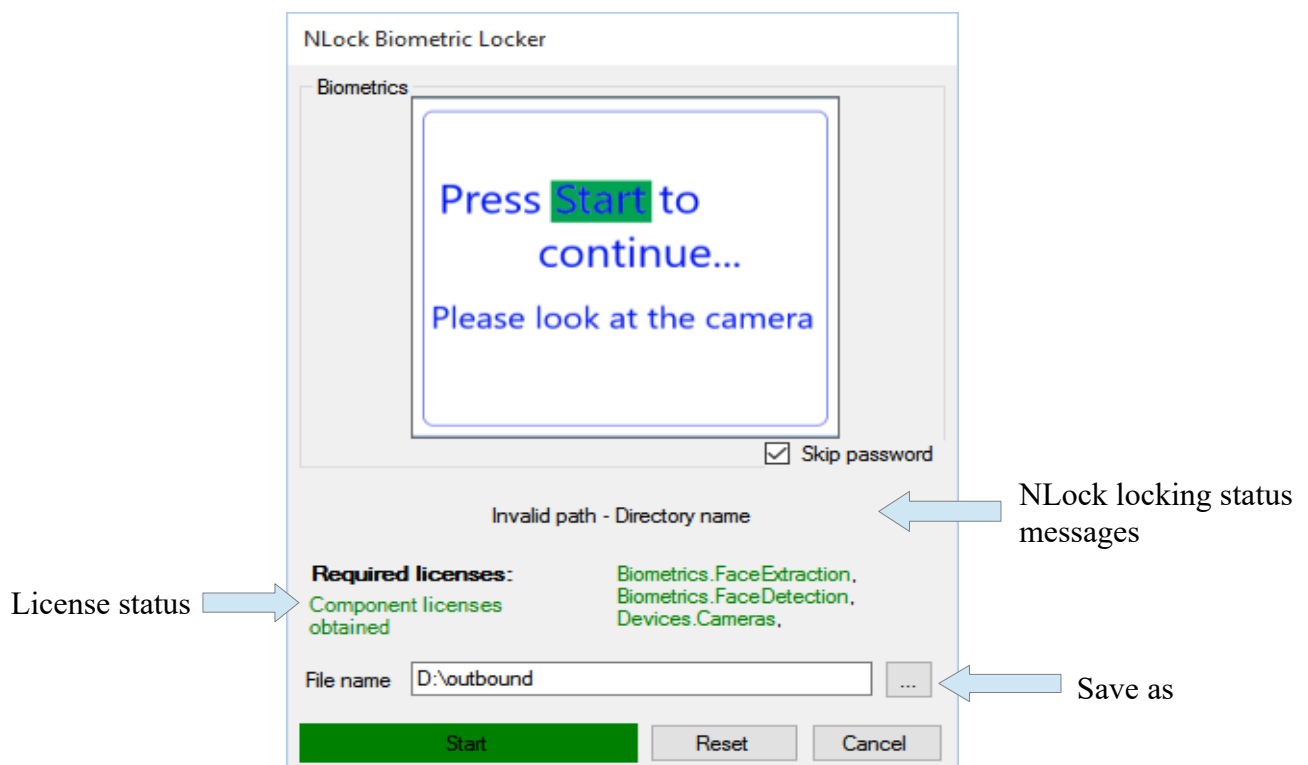
Main Windows

Illustration 1: Main Window

- ○ Open ↪ - Open a locked NLock container (.nlk) for editing

- ○ Add File 📄 - Add files to the currently editing NLock container

- ○ Remove ▬ - Remove selected file from the file list area

- ○ Add Folder 📁 - Add a folder to the currently editing NLock container and it will add

the its contents recursive with all the sub-folders and files within sub-folders.

- ○ Lock 🔒 - This will lock the currently editing NLock container with details of the users face and save it to a desired location. It will open up the Illustration 2 : Biometric Locker Window

- ○ Extract - This will extract an opened NLock container to a desired location. It will open up a folder browser for you to select a location to extract.
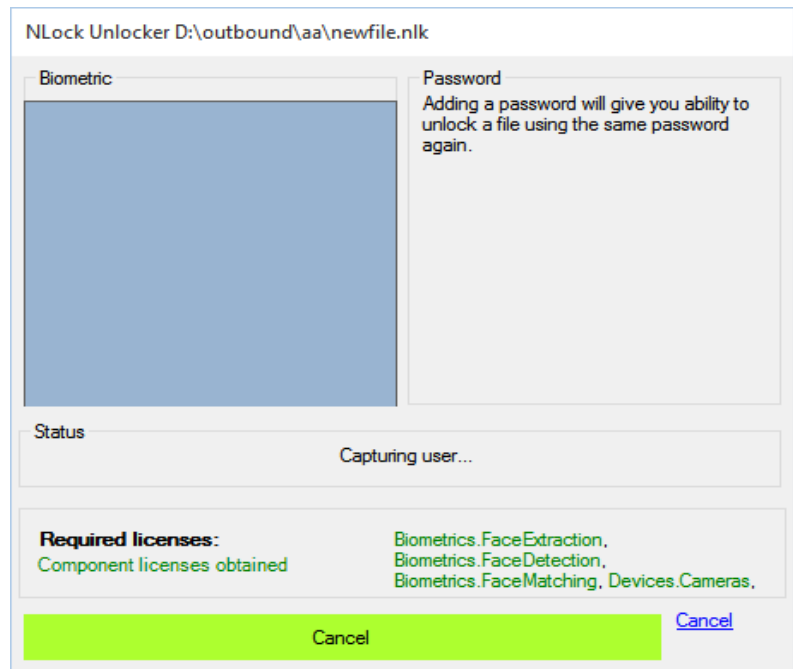
Biometric Locker Window

Illustration 2: Biometric Locker Window

Start – Will start biometric face capturing
Skip Password – Will skip the password addition process and save the NLock container (*.nlk)
Reset – Will reset the Biometric locker form to initial status
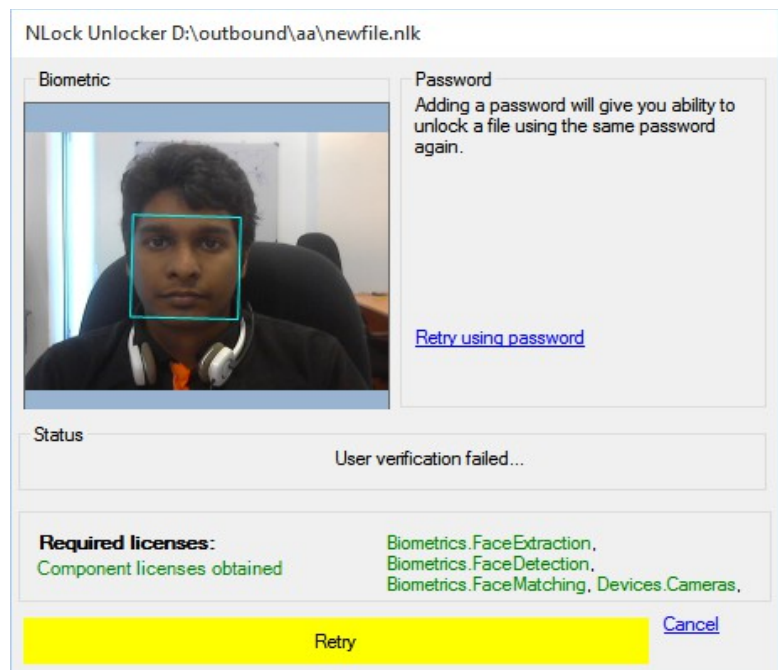
NLock File (*.nlk) Openning Operation

1. Capturing Process

NLock is capturing users face details (biometric template) from the camera.
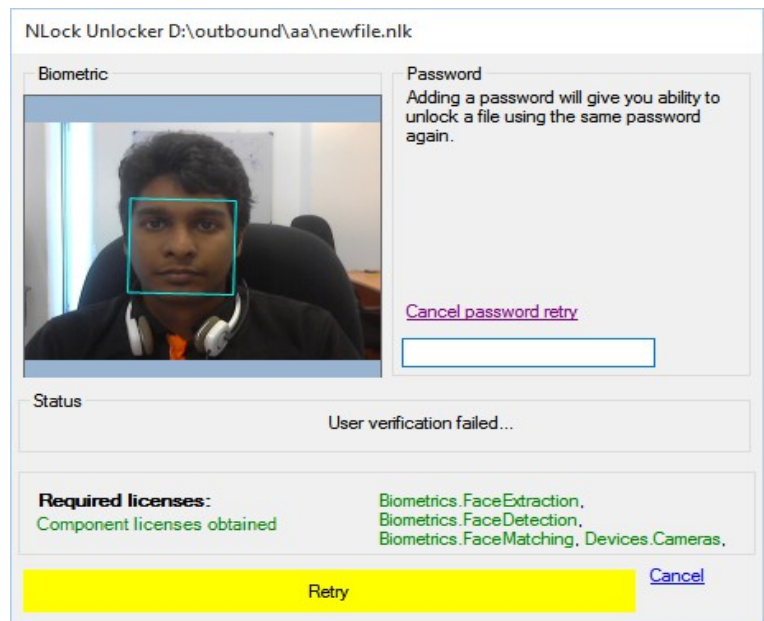

2. User identification failed

After capturing NLock has tried to unlock but because bio-metric operations failed to identify the user it fails to unlock and give you a chance to unlock it using the password.
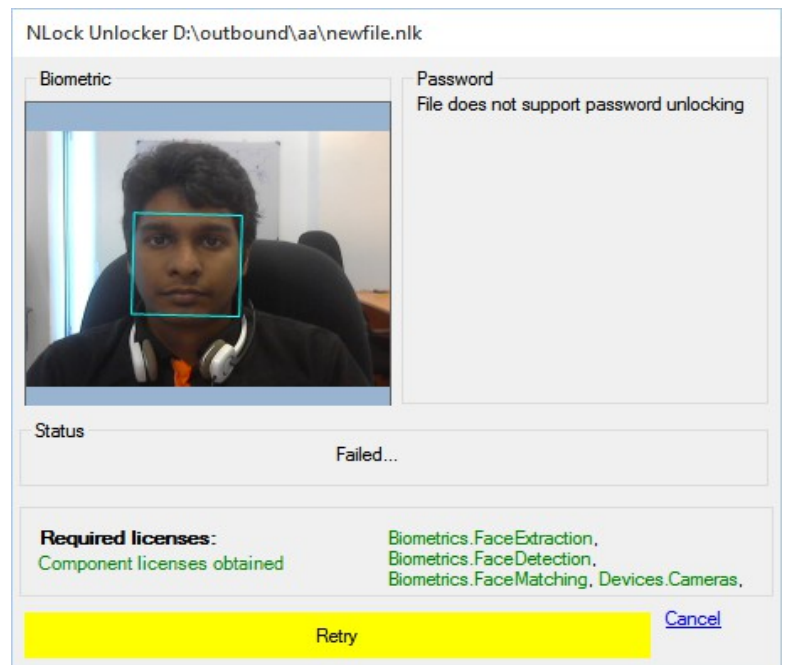
3. Password unlocking

NLock Unlocker D:\outbound\aa\newfile.nlk

Biometric

Password
Adding a password will give you ability to unlock a file using the same password again.

Cancel password retry

Status
User verification failed...

Required licenses:
Component licenses obtained

Biometrics.FaceExtraction,
Biometrics.FaceDetection,
Biometrics.FaceMatching, Devices.Cameras,

Cancel

Retry

4. File is locked without a password.

This file is locked without using a password and therefore can only be unlocked by the same users face.

NLock Unlocker D:\outbound\aa\newfile.nlk

Biometric

Password
File does not support password unlocking

Status
Failed...

Required licenses:
Component licenses obtained

Biometrics.FaceExtraction,
Biometrics.FaceDetection,
Biometrics.FaceMatching, Devices.Cameras,

Cancel

Retry

System Requirements

• Microsoft Windows specific requirements:

Microsoft Windows XP / Vista / 7 / 8 / 8.1 / 10, 32-bit.
Microsoft .NET framework 4.5 or higher
Microsoft DirectX 9.0 or later (for face capture using camera/webcam)

NLock internally uses Neurotechnology VeriLook SDK and thus should meet requirements of VeriLook SDK.

"VeriLook face identification technology, algorithm and SDK for PC, smartphones and Web."

[Online]. Available: http://www.neurotechnology.com/verilook.html. [Accessed: 19-Feb-2016].

• Hardware Requirements

PC Webcam

supported devices

Processor

Ram – Ram usage is currently high on NLock due in memory locking operation and will be changed in future operations