



Fingerprint & face
biometrics for
attendance
management

NCheck Bio Attendance



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NCheck Bio Attendance is an **end-user biometric system** designed to **automate attendance control**. The system may be used in a wide range of business applications, from employee time tracking to check-in at events, clubs, clinics, public and commercial facilities.

The NCheck software uses biometric fingerprint and facial identification to track the time of each user presence, automatically calculates summary time for each user and generates printable reports. The software is designed for installation on a desktop computer or laptop (PC) that is running under Microsoft Windows. Also, NCheck can be used on Android-based smartphones, tablets or other embedded/mobile devices.

- Attendance control automation system using fingerprint or face biometrics.
- Fingerprint and face biometrics protect against errors or user fraud.
- Ready-to-use software with friendly user interface.
- Reports generation for employees' attendance.
- Fast operation based on reliable NIST MINEX-compliant fingerprint engine.
- Multi-lingual user interface.
- Windows and Android supported.
- Client-server architecture for larger systems.
- Webcams and 50+ models of fingerprint scanners supported.
- 30-day trial with full functionality available for download.



Application Details

- **Full control on user attendance.** The NCheck software allows to register all arrival and departure events for every registered person. There are no software limitations on how many times a user checks with the system, so all leaves can be registered with the systems.
- **Reports generation.** Time and attendance reports with daily summary times for all or selected users can be automatically generated and printed. The reports can be generated for current day, week, month or for a custom time interval.
- **Multilingual.** The user interface is available in **English** and **Spanish**. If you need additional language support and would like to translate the UI into your language, please contact us.
- **Client-server architecture.** NCheck may be installed on multiple PCs or Android devices, which are on the same network. One PC will act as a server, which stores users' data and performs biometric identification, while the others can be configured to connect it as clients. The system may be **scaled up** anytime by just adding more computers or Android devices with NCheck to the existing network.
- **Stand-alone mode.** NCheck may run on a PC, laptop or an Android device (i.e. tablet, smartphone or an embedded device) in a stand-alone mode, which means that all biometric data will be stored on that computer or device, as well as all operations will be also performed locally. The computer or device with NCheck installation may operate **without network** connection, except for the first launch just after installation. This mode is more suitable for smaller businesses, organizations or events, where **low peak numbers of attendees** are expected.
- **Data export.** The time and attendance data can be exported to XLS or CSV files. The data is exported for a selected month or custom time interval as daily summaries.
- **Notifications via email.** A notification is sent to a user who forgot to check with the system or in case of other issues. Optionally, a copy of the notification can be also sent to a dedicated user like HR manager or system administrator.
- **Managed by an administrator.** An "administrator" user can log in to the NCheck with a password and perform these actions:
 - manage the list of the users;
 - add or edit check-in/check-out events for a selected users;
 - manage the connected fingerprint scanners and face cameras;
 - generate attendance reports;
 - manage multiple installations in a networked systems;
 - configure other features of the application.

Screenshots are available at: www.neurotechnology.com/ncheck-bio-attendance-details.html



Technical Details

- **Fingerprint image size.** The NCheck software performance and usage convenience strongly depends on the used fingerprint scanner, as the fingerprint image size has direct influence on the software performance and reliability. Using larger fingerprint images results in higher identification reliability but lower response time and vice versa. Usually, the **optimal fingerprint image size** for NCheck software is about **300 x 400 pixels**.
- **Recommendations for facial recognition.** **640 x 480** pixel or better native **camera resolution** is recommended. Users may enroll **several face images**, especially with differences in appearance (i.e. with and without glasses, with beard or moustache etc.).
- **Employee enrollment and identification.** The enrollment process for an employee requires to put one's finger on a fingerprint scanner, or to show up in front of a camera and to enter employee name, meaning that the enrollment process is **fast and simple**. Later the employee has to just put his/her finger on the fingerprint reader or to show up in front of the camera for checking in or out. The NCheck software assures **fast response** during employee identification within a recommended database size.
- **Several fingers for each user.** The system allows to enroll more than one finger for each user to avoid user rejections if an incorrect finger was placed. Later, during the everyday check-in/check-out, employees can conveniently put any of their fingers on the fingerprint reader and be accurately recognized.
- **Identification reliability.** The NCheck Bio Attendance software is based on our own VeriFinger fingerprint identification technology that is **NIST MINEX compliant** and has received awards for its high reliability in competitions since 2000. The VeriFinger technology has been successfully used in more than 1,500 end-user products over the past 17 years. See *VeriFinger brochure* for more information on identification reliability of the engine.



System Requirements

*We recommend to install NCheck Bio Attendance software on a separate **PC, laptop** or **Android device** which do not run any non-related applications. Such configuration is required for stable and optimal system performance.*

To install and run NCheck Bio Attendance software your system should meet the following requirements:

- PC or laptop specific:
 - An **x86 32-bit** or **64-bit** processor with at least **1.6 GHz** clock rate.
 - At least **256 MB of free RAM** should be available for the NCheck software and its database.
 - At least **2 GB** of free space on a **hard disk**.
 - **Microsoft Windows XP / Vista / 7 / 8**, 32-bit or 64-bit.
- **Tablet, smartphone** or **embedded device** specific:
 - An **ARM-based 1.5 GHz processor** recommended for convenient performance. Slower processors may be also used, but the fingerprint or face processing will take longer time.
 - The device should have at least **512 MB of RAM**.
 - At least **2 GB of free storage space** on a build-in flash or external memory card.
 - **Android 4.0** or newer.
- One of the following devices for capturing fingerprints or faces:
 - A **fingerprint scanner** that is supported by NCheck software.
300 x 400 pixels fingerprint image size is recommended;
you may find more details in the comparison table of the supported scanners on the next page.
 - A **webcam**, smartphone or tablet **built-in camera**, or other camera with at least 640 x 480 pixel native resolution.
Smartphone and tablet users should note that we recommend to use **front camera** in most cases, whereas the **rear camera** is more suitable, when an **operator** scans and checks attendees.



Supported fingerprint scanners

	Windows XP		Windows Vista / 7		Windows 8		Android
	32 bit	64 bit	32 bit	64 bit	32 bit	64 bit	
• 3M Cogent CSD 330	+		+				
• BioLink U-Match MatchBook v.3.5	+		+	+	+	+	
• Biometrika Fx2000 / Fx3000 / HiScan	+		+				
• Cross Match Verifier 300 family	+	+	+	+			
• Dermalog F1 / ZF1	+		+		+	+	
• DigitalPersona U.are.U 4000 / 4500 / 5100 / 5160	+	+	+	+	+	+	
• DigitalPersona EikonTouch 710	+		+	+	+	+	
• DigitalPersona (UPEK) EikonTouch 300 / 500 / 700	+		+	+	+	+	+
• Fujitsu MBF200	+						
• Futronic FS80 / FS88 / FS88H	+	+	+	+	+	+	+
• Hongda S500	+						
• Integrated Biometrics Columbo	+	+	+	+	+	+	+
• Integrated Biometrics LES650	+	+	+	+	+	+	
• Koehlke KIAU-5110B3 / KIA-UM01	+		+				
• LighTuning LTT-C500	+						
• Lumidigm Mercury / Venus series sensors	+	+	+	+	+	+	
• NITGEN Fingkey Hamster / Fingkey Hamster II / eNBioScan-F	+	+	+	+		+	
• SecuGen Hamster III	+		+		+		
• SecuGen Hamster Plus / Hamster IV	+	+	+	+	+	+	+
• Suprema BioMini / BioMini Plus	+		+	+	+	+	+
• Suprema RealScan-G1 / RealScan-S	+	+	+	+	+	+	
• Tacoma CMOS	+		+				
• TazTag TazPad							+
• Testech Bio-i	+		+		+		
• TopLink Pacific BLUEFiN							+
• ZKSoftware ZK4000 / ZK6000 / ZK7000	+		+				



Supported Face Capture Cameras

Several cameras can be installed and connected to the same PC allowing to process several users in parallel thus eliminating peak hour queues.

A camera can be assigned to be used only for checking in, checking out or for both events.

These cameras are supported by NCheck Bio Attendance:

- Any **webcam** or camera that is accessible using DirectShow.
The camera should have at least **640 x 480 pixel native resolution**.
- Any built-in **smartphone** or **tablet** camera that is supported by Android OS.
The camera should have at least 0.3 MegaPixel (640 x 480 pixels) resolution.
- Any **IP camera**, that supports **RTSP** (Real Time Streaming Protocol):
 - Only **RTP over UDP** is supported.
 - **H.264/MPEG-4 AVC** or **Motion JPEG** should be used for encoding the video stream.
- These models of **still cameras** are supported on Microsoft Windows:
 - Canon EOS family still cameras
 - Nikon DSLR still cameras (a specific camera model should support video capture and should be listed at <https://sdk.nikonimaging.com/apply/>)
- These specific models of high-resolution **IP cameras** are supported on Microsoft Windows:
 - Axis M1114 camera
 - Basler scA1000-30gm IP camera (requires Basler Pylon SDK)
 - Basler BIP2-1600-25c-DN IP camera
 - Cisco 4500 IP camera
 - IrisGuard IG-AD100 – face & iris camera
 - Mobotix S14D and DualNight M12 IP cameras
 - PiXORD N606 camera
 - Prosilica GigE Vision camera
 - Sony SNC-CS50 camera
 - VistaFA2 / VistaFA2E / VistaEY2 face & iris cameras



NCheck Bio Attendance Trial and Related Products

NCheck Bio Attendance **30-day Trial** application is available for downloading at www.neurotechnology.com/download.html#ncheck

The trial applications has full functionality and allows to evaluate the capabilities of NCheck Bio Attendance in real environment. Constant Internet connection is required during the trial period.

These *software development* products are related to NCheck Bio Attendance:

- **VeriFinger SDK** – for *development* of PC-based, embedded and mobile fingerprint identification systems; NCheck Bio Attendance fingerprint identification functionality is based on VeriFinger algorithm.
- **VeriLook SDK** – for *development* of PC-based, embedded and mobile facial identification systems; NCheck Bio Attendance face identification functionality is based on VeriLook algorithm. See “VeriLook SDK” brochure for more information.
- **Free Fingerprint Verification SDK** – a **freeware** SDK for adding fingerprint verification functionality into various applications. See our web site for more information.



Licensing NCheck Bio Attendance

A license for NCheck Bio Attendance application is required for each PC or each Android-based device that runs this application.. The license is called *single computer license*.

Additional licenses for NCheck Bio Attendance application can be purchased at any time. Prices for the NCheck Bio Attendance licenses can be found on the next page.

Please also refer to NCheck Bio Attendance Software License Agreement on Neurotechnology web site for all licensing terms and conditions.

Single computer license

A single computer license allows to install and run a NCheck Bio Attendance application installation on a single Personal Computer or a single Android-based device. The license will not be lost if computer will be reinstalled.

The installation license should be **activated** before starting using an NCheck Bio Attendance software installation. A **deactivation** is available in case the license needs to be moved to another PC or device.

The following license activation options are available:

- **automatic activation** – the NCheck Bio Attendance application will communicate with Neurotechnology's server and perform all actions needed for activation. Note that this method requires **Internet connection** when activating or deactivating the license for a PC or device with the NCheck Bio Attendance software; after the license is activated, the PC or device no longer need to be connected to the Internet.
- **manual activation** – this method is suitable when the PC with NCheck Bio Attendance software is not connected to the Internet. The manual activation requires to generate a **hardware ID** for the PC running the NCheck Bio Attendance software and request a license at Neurotechnology web site or by email. See NCheck Bio Attendance documentation for detailed instructions.
- **use a dongle** – this method requires to purchase a dongle (special hardware token) that needs to be connected all the time to the USB port of the PC that runs the NCheck Bio Attendance software. No online registration required.

Single computer license activated over Internet or by email is not suitable for virtual environments. The dongle will be required.



Prices

- These prices are **effective from August 18, 2014**. The prices may change in the future, so please **download and review the latest version** of the brochure before making an order.
- Quantity discounts do not accumulate over time.
- Prices do not include local import duties or taxes.
- Product shipping costs depend on delivery country

NCheck Bio Attendance single computer licenses

Quantity	Price per license
1-9	€ 95.00
10-19	€ 69.00
20-49	€ 62.00
50-99	€ 54.00
100-199	€ 48.00
200 and more	Please contact us for more information

License management

USB Dongle (optional)	€ 16.00
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NCheck Bio Attendance licenses can be ordered:

- online, at www.neurotechnology.com/cgi-bin/order.cgi
- via a local Neurotechnology distributor; the list of distributors is available at www.neurotechnology.com/distributors.html