



Face recognition technology for taking high-quality biometric portraits

FaceVACS-PortraitAcquisition

- streamline production of high-quality portraits suitable for face recognition
- supervise and operate the acquisition process
- integrate self-service technology into kiosk applications
- assess key technical characteristics such as frontal pose, uniform lighting, glasses and open eyes
- check compliance with international standards for full frontal image type (e.g. ISO 19794-5 standard)
- link demographics to facial images
- integrate software into existing document issuing processes and applications



Applications

Governments and private organizations around the world are now using facial image quality requirements standardized by international organizations (ICAO/ISO). Our technology complies with these standards and can produce compliant photos for

- international travel documents like ePassports and eVisas
- national identity documents and drivers' licenses
- health cards
- photo-ID documents for corporations and organizations

FaceVACS-PortraitAcquisition is currently the only photo quality assessment tool that received government certification.



Technology

Cognitec's **FaceVACS-PortraitAcquisition** technology uses advanced pattern recognition technology to determine quality characteristics of the portrait images. All measurements are used for ICAO/ISO compliance tests or similar testing. Test criteria can be configured for each application.

Geometric measurements

- eye positions, ear positions, chin and crown positions
- head length and width
- homogeneous illumination
- homogenous background
- exposure
- sharpness

Behaviour measurement

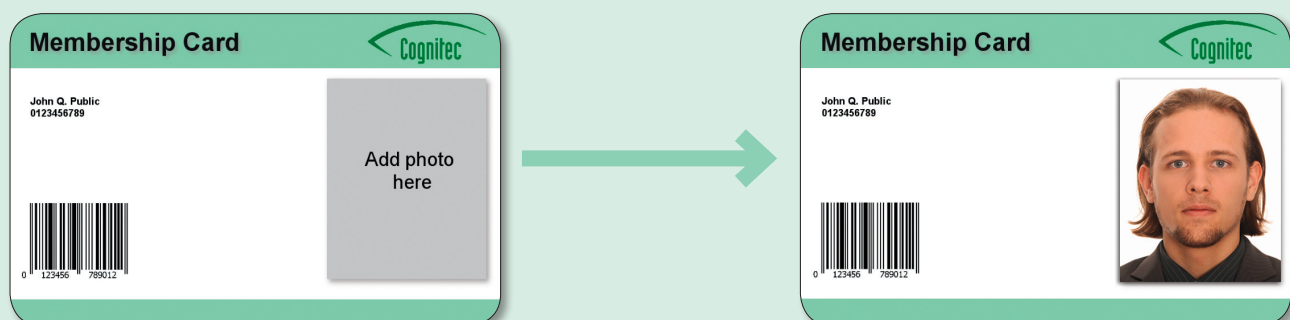
- frontal pose
- eyes open
- frontal gaze
- mouth open

Cognitec's product received an independent certification by the German government for security in information technology.



Process and Integration

A digital camera automatically previews and captures the image. During the process, the application assesses the portrait for standard compliance. The operator can adjust eye annotations or other areas like chin, crown or ears and tag the image for problems. Operators can save the compliant images and store them in databases for future face recognition and verification processes. An ActiveX-Component implementing an interactive acquisition process allows smooth integration into self-service, browser-based kiosk applications.



Cognitec develops market-leading face recognition technologies and applications for industry customers and government agencies around the world. In various independent evaluation tests, our FaceVACS® software has proven to be the leading technology available on the market. Cognitec's portfolio includes products for facial database search, video screening, border control, ICAO compliant photo capturing and facial image quality assessment. Corporate headquarters are located in Dresden, Germany; other offices in Miami, FL; Rockland, MA; and Hong Kong.