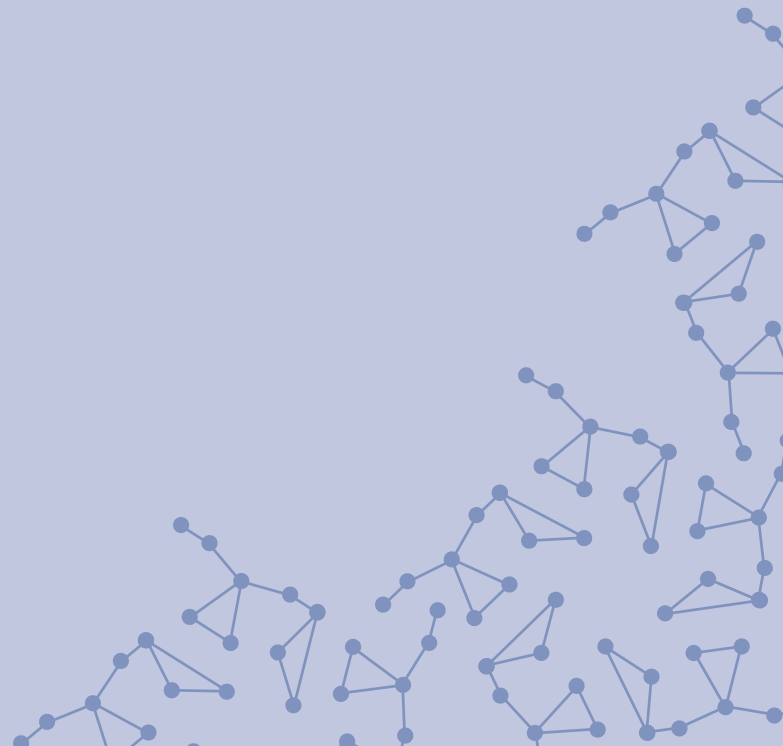


Golden Rules for PhotoVerify™

with a BioID Web Service
(BWS)

Guide



GOLDEN RULES for PhotoVerify™

PhotoVerify is a BioID Web Service (BWS) specifically designed for enabling remote identity proofing and automated onboarding. It uses the photo image cropped from an ID document and compares it to two images captured live from a person, to find out whether the images belong to the same person.

Thereby, it performs liveness detection to prevent any fraud by presentation attacks. This service does not perform ID document authenticity check or validity check against databases. It is a privacy-assured service for verification of ID ownership that requires no ID document data (e.g. passport number, name etc.). Furthermore, all images submitted will be deleted, leaving no traces behind.

TWO THINGS one should know about before using the PhotoVerify service

ID PHOTO

A photo ID is an identity document issued by an authority with the necessary security features to ensure authenticity. Such an ID typically accepts a high-quality frontal photo with a certain quality standard, e.g. the ICAO guidelines. ID documents can additionally store a digital copy of the photo (“thumbnail image”) on the chip embedded in the ID document. The best way to provide an ID photo is to retrieve the thumbnail image directly from the chip using an NFC reader or an NFC-ready mobile phone. However, it is very common to simply ask the user to take a snapshot of the ID using a smartphone or webcam.

LIVE SELFIE CAPTURE

Live images can be captured simply by using a webcam or a smartphone camera. For good ID photo comparison results, always ensure uniform frontal lighting. The first selfie should be captured by prompting the user to look frontal into the camera, followed by asking the user to nod slightly for the second selfie. This enables camera-independent **presentation attack detection**. BioID’s face match then makes sure the ID belongs to the person presenting it.

How Accurate Does Identity Proofing Need to be?

Identity proofing often involves comparing a user's current appearance to a photo ID that may have been issued many years ago. PhotoVerify excels at this task, delivering high recognition rates even for ID photos over 15 years old – thanks to robust biometric matching and liveness detection.

To accommodate diverse use cases and ID document qualities, PhotoVerify offers five adjustable accuracy levels, each defined by a specific False Acceptance Rate (FAR):

Level 1	FAR of 0.5%
Level 2	FAR of 0.1%
Level 3	FAR of 0.01%
Level 4	FAR of 0.001%
Level 5	FAR of 0.0001%

Level 5 is ideal when a high-quality live photo is available and maximum security is required – such as in financial onboarding or trust service scenarios.

For cases where ID images are older, contain holographic distortions, or were scanned under suboptimal conditions, a lower level can be selected to balance usability and accuracy.

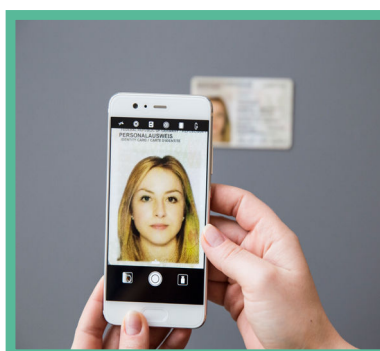
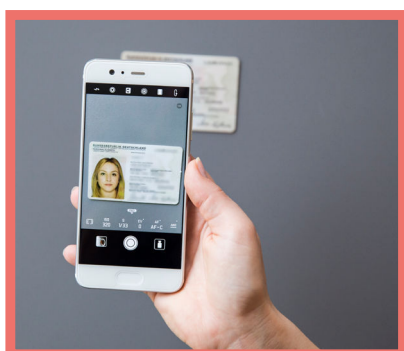
While PhotoVerify is designed to work with real-world ID quality variations, recognition performance may still be impacted by factors like poor lighting, ID wear, or scan artifacts. Nevertheless, even under these conditions, PhotoVerify significantly reduces false rejections compared to manual review – providing a scalable, privacy-first alternative to human-based checks.

Best Practice for ID Photo Capture



1.1

Align your camera so that it is looking straight down to your ID. It's best to use a smartphone camera and lay your ID on a flat surface such as a table top.



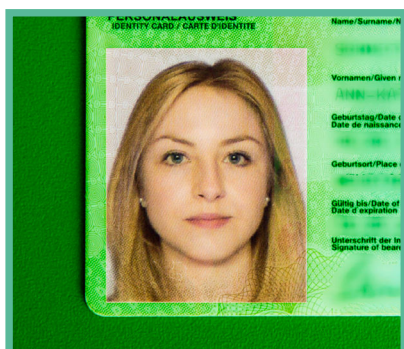
1.2

Focus your camera only on the photo, not the whole ID document. Fully fill your picture frame with the ID photo. Adjust your camera position and use zoom if necessary.



1.3

Avoid any shadow, reflection or visible holographic image on the ID photo. Adjust your camera position and angle if necessary.



1.4

Send only the photo image. We don't need any data on the ID document. Just the ID photo.

Best Practice for Live Selfie Capture



2.1

Go to a room with good lighting. Ensure that lighting comes from the front. Avoid any lighting condition that creates shadows or uneven brightness on your face (e.g. windows from the side).

2.2

Wear your glasses if you wore them for the ID photo. Likewise, take off your glasses otherwise.



2.3

Avoid any reflection on your face or glasses. Change your and/or camera position if necessary.

2.4

If prompted, turn your head only slightly, e.g. 2 to 5 degrees.

Examples of Unsuitable Live Selfies

