

Use Case: Authentication

Step 1:

Customer Input

Via your mobile app, capture the following customer details

- Personal details
- SmartSelfie™

Smile Identity Actions

The Smile Identity SDK will:

- Capture multiple images (at the point of taking a selfie)
- Attempt to detect a face, brightness & blur detection
- Send the customer input as a package to Smile Identity servers

Step 2:

Smile Identity Actions

Smile Identity algorithms will perform a two-staged check on the received package.

Step 2.1:

- Filter SmartSelfie™ Images
- Check SmartSelfie™ for proof-of-life / spoofs

Step 2.2:

- Compare enrolled selfie on file with SmartSelfie™

Step 3:

Smile Identity Actions

A Machine Result is generated. The Machine Result is a confidence score derived from multiple algorithmic facial similarity scores generated at step 2.2.

Step 4:

Smile Identity Actions

If the Machine Result is provisional, Smile Identity will send the details of the package for human review. Provisional Results occur when the Machine Result similarity score is not high enough for the set acceptable threshold. A Provisional result message is sent to Partner Server.

Step 5:

Smile Identity Actions

Two checks are performed during human review:

- Spoof review (if required)
- Compare review (comparison of SmartSelfie™ to selfie on file)

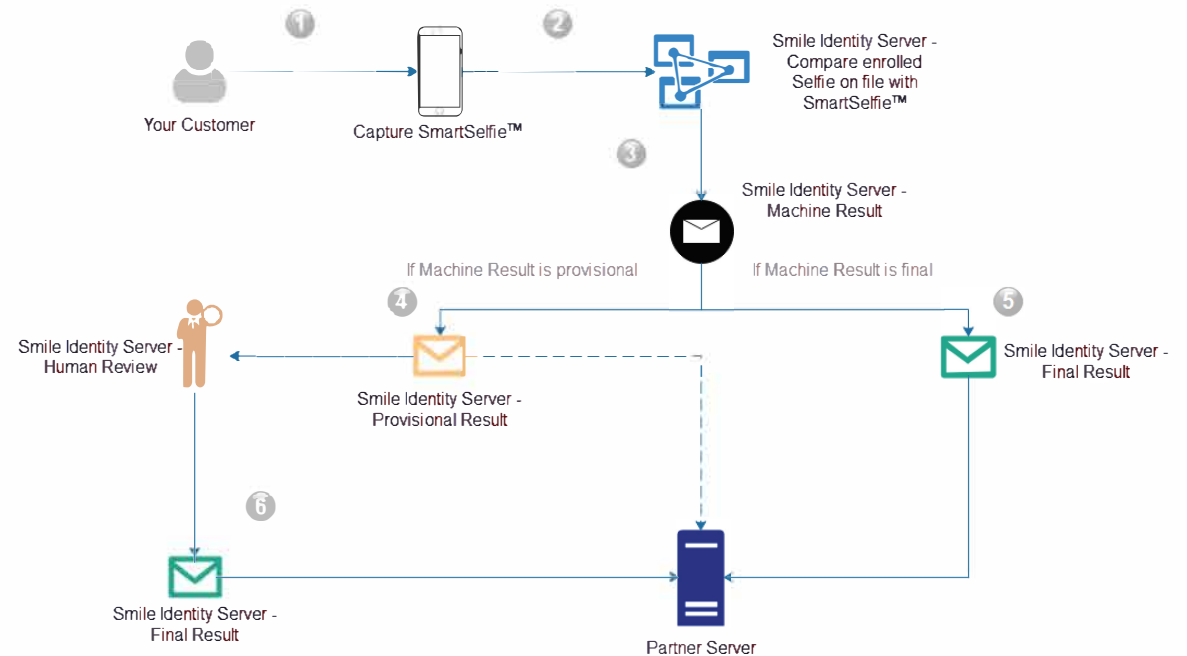


Figure 1: Authentication Flow Diagram

Step 6:

Smile Identity Actions

If the Machine Result in step 3 is final, Smile Identity will forward the result as a Final Result to the partner's server. Where the Machine Result was provisional and human review performed, Smile Identity will forward both the provisional Machine Result and then the Final Result (which would be a factor of the human review result and provisional machine result) to the Partner Server.

Configuration Options	Upcoming Attractions	Engineering Reference Box	General Comments & Info
<p>Step 3</p> <p>Strictness - Decide what confidence level is acceptable for enrollment and whether to pass marginal results to human review or reject outright</p> <p>Step 5,6</p> <p>Control Results - Results are sent directly to your server for you to handle with your own business logic</p>		<p>Step 1:</p> <p>/compare-face-to-id-captured</p> <p>/compare-face-to-id</p> <p>/set-job-type</p> <p>Step 5:</p> <p>/server/callback</p>	<p>Smile Identity server time from steps 2 & 3 = 3.5 seconds</p> <p>Asynchronous processes = All Smile Identity server jobs except Human Review</p> <p>Proof-of-life check = A check to determine that the SmartSelfie™ being taken is that of a live human being</p>