Technical Glossary

Here are some important terms you will need to understand in order to implement the FaceTec SDKs.

User Session

A User Session is the process a User takes to place their Face in the Initial Oval, press Start, and align their Face in the Oval again once it expands. This is essentially two passive Liveness Checks and only takes 2-3 seconds.

3D FaceScan

After the User Session is performed, an encrypted 3D FaceScan object is output by the iOS, Android, and Browser SDKs after the completion of a User Session. 3D FaceScans contain Liveness Data (3D FaceMaps don't) and 3D FaceScans are encrypted by default.

3D Liveness Check

User Sessions produce FaceScans. FaceScans are evaluated by the FaceTec Server. FaceTec's highly secure and highly accurate ensemble of 100+ Algorithms and heuristics evaluate the FaceScan and if Liveness is proven, a result is given to you in your secure Server environment. 3D FaceMaps are provided as an output to the Liveness Check API.

2D Liveness Check

2D Single Image Liveness Checks are performed on a face photo by the FaceTec Server. 2D Liveness checks are ~97% accurate on Level 1-3 Spoof Attacks, and do not require a Device SDK to capture them. They are also FREE to all FaceTec Customer's & Partners. More Info

3D FaceMap

After a successful Liveness Check, the FaceTec Server deletes the Liveness Data from the 3D FaceScan (~350kb) and the 3D FaceMap (~180kb) is output. The 3D FaceMap, can then be stored in your Database for future 3D:3D Matching and/or 1:N Searches.

Session History Data

The Session History Data Object is a proprietary data construct that stores the results from FaceTec Sessions. A Session History Data Object is saved when a FaceTec Session has been completed or has been aborted. A Session History Data Object is not recorded if the Session is still in progress.

New Users, User Accounts & Onboarding

New Users perform 3D Liveness Checks. On success, you can have confidence the biometric data was collected, 1st Generation, from a real Human. Optionally, a 2D Photo ID Match can be performed with the User's 2D Photo ID or against a Govt. 2D Identity Photo Database.

Re-Verification via 3D:3D Matching

Once a 3D FaceMap is created for a User, you have a trusted reference for when you need to verify the User in the future. Liveness is proven again, and a 3D to 3D Match is performed to achieve extremely high confidence that the same user has returned no matter what device they are using to login from.

For more information, please see the Intro to 3D Face Matching.

More Liveness & Matching Terms

2D Image

A JPEG or PNG image. FaceTec Servers operate on Image Bytes. 2D Images, and examples of how to work with 2D Images in the case of Matching against a 3D FaceMap at 1/750,000

3D:2D Face Image Matching

Though not as accurate as 3D to 3D, FaceTec SDKs contain numerous APIs for Matching 3D FaceMaps to 2D images from various sources.

For more information, please see Intro to 3D Face Matching.

Audit Trail Images

An Audit Trail Image is a 2D Face Portrait Image generated from a User's Session that can be used for security, auditing, fraud investigation, and transaction validation.

For more information, please see Audit Trail Images.

Photo ID Match

FaceTec Photo ID Match compares the user's 3D Face to their Photo ID. Photo ID Match allows FaceTec Partners & Customers the ability to use one SDK on the client-side to do Onboarding, Liveness Check, and Photo ID Match. High resolution, high quality photos from the IDs from the Photo ID Match can be used with multiple IDVs on the backend.

ID Scan Images

A set of 2D images of the front and back (ID Cards) or just the front (Passports) of the Identity Document that was scanned during a Photo ID Match.

Key & Usage Log Related Terms

Device & Server Keys

Production Mode - Please see Development Mode: Initialization and Key Validation

Development Mode - Please see Development Mode: Initialization and Key Validation

FaceScan/Map Encryption Key

Please see FaceMap Encryption Keys

Usage Logs

Please see Usage Logs

General Technology & API-Related Terms

Testing API

A hosted API that is provided by FaceTec during the initial phases of development before the Customer deploys the FaceTec Server to their own infrastructure. The FaceTec Sample Apps in the FaceTec Device SDKs are configured to use the FaceTec Testing API when launched with the default packages.

AWS

Amazon Web Services, the leading cloud-computing provider. The FaceTec Server contains sample code and scripts for deploying on AWS.

AWS S3 & Elastic Beanstalk

Amazon S3 is a simple, cost-effective storage solution. The FaceTec Server contains sample code for utilizing Amazon S3 for FaceMap storage. Amazon Elastic Beanstalk is a web app deployment and management solution that makes it easier to scale and deploy large scale web applications. The FaceTec Server Dockerized deployment uses Amazon Elastic Beanstalk and can be deployed using a single command.

AWS Transfer for SFTP

AWS Transfer for SFTP is an Amazon product that FaceTec uses for Production FaceTec Customers to transfer anonymous Usage Logs to FaceTec. All FaceTec Production Customers will have an SFTP Account created as a required deployment step.

Azure

The Microsoft Cloud computing platform. The FaceTec Server is compatible with Azure deployments.

Google Cloud

The Google Cloud computing platform. The FaceTec Server is compatible with Google Cloud deployments.

HTTPS API

Representational State Transfer Application Programming Interface. The FaceTec Server creates a service that can be used to perform all of the core FaceTec operations in a fast and scalable manner.

For More Terms & Definitions, Click Here

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