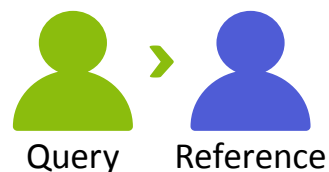


VERIFICATION AND IDENTIFICATION: USE CASES, OPERATING MODES AND DATA MANAGEMENT



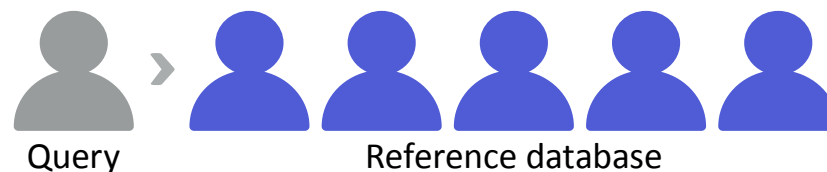
Verification (1:1)

Am I who I say I am?



Identification (1:N)

Is the data subject in the database?



	Verification	Positive ID	Deduplication	Screening	Forensic search, investigative	Watch list	Real-time search
USE CASES	Mobile device login Passport Credit card ATM Access control	School meal access Trusted traveller Access control	Government identity systems Bank account opening	Issuances of an immigration visa; part of screening process for employment or volunteering	Latent fingerprint at a crime scene Face captured by camera during a suspected crime event	Detained individual in wartime Check watch list for visa request	Real-time search of CCTV video with face biometrics Surveillance* Monitoring of major event
OPERATION	Biometric sample provided by user making the claim Compared to single reference associated with claim	Biometric sample from the capture subject Compared to full database of registered users to find best match	Biometric sample from the capture subject Compared all references in database to ensure not already present under another identity	Biometric sample from the capture subject Compared to database(s) to obtain additional information/personal history, confirm identify	Biometric sample part of crime scene Compared to database for investigative purposes to generate leads. Typically manually reviewed	Biometric sample captured from suspicious data subject, scene or voluntarily provided for visa request Compared to database of known and suspected terrorists/criminals	Biometric sample captured from public area Compared to database containing data subject/s of interest
DATA STORAGE	Reference stored on phone, passport, credit card, etc Reference stored in cloud database (only compared with claimed identity)	References stored on cloud or local database	References stored on cloud or local database	May not be retained by screener and/or partner, record of match and screening results may be stored	Govt database of prior arrests Govt civil databases (e.g. passport or drivers license)	Watch list compiled by government, police, international agencies, etc	Data subjects of interest: Watch lists; wants and warrants; lost or missing persons

*This is a particularly controversial topic, but for completion this is included to highlight the differences between different use cases.

Disclaimer: The use cases are only examples, not a definitive list. There could be more detail, but for the purpose of this graphic, we have kept it high level. Some systems may use one or more of these configurations.