ASIS

Automatic Speaker Identification System (ASIS) is designed for searching in centralized Voice Biometrics databases dedicated to law enforcement organizations, providing police forces with a new tool for identification of suspects and criminals during investigations.

KEY BENEFITS

Based on the brand new iVector algorithm, ASIS uses AGNITIO's 4th generation technology and achieves the fastest and most accurate results ever, providing channel, text and language independent scores and the best accuracy for very short utterances.

Architecture

ASIS is a distributed client-server system in which the application server responds to requests coming from all Web clients. ASIS provides identification capabilities for multiple operators with multiple simultaneous requests.

- Intuitive: does not require any expertise
- Scalable: multi-threaded/multi-core environment
- Modular: from 5,000 to 1,000,000+ BVPs stored and from 5 to up to 1,000 simultaneous connections

Main GUI functionalities

- Database management: registration, modification, deletion, search
- Training (voice model) and launching identification (immediately or delayed)
- Process monitoring and administration
- Database access control (different profiles)

Performance

ASIS' multi-engine architecture enables speaker identification from more than 20,000 voice models in less than 5 seconds, on recommended hardware platforms.

WHAT IS ASIS?

FEATURES

ASIS provides services comparable to the existing Automatic Fingerprint Identification System (AFIS). ASIS is available in two different packages:

- A high level API that provides a Web Services interface allowing easy integration into existing platforms
- A standalone solution, a complete Graphical User Interface (GUI), that provides, among other capabilities:
  - Collection of Voice Biometrics information of known or unknown suspects and related details (e.g. name/group) on a central Biometric Voiceprint (BVP) database
  - Comparison of 'field' samples (e.g. intercepted calls) of an unknown individual against Voice Biometrics models stored in a central database (or a sub-unit of it by applying criteria such as Gender or Language): 1 to M identification.

The identification results consist of a list of possible candidates with matching scores (ranked from highest to lowest probability to show that the audio test belongs to the suspect), thus supporting further investigations.

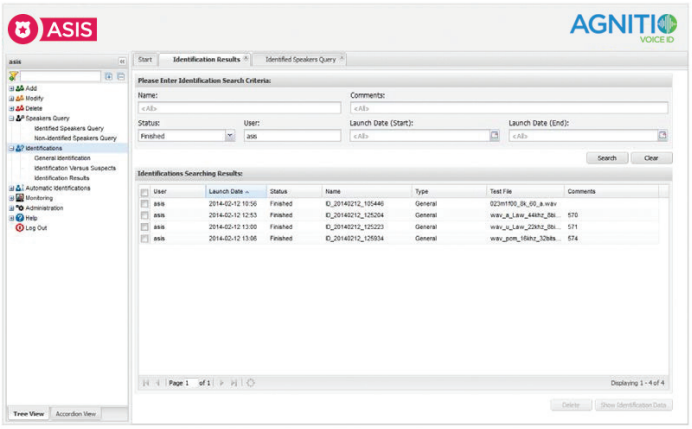
ASIS has been designed to satisfy different customer requirements (small to large deployments). ASIS takes advantage of client-server architecture: deployment cost reduced, no disk space needed on the client, data stored on the server with far greater security controls than most clients, control access and resources guaranteed, etc.

AGNITIO VOICE ID

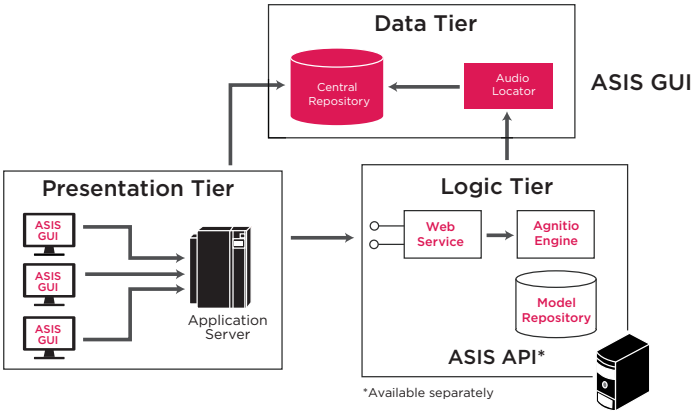
USE CASES

- Storage of BVPs for further intelligence required in a speaker query
- Subsequent identification of speakers involved in a case during a police or security forces investigation

ASIS Web-based interface is intuitive, scalable and can be integrated into a multi-modal platform including complementary biometrics to increase identification accuracy



ASIS Architecture



AGNITIO - Leading Voice Biometric Technology for Homeland Security:

Recent independent tests conducted by International Biometric Group (IBG) demonstrated AGNITIO's superior voice biometric technology capabilities.

"AGNITIO identified the correct voice within the top 2 results 99.02% of the time using 60 seconds of audio in a cross channel environment"

International·Biometric·Group
Research Consulting Integration

AGNITIO won numerous awards including Global Security Challenge (2011) and Speech Technology Market winner award (2012).

AGNITIO's Voice Biometrics consultants are available to provide all the necessary expertise and support to our clients worldwide in order to ensure the best results: consulting services include Voice Biometrics workshops, advanced training for users and system integrators, and best practices (please contact info@agnitio-corp.com).

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