# Nuance Identifier:
# Analyzing voice to fight crime.

Empowers law enforcement to identify
a speaker, get information and help
investigations.

Nuance Identifier is a powerful tool that assists intelligence, military and law enforcement personnel by comparing a target speaker to a database of possible candidates. Performing hundreds of thousands of comparisons per second, Identifier delivers a ranked list of candidates with likelihood scores enabling law enforcement to find the criminal needle in the haystack. Identifier also provides a state-of-the-art set of speech-related technologies that can help to focus the voice biometrics results by identifying language and gender and additionally providing specific information about the content of the audio recordings through transcription.

Identifier is a stand-alone solution that includes a complete and easy-to-use interface to simply enroll new speakers to find who you are looking for; compare a new unknown audio file with the existing database to find if that audio is on a watch list; or extract content information to assist in prosecution. Additionally, Identifier provides a web services interface that enables easy integration in your organization's infrastructure, allows automatic feeding of audio, connects with external databases and systems and even enables smartphone devices to search directly from the "field."

**Key features**

**Flexible and scalable architecture**
Nuance Identifier can be used as a stand-alone tool installed in a single laptop or scaled to support a country-wide deployment, being able to support up to hundreds of users accessing it simultaneously. The system can perform searches against millions of voiceprints within seconds and provides load balancing, data replication and high availability capabilities.

**Deep neural networks-based voice biometrics**
Nuance voice biometric algorithms have been used to protect security-critical applications since 2001. In 2015, Nuance released the industry's first voice biometric algorithms powered by deep neural networks (DNN), a computer learning technology that enables a quantum leap in performance. Nuance Identifier is embedding the third generation of its DNN-based voice biometric algorithms, setting a new industry benchmark in voice biometric performance.

**Key benefits**
– **Prevent crimes & terrorist activity.** Equip security personnel with criminal and terrorist identification capabilities so that they can apprehend individuals of interest before they can act.
– **Speed up your investigations.** Quickly get a list of potential suspects and extract extra information about the content of the audio files collected in the case, expanding your analysis capabilities.
– **Connect previously unrelated cases.** While storing audios from new cases, the system can perform backward searches and group/cluster voices to help in connecting cases and providing new clues for your investigation.
– **Enable your team everywhere.** Thanks to its web-based GUI, the access to the system can be done from any device with a web browser installed or through a mobile app.

"The use of the Internet for terrorist purposes is a rapidly growing phenomenon requiring a proactive and coordinated response."[1]

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1 Ki-moon, Ban. September 2012. The Use of the Internet for Terrorist Purposes. United Nations Office on Drugs and Crime.

### Clustering

Nuance Identifier groups audio in clusters based on speaker voices contained in each file. This allows for significant improvements in information gathering: investigators can now quickly associate previously unrelated cases.

### Market-leading automatic transcription

Nuance Identifier leverages the market-leading Nuance Transcription Engine (NTE) providing an unparalleled combination of technologies. It supports over 20 languages and 35 dialects (with additional languages rolled out regularly) and provides up to three different modes that allows to balance speed, accuracy and hardware requirements.

### Keyword detection

Using state-of-the-art Nuance speech recognition technology, Identifier enables monitoring of large volume of recorded conversations to track keywords on processed audio files. With keyword detection investigators can find potential issues before they are a problem.

### Intelligent Detectors

Nuance Identifier can narrow down searches by filtering based on many criteria including gender and language. Investigators can quickly get to the results they need.

### Administration made easy

Nuance Identifier provides a full set of administration capabilities such as user administration and authorization, database management, audit management, multi-tenancy storage management or storage encryption.

### Part of the family of Nuance Security products

This allows an easy interoperability with other products such as Nuance Forensics or FraudMiner and has them all installed in a single platform. The Nuance Security Suite is also fully interoperable with the rest of the products of the Nuance Public Security portfolio.

### Nuance Public Security solutions

Nuance is the global leader in voice biometrics and security solutions for public security with a comprehensive portfolio of products designed to cover all the needs of law enforcement, intelligence and

200,000 comparisons made per second.

military agencies providing forensic, criminal ID and audio mining capabilities. Nuance products allow full interoperability between organizations and provide more than 15 years of unrivaled experience in delivering successful voice biometrics solutions that enable agencies to build a safer world.

For more information about Nuance omni-channel solutions, go to www.nuance.com/omni-channel-customer-engagement/security/public-safety

**About Nuance Communications, Inc.**
Nuance Enterprise is reinventing the relationship between enterprises and consumers through customer engagement solutions powered by artificial intelligence. We aim to be the market leading provider of intelligent self- and assisted-service solutions delivered to large enterprises around the world. These solutions are differentiated by speech, voice biometrics, virtual assistant, web chat and cognitive technologies; enabling cross-channel customer service for IVR, mobile and web, Inbound and Outbound; and magnified by the design and development skill of a global professional services team. We serve Fortune 2500 companies across the globe with a mix of direct and channel partner selling models.