

OVERVIEW

Nexidia AudioFinder for Public Safety

Applying audio search to investigations, quality assurance and analysis



CHALLENGE

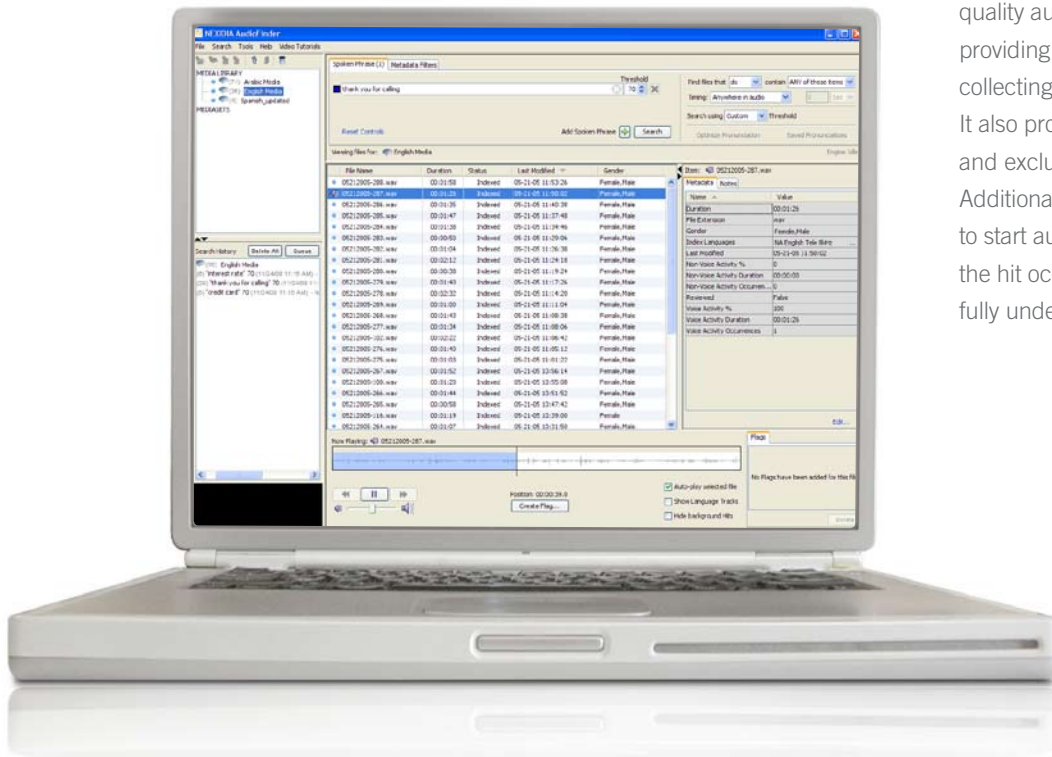
Public Safety officials rely on audio recordings to provide investigation support, fulfill open record requests, conduct quality assurance reviews and perform research on non-emergency calls. While recorded 911 calls and dispatches can be a valuable asset, very few of the thousands of calls are ever actually reviewed or analyzed. When a request to find a specific call is made, it usually involves listening to a considerable number of calls before locating the right one. Additionally, rigid time constraints often make this process difficult.

SOLUTION

Public safety officials require the ability to search on the spoken phrases to easily find the calls they need. Nexidia AudioFinder expedites audio searches, expands the use of recordings and increases the number of calls included in analysis. Now, the majority of 911 calls and dispatches—even non-emergency calls—can be included in investigations and research. This is ideal for comparing a documented police report against the actual call. Call trends can also be analyzed for city sectors or locations, providing valuable information for the purpose of patrol, crime prevention and overall public safety deployment.

AudioFinder is a flexible, stand-alone application that enables users to index and search audio-video content. Nexidia's technology is specifically designed to search the actual content with a high degree of accuracy, providing the ability to immediately playback the most crucial aspects of the audio files.

AudioFinder brings the full power of Nexidia's patented phonetic technology into a simple application that users can install and use on a single machine. No other software can help with the daunting problem of processing large volumes of audio in challenging conditions. AudioFinder works in over 35 languages across a broad range of acoustic qualities, including almost any collection of low quality audio, voicemails and video files, providing a fast and efficient means of collecting information and analysis. It also provides flexibility in including and excluding topics based on relevance. Additionally, review tools allow the user to start audio playback at the exact point the hit occurred or prior to that point to fully understand the conversation.



Nexidia's phonetic indexing technology searches on the spoken word content contained within the media

PHONETIC SEARCH

At the core of Nexidia's strength is the ability to execute search criteria against the phonetic indexes that Nexidia creates. This method allows users to enter simple words or phrases and find them wherever they exist in the recordings. The Search function includes the ability to specify multiple search terms in a single query, to nest searches at different levels, and to apply BOOLEAN logic (e.g. AND, OR, NOT) and even time-based proximity logic to a query. Additionally, phonetic search eliminates the need to create and maintain a dictionary of key terms and proper names.

PRONUNCIATION OPTIMIZER

Pronunciation Optimizer allows the user to do test searches and identify those results which are most relevant. This feature is essential for words that may be obscure or hard to pronounce. Based on the results of the test search, the system generates a new search term in Nexidia's unique phonetic notation that most closely represents the best hits. This query can then be used to re-run the current search, or saved and later used in any other search function, dramatically improving the

overall results. Additionally, AudioFinder can search by example when users identify a specific segment of audio that contains the desired term.

LANGUAGE ID

AudioFinder automates the process of identifying languages, and even dialects, spoken in media files. Files can be grouped by primary language spoken, and therefore can be routed to the appropriate specialists for further processing and searching.

HOW IT WORKS

Nexidia's award-winning, patented Phonetic Search Engine (PSE) technology enables audio-video search using phonemes—the smallest unit of human speech. As media files are added into AudioFinder, they are phonetically indexed—broken down into phonemes—which can be searched for the most accurate, relevant results. This phonetic approach supports almost all generally available audio qualities and audio variances such as a speaker's language, accent, dialect, gender and age.

AudioFinder is quickly and easily installed on a standard desktop machine or laptop; users can immediately begin to create and import new media for search and

analysis, with AudioFinder accommodating up to 100,000 media files. Minimum system requirements include a computer running Windows XP with a 1.8Ghz processor and 2Gbytes of RAM.

BENEFITS

- Reduce the amount of time searching audio and compiling results
- Compile a more complete set of investigation results by including non-CAD calls
- Expand QA efforts by performing targeted topic searches vs. random or live call listening
- Decrease the amount of time spent on open record requests
- Improve the ability to search on names, streets, neighborhoods and cross streets

FEATURES

- Simple interface
- Supports saved searches for on-going usages
- Desktop-based
- No dependency on accurate spelling of names
- Built in, video-based training