

Gracenote Mobile MusicID

Hear it. Find it. Buy it.

Gracenote® offers wireless carriers and service providers a customized mobile solution that enables users to identify and discover new songs. Consumers simply hold up their phone anywhere the music is playing—in a bar, at a party or on the radio. Then a short clip of the music, from any section of the song, is matched to Gracenote's global database of audio fingerprints and music information. Once identified, Gracenote Link™ can be used to automatically connect the user to related content for hearing, viewing and purchase. Music fans get fast access to ringtones, full tracks, videos and all the content that makes mobile music fun.

MOBILE MUSIC RECOGNITION

Waveform Fingerprint Technology

Gracenote Mobile MusicID™ uses a patent-pending waveform fingerprinting and search technology combined with the Gracenote Global Media Database, the world's largest database of music information, to provide a robust, scalable solution. Carriers and service providers can secure dedicated capacity or can access a hosted service operated by Gracenote to share capacity among multiple carriers.

Put the Partner in Control

The partner service provider uses Gracenote Mobile MusicID along with Gracenote Link as the core of a revenue-generating service that they design to meet their needs:

- The partner uses Gracenote Link to associate their own unique content and commerce opportunities to identified songs.
- Partner content can include tracks for download, ringtones, wallpaper, videos, phone skins and other merchandise.
- To make the service even more compelling, the partner can also license additional content such as artist biographies, album art and music news.
- Additionally, Gracenote Discover™ can be utilized to generate recommendations for music, videos and other music-related merchandise that the fan can browse and buy.

How It Works

Step 1: When music fans hear a song they want to identify, they tap a command on the phone keypad to start the audio recognition process, and then hold the phone up to the music source.

Step 2: The phone captures a few seconds of the audio and extracts a waveform fingerprint of the snippet. The snippet can be from any section of the song, even the last few seconds.

Step 3: The fingerprint is sent to the Mobile MusicID recognition service from the service provider that may be located anywhere in the world.

Step 4: The Mobile MusicID recognition server compares the fingerprint to its database of reference fingerprints and responds with the exact match.

Step 5: The artist, song title and related information, as well as content like album art and download links are relayed to the fan.

Mobile MusicID can complete the entire recognition and content linking process in as little as 10 seconds.

A Global Waveform Database

- The Gracenote Media Database currently has waveform fingerprints for over 8 million music tracks and is growing by over 25,000 a week.
- The waveform fingerprint database includes music from countries around the world, providing the greatest diversity in music recognition for a global population.
- Data is delivered in UTF-8 encoded character sets, providing Unicode support for all languages.

What's Included For Software Developers

Software development kits (SDKs) are required to build and implement music recognition applications. A mobile phone handset application or an Interactive Voice Response call-management system integrates Gracenote software to generate audio fingerprints and to connect to the recognition service. The software also retrieves metadata, associated content links, third-party content and recommendations.

- Gracenote Mobile SDK, a set of APIs for generating fingerprints and managing connections to the recognition service. Typical platforms are Windows and Linux.
- (Optional) Gracenote Link, an API to retrieve links to your licensed content upon music identification and includes a content matching service between your content and all the songs within Gracenote Global Media Database.
- (Optional) Gracenote Discover, an API to provide recommendations based on your catalog of licensed content. Discover uses music recognition as the seed for the recommendation and requires Gracenote Link to match your content to the Gracenote Global Media Database.

Mobile Audio Recognition Service

Gracenote operates a generally available search database that is shared by multiple partners. Partners can focus on development of a specialized end-user application and music experience, allowing Gracenote to manage data center, network and system administration for a large number of servers. Partners simply connect to the service with their music recognition applications.

- Operational administration of a very large music recognition system.
- Access to reference database containing millions of songs.
- Constant updates of the latest popular music.
- Technical support resources, including a development environment.

Mobile Music Recognition Software

The same search database software operated by Gracenote can be licensed by a service provider to create a dedicated recognition system. The service provider hosts and manages all operational aspects of the system.

- System software for the Gracenote Audio Fingerprint search database.
- Customized reference fingerprint database, targeting the service provider's desired regions.
- Frequent and on-demand fingerprint updates with the latest popular music relevant to the service provider's regions.
- Technical support resources, including a development environment.