Entourage ACR FAQ

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Common Entourage ACR Questions

Question: How long does it take to identify a show (best, typical, worst, and cached content cases)?

Answer: The best case round-trip time for detecting a live broadcast transition (channel change), generating a fingerprint, querying and receiving a response, is 6-9 seconds. Typical times are 10-12 seconds. Worst case is 15-18 seconds. Cached content can be identified in 3-4 seconds.

Question: Why am I getting multiple matches for one show?

Answer: If the same TV show is on multiple channels, more than one response could be returned. Entourage sorts the first one as the best match, which it determines based on a number of factors. However, it us up to the application to decide which one to display. The Entourage platform is built as a content recognition system (vs. a "channel identification" system).

Question: I can see that the SDK has detected a transition, but I do not see it followed by a query. What is going on?

Answer**:** Though in most cases it does, a query does not always follow a transition. For example, there could be silence after a transition, or not enough audio to generate a fingerprint. A number of other factors also come into play before the SDK generates a query.

Question: How close is the airing position identified to that actually being watched?

Answer: For live broadcast recognition, 1-3 seconds. For a pre-recorded cached show, approximately .5 seconds. Typically, cached precision is within 100 milliseconds of the reference source that was fingerprinted.

Question: How probable is a false-positive (wrong show identified)?

Answer: The probability of a false-positive is extremely low. Our goal is to have no false-positives and we continuously test to ensure that.

Question: Can the Entourage SDK perform in noisy environments?

Answer: The SDK attempts to mitigate background noise, including speech. However, the greater the difference between the TV volume and the background noise, the more likely the SDK is to return a match.

Question: How does the SDK affect battery life and power consumption?

Answer: The SDK continuously analyzes audio with a minimally resource-intensive process. To conserve battery life, fingerprints and queries are sent when "transitions" are detected (e.g. channel changes). To further conserve the battery, the Entourage SDK has options to configure query frequency and network access.

Question: How often does the microphone gather audio samples?

Answer: The Entourage SDK continuously gathers audio samples which it analyzes to detect transitions. When a transition is detected, a fingerprint and query is generated. This is done to ensure channel change detection. Additionally, the Entourage SDK provides real-time descriptors for received audio. Current descriptors include ones for speech, music, noise, and silence ratio. This allows for highly dynamic and interactive applications.

Question: How are the broadcast channels monitored? (On satellite, cable, IP, or terrestrial TV transmission? How many sites?)

Answer: Broadcast Listening Stations predominantly monitor cable and satellite channels with select terrestrial feeds. Entourage focuses on the earliest broadcast for national channels with the lowest delay. Based on business needs, the number of sites, types, and countries will continue to expand.

Question: How long does it takes for a fingerprint generated from an aired show (defined as a terrestrial broadcast for local channels; programmer network satellite uplink for national channels) to become available for matching?

Answer: Typically, it will take 1-3 seconds. The Entourage SDK automatically adjusts a client-side delay so that a match is possible.

Question: How long is a fingerprint stored after a show is aired?

Answer: To support cases where a user is watching content after its airing (e.g., DVR), fingerprints are stored for seven days.

Question: User privacy concern: Does Gracenote collect any information about a user or device requesting a match?

Answer: Gracenote does NOT collect any user information. All requests are anonymous with minimal generic device information returned, e.g., make/OS.

Question: Can the Entourage SDK recognize advertisements?

Answer: Not at this time; future Entourage releases will support this. Currently, the Entourage transition engine is optimized for channel changes and, as such, does not specifically look for an advertisement. If an advertisement is recognized, the associated TV show is returned (not the advertisement).

Question: What operating systems does the Entourage SDK support?

Answer: The Entourage SDK supports Apple iOS and Android OS' devices. It does not officially support TV OS, Set Top Boxes, or DVD/BD devices. There may be support for other operating systems in the future - consult with Gracenote Services & Support for details.

Question: Can I use Slingbox® or Internet streaming sites with Entourage?

Answer: Entourage is designed to work with actual TV broadcasts. Systems such as Slingbox® or Internet streaming sites may work, but are NOT recommended as recognition varies significantly depending on location and other factors.