

☰ Documentation

[Analytics Reports](#) / Streaming Playback Performance

Article

Streaming Playback Performance

Review playback performance when using the AVPlayerItem APIs in your apps.

Overview

You can use the [AVPlayerItem](#) API and others in [AVFoundation](#) to manage the playback of [HTTP Live Streaming](#) (HLS) media assets in apps. The data in this report contains aggregate information about playback performance.

- Privacy Measures: Data for this report is collected from select 3rd party apps. Each data point in this report comes from at least 200 unique playback sessions. Data points with fewer playback sessions are omitted.
- Data Source: Data in this report only comes from devices that opt in to share data with Apple and developers.
- Historical Data: One-time snapshots for this report are available beginning in February 2024, if there are events for the report.

Report Fields

Report Field	Description	Data Type
Session Count	The number of playback sessions	integer
Display Video Range	The video range of playback. Values can be of type: HDR or SDR.	string

Report Field	Description	Data Type
Interface Type	Type of network interface for the playback. Values can be of type: WiFi, Cellular, Loopback, Wired, Cache, or Unknown.	string
Play Type	Type of media. Values can be of type: LIVE, VOD, or Unknown.	string
Average Stall Rate	Average stalls per hours watched	float
Total Play Time	Total amount of content played in hours	float
Indicated Bit Rate Distribution	Distribution of content bit rate, in bits per second, played as indicated in the multi-variant playlist. Values are an array of percentiles: 10th, 25th, 50th, 75th, 95th, 99th.	list of float
Observed Bit Rate Distribution	Distribution of network download bit rate, in bits per second, as observed by the player during playback. Values are an array of percentiles: 10th, 25th, 50th, 75th, 95th, 99th.	list of float
Startup Time Distribution	Distribution of time taken, in milliseconds, for the player to reach ready-to-play state. Values are an array of percentiles: 10th, 25th, 50th, 75th, 95th, 99th.	list of float
Total Stalls Distribution	Distribution of total number of stall events during playback. Values are an array of percentiles: 10th, 25th, 50th, 75th, 95th, 99th.	list of float
Switch Count Distribution	Distribution of the number of variant switches during playback. Values are an array of percentiles: 10th, 25th, 50th, 75th, 95th, 99th.	list of float
Network Error Rate	Rate of recoverable networking errors over all playback sessions	float
Playback Error Rate	Rate of non-recoverable errors over all playback sessions	float
Date	Date when the event occurred	string
Territory	Country or region in which the event occurred	string

Report Field	Description	Data Type
Device	Type of device on which the event occurred	string
Platform Version	Operating System (OS) version on the device on which the event occurred	string
Build Type	Build type of device on which the event occurred	string
Build	Build of device on which the event occurred	string

See Also

Performance

- 📄 [AirPlay Errors](#)
Analyze AirPlay errors in your apps.
- 📄 [AirPlay Performance](#)
Review AirPlay performance in your apps.
- 📄 [App Crashes Expanded](#)
Analyze the rate at which your app crashes.
- 📄 [App Installs Performance](#)
Analyze details about installation success and failure rates for your apps.
- 📄 [App Storage Reads and Writes](#)
Analyze how often your app uses disk reads and writes.
- 📄 [Audio Overloads](#)
Analyze how many audio glitches people experience in your app.
- 📄 [Bluetooth LE Session Duration](#)
Analyze how long your app uses Bluetooth Low Energy (LE) connections.
- 📄 [Bluetooth System Wakes](#)
Analyze details about bluetooth system wakes that your app causes.
- 📄 [CAMetalLayer Performance](#)

Review CAMetalLayer metadata and performance in your app.

 Custom Language Model Builds Failed

Analyze how often your app-triggered rebuild of a custom language model failed.

 Display Power Information

Review your app's impact on display pixel attributes.

 HTTP Live Streaming Playback Errors

Analyze playback errors that your app receives.

 Launch Image Over Memory Limit

Analyze how often your app fails to load because it's over the memory limit.

 Networking Connection Activity

Review how your app uses network connections.

 Spotlight Query Performance

Review how your app uses Spotlight queries.