Timed metadata allows you to build interactivity into live streams. Wowza Streaming Engine™ media server software, the Wowza Streaming Cloud™ service, Wowza GoCoder™ SDK, and Wowza™ Player all support timed metadata in streaming workflows.

The three core workflows are:

**Wowza Streaming Engine to Wowza Streaming Cloud**

Ingest (or inject) AMF metadata into Wowza Streaming Engine and send it to Wowza Streaming Cloud. In Wowza Streaming Cloud, convert the AMF metadata into ID3 tags, transcode the stream into adaptive bitrate renditions, and send the renditions with the timed metadata to a CDN edge resource using HLS.

**Wowza Streaming Engine to a Wowza CDN or HLS stream target**

Ingest (or inject) AMF metadata into Wowza Streaming Engine. Convert the AMF metadata to ID3 and send the ID3 tags with transcoded output renditions for HLS delivery using a Wowza CDN or other edge resource.

**Wowza Streaming Cloud with Ultra Low Latency**

Ingest AMF metadata into a Wowza Streaming Cloud Ultra Low Latency Stream Target. Pass the AMF data to the ultra low latency edge server with the WOWZ stream, and convert it to ID3 and send those tags with the HLS backup stream.

Use the following articles to achieve these and other timed metadata workflows, including getting AMF metadata into Wowza Streaming Engine and Wowza Streaming Cloud from Wowza GoCoder SDK, and sending streams with timed metadata to Wowza Player:

- [About timed metadata in Wowza live streaming workflows](#)
- [Inject timed metadata using a Wowza Streaming Engine HTTP provider](#)
- [Convert timed metadata from AMF to ID3 using the Wowza Streaming Engine Java API](#)
• Ingest and convert timed metadata with the Wowza Streaming Cloud REST API
• Use timed metadata with an ultra low latency stream target in Wowza Streaming Cloud
• Send and receive events with Wowza GoCoder SDK for iOS
• Send and receive events with Wowza GoCoder SDK for Android
• Listen for metadata and trigger an action with the Wowza Player JavaScript API