

[AI & Machine Learning Products](https://cloud.google.com/products/machine-learning/) (https://cloud.google.com/products/machine-learning/)

[Cloud Video Intelligence API](https://cloud.google.com/video-intelligence/) (https://cloud.google.com/video-intelligence/)

[Documentation](https://cloud.google.com/video-intelligence/docs/) (https://cloud.google.com/video-intelligence/docs/) [Guides](#)

# Streaming video annotation to storage

## Beta

This feature is in a pre-release state and might change or have limited support. For more information, see the [product launch stages](https://cloud.google.com/products/#product-launch-stages) (https://cloud.google.com/products/#product-launch-stages).

The Video Intelligence API allows you to specify a Cloud Storage bucket that will hold the results of your streaming video annotation.

The following code sample demonstrates how to configure your video annotation request to store the result in Cloud Storage.

JAVA

NODE.JS

PYTHON

ER/VIDEO/BETA/SRC/MAIN/JAVA/COM/EXAMPLE/VIDEO/STREAMINGANNOTATIONTOSTORAGE.JAVA)

FEEDBACK (#)

```
import com.google.api.gax.rpc.BidiStream;
import com.google.cloud.videointelligence.v1p3beta1.StreamingAnnotateVideoRequest;
import com.google.cloud.videointelligence.v1p3beta1.StreamingAnnotateVideoResponse;
import com.google.cloud.videointelligence.v1p3beta1.StreamingFeature;
import com.google.cloud.videointelligence.v1p3beta1.StreamingLabelDetectionConfig;
import com.google.cloud.videointelligence.v1p3beta1.StreamingStorageConfig;
import com.google.cloud.videointelligence.v1p3beta1.StreamingVideoConfig;
import com.google.cloud.videointelligence.v1p3beta1.StreamingVideoIntelligenceServ
import com.google.protobuf.ByteString;
import java.io.IOException;
import java.nio.file.Files;
import java.nio.file.Path;
import java.nio.file.Paths;
import java.util.Arrays;

public class StreamingAnnotationToStorage {
```

```
// Perform streaming video detection for explicit content
static void streamingAnnotationToStorage(String filePath, String gcsUri) {
    // String filePath = "path_to_your_video_file";
    // String gcsUri = "gs://BUCKET_ID";

    try (StreamingVideoIntelligenceServiceClient client =
        StreamingVideoIntelligenceServiceClient.create()) {

        Path path = Paths.get(filePath);
        byte[] data = Files.readAllBytes(path);
        // Set the chunk size to 5MB (recommended less than 10MB).
        int chunkSize = 5 * 1024 * 1024;
        int numChunks = (int) Math.ceil((double) data.length / chunkSize);

        StreamingStorageConfig streamingStorageConfig = StreamingStorageConfig.newBuilder()
            .setEnableStorageAnnotationResult(true)
            .setAnnotationResultStorageDirectory(gcsUri)
            .build();

        StreamingLabelDetectionConfig labelConfig = StreamingLabelDetectionConfig.newBuilder()
            .setStationaryCamera(false)
            .build();

        StreamingVideoConfig streamingVideoConfig = StreamingVideoConfig.newBuilder()
            .setFeature(StreamingFeature.STREAMING_LABEL_DETECTION)
            .setLabelDetectionConfig(labelConfig)
            .setStorageConfig(streamingStorageConfig)
            .build();

        BidiStream<StreamingAnnotateVideoRequest, StreamingAnnotateVideoResponse> call
            client.streamingAnnotateVideoCallable().call();

        // The first request must only contain the audio configuration:
        call.send(
            StreamingAnnotateVideoRequest.newBuilder()
                .setVideoConfig(streamingVideoConfig)
                .build());

        // Subsequent requests must only contain the audio data.
        // Send the requests in chunks
        for (int i = 0; i < numChunks; i++) {
            call.send(
                StreamingAnnotateVideoRequest.newBuilder()
                    .setInputContent(ByteString.copyFrom(
                        Arrays.copyOfRange(data, i * chunkSize, i * chunkSize + chunkS
```

```
        .build());
    }

    // Tell the service you are done sending data
    call.closeSend();

    for (StreamingAnnotateVideoResponse response : call) {
        System.out.format("Storage Uri: %s\n", response.getAnnotationResultsUri())
    }
} catch (IOException e) {
    e.printStackTrace();
}
}
```

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