



CHAPTER 8

Pulse Video Analytics APIs

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Note

Pulse Video Analytics APIs are available in Release 3.3.

This chapter describes the Pulse video analytics APIs, and contains the following information:

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Job Submission

Use this API to submit a job to Pulse video analytics.

URL Template

`http://hostname/analytics/submit?docType=ANA&filepath=location_of_the_file_with_file_name`

HTTP Method

POST

Example

`http://hostname/analytics/submit?docType=ANA&filepath=/absolute/path/to/the/file/video.flv`

Response Example

```
<?xml version="1.0" encoding="UTF-8" standalone="no"?>
<job>
<ncpDocId>f64c4bb318a36271c93cc52708322d5a</ncpDocId>
<statusCode>1000<statusCode><message> Job submitted for processing</message>
</job>
```

Parameters

Request Fields	Description
docType	Type of document.
filepath	Location of the file with the file name.
Response Fields	Description
ncpDocId	Document ID generated by the system.
statusCode	The following status codes may be returned: <ul style="list-style-type: none"> 1000—The job was submitted successfully. 1001—The job submission failed.
message	The following status messages may be returned: <ul style="list-style-type: none"> Job submitted for processing. Job submission failed.

HTTP Response Codes

HTTP Response 200 – Successful update

HTTP Response 400 – Missing/invalid parameters

Job cancelation

Use this API to cancel a job in Pulse video analytics.

URL Template

`http://hostname:port/analytics/cancel?docID=document_ID`

HTTP Method

POST

Example

`http://hostname:port/analytics/cancel?docID= f64c4bb318a36271c93cc52708322d5a`

Response Example

```
<?xml version="1.0 encoding="UTF-8"
standalone="no"?><job><responseCode>2000</responseCode></job>
```

Parameters

Request Fields	Description
docID	Document ID generated by the system when the document is submitted.

Response Fields	Description
responseCode	The following response codes may be returned: <ul style="list-style-type: none"> • 2000—The job was cancelled successfully. • 2001—Failed to cancel the job. • 2002—The job was not found.

HTTP response Codes

HTTP Response 200—Successful update

HTTP Response 400—Missing/invalid parameters

Get Analytics

Use this API to get the analytics data for a given video ID.

URL Template

`http://hostname/analytics/search?qtype=video&docID=ncpDocID`

HTTP Method

GET

Example

`http://hostname/analytics/search?qtype=video&docID= f64c4bb318a36271c93cc52708322d5a`

Response Example

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<feed xmlns:opensearch="http://a9.com/-/spec/opensearch/1.1/"
xmlns="http://www.w3.org/2005/Atom" xmlns:pulse="http://www.cisco.com/nc/pulse">
  <id>05730d81-2372-4008-9968-33e0155af639</id>
  <title>Cisco Pulse video match for: [governments]</title>
  ....
  <pulse:videoTags>
    <pulse:videoTag>
      <pulse:tag>agency</pulse:tag>
      <pulse:occurrenceCount>3</pulse:occurrenceCount>
      <pulse:occurrence>
        <pulse:time>4064</pulse:time>
        <pulse:confidence>1.0</pulse:confidence>
      </pulse:occurrence>
      <pulse:occurrence>
        <pulse:time>4457</pulse:time>
        <pulse:confidence>1.0</pulse:confidence>
      </pulse:occurrence>
    </pulse:videoTag>
  </pulse:videoTags>
</feed>
```

```

    </pulse:occurrence>
  <pulse:occurrence>
    <pulse:time>5430</pulse:time>
    <pulse:confidence>1.0</pulse:confidence>
  </pulse:occurrence>
</pulse:videoTag>
...
<pulse:speakerSeg>
  <pulse:startTime>51</pulse:startTime>
  <pulse:endTime>259</pulse:endTime>
  <pulse:speakerId>100048</pulse:speakerId>
  <pulse:confidence>1.14498</pulse:confidence>
</pulse:speakerSeg>
<pulse:speakerSeg>
  <pulse:startTime>259</pulse:startTime>
  <pulse:endTime>261</pulse:endTime>
  <pulse:speakerId>0</pulse:speakerId>
  <pulse:confidence>0.0</pulse:confidence>
</pulse:speakerSeg>
...
<pulse:speakerIDMap>
  <pulse:speakerID>100048</pulse:speakerID>
  <pulse:speakerName>michel</pulse:speakerName>
</pulse:speakerIDMap>
...
</feed>

```

Parameters

Request Fields	Description
qtype	This is always video.
docID	Document ID generated by the system when the document is submitted.
Response Fields	Description
pulse:videoTag	
Identifies the keywords in a video. A video may contain multiple keywords. Each keyword may occur multiple times.	
pulse:tag	Identifies the tagged keyword.
pulse:occurrenceCount	Number of times the the keyword was spoken.

pulse:time	Time when the keyword occurred.
pulse:confidence	This field is currently not used.

pulse:speakerSeg

Identifies the speech segments in the video. A video may have multiple speakers. Each speaker may speak multiple times at different time intervals. Each speaker is identified by a unique number.

pulse:startTime	Time in the video when the speaker started speaking.
pulse:endTime	Time in the video when the speaker stopped speaking.
pulse:speakerId	Unique speaker ID (number) generated by the system.
pulse:confidence	This field is currently not used.

pulse:speakerIDMap

Identifies the speech segments in the video. A video may have multiple speakers. Each speaker may speak multiple times at different time intervals. Each speaker is identified by a unique number. This is used to automatically map a name to a speaker in the video.

pulse:speakerID	Unique speaker ID (number) generated by the system.
pulse:speakerName	Speaker name provided by the user.

HTTP response Codes

HTTP Response 200—Successful update

HTTP Response 400—Missing/invalid parameters

Get status

Use this API to get a status for the submitted Job in Pulse video analytics.

URL Template

`http://hostname/analytics/status?docID= ncpDocID`

HTTP Method

POST

Example

`http://hostname/analytics/status?docID= f64c4bb318a36271c93cc52708322d5a`

Response Example

```
<?xml version="1.0 encoding="UTF-8" standalone="no"?><job><statusCode>1001</statusCode>
<message>Processing the media analytics </message></job>
```

Parameters

Request Fields	Description
docID	Document ID generated by the system when the document is submitted.

Response Fields	Description
statusCode	The following status codes may be returned: <ul style="list-style-type: none"> • 1000—The job was submitted successfully. • 1100—The job is processing. • 1200—The job was completed successfully. • 1300—The job failed.
message	The following status messages may be returned: <ul style="list-style-type: none"> • Processing the media analytics.

HTTP Response Codes

HTTP Response 200—Successful update

HTTP Response 400—Missing/invalid parameters

Speaker Mapping Update

Use this API to update all videos to map the speaker ID to the speaker name.

URL Template

http://hostname/analytics/mapSpeaker

HTTP Method

PUT

PUT Data

The PUT data is text using the following XML schema:

```
<?xml version="1.0" encoding="UTF-8" ?>
<xs:schema xmlns:xs="http://www.w3.org/2001/XMLSchema">

  <xs:element name="speakerMappings" minOccurs="1" maxOccurs="1">
    <xs:complexType>
      <xs:sequence>
        <xs:element name="speakerMapping" minOccurs="0" maxOccurs="unbounded">
          <xs:complexType>
            <xs:sequence>
              <xs:element name="speakerId" type="xs:string" minOccurs="1" maxOccurs="1"/>
              <xs:element name="givenName" type="xs:string" minOccurs="1" maxOccurs="1"/>
              <xs:element name="lastName" type="xs:string" minOccurs="0" maxOccurs="1"/>
              <xs:element name="nickname" type="xs:string" minOccurs="0" maxOccurs="1"/>
              <xs:element name="email" type="xs:string" minOccurs="0" maxOccurs="1"/>
            </xs:sequence>
          </xs:complexType>
        </xs:element>
      </xs:sequence>
    </xs:complexType>
  </xs:element>
</xs:schema>
```

```

        </xs:complexType>
    </xs:element>
</xs:sequence>
</xs:complexType>
</xs:element>

</xs:schema>

```

Example

The following is sample PUT data:

```

<speakerMappings>
  <speakerMapping>
    <speakerId>1</speakerId>
    <givenName>John</givenName>
    <lastName>Doe</lastName>
    <nickname>Johnny</nickname>
    <email>jdoe@company.com</email>
  </speakerMapping>
  <speakerMapping>
    <speakerId>5</speakerId>
    <givenName>Jane Doe</givenName>
  </speakerMapping>
</speakerMappings>

```

Parameters

Request Fields	Description
speakerId	Speaker ID generated by the system.
givenName	Name provided by the user.
lastName	Name provided by the user.
nickname	Name provided by the user.
email	Email address provided by the user.

HTTP Response Codes

HTTP Response 200—Successful update

HTTP Response 400—Missing/invalid parameters

HTTP Response 401—Unauthorized

