



Real-Time Streaming API Reference

# Amazon IVS



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# Amazon IVS: Real-Time Streaming API Reference

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# Welcome

The Amazon Interactive Video Service (IVS) real-time API is REST compatible, using a standard HTTP API and an AWS EventBridge event stream for responses. JSON is used for both requests and responses, including errors.

## Key Concepts

- **Stage** — A virtual space where participants can exchange video in real time.
- **Participant token** — A token that authenticates a participant when they join a stage.
- **Participant object** — Represents participants (people) in the stage and contains information about them. When a token is created, it includes a participant ID; when a participant uses that token to join a stage, the participant is associated with that participant ID. There is a 1:1 mapping between participant tokens and participants.

For server-side composition:

- **Composition process** — Composites participants of a stage into a single video and forwards it to a set of outputs (e.g., IVS channels). Composition operations support this process.
- **Composition** — Controls the look of the outputs, including how participants are positioned in the video.

For participant replication:

- **Source stage** — The stage where the participant originally joined, which is used as the source for replication.
- **Destination stage** — The stage to which the participant is replicated.
- **Replicated participant** — A participant in a stage that is replicated to one or more destination stages.
- **Replica participant** — A participant in a destination stage that is replicated from another stage (the source stage).

For more information about your IVS live stream, also see [Getting Started with Amazon IVS Real-Time Streaming](#).

## Tagging

A *tag* is a metadata label that you assign to an AWS resource. A tag comprises a *key* and a *value*, both set by you. For example, you might set a tag as `topic:nature` to label a particular video category. See [Best practices and strategies](#) in *Tagging AWS Resources and Tag Editor* for details, including restrictions that apply to tags and "Tag naming limits and requirements"; Amazon IVS stages has no service-specific constraints beyond what is documented there.

Tags can help you identify and organize your AWS resources. For example, you can use the same tag for different resources to indicate that they are related. You can also use tags to manage access (see [Access Tags](#)).

The Amazon IVS real-time API has these tag-related operations: [TagResource](#), [UntagResource](#), and [ListTagsForResource](#). The following resource supports tagging: Stage.

At most 50 tags can be applied to a resource.

This document was last published on May 1, 2026.

# Actions

The following actions are supported:

- [CreateEncoderConfiguration](#)
- [CreateIngestConfiguration](#)
- [CreateParticipantToken](#)
- [CreateStage](#)
- [CreateStorageConfiguration](#)
- [DeleteEncoderConfiguration](#)
- [DeleteIngestConfiguration](#)
- [DeletePublicKey](#)
- [DeleteStage](#)
- [DeleteStorageConfiguration](#)
- [DisconnectParticipant](#)
- [GetComposition](#)
- [GetEncoderConfiguration](#)
- [GetIngestConfiguration](#)
- [GetParticipant](#)
- [GetPublicKey](#)
- [GetStage](#)
- [GetStageSession](#)
- [GetStorageConfiguration](#)
- [ImportPublicKey](#)
- [ListCompositions](#)
- [ListEncoderConfigurations](#)
- [ListIngestConfigurations](#)
- [ListParticipantEvents](#)
- [ListParticipantReplicas](#)
- [ListParticipants](#)
- [ListPublicKeys](#)

- [ListStages](#)
- [ListStageSessions](#)
- [ListStorageConfigurations](#)
- [ListTagsForResource](#)
- [StartComposition](#)
- [StartParticipantReplication](#)
- [StopComposition](#)
- [StopParticipantReplication](#)
- [TagResource](#)
- [UntagResource](#)
- [UpdateIngestConfiguration](#)
- [UpdateStage](#)

# CreateEncoderConfiguration

Creates an EncoderConfiguration object.

## Request Syntax

```
POST /CreateEncoderConfiguration HTTP/1.1
Content-type: application/json
```

```
{
  "name": "string",
  "tags": {
    "string" : "string"
  },
  "video": {
    "bitrate": number,
    "framerate": number,
    "height": number,
    "width": number
  }
}
```

## URI Request Parameters

The request does not use any URI parameters.

## Request Body

The request accepts the following data in JSON format.

### name

Optional name to identify the resource.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 128.

Pattern: [a-zA-Z0-9-\_\*]

Required: No

## tags

Tags attached to the resource. Array of maps, each of the form `string:string` (key:value). See [Best practices and strategies](#) in *Tagging AWS Resources and Tag Editor* for details, including restrictions that apply to tags and "Tag naming limits and requirements"; Amazon IVS has no constraints on tags beyond what is documented there.

Type: String to string map

Map Entries: Minimum number of 0 items. Maximum number of 50 items.

Key Length Constraints: Minimum length of 1. Maximum length of 128.

Value Length Constraints: Minimum length of 0. Maximum length of 256.

Required: No

## video

Video configuration. Default: video resolution 1280x720, bitrate 2500 kbps, 30 fps.

Type: [Video](#) object

Required: No

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "encoderConfiguration": {
    "arn": "string",
    "name": "string",
    "tags": {
      "string": "string"
    },
    "video": {
      "bitrate": number,
      "framerate": number,
      "height": number,
      "width": number
    }
  }
}
```

```
}  
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### [encoderConfiguration](#)

The EncoderConfiguration that was created.

Type: [EncoderConfiguration](#) object

## Errors

For information about the errors that are common to all actions, see [Common Error Types](#).

### **AccessDeniedException**

#### **exceptionMessage**

User does not have sufficient access to perform this action.

HTTP Status Code: 403

### **ConflictException**

#### **exceptionMessage**

Updating or deleting a resource can cause an inconsistent state.

HTTP Status Code: 409

### **InternalServerError**

#### **exceptionMessage**

Unexpected error during processing of request.

HTTP Status Code: 500

## PendingVerification

### exceptionMessage

Your account is pending verification.

HTTP Status Code: 403

## ResourceNotFoundException

### exceptionMessage

Request references a resource which does not exist.

HTTP Status Code: 404

## ServiceQuotaExceededException

### exceptionMessage

Request would cause a service quota to be exceeded.

HTTP Status Code: 402

## ValidationException

### exceptionMessage

The input fails to satisfy the constraints specified by an AWS service.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface V2](#)
- [AWS SDK for .NET V4](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)

- [AWS SDK for JavaScript V3](#)
- [AWS SDK for Kotlin](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# CreateIngestConfiguration

Creates a new IngestConfiguration resource, used to specify the ingest protocol for a stage.

## Request Syntax

```
POST /CreateIngestConfiguration HTTP/1.1
```

```
Content-type: application/json
```

```
{
  "attributes": {
    "string" : "string"
  },
  "ingestProtocol": "string",
  "insecureIngest": boolean,
  "name": "string",
  "redundantIngest": boolean,
  "stageArn": "string",
  "tags": {
    "string" : "string"
  },
  "userId": "string"
}
```

## URI Request Parameters

The request does not use any URI parameters.

## Request Body

The request accepts the following data in JSON format.

### attributes

Application-provided attributes to store in the IngestConfiguration and attach to a stage. Map keys and values can contain UTF-8 encoded text. The maximum length of this field is 1 KB total. *This field is exposed to all stage participants and should not be used for personally identifying, confidential, or sensitive information.*

Type: String to string map

Required: No

## ingestProtocol

Type of ingest protocol that the user employs to broadcast. If this is set to `RTMP`, `insecureIngest` must be set to `true`.

Type: String

Valid Values: `RTMP` | `RTMPS`

Required: Yes

## insecureIngest

Whether the stage allows insecure RTMP ingest. This must be set to `true`, if `ingestProtocol` is set to `RTMP`. Default: `false`.

Type: Boolean

Required: No

## name

Optional name that can be specified for the `IngestConfiguration` being created.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 128.

Pattern: `[a-zA-Z0-9-_*]`

Required: No

## redundantIngest

Indicates whether redundant ingest is enabled for the ingest configuration. Default: `false`.

Type: Boolean

Required: No

## stageArn

ARN of the stage with which the `IngestConfiguration` is associated.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 128.

Pattern: `^$|^arn:aws:ivs:[a-z0-9-]+:[0-9]+:stage/[a-zA-Z0-9-]+$`

Required: No

### tags

Tags attached to the resource. Array of maps, each of the form `string:string` (`key:value`). See [Best practices and strategies](#) in *Tagging AWS Resources and Tag Editor* for details, including restrictions that apply to tags and "Tag naming limits and requirements"; Amazon IVS has no constraints on tags beyond what is documented there.

Type: String to string map

Map Entries: Minimum number of 0 items. Maximum number of 50 items.

Key Length Constraints: Minimum length of 1. Maximum length of 128.

Value Length Constraints: Minimum length of 0. Maximum length of 256.

Required: No

### userId

Customer-assigned name to help identify the participant using the `IngestConfiguration`; this can be used to link a participant to a user in the customer's own systems. This can be any UTF-8 encoded text. *This field is exposed to all stage participants and should not be used for personally identifying, confidential, or sensitive information.*

Type: String

Length Constraints: Minimum length of 0. Maximum length of 128.

Required: No

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "ingestConfiguration": {
```

```
"arn": "string",
"attributes": {
  "string" : "string"
},
"ingestProtocol": "string",
"name": "string",
"participantId": "string",
"redundantIngest": boolean,
"redundantIngestCredentials": [
  {
    "participantId": "string",
    "streamKey": "string"
  }
],
"stageArn": "string",
"state": "string",
"streamKey": "string",
"tags": {
  "string" : "string"
},
"userId": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### ingestConfiguration

The IngestConfiguration that was created.

Type: [IngestConfiguration](#) object

## Errors

For information about the errors that are common to all actions, see [Common Error Types](#).

### AccessDeniedException

**exceptionMessage**

User does not have sufficient access to perform this action.

HTTP Status Code: 403

**PendingVerification****exceptionMessage**

Your account is pending verification.

HTTP Status Code: 403

**ServiceQuotaExceededException****exceptionMessage**

Request would cause a service quota to be exceeded.

HTTP Status Code: 402

**ValidationException****exceptionMessage**

The input fails to satisfy the constraints specified by an AWS service.

HTTP Status Code: 400

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface V2](#)
- [AWS SDK for .NET V4](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)

- [AWS SDK for Kotlin](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# CreateParticipantToken

Creates an additional token for a specified stage. This can be done after stage creation or when tokens expire. Tokens always are scoped to the stage for which they are created.

Encryption keys are owned by Amazon IVS and never used directly by your application.

## Request Syntax

```
POST /CreateParticipantToken HTTP/1.1
```

```
Content-type: application/json
```

```
{
  "attributes": {
    "string" : "string"
  },
  "capabilities": [ "string" ],
  "duration": number,
  "stageArn": "string",
  "userId": "string"
}
```

## URI Request Parameters

The request does not use any URI parameters.

## Request Body

The request accepts the following data in JSON format.

### attributes

Application-provided attributes to encode into the token and attach to a stage. Map keys and values can contain UTF-8 encoded text. The maximum length of this field is 1 KB total. *This field is exposed to all stage participants and should not be used for personally identifying, confidential, or sensitive information.*

Type: String to string map

Required: No

## capabilities

Set of capabilities that the user is allowed to perform in the stage. Default: PUBLISH, SUBSCRIBE.

Type: Array of strings

Array Members: Minimum number of 0 items. Maximum number of 2 items.

Valid Values: PUBLISH | SUBSCRIBE

Required: No

## duration

Duration (in minutes), after which the token expires. Default: 720 (12 hours).

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 20160.

Required: No

## stageArn

ARN of the stage to which this token is scoped.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `arn:aws:ivs:[a-z0-9-]+:[0-9]+:stage/[a-zA-Z0-9-]+`

Required: Yes

## userId

Name that can be specified to help identify the token. This can be any UTF-8 encoded text. *This field is exposed to all stage participants and should not be used for personally identifying, confidential, or sensitive information.*

Type: String

Length Constraints: Minimum length of 0. Maximum length of 128.

Required: No

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "participantToken": {
    "attributes": {
      "string" : "string"
    },
    "capabilities": [ "string" ],
    "duration": number,
    "expirationTime": "string",
    "participantId": "string",
    "token": "string",
    "userId": "string"
  }
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### participantToken

The participant token that was created.

Type: [ParticipantToken](#) object

## Errors

For information about the errors that are common to all actions, see [Common Error Types](#).

### AccessDeniedException

#### exceptionMessage

User does not have sufficient access to perform this action.

HTTP Status Code: 403

## PendingVerification

### exceptionMessage

Your account is pending verification.

HTTP Status Code: 403

## ResourceNotFoundException

### exceptionMessage

Request references a resource which does not exist.

HTTP Status Code: 404

## ServiceQuotaExceededException

### exceptionMessage

Request would cause a service quota to be exceeded.

HTTP Status Code: 402

## ValidationException

### exceptionMessage

The input fails to satisfy the constraints specified by an AWS service.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface V2](#)
- [AWS SDK for .NET V4](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)

- [AWS SDK for JavaScript V3](#)
- [AWS SDK for Kotlin](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# CreateStage

Creates a new stage (and optionally participant tokens).

## Request Syntax

```
POST /CreateStage HTTP/1.1
Content-type: application/json

{
  "autoParticipantRecordingConfiguration": {
    "hlsConfiguration": {
      "targetSegmentDurationSeconds": number
    },
    "mediaTypes": [ "string" ],
    "recordingReconnectWindowSeconds": number,
    "recordParticipantReplicas": boolean,
    "storageConfigurationArn": "string",
    "thumbnailConfiguration": {
      "recordingMode": "string",
      "storage": [ "string" ],
      "targetIntervalSeconds": number
    }
  },
  "name": "string",
  "participantTokenConfigurations": [
    {
      "attributes": {
        "string" : "string"
      },
      "capabilities": [ "string" ],
      "duration": number,
      "userId": "string"
    }
  ],
  "tags": {
    "string" : "string"
  }
}
```

## URI Request Parameters

The request does not use any URI parameters.

## Request Body

The request accepts the following data in JSON format.

### autoParticipantRecordingConfiguration

Configuration object for individual participant recording, to attach to the new stage.

Type: [AutoParticipantRecordingConfiguration](#) object

Required: No

#### name

Optional name that can be specified for the stage being created.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 128.

Pattern: [a-zA-Z0-9-\_\*]

Required: No

### participantTokenConfigurations

Array of participant token configuration objects to attach to the new stage.

Type: Array of [ParticipantTokenConfiguration](#) objects

Array Members: Minimum number of 0 items. Maximum number of 12 items.

Required: No

#### tags

Tags attached to the resource. Array of maps, each of the form `string:string` (key:value). See [Best practices and strategies](#) in *Tagging AWS Resources and Tag Editor* for details, including restrictions that apply to tags and "Tag naming limits and requirements"; Amazon IVS has no constraints on tags beyond what is documented there.

Type: String to string map

Map Entries: Minimum number of 0 items. Maximum number of 50 items.

Key Length Constraints: Minimum length of 1. Maximum length of 128.

Value Length Constraints: Minimum length of 0. Maximum length of 256.

Required: No

## Response Syntax

```
HTTP/1.1 200
```

```
Content-type: application/json
```

```
{
  "participantTokens": [
    {
      "attributes": {
        "string" : "string"
      },
      "capabilities": [ "string" ],
      "duration": number,
      "expirationTime": "string",
      "participantId": "string",
      "token": "string",
      "userId": "string"
    }
  ],
  "stage": {
    "activeSessionId": "string",
    "arn": "string",
    "autoParticipantRecordingConfiguration": {
      "hlsConfiguration": {
        "targetSegmentDurationSeconds": number
      },
      "mediaTypes": [ "string" ],
      "recordingReconnectWindowSeconds": number,
      "recordParticipantReplicas": boolean,
      "storageConfigurationArn": "string",
      "thumbnailConfiguration": {
        "recordingMode": "string",
        "storage": [ "string" ],
        "targetIntervalSeconds": number
      }
    }
  }
}
```

```
    },
    "endpoints": {
      "events": "string",
      "rtmp": "string",
      "rtmps": "string",
      "whip": "string"
    },
    "name": "string",
    "tags": {
      "string" : "string"
    }
  }
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### participantTokens

Participant tokens attached to the stage. These correspond to the participants in the request.

Type: Array of [ParticipantToken](#) objects

### stage

The stage that was created.

Type: [Stage](#) object

## Errors

For information about the errors that are common to all actions, see [Common Error Types](#).

### **AccessDeniedException**

#### **exceptionMessage**

User does not have sufficient access to perform this action.

HTTP Status Code: 403

### **PendingVerification**

#### **exceptionMessage**

Your account is pending verification.

HTTP Status Code: 403

### **ServiceQuotaExceededException**

#### **exceptionMessage**

Request would cause a service quota to be exceeded.

HTTP Status Code: 402

### **ValidationException**

#### **exceptionMessage**

The input fails to satisfy the constraints specified by an AWS service.

HTTP Status Code: 400

## **See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface V2](#)
- [AWS SDK for .NET V4](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for Kotlin](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)

- [AWS SDK for Ruby V3](#)

# CreateStorageConfiguration

Creates a new storage configuration, used to enable recording to Amazon S3. When a StorageConfiguration is created, IVS will modify the S3 bucketPolicy of the provided bucket. This will ensure that IVS has sufficient permissions to write content to the provided bucket.

## Request Syntax

```
POST /CreateStorageConfiguration HTTP/1.1
Content-type: application/json
```

```
{
  "name": "string",
  "s3": {
    "bucketName": "string"
  },
  "tags": {
    "string" : "string"
  }
}
```

## URI Request Parameters

The request does not use any URI parameters.

## Request Body

The request accepts the following data in JSON format.

### name

Storage configuration name. The value does not need to be unique.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 128.

Pattern: [a-zA-Z0-9-\_\*]

Required: No

## s3

A complex type that contains a storage configuration for where recorded video will be stored.

Type: [S3StorageConfiguration](#) object

Required: Yes

## tags

Tags attached to the resource. Array of maps, each of the form `string:string` (key:value). See [Best practices and strategies](#) in *Tagging AWS Resources and Tag Editor* for details, including restrictions that apply to tags and "Tag naming limits and requirements"; Amazon IVS has no constraints on tags beyond what is documented there.

Type: String to string map

Map Entries: Minimum number of 0 items. Maximum number of 50 items.

Key Length Constraints: Minimum length of 1. Maximum length of 128.

Value Length Constraints: Minimum length of 0. Maximum length of 256.

Required: No

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json
```

```
{
  "storageConfiguration": {
    "arn": "string",
    "name": "string",
    "s3": {
      "bucketName": "string"
    },
    "tags": {
      "string": "string"
    }
  }
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### storageConfiguration

The StorageConfiguration that was created.

Type: [StorageConfiguration](#) object

## Errors

For information about the errors that are common to all actions, see [Common Error Types](#).

### AccessDeniedException

#### exceptionMessage

User does not have sufficient access to perform this action.

HTTP Status Code: 403

### ConflictException

#### exceptionMessage

Updating or deleting a resource can cause an inconsistent state.

HTTP Status Code: 409

### InternalServerError

#### exceptionMessage

Unexpected error during processing of request.

HTTP Status Code: 500

### PendingVerification

**exceptionMessage**

Your account is pending verification.

HTTP Status Code: 403

**ResourceNotFoundException****exceptionMessage**

Request references a resource which does not exist.

HTTP Status Code: 404

**ServiceQuotaExceededException****exceptionMessage**

Request would cause a service quota to be exceeded.

HTTP Status Code: 402

**ValidationException****exceptionMessage**

The input fails to satisfy the constraints specified by an AWS service.

HTTP Status Code: 400

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface V2](#)
- [AWS SDK for .NET V4](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)

- [AWS SDK for Kotlin](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# DeleteEncoderConfiguration

Deletes an EncoderConfiguration resource. Ensures that no Compositions are using this template; otherwise, returns an error.

## Request Syntax

```
POST /DeleteEncoderConfiguration HTTP/1.1
Content-type: application/json

{
  "arn": "string"
}
```

## URI Request Parameters

The request does not use any URI parameters.

## Request Body

The request accepts the following data in JSON format.

### arn

ARN of the EncoderConfiguration.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `arn:aws:ivs:[a-z0-9-]+:[0-9]+:encoder-configuration/[a-zA-Z0-9-]+`

Required: Yes

## Response Syntax

```
HTTP/1.1 200
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

## Errors

For information about the errors that are common to all actions, see [Common Error Types](#).

### AccessDeniedException

#### exceptionMessage

User does not have sufficient access to perform this action.

HTTP Status Code: 403

### ConflictException

#### exceptionMessage

Updating or deleting a resource can cause an inconsistent state.

HTTP Status Code: 409

### InternalServerError

#### exceptionMessage

Unexpected error during processing of request.

HTTP Status Code: 500

### ResourceNotFoundException

#### exceptionMessage

Request references a resource which does not exist.

HTTP Status Code: 404

### ServiceQuotaExceededException

#### exceptionMessage

Request would cause a service quota to be exceeded.

HTTP Status Code: 402

### ValidationException

## **exceptionMessage**

The input fails to satisfy the constraints specified by an AWS service.

HTTP Status Code: 400

## **See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface V2](#)
- [AWS SDK for .NET V4](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for Kotlin](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# DeleteIngestConfiguration

Deletes a specified IngestConfiguration, so it can no longer be used to broadcast. An IngestConfiguration cannot be deleted if the publisher is actively streaming to a stage, unless `force` is set to `true`.

## Request Syntax

```
POST /DeleteIngestConfiguration HTTP/1.1
Content-type: application/json

{
  "arn": "string",
  "force": boolean
}
```

## URI Request Parameters

The request does not use any URI parameters.

## Request Body

The request accepts the following data in JSON format.

### arn

ARN of the IngestConfiguration.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `arn:aws:ivs:[a-z0-9-]+:[0-9]+:ingest-configuration/[a-zA-Z0-9-]+`

Required: Yes

### force

Optional field to force deletion of the IngestConfiguration. If this is set to `true` when a participant is actively publishing, the participant is disconnected from the stage, followed by deletion of the IngestConfiguration. Default: `false`.

Type: Boolean

Required: No

## Response Syntax

```
HTTP/1.1 200
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

## Errors

For information about the errors that are common to all actions, see [Common Error Types](#).

### AccessDeniedException

#### exceptionMessage

User does not have sufficient access to perform this action.

HTTP Status Code: 403

### ConflictException

#### exceptionMessage

Updating or deleting a resource can cause an inconsistent state.

HTTP Status Code: 409

### PendingVerification

#### exceptionMessage

Your account is pending verification.

HTTP Status Code: 403

### ResourceNotFoundException

## **exceptionMessage**

Request references a resource which does not exist.

HTTP Status Code: 404

## **ValidationException**

### **exceptionMessage**

The input fails to satisfy the constraints specified by an AWS service.

HTTP Status Code: 400

## **See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface V2](#)
- [AWS SDK for .NET V4](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for Kotlin](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

## DeletePublicKey

Deletes the specified public key used to sign stage participant tokens. This invalidates future participant tokens generated using the key pair's private key.

### Request Syntax

```
POST /DeletePublicKey HTTP/1.1
Content-type: application/json

{
  "arn": "string"
}
```

### URI Request Parameters

The request does not use any URI parameters.

### Request Body

The request accepts the following data in JSON format.

#### arn

ARN of the public key to be deleted.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `arn:aws:ivs:[a-z0-9-]+:[0-9]+:public-key/[a-zA-Z0-9-]+`

Required: Yes

### Response Syntax

```
HTTP/1.1 200
```

### Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

## Errors

For information about the errors that are common to all actions, see [Common Error Types](#).

### AccessDeniedException

#### exceptionMessage

User does not have sufficient access to perform this action.

HTTP Status Code: 403

### ConflictException

#### exceptionMessage

Updating or deleting a resource can cause an inconsistent state.

HTTP Status Code: 409

### PendingVerification

#### exceptionMessage

Your account is pending verification.

HTTP Status Code: 403

### ResourceNotFoundException

#### exceptionMessage

Request references a resource which does not exist.

HTTP Status Code: 404

### ValidationException

#### exceptionMessage

The input fails to satisfy the constraints specified by an AWS service.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface V2](#)
- [AWS SDK for .NET V4](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for Kotlin](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

## DeleteStage

Shuts down and deletes the specified stage (disconnecting all participants). This operation also removes the stageArn from the associated [IngestConfiguration](#), if there are participants using the IngestConfiguration to publish to the stage.

### Request Syntax

```
POST /DeleteStage HTTP/1.1
Content-type: application/json

{
  "arn": "string"
}
```

### URI Request Parameters

The request does not use any URI parameters.

### Request Body

The request accepts the following data in JSON format.

#### arn

ARN of the stage to be deleted.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: arn:aws:ivs:[a-z0-9-]+:[0-9]+:stage/[a-zA-Z0-9-]+

Required: Yes

### Response Syntax

```
HTTP/1.1 200
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

## Errors

For information about the errors that are common to all actions, see [Common Error Types](#).

### AccessDeniedException

#### exceptionMessage

User does not have sufficient access to perform this action.

HTTP Status Code: 403

### ConflictException

#### exceptionMessage

Updating or deleting a resource can cause an inconsistent state.

HTTP Status Code: 409

### PendingVerification

#### exceptionMessage

Your account is pending verification.

HTTP Status Code: 403

### ResourceNotFoundException

#### exceptionMessage

Request references a resource which does not exist.

HTTP Status Code: 404

### ValidationException

#### exceptionMessage

The input fails to satisfy the constraints specified by an AWS service.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface V2](#)
- [AWS SDK for .NET V4](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for Kotlin](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# DeleteStorageConfiguration

Deletes the storage configuration for the specified ARN.

If you try to delete a storage configuration that is used by a Composition, you will get an error (409 ConflictException). To avoid this, for all Compositions that reference the storage configuration, first use [StopComposition](#) and wait for it to complete, then use DeleteStorageConfiguration.

## Request Syntax

```
POST /DeleteStorageConfiguration HTTP/1.1
Content-type: application/json

{
  "arn": "string"
}
```

## URI Request Parameters

The request does not use any URI parameters.

## Request Body

The request accepts the following data in JSON format.

### arn

ARN of the storage configuration to be deleted.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `arn:aws:ivs:[a-z0-9-]+:[0-9]+:storage-configuration/[a-zA-Z0-9-]+`

Required: Yes

## Response Syntax

```
HTTP/1.1 200
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

## Errors

For information about the errors that are common to all actions, see [Common Error Types](#).

### AccessDeniedException

#### exceptionMessage

User does not have sufficient access to perform this action.

HTTP Status Code: 403

### ConflictException

#### exceptionMessage

Updating or deleting a resource can cause an inconsistent state.

HTTP Status Code: 409

### InternalServerErrorException

#### exceptionMessage

Unexpected error during processing of request.

HTTP Status Code: 500

### ResourceNotFoundException

#### exceptionMessage

Request references a resource which does not exist.

HTTP Status Code: 404

### ServiceQuotaExceededException

#### exceptionMessage

Request would cause a service quota to be exceeded.

HTTP Status Code: 402

## ValidationException

### exceptionMessage

The input fails to satisfy the constraints specified by an AWS service.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface V2](#)
- [AWS SDK for .NET V4](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for Kotlin](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# DisconnectParticipant

Disconnects a specified participant from a specified stage. If the participant is publishing using an [IngestConfiguration](#), DisconnectParticipant also updates the stageArn in the IngestConfiguration to be an empty string.

## Request Syntax

```
POST /DisconnectParticipant HTTP/1.1
Content-type: application/json
```

```
{
  "participantId": "string",
  "reason": "string",
  "stageArn": "string"
}
```

## URI Request Parameters

The request does not use any URI parameters.

## Request Body

The request accepts the following data in JSON format.

### [participantId](#)

Identifier of the participant to be disconnected. IVS assigns this; it is returned by [CreateParticipantToken](#) (for streams using WebRTC ingest) or [CreateIngestConfiguration](#) (for streams using RTMP ingest).

Type: String

Length Constraints: Minimum length of 0. Maximum length of 64.

Pattern: [a-zA-Z0-9-\_\*]

Required: Yes

### [reason](#)

Description of why this participant is being disconnected.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 128.

Required: No

### stageArn

ARN of the stage to which the participant is attached.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `arn:aws:ivs:[a-z0-9-]+:[0-9]+:stage/[a-zA-Z0-9-]+`

Required: Yes

## Response Syntax

```
HTTP/1.1 200
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

## Errors

For information about the errors that are common to all actions, see [Common Error Types](#).

### **AccessDeniedException**

#### **exceptionMessage**

User does not have sufficient access to perform this action.

HTTP Status Code: 403

### **PendingVerification**

#### **exceptionMessage**

Your account is pending verification.

HTTP Status Code: 403

## **ResourceNotFoundException**

### **exceptionMessage**

Request references a resource which does not exist.

HTTP Status Code: 404

## **ValidationException**

### **exceptionMessage**

The input fails to satisfy the constraints specified by an AWS service.

HTTP Status Code: 400

## **See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface V2](#)
- [AWS SDK for .NET V4](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for Kotlin](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# GetComposition

Get information about the specified Composition resource.

## Request Syntax

```
POST /GetComposition HTTP/1.1
Content-type: application/json
```

```
{
  "arn": "string"
}
```

## URI Request Parameters

The request does not use any URI parameters.

## Request Body

The request accepts the following data in JSON format.

### arn

ARN of the Composition resource.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `arn:aws:ivs:[a-z0-9-]+:[0-9]+:composition/[a-zA-Z0-9-]+`

Required: Yes

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json
```

```
{
  "composition": {
    "arn": "string",
    "destinations": [
```

```

{
  "configuration": {
    "channel": {
      "channelArn": "string",
      "encoderConfigurationArn": "string"
    },
    "name": "string",
    "s3": {
      "encoderConfigurationArns": [ "string" ],
      "recordingConfiguration": {
        "format": "string",
        "hlsConfiguration": {
          "targetSegmentDurationSeconds": number
        }
      },
      "storageConfigurationArn": "string",
      "thumbnailConfigurations": [
        {
          "storage": [ "string" ],
          "targetIntervalSeconds": number
        }
      ]
    }
  },
  "detail": {
    "s3": {
      "recordingPrefix": "string"
    }
  },
  "endTime": "string",
  "id": "string",
  "startTime": "string",
  "state": "string"
},
"endTime": "string",
"layout": {
  "grid": {
    "featuredParticipantAttribute": "string",
    "gridGap": number,
    "omitStoppedVideo": boolean,
    "participantOrderAttribute": "string",
    "videoAspectRatio": "string",
    "videoFillMode": "string"
  }
}

```

```
    },
    "pip": {
      "featuredParticipantAttribute": "string",
      "gridGap": number,
      "omitStoppedVideo": boolean,
      "participantOrderAttribute": "string",
      "pipBehavior": "string",
      "pipHeight": number,
      "pipOffset": number,
      "pipParticipantAttribute": "string",
      "pipPosition": "string",
      "pipWidth": number,
      "videoFillMode": "string"
    }
  },
  "stageArn": "string",
  "startTime": "string",
  "state": "string",
  "tags": {
    "string" : "string"
  }
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### composition

The Composition that was returned.

Type: [Composition](#) object

## Errors

For information about the errors that are common to all actions, see [Common Error Types](#).

### AccessDeniedException

**exceptionMessage**

User does not have sufficient access to perform this action.

HTTP Status Code: 403

**ConflictException****exceptionMessage**

Updating or deleting a resource can cause an inconsistent state.

HTTP Status Code: 409

**InternalServerErrorException****exceptionMessage**

Unexpected error during processing of request.

HTTP Status Code: 500

**ResourceNotFoundException****exceptionMessage**

Request references a resource which does not exist.

HTTP Status Code: 404

**ServiceQuotaExceededException****exceptionMessage**

Request would cause a service quota to be exceeded.

HTTP Status Code: 402

**ValidationException****exceptionMessage**

The input fails to satisfy the constraints specified by an AWS service.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface V2](#)
- [AWS SDK for .NET V4](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for Kotlin](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# GetEncoderConfiguration

Gets information about the specified EncoderConfiguration resource.

## Request Syntax

```
POST /GetEncoderConfiguration HTTP/1.1
Content-type: application/json

{
  "arn": "string"
}
```

## URI Request Parameters

The request does not use any URI parameters.

## Request Body

The request accepts the following data in JSON format.

### arn

ARN of the EncoderConfiguration resource.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `arn:aws:ivs:[a-z0-9-]+:[0-9]+:encoder-configuration/[a-zA-Z0-9-]+`

Required: Yes

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "encoderConfiguration": {
```

```
"arn": "string",
"name": "string",
"tags": {
  "string" : "string"
},
"video": {
  "bitrate": number,
  "framerate": number,
  "height": number,
  "width": number
}
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### encoderConfiguration

The EncoderConfiguration that was returned.

Type: [EncoderConfiguration](#) object

## Errors

For information about the errors that are common to all actions, see [Common Error Types](#).

### AccessDeniedException

#### exceptionMessage

User does not have sufficient access to perform this action.

HTTP Status Code: 403

### ConflictException

#### exceptionMessage

Updating or deleting a resource can cause an inconsistent state.

HTTP Status Code: 409

### **InternalServerErrorException**

#### **exceptionMessage**

Unexpected error during processing of request.

HTTP Status Code: 500

### **ResourceNotFoundException**

#### **exceptionMessage**

Request references a resource which does not exist.

HTTP Status Code: 404

### **ServiceQuotaExceededException**

#### **exceptionMessage**

Request would cause a service quota to be exceeded.

HTTP Status Code: 402

### **ValidationException**

#### **exceptionMessage**

The input fails to satisfy the constraints specified by an AWS service.

HTTP Status Code: 400

## **See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface V2](#)
- [AWS SDK for .NET V4](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)

- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for Kotlin](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# GetIngestConfiguration

Gets information about the specified IngestConfiguration.

## Request Syntax

```
POST /GetIngestConfiguration HTTP/1.1
Content-type: application/json

{
  "arn": "string"
}
```

## URI Request Parameters

The request does not use any URI parameters.

## Request Body

The request accepts the following data in JSON format.

### arn

ARN of the ingest for which the information is to be retrieved.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `arn:aws:ivs:[a-z0-9-]+:[0-9]+:ingest-configuration/[a-zA-Z0-9-]+`

Required: Yes

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "ingestConfiguration": {
```

```
"arn": "string",
"attributes": {
  "string" : "string"
},
"ingestProtocol": "string",
"name": "string",
"participantId": "string",
"redundantIngest": boolean,
"redundantIngestCredentials": [
  {
    "participantId": "string",
    "streamKey": "string"
  }
],
"stageArn": "string",
"state": "string",
"streamKey": "string",
"tags": {
  "string" : "string"
},
"userId": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### ingestConfiguration

The IngestConfiguration that was returned.

Type: [IngestConfiguration](#) object

## Errors

For information about the errors that are common to all actions, see [Common Error Types](#).

### AccessDeniedException

**exceptionMessage**

User does not have sufficient access to perform this action.

HTTP Status Code: 403

**ResourceNotFoundException****exceptionMessage**

Request references a resource which does not exist.

HTTP Status Code: 404

**ValidationException****exceptionMessage**

The input fails to satisfy the constraints specified by an AWS service.

HTTP Status Code: 400

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface V2](#)
- [AWS SDK for .NET V4](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for Kotlin](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# GetParticipant

Gets information about the specified participant token.

## Request Syntax

```
POST /GetParticipant HTTP/1.1
Content-type: application/json

{
  "participantId": "string",
  "sessionId": "string",
  "stageArn": "string"
}
```

## URI Request Parameters

The request does not use any URI parameters.

## Request Body

The request accepts the following data in JSON format.

### participantId

Unique identifier for the participant. This is assigned by IVS and returned by [CreateParticipantToken](#).

Type: String

Length Constraints: Minimum length of 0. Maximum length of 64.

Pattern: [a-zA-Z0-9-]\*

Required: Yes

### sessionId

ID of a session within the stage.

Type: String

Length Constraints: Fixed length of 16.

Pattern: `st-[a-zA-Z0-9]+`

Required: Yes

### stageArn

Stage ARN.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `arn:aws:ivs:[a-z0-9-]+:[0-9]+:stage/[a-zA-Z0-9-]+`

Required: Yes

## Response Syntax

```
HTTP/1.1 200
```

```
Content-type: application/json
```

```
{
  "participant": {
    "attributes": {
      "string" : "string"
    },
    "browserName": "string",
    "browserVersion": "string",
    "firstJoinTime": "string",
    "ingestConfigurationArn": "string",
    "ispName": "string",
    "osName": "string",
    "osVersion": "string",
    "participantId": "string",
    "protocol": "string",
    "published": boolean,
    "recordingS3BucketName": "string",
    "recordingS3Prefix": "string",
    "recordingState": "string",
    "redundantIngest": boolean,
    "replicationState": "string",
```

```
"replicationType": "string",  
"sdkVersion": "string",  
"sourceSessionId": "string",  
"sourceStageArn": "string",  
"state": "string",  
"userId": "string"  
}  
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### [participant](#)

The participant that is returned.

Type: [Participant](#) object

## Errors

For information about the errors that are common to all actions, see [Common Error Types](#).

### AccessDeniedException

#### exceptionMessage

User does not have sufficient access to perform this action.

HTTP Status Code: 403

### ResourceNotFoundException

#### exceptionMessage

Request references a resource which does not exist.

HTTP Status Code: 404

### ValidationException

## **exceptionMessage**

The input fails to satisfy the constraints specified by an AWS service.

HTTP Status Code: 400

## **See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface V2](#)
- [AWS SDK for .NET V4](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for Kotlin](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# GetPublicKey

Gets information for the specified public key.

## Request Syntax

```
POST /GetPublicKey HTTP/1.1
Content-type: application/json
```

```
{
  "arn": "string"
}
```

## URI Request Parameters

The request does not use any URI parameters.

## Request Body

The request accepts the following data in JSON format.

### arn

ARN of the public key for which the information is to be retrieved.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `arn:aws:ivs:[a-z0-9-]+:[0-9]+:public-key/[a-zA-Z0-9-]+`

Required: Yes

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json
```

```
{
  "publicKey": {
    "arn": "string",
```

```
"fingerprint": "string",  
"name": "string",  
"publicKeyMaterial": "string",  
"tags": {  
  "string" : "string"  
}  
}  
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### publicKey

The public key that is returned.

Type: [PublicKey](#) object

## Errors

For information about the errors that are common to all actions, see [Common Error Types](#).

### **AccessDeniedException**

#### **exceptionMessage**

User does not have sufficient access to perform this action.

HTTP Status Code: 403

### **ResourceNotFoundException**

#### **exceptionMessage**

Request references a resource which does not exist.

HTTP Status Code: 404

### **ValidationException**

## exceptionMessage

The input fails to satisfy the constraints specified by an AWS service.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface V2](#)
- [AWS SDK for .NET V4](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for Kotlin](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# GetStage

Gets information for the specified stage.

## Request Syntax

```
POST /GetStage HTTP/1.1
Content-type: application/json
```

```
{
  "arn": "string"
}
```

## URI Request Parameters

The request does not use any URI parameters.

## Request Body

The request accepts the following data in JSON format.

### arn

ARN of the stage for which the information is to be retrieved.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `arn:aws:ivs:[a-z0-9-]+:[0-9]+:stage/[a-zA-Z0-9-]+`

Required: Yes

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json
```

```
{
  "stage": {
    "activeSessionId": "string",
```

```

"arn": "string",
"autoParticipantRecordingConfiguration": {
  "hlsConfiguration": {
    "targetSegmentDurationSeconds": number
  },
  "mediaTypes": [ "string" ],
  "recordingReconnectWindowSeconds": number,
  "recordParticipantReplicas": boolean,
  "storageConfigurationArn": "string",
  "thumbnailConfiguration": {
    "recordingMode": "string",
    "storage": [ "string" ],
    "targetIntervalSeconds": number
  }
},
"endpoints": {
  "events": "string",
  "rtmp": "string",
  "rtmps": "string",
  "whip": "string"
},
"name": "string",
"tags": {
  "string" : "string"
}
}
}

```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### stage

The stage that is returned.

Type: [Stage](#) object

## Errors

For information about the errors that are common to all actions, see [Common Error Types](#).

## AccessDeniedException

### exceptionMessage

User does not have sufficient access to perform this action.

HTTP Status Code: 403

## ResourceNotFoundException

### exceptionMessage

Request references a resource which does not exist.

HTTP Status Code: 404

## ValidationException

### exceptionMessage

The input fails to satisfy the constraints specified by an AWS service.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface V2](#)
- [AWS SDK for .NET V4](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for Kotlin](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)



# GetStageSession

Gets information for the specified stage session.

## Request Syntax

```
POST /GetStageSession HTTP/1.1
Content-type: application/json
```

```
{
  "sessionId": "string",
  "stageArn": "string"
}
```

## URI Request Parameters

The request does not use any URI parameters.

## Request Body

The request accepts the following data in JSON format.

### [sessionId](#)

ID of a session within the stage.

Type: String

Length Constraints: Fixed length of 16.

Pattern: `st-[a-zA-Z0-9]+`

Required: Yes

### [stageArn](#)

ARN of the stage for which the information is to be retrieved.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `arn:aws:ivs:[a-z0-9-]+:[0-9]+:stage/[a-zA-Z0-9-]+`

Required: Yes

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "stageSession": {
    "endTime": "string",
    "sessionId": "string",
    "startTime": "string"
  }
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### stageSession

The stage session that is returned.

Type: [StageSession](#) object

## Errors

For information about the errors that are common to all actions, see [Common Error Types](#).

### **AccessDeniedException**

#### **exceptionMessage**

User does not have sufficient access to perform this action.

HTTP Status Code: 403

### **ResourceNotFoundException**

## **exceptionMessage**

Request references a resource which does not exist.

HTTP Status Code: 404

## **ValidationException**

### **exceptionMessage**

The input fails to satisfy the constraints specified by an AWS service.

HTTP Status Code: 400

## **See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface V2](#)
- [AWS SDK for .NET V4](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for Kotlin](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# GetStorageConfiguration

Gets the storage configuration for the specified ARN.

## Request Syntax

```
POST /GetStorageConfiguration HTTP/1.1
Content-type: application/json

{
  "arn": "string"
}
```

## URI Request Parameters

The request does not use any URI parameters.

## Request Body

The request accepts the following data in JSON format.

### arn

ARN of the storage configuration to be retrieved.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `arn:aws:ivs:[a-z0-9-]+:[0-9]+:storage-configuration/[a-zA-Z0-9-]+`

Required: Yes

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "storageConfiguration": {
```

```
"arn": "string",
"name": "string",
"s3": {
  "bucketName": "string"
},
"tags": {
  "string" : "string"
}
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### storageConfiguration

The StorageConfiguration that was returned.

Type: [StorageConfiguration](#) object

## Errors

For information about the errors that are common to all actions, see [Common Error Types](#).

### AccessDeniedException

#### exceptionMessage

User does not have sufficient access to perform this action.

HTTP Status Code: 403

### ConflictException

#### exceptionMessage

Updating or deleting a resource can cause an inconsistent state.

HTTP Status Code: 409

## InternalServerErrorException

### exceptionMessage

Unexpected error during processing of request.

HTTP Status Code: 500

## ResourceNotFoundException

### exceptionMessage

Request references a resource which does not exist.

HTTP Status Code: 404

## ServiceQuotaExceededException

### exceptionMessage

Request would cause a service quota to be exceeded.

HTTP Status Code: 402

## ValidationException

### exceptionMessage

The input fails to satisfy the constraints specified by an AWS service.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface V2](#)
- [AWS SDK for .NET V4](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)

- [AWS SDK for JavaScript V3](#)
- [AWS SDK for Kotlin](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# ImportPublicKey

Import a public key to be used for signing stage participant tokens.

## Request Syntax

```
POST /ImportPublicKey HTTP/1.1
Content-type: application/json

{
  "name": "string",
  "publicKeyMaterial": "string",
  "tags": {
    "string" : "string"
  }
}
```

## URI Request Parameters

The request does not use any URI parameters.

## Request Body

The request accepts the following data in JSON format.

### name

Name of the public key to be imported.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 128.

Pattern: [a-zA-Z0-9-\_\*]

Required: No

### publicKeyMaterial

The content of the public key to be imported.

Type: String

Pattern: `. *-----BEGIN PUBLIC KEY-----\r?\n([a-zA-Z0-9+/\=\r\n])+\r?\n-----END PUBLIC KEY-----(\r?\n)?.*`

Required: Yes

## tags

Tags attached to the resource. Array of maps, each of the form `string:string` (`key:value`). See [Best practices and strategies](#) in *Tagging AWS Resources and Tag Editor* for details, including restrictions that apply to tags and "Tag naming limits and requirements"; Amazon IVS has no constraints on tags beyond what is documented there.

Type: String to string map

Map Entries: Minimum number of 0 items. Maximum number of 50 items.

Key Length Constraints: Minimum length of 1. Maximum length of 128.

Value Length Constraints: Minimum length of 0. Maximum length of 256.

Required: No

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "publicKey": {
    "arn": "string",
    "fingerprint": "string",
    "name": "string",
    "publicKeyMaterial": "string",
    "tags": {
      "string" : "string"
    }
  }
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### publicKey

The public key that was imported.

Type: [PublicKey](#) object

## Errors

For information about the errors that are common to all actions, see [Common Error Types](#).

### AccessDeniedException

#### exceptionMessage

User does not have sufficient access to perform this action.

HTTP Status Code: 403

### ConflictException

#### exceptionMessage

Updating or deleting a resource can cause an inconsistent state.

HTTP Status Code: 409

### PendingVerification

#### exceptionMessage

Your account is pending verification.

HTTP Status Code: 403

### ServiceQuotaExceededException

#### exceptionMessage

Request would cause a service quota to be exceeded.

HTTP Status Code: 402

## ValidationException

### exceptionMessage

The input fails to satisfy the constraints specified by an AWS service.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface V2](#)
- [AWS SDK for .NET V4](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for Kotlin](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# ListCompositions

Gets summary information about all Compositions in your account, in the AWS region where the API request is processed.

## Request Syntax

```
POST /ListCompositions HTTP/1.1
Content-type: application/json

{
  "filterByEncoderConfigurationArn": "string",
  "filterByStageArn": "string",
  "maxResults": number,
  "nextToken": "string"
}
```

## URI Request Parameters

The request does not use any URI parameters.

## Request Body

The request accepts the following data in JSON format.

### [filterByEncoderConfigurationArn](#)

Filters the Composition list to match the specified EncoderConfiguration attached to at least one of its output.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `arn:aws:ivs:[a-z0-9-]+:[0-9]+:encoder-configuration/[a-zA-Z0-9-]+`

Required: No

### [filterByStageArn](#)

Filters the Composition list to match the specified Stage ARN.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `arn:aws:ivs:[a-z0-9-]+:[0-9]+:stage/[a-zA-Z0-9-]+`

Required: No

### maxResults

Maximum number of results to return. Default: 100.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 100.

Required: No

### nextToken

The first Composition to retrieve. This is used for pagination; see the `nextToken` response field.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 1024.

Pattern: `[a-zA-Z0-9+/_=-]*`

Required: No

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "compositions": [
    {
      "arn": "string",
      "destinations": [
        {
          "endTime": "string",
          "id": "string",
```

```
        "startTime": "string",
        "state": "string"
    }
],
"endTime": "string",
"stageArn": "string",
"startTime": "string",
"state": "string",
"tags": {
    "string" : "string"
}
}
],
"nextToken": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### compositions

List of the matching Compositions (summary information only).

Type: Array of [CompositionSummary](#) objects

### nextToken

If there are more compositions than `maxResults`, use `nextToken` in the request to get the next set.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 1024.

Pattern: `[a-zA-Z0-9+/_=-]*`

## Errors

For information about the errors that are common to all actions, see [Common Error Types](#).

## **AccessDeniedException**

### **exceptionMessage**

User does not have sufficient access to perform this action.

HTTP Status Code: 403

## **ConflictException**

### **exceptionMessage**

Updating or deleting a resource can cause an inconsistent state.

HTTP Status Code: 409

## **InternalServerErrorException**

### **exceptionMessage**

Unexpected error during processing of request.

HTTP Status Code: 500

## **ServiceQuotaExceededException**

### **exceptionMessage**

Request would cause a service quota to be exceeded.

HTTP Status Code: 402

## **ValidationException**

### **exceptionMessage**

The input fails to satisfy the constraints specified by an AWS service.

HTTP Status Code: 400

## **See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface V2](#)
- [AWS SDK for .NET V4](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for Kotlin](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# ListEncoderConfigurations

Gets summary information about all EncoderConfigurations in your account, in the AWS region where the API request is processed.

## Request Syntax

```
POST /ListEncoderConfigurations HTTP/1.1
Content-type: application/json
```

```
{
  "maxResults": number,
  "nextToken": "string"
}
```

## URI Request Parameters

The request does not use any URI parameters.

## Request Body

The request accepts the following data in JSON format.

### maxResults

Maximum number of results to return. Default: 100.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 100.

Required: No

### nextToken

The first encoder configuration to retrieve. This is used for pagination; see the nextToken response field.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 1024.

Pattern: [a-zA-Z0-9+/\_=-]\*

Required: No

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "encoderConfigurations": [
    {
      "arn": "string",
      "name": "string",
      "tags": {
        "string" : "string"
      }
    }
  ],
  "nextToken": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### encoderConfigurations

List of the matching EncoderConfigurations (summary information only).

Type: Array of [EncoderConfigurationSummary](#) objects

### nextToken

If there are more encoder configurations than `maxResults`, use `nextToken` in the request to get the next set.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 1024.

Pattern: [a-zA-Z0-9+/\_-]\*

## Errors

For information about the errors that are common to all actions, see [Common Error Types](#).

### AccessDeniedException

#### exceptionMessage

User does not have sufficient access to perform this action.

HTTP Status Code: 403

### ConflictException

#### exceptionMessage

Updating or deleting a resource can cause an inconsistent state.

HTTP Status Code: 409

### InternalServerError

#### exceptionMessage

Unexpected error during processing of request.

HTTP Status Code: 500

### ServiceQuotaExceededException

#### exceptionMessage

Request would cause a service quota to be exceeded.

HTTP Status Code: 402

### ValidationException

#### exceptionMessage

The input fails to satisfy the constraints specified by an AWS service.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface V2](#)
- [AWS SDK for .NET V4](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for Kotlin](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# ListIngestConfigurations

Lists all IngestConfigurations in your account, in the AWS region where the API request is processed.

## Request Syntax

```
POST /ListIngestConfigurations HTTP/1.1
Content-type: application/json
```

```
{
  "filterByStageArn": "string",
  "filterByState": "string",
  "maxResults": number,
  "nextToken": "string"
}
```

## URI Request Parameters

The request does not use any URI parameters.

## Request Body

The request accepts the following data in JSON format.

### [filterByStageArn](#)

Filters the response list to match the specified stage ARN. Only one filter (by stage ARN or by state) can be used at a time.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `arn:aws:ivs:[a-z0-9-]+:[0-9]+:stage/[a-zA-Z0-9-]+`

Required: No

### [filterByState](#)

Filters the response list to match the specified state. Only one filter (by stage ARN or by state) can be used at a time.

Type: String

Valid Values: ACTIVE | INACTIVE

Required: No

### maxResults

Maximum number of results to return. Default: 50.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 100.

Required: No

### nextToken

The first IngestConfiguration to retrieve. This is used for pagination; see the nextToken response field.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 1024.

Pattern: [a-zA-Z0-9+/\_=-]\*

Required: No

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "ingestConfigurations": [
    {
      "arn": "string",
      "ingestProtocol": "string",
      "name": "string",
      "participantId": "string",
      "redundantIngest": boolean,
      "stageArn": "string",
      "state": "string",
```

```
    "userId": "string"
  }
],
"nextToken": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### ingestConfigurations

List of the matching ingest configurations (summary information only).

Type: Array of [IngestConfigurationSummary](#) objects

### nextToken

If there are more IngestConfigurations than `maxResults`, use `nextToken` in the request to get the next set.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 1024.

Pattern: `[a-zA-Z0-9+/_=-]*`

## Errors

For information about the errors that are common to all actions, see [Common Error Types](#).

### **AccessDeniedException**

#### **exceptionMessage**

User does not have sufficient access to perform this action.

HTTP Status Code: 403

### **ValidationException**

## exceptionMessage

The input fails to satisfy the constraints specified by an AWS service.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface V2](#)
- [AWS SDK for .NET V4](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for Kotlin](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# ListParticipantEvents

Lists events for a specified participant that occurred during a specified stage session.

## Request Syntax

```
POST /ListParticipantEvents HTTP/1.1
Content-type: application/json
```

```
{
  "maxResults": number,
  "nextToken": "string",
  "participantId": "string",
  "sessionId": "string",
  "stageArn": "string"
}
```

## URI Request Parameters

The request does not use any URI parameters.

## Request Body

The request accepts the following data in JSON format.

### maxResults

Maximum number of results to return. Default: 50.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 100.

Required: No

### nextToken

The first participant event to retrieve. This is used for pagination; see the nextToken response field.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 1024.

Pattern: [a-zA-Z0-9+/\_-]\*

Required: No

### participantId

Unique identifier for this participant. This is assigned by IVS and returned by [CreateParticipantToken](#).

Type: String

Length Constraints: Minimum length of 0. Maximum length of 64.

Pattern: [a-zA-Z0-9-]\*

Required: Yes

### sessionId

ID of a session within the stage.

Type: String

Length Constraints: Fixed length of 16.

Pattern: st-[a-zA-Z0-9]+

Required: Yes

### stageArn

Stage ARN.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: arn:aws:ivs:[a-z0-9-]+:[0-9]+:stage/[a-zA-Z0-9-]+

Required: Yes

## Response Syntax

```
HTTP/1.1 200
```

Content-type: application/json

```
{
  "events": [
    {
      "destinationSessionId": "string",
      "destinationStageArn": "string",
      "errorCode": "string",
      "eventTime": "string",
      "name": "string",
      "newToken": {
        "attributes": {
          "string": "string"
        },
        "capabilities": [ "string" ],
        "expirationTime": "string",
        "userId": "string"
      },
      "participantId": "string",
      "previousToken": {
        "attributes": {
          "string": "string"
        },
        "capabilities": [ "string" ],
        "expirationTime": "string",
        "userId": "string"
      },
      "remoteParticipantId": "string",
      "replica": boolean
    }
  ],
  "nextToken": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### events

List of the matching events.

Type: Array of [Event](#) objects

### [nextToken](#)

If there are more events than `maxResults`, use `nextToken` in the request to get the next set.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 1024.

Pattern: `[a-zA-Z0-9+/_=-]*`

## Errors

For information about the errors that are common to all actions, see [Common Error Types](#).

### **AccessDeniedException**

#### **exceptionMessage**

User does not have sufficient access to perform this action.

HTTP Status Code: 403

### **ValidationException**

#### **exceptionMessage**

The input fails to satisfy the constraints specified by an AWS service.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface V2](#)
- [AWS SDK for .NET V4](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)

- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for Kotlin](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# ListParticipantReplicas

Lists all the replicas for a participant from a source stage.

## Request Syntax

```
POST /ListParticipantReplicas HTTP/1.1
Content-type: application/json
```

```
{
  "maxResults": number,
  "nextToken": "string",
  "participantId": "string",
  "sourceStageArn": "string"
}
```

## URI Request Parameters

The request does not use any URI parameters.

## Request Body

The request accepts the following data in JSON format.

### maxResults

Maximum number of results to return. Default: 50.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 50.

Required: No

### nextToken

The first participant to retrieve. This is used for pagination; see the nextToken response field.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 1024.

Pattern: [a-zA-Z0-9+/\_=-]\*

Required: No

### participantId

Participant ID of the publisher that has been replicated. This is assigned by IVS and returned by [CreateParticipantToken](#) or the `jti` (JWT ID) used to [create a self signed token](#).

Type: String

Length Constraints: Minimum length of 0. Maximum length of 64.

Pattern: `[a-zA-Z0-9-]*`

Required: Yes

### sourceStageArn

ARN of the stage where the participant is publishing.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `arn:aws:ivs:[a-z0-9-]+:[0-9]+:stage/[a-zA-Z0-9-]+`

Required: Yes

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "nextToken": "string",
  "replicas": [
    {
      "destinationSessionId": "string",
      "destinationStageArn": "string",
      "participantId": "string",
      "replicationState": "string",
      "sourceSessionId": "string",
      "sourceStageArn": "string"
    }
  ]
}
```

```
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### [nextToken](#)

If there are more participants than `maxResults`, use `nextToken` in the request to get the next set.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 1024.

Pattern: `[a-zA-Z0-9+/_-]*`

### [replicas](#)

List of all participant replicas.

Type: Array of [ParticipantReplica](#) objects

## Errors

For information about the errors that are common to all actions, see [Common Error Types](#).

### **AccessDeniedException**

#### **exceptionMessage**

User does not have sufficient access to perform this action.

HTTP Status Code: 403

### **ValidationException**

#### **exceptionMessage**

The input fails to satisfy the constraints specified by an AWS service.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface V2](#)
- [AWS SDK for .NET V4](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for Kotlin](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# ListParticipants

Lists all participants in a specified stage session.

## Request Syntax

```
POST /ListParticipants HTTP/1.1
Content-type: application/json

{
  "filterByPublished": boolean,
  "filterByRecordingState": "string",
  "filterByState": "string",
  "filterByUserId": "string",
  "maxResults": number,
  "nextToken": "string",
  "sessionId": "string",
  "stageArn": "string"
}
```

## URI Request Parameters

The request does not use any URI parameters.

## Request Body

The request accepts the following data in JSON format.

### filterByPublished

Filters the response list to only show participants who published during the stage session. Only one of `filterByUserId`, `filterByPublished`, `filterByState`, or `filterByRecordingState` can be provided per request.

Type: Boolean

Required: No

### filterByRecordingState

Filters the response list to only show participants with the specified recording state. Only one of `filterByUserId`, `filterByPublished`, `filterByState`, or `filterByRecordingState` can be provided per request.

Type: String

Valid Values: STARTING | ACTIVE | STOPPING | STOPPED | FAILED

Required: No

### filterByState

Filters the response list to only show participants in the specified state. Only one of `filterByUserId`, `filterByPublished`, `filterByState`, or `filterByRecordingState` can be provided per request.

Type: String

Valid Values: CONNECTED | DISCONNECTED

Required: No

### filterByUserId

Filters the response list to match the specified user ID. Only one of `filterByUserId`, `filterByPublished`, `filterByState`, or `filterByRecordingState` can be provided per request. A `userId` is a customer-assigned name to help identify the token; this can be used to link a participant to a user in the customer's own systems.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 128.

Required: No

### maxResults

Maximum number of results to return. Default: 50.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 100.

Required: No

### nextToken

The first participant to retrieve. This is used for pagination; see the `nextToken` response field.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 1024.

Pattern: `[a-zA-Z0-9+/_-]*`

Required: No

### sessionId

ID of the session within the stage.

Type: String

Length Constraints: Fixed length of 16.

Pattern: `st-[a-zA-Z0-9]+`

Required: Yes

### stageArn

Stage ARN.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `arn:aws:ivs:[a-z0-9-]+:[0-9]+:stage/[a-zA-Z0-9-]+`

Required: Yes

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "nextToken": "string",
  "participants": [
    {
      "firstJoinTime": "string",
      "ingestConfigurationArn": "string",
      "participantId": "string",
      "published": boolean,
      "recordingState": "string",
```

```
    "redundantIngest": boolean,
    "replicationState": "string",
    "replicationType": "string",
    "sourceSessionId": "string",
    "sourceStageArn": "string",
    "state": "string",
    "userId": "string"
  }
]
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### nextToken

If there are more participants than `maxResults`, use `nextToken` in the request to get the next set.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 1024.

Pattern: `[a-zA-Z0-9+/_=-]*`

### participants

List of the matching participants (summary information only).

Type: Array of [ParticipantSummary](#) objects

## Errors

For information about the errors that are common to all actions, see [Common Error Types](#).

### **AccessDeniedException**

#### **exceptionMessage**

User does not have sufficient access to perform this action.

HTTP Status Code: 403

## ValidationException

### exceptionMessage

The input fails to satisfy the constraints specified by an AWS service.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface V2](#)
- [AWS SDK for .NET V4](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for Kotlin](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# ListPublicKeys

Gets summary information about all public keys in your account, in the AWS region where the API request is processed.

## Request Syntax

```
POST /ListPublicKeys HTTP/1.1
Content-type: application/json
```

```
{
  "maxResults": number,
  "nextToken": "string"
}
```

## URI Request Parameters

The request does not use any URI parameters.

## Request Body

The request accepts the following data in JSON format.

### maxResults

Maximum number of results to return. Default: 50.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 100.

Required: No

### nextToken

The first public key to retrieve. This is used for pagination; see the nextToken response field.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 1024.

Pattern: [a-zA-Z0-9+/\_=-]\*

Required: No

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "nextToken": "string",
  "publicKeys": [
    {
      "arn": "string",
      "name": "string",
      "tags": {
        "string" : "string"
      }
    }
  ]
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### nextToken

If there are more public keys than `maxResults`, use `nextToken` in the request to get the next set.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 1024.

Pattern: `[a-zA-Z0-9+/_-]*`

### publicKeys

List of the matching public keys (summary information only).

Type: Array of [PublicKeySummary](#) objects

## Errors

For information about the errors that are common to all actions, see [Common Error Types](#).

### AccessDeniedException

#### exceptionMessage

User does not have sufficient access to perform this action.

HTTP Status Code: 403

### ValidationException

#### exceptionMessage

The input fails to satisfy the constraints specified by an AWS service.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface V2](#)
- [AWS SDK for .NET V4](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for Kotlin](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# ListStages

Gets summary information about all stages in your account, in the AWS region where the API request is processed.

## Request Syntax

```
POST /ListStages HTTP/1.1
Content-type: application/json

{
  "maxResults": number,
  "nextToken": "string"
}
```

## URI Request Parameters

The request does not use any URI parameters.

## Request Body

The request accepts the following data in JSON format.

### maxResults

Maximum number of results to return. Default: 50.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 100.

Required: No

### nextToken

The first stage to retrieve. This is used for pagination; see the nextToken response field.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 1024.

Pattern: [a-zA-Z0-9+/\_-]\*

Required: No

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "nextToken": "string",
  "stages": [
    {
      "activeSessionId": "string",
      "arn": "string",
      "name": "string",
      "tags": {
        "string" : "string"
      }
    }
  ]
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### nextToken

If there are more stages than `maxResults`, use `nextToken` in the request to get the next set.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 1024.

Pattern: `[a-zA-Z0-9+/_=-]*`

### stages

List of the matching stages (summary information only).

Type: Array of [StageSummary](#) objects

## Errors

For information about the errors that are common to all actions, see [Common Error Types](#).

### AccessDeniedException

#### exceptionMessage

User does not have sufficient access to perform this action.

HTTP Status Code: 403

### ConflictException

#### exceptionMessage

Updating or deleting a resource can cause an inconsistent state.

HTTP Status Code: 409

### ValidationException

#### exceptionMessage

The input fails to satisfy the constraints specified by an AWS service.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface V2](#)
- [AWS SDK for .NET V4](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for Kotlin](#)

- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# ListStageSessions

Gets all sessions for a specified stage.

## Request Syntax

```
POST /ListStageSessions HTTP/1.1
Content-type: application/json
```

```
{
  "maxResults": number,
  "nextToken": "string",
  "stageArn": "string"
}
```

## URI Request Parameters

The request does not use any URI parameters.

## Request Body

The request accepts the following data in JSON format.

### maxResults

Maximum number of results to return. Default: 50.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 100.

Required: No

### nextToken

The first stage session to retrieve. This is used for pagination; see the nextToken response field.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 1024.

Pattern: `[a-zA-Z0-9+/_-]*`

Required: No

### [stageArn](#)

Stage ARN.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `arn:aws:ivs:[a-z0-9-]+:[0-9]+:stage/[a-zA-Z0-9-]+`

Required: Yes

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "nextToken": "string",
  "stageSessions": [
    {
      "endTime": "string",
      "sessionId": "string",
      "startTime": "string"
    }
  ]
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### [nextToken](#)

If there are more stage sessions than `maxResults`, use `nextToken` in the request to get the next set.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 1024.

Pattern: [a-zA-Z0-9+/\_=-]\*

### stageSessions

List of matching stage sessions.

Type: Array of [StageSessionSummary](#) objects

## Errors

For information about the errors that are common to all actions, see [Common Error Types](#).

### AccessDeniedException

#### exceptionMessage

User does not have sufficient access to perform this action.

HTTP Status Code: 403

### ValidationException

#### exceptionMessage

The input fails to satisfy the constraints specified by an AWS service.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface V2](#)
- [AWS SDK for .NET V4](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)

- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for Kotlin](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# ListStorageConfigurations

Gets summary information about all storage configurations in your account, in the AWS region where the API request is processed.

## Request Syntax

```
POST /ListStorageConfigurations HTTP/1.1
Content-type: application/json

{
  "maxResults": number,
  "nextToken": "string"
}
```

## URI Request Parameters

The request does not use any URI parameters.

## Request Body

The request accepts the following data in JSON format.

### maxResults

Maximum number of storage configurations to return. Default: your service quota or 100, whichever is smaller.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 100.

Required: No

### nextToken

The first storage configuration to retrieve. This is used for pagination; see the nextToken response field.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 1024.

Pattern: [a-zA-Z0-9+/\_-]\*

Required: No

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "nextToken": "string",
  "storageConfigurations": [
    {
      "arn": "string",
      "name": "string",
      "s3": {
        "bucketName": "string"
      },
      "tags": {
        "string" : "string"
      }
    }
  ]
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### nextToken

If there are more storage configurations than `maxResults`, use `nextToken` in the request to get the next set.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 1024.

Pattern: [a-zA-Z0-9+/\_-]\*

## storageConfigurations

List of the matching storage configurations.

Type: Array of [StorageConfigurationSummary](#) objects

## Errors

For information about the errors that are common to all actions, see [Common Error Types](#).

### AccessDeniedException

#### exceptionMessage

User does not have sufficient access to perform this action.

HTTP Status Code: 403

### ConflictException

#### exceptionMessage

Updating or deleting a resource can cause an inconsistent state.

HTTP Status Code: 409

### InternalServerError

#### exceptionMessage

Unexpected error during processing of request.

HTTP Status Code: 500

### ServiceQuotaExceededException

#### exceptionMessage

Request would cause a service quota to be exceeded.

HTTP Status Code: 402

### ValidationException

## exceptionMessage

The input fails to satisfy the constraints specified by an AWS service.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface V2](#)
- [AWS SDK for .NET V4](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for Kotlin](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# ListTagsForResource

Gets information about AWS tags for the specified ARN.

## Request Syntax

```
GET /tags/resourceArn HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### resourceArn

The ARN of the resource to be retrieved. The ARN must be URL-encoded.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `arn:aws:ivs:[a-z0-9-]+:[0-9]+:[a-z-]/[a-zA-Z0-9-]+`

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "tags": {
    "string" : "string"
  }
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### tags

Tags attached to the resource. Array of maps, each of the form `string:string` (`key:value`).

Type: String to string map

Map Entries: Minimum number of 0 items. Maximum number of 50 items.

Key Length Constraints: Minimum length of 1. Maximum length of 128.

Value Length Constraints: Minimum length of 0. Maximum length of 256.

## Errors

For information about the errors that are common to all actions, see [Common Error Types](#).

### InternalServerErrorException

#### exceptionMessage

Unexpected error during processing of request.

HTTP Status Code: 500

### ResourceNotFoundException

#### exceptionMessage

Request references a resource which does not exist.

HTTP Status Code: 404

### ValidationException

#### exceptionMessage

The input fails to satisfy the constraints specified by an AWS service.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface V2](#)
- [AWS SDK for .NET V4](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for Kotlin](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# StartComposition

Starts a Composition from a stage based on the configuration provided in the request.

A Composition is an ephemeral resource that exists after this operation returns successfully. Composition stops and the resource is deleted:

- When [StopComposition](#) is called.
- After a 1-minute timeout, when all participants are disconnected from the stage.
- After a 1-minute timeout, if there are no participants in the stage when StartComposition is called.
- When broadcasting to the IVS channel fails and all retries are exhausted.
- When broadcasting is disconnected and all attempts to reconnect are exhausted.

## Request Syntax

```
POST /StartComposition HTTP/1.1
```

```
Content-type: application/json
```

```
{
  "destinations": [
    {
      "channel": {
        "channelArn": "string",
        "encoderConfigurationArn": "string"
      },
      "name": "string",
      "s3": {
        "encoderConfigurationArns": [ "string" ],
        "recordingConfiguration": {
          "format": "string",
          "hlsConfiguration": {
            "targetSegmentDurationSeconds": number
          }
        }
      },
      "storageConfigurationArn": "string",
      "thumbnailConfigurations": [
        {
          "storage": [ "string" ],

```

```

        "targetIntervalSeconds": number
      }
    ]
  }
},
"layout": {
  "grid": {
    "featuredParticipantAttribute": "string",
    "gridGap": number,
    "omitStoppedVideo": boolean,
    "participantOrderAttribute": "string",
    "videoAspectRatio": "string",
    "videoFillMode": "string"
  },
  "pip": {
    "featuredParticipantAttribute": "string",
    "gridGap": number,
    "omitStoppedVideo": boolean,
    "participantOrderAttribute": "string",
    "pipBehavior": "string",
    "pipHeight": number,
    "pipOffset": number,
    "pipParticipantAttribute": "string",
    "pipPosition": "string",
    "pipWidth": number,
    "videoFillMode": "string"
  }
},
"stageArn": "string",
"tags": {
  "string" : "string"
}
}

```

## URI Request Parameters

The request does not use any URI parameters.

## Request Body

The request accepts the following data in JSON format.

## destinations

Array of destination configuration.

Type: Array of [DestinationConfiguration](#) objects

Array Members: Minimum number of 1 item. Maximum number of 2 items.

Required: Yes

## idempotencyToken

Idempotency token.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: [a-zA-Z0-9-\_\*]

Required: No

## layout

Layout object to configure composition parameters.

Type: [LayoutConfiguration](#) object

Required: No

## stageArn

ARN of the stage to be used for compositing.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: arn:aws:ivs:[a-z0-9-]+:[0-9]+:stage/[a-zA-Z0-9-]+

Required: Yes

## tags

Tags attached to the resource. Array of maps, each of the form `string:string` (key:value). See [Best practices and strategies](#) in *Tagging AWS Resources and Tag Editor* for details, including restrictions that apply to tags and "Tag naming limits and requirements"; Amazon IVS has no constraints on tags beyond what is documented there.

Type: String to string map

Map Entries: Minimum number of 0 items. Maximum number of 50 items.

Key Length Constraints: Minimum length of 1. Maximum length of 128.

Value Length Constraints: Minimum length of 0. Maximum length of 256.

Required: No

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "composition": {
    "arn": "string",
    "destinations": [
      {
        "configuration": {
          "channel": {
            "channelArn": "string",
            "encoderConfigurationArn": "string"
          },
          "name": "string",
          "s3": {
            "encoderConfigurationArns": [ "string" ],
            "recordingConfiguration": {
              "format": "string",
              "hlsConfiguration": {
                "targetSegmentDurationSeconds": number
              }
            }
          },
          "storageConfigurationArn": "string",
          "thumbnailConfigurations": [
            {
              "storage": [ "string" ],
              "targetIntervalSeconds": number
            }
          ]
        }
      }
    ]
  },
},
```

```

    "detail": {
      "s3": {
        "recordingPrefix": "string"
      }
    },
    "endTime": "string",
    "id": "string",
    "startTime": "string",
    "state": "string"
  }
],
"endTime": "string",
"layout": {
  "grid": {
    "featuredParticipantAttribute": "string",
    "gridGap": number,
    "omitStoppedVideo": boolean,
    "participantOrderAttribute": "string",
    "videoAspectRatio": "string",
    "videoFillMode": "string"
  },
  "pip": {
    "featuredParticipantAttribute": "string",
    "gridGap": number,
    "omitStoppedVideo": boolean,
    "participantOrderAttribute": "string",
    "pipBehavior": "string",
    "pipHeight": number,
    "pipOffset": number,
    "pipParticipantAttribute": "string",
    "pipPosition": "string",
    "pipWidth": number,
    "videoFillMode": "string"
  }
},
"stageArn": "string",
"startTime": "string",
"state": "string",
"tags": {
  "string" : "string"
}
}
}

```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### composition

The Composition that was created.

Type: [Composition](#) object

## Errors

For information about the errors that are common to all actions, see [Common Error Types](#).

### **AccessDeniedException**

#### **exceptionMessage**

User does not have sufficient access to perform this action.

HTTP Status Code: 403

### **ConflictException**

#### **exceptionMessage**

Updating or deleting a resource can cause an inconsistent state.

HTTP Status Code: 409

### **InternalServerError**

#### **exceptionMessage**

Unexpected error during processing of request.

HTTP Status Code: 500

### **PendingVerification**

**exceptionMessage**

Your account is pending verification.

HTTP Status Code: 403

**ResourceNotFoundException****exceptionMessage**

Request references a resource which does not exist.

HTTP Status Code: 404

**ServiceQuotaExceededException****exceptionMessage**

Request would cause a service quota to be exceeded.

HTTP Status Code: 402

**ValidationException****exceptionMessage**

The input fails to satisfy the constraints specified by an AWS service.

HTTP Status Code: 400

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface V2](#)
- [AWS SDK for .NET V4](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)

- [AWS SDK for Kotlin](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# StartParticipantReplication

Starts replicating a publishing participant from a source stage to a destination stage.

## Request Syntax

```
POST /StartParticipantReplication HTTP/1.1
Content-type: application/json

{
  "attributes": {
    "string" : "string"
  },
  "destinationStageArn": "string",
  "participantId": "string",
  "reconnectWindowSeconds": number,
  "sourceStageArn": "string"
}
```

## URI Request Parameters

The request does not use any URI parameters.

## Request Body

The request accepts the following data in JSON format.

### attributes

Application-provided attributes to set on the replicated participant in the destination stage. Map keys and values can contain UTF-8 encoded text. The maximum length of this field is 1 KB total. *This field is exposed to all stage participants and should not be used for personally identifying, confidential, or sensitive information.*

These attributes are merged with any attributes set for this participant when creating the token. If there is overlap in keys, the values in these attributes are replaced.

Type: String to string map

Required: No

### destinationStageArn

ARN of the stage to which the participant will be replicated.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `arn:aws:ivs:[a-z0-9-]+:[0-9]+:stage/[a-zA-Z0-9-]+`

Required: Yes

### participantId

Participant ID of the publisher that will be replicated. This is assigned by IVS and returned by [CreateParticipantToken](#) or the `jt i` (JWT ID) used to [create a self signed token](#).

Type: String

Length Constraints: Minimum length of 0. Maximum length of 64.

Pattern: `[a-zA-Z0-9-]*`

Required: Yes

### reconnectWindowSeconds

If the participant disconnects and then reconnects within the specified interval, replication will continue to be ACTIVE. Default: 0.

Type: Integer

Valid Range: Minimum value of 0. Maximum value of 300.

Required: No

### sourceStageArn

ARN of the stage where the participant is publishing.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `arn:aws:ivs:[a-z0-9-]+:[0-9]+:stage/[a-zA-Z0-9-]+`

Required: Yes

## Response Syntax

```
HTTP/1.1 200
Access-Control-Allow-Origin: accessControlAllowOrigin
Access-Control-Expose-Headers: accessControlExposeHeaders
Cache-Control: cacheControl
Content-Security-Policy: contentSecurityPolicy
Strict-Transport-Security: strictTransportSecurity
X-Content-Type-Options: xContentTypeOptions
X-Frame-Options: xFrameOptions
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The response returns the following HTTP headers.

### [accessControlAllowOrigin](#)

See [Access-Control-Allow-Origin](#) in the MDN Web Docs.

### [accessControlExposeHeaders](#)

See [Access-Control-Expose-Headers](#) in the MDN Web Docs.

### [cacheControl](#)

See [Cache-Control](#) in the MDN Web Docs.

### [contentSecurityPolicy](#)

See [Content-Security-Policy](#) in the MDN Web Docs.

### [strictTransportSecurity](#)

See [Strict-Transport-Security](#) in the MDN Web Docs.

### [xContentTypeOptions](#)

See [X-Content-Type-Options](#) in the MDN Web Docs.

### [xFrameOptions](#)

See [X-Frame-Options](#) in the MDN Web Docs.

## Errors

For information about the errors that are common to all actions, see [Common Error Types](#).

### AccessDeniedException

#### exceptionMessage

User does not have sufficient access to perform this action.

HTTP Status Code: 403

### ConflictException

#### exceptionMessage

Updating or deleting a resource can cause an inconsistent state.

HTTP Status Code: 409

### InternalServerError

#### exceptionMessage

Unexpected error during processing of request.

HTTP Status Code: 500

### PendingVerification

#### exceptionMessage

Your account is pending verification.

HTTP Status Code: 403

### ResourceNotFoundException

#### exceptionMessage

Request references a resource which does not exist.

HTTP Status Code: 404

### ServiceQuotaExceededException

### **exceptionMessage**

Request would cause a service quota to be exceeded.

HTTP Status Code: 402

### **ValidationException**

#### **exceptionMessage**

The input fails to satisfy the constraints specified by an AWS service.

HTTP Status Code: 400

## **See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface V2](#)
- [AWS SDK for .NET V4](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for Kotlin](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# StopComposition

Stops and deletes a Composition resource. Any broadcast from the Composition resource is stopped.

## Request Syntax

```
POST /StopComposition HTTP/1.1
Content-type: application/json

{
  "arn": "string"
}
```

## URI Request Parameters

The request does not use any URI parameters.

## Request Body

The request accepts the following data in JSON format.

### arn

ARN of the Composition.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `arn:aws:ivs:[a-z0-9-]+:[0-9]+:composition/[a-zA-Z0-9-]+`

Required: Yes

## Response Syntax

```
HTTP/1.1 200
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

## Errors

For information about the errors that are common to all actions, see [Common Error Types](#).

### AccessDeniedException

#### exceptionMessage

User does not have sufficient access to perform this action.

HTTP Status Code: 403

### ConflictException

#### exceptionMessage

Updating or deleting a resource can cause an inconsistent state.

HTTP Status Code: 409

### InternalServerError

#### exceptionMessage

Unexpected error during processing of request.

HTTP Status Code: 500

### ResourceNotFoundException

#### exceptionMessage

Request references a resource which does not exist.

HTTP Status Code: 404

### ServiceQuotaExceededException

#### exceptionMessage

Request would cause a service quota to be exceeded.

HTTP Status Code: 402

### ValidationException

## exceptionMessage

The input fails to satisfy the constraints specified by an AWS service.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface V2](#)
- [AWS SDK for .NET V4](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for Kotlin](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# StopParticipantReplication

Stops a replicated participant session.

## Request Syntax

```
POST /StopParticipantReplication HTTP/1.1
Content-type: application/json
```

```
{
  "destinationStageArn": "string",
  "participantId": "string",
  "sourceStageArn": "string"
}
```

## URI Request Parameters

The request does not use any URI parameters.

## Request Body

The request accepts the following data in JSON format.

### destinationStageArn

ARN of the stage where the participant has been replicated.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `arn:aws:ivs:[a-z0-9-]+:[0-9]+:stage/[a-zA-Z0-9-]+`

Required: Yes

### participantId

Participant ID of the publisher that has been replicated. This is assigned by IVS and returned by [CreateParticipantToken](#) or the `jti` (JWT ID) used to [create a self signed token](#).

Type: String

Length Constraints: Minimum length of 0. Maximum length of 64.

Pattern: `[a-zA-Z0-9-]*`

Required: Yes

### sourceStageArn

ARN of the stage where the participant is publishing.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `arn:aws:ivs:[a-z0-9-]+:[0-9]+:stage/[a-zA-Z0-9-]+`

Required: Yes

## Response Syntax

```
HTTP/1.1 200
Access-Control-Allow-Origin: accessControlAllowOrigin
Access-Control-Expose-Headers: accessControlExposeHeaders
Cache-Control: cacheControl
Content-Security-Policy: contentSecurityPolicy
Strict-Transport-Security: strictTransportSecurity
X-Content-Type-Options: xContentTypeOptions
X-Frame-Options: xFrameOptions
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The response returns the following HTTP headers.

### accessControlAllowOrigin

See [Access-Control-Allow-Origin](#) in the MDN Web Docs.

### accessControlExposeHeaders

See [Access-Control-Expose-Headers](#) in the MDN Web Docs.

## cacheControl

See [Cache-Control](#) in the MDN Web Docs.

## contentSecurityPolicy

See [Content-Security-Policy](#) in the MDN Web Docs.

## strictTransportSecurity

See [Strict-Transport-Security](#) in the MDN Web Docs.

## xContentTypeOptions

See [X-Content-Type-Options](#) in the MDN Web Docs.

## xFrameOptions

See [X-Frame-Options](#) in the MDN Web Docs.

## Errors

For information about the errors that are common to all actions, see [Common Error Types](#).

### AccessDeniedException

#### exceptionMessage

User does not have sufficient access to perform this action.

HTTP Status Code: 403

### InternalServerError

#### exceptionMessage

Unexpected error during processing of request.

HTTP Status Code: 500

### ResourceNotFoundException

#### exceptionMessage

Request references a resource which does not exist.

HTTP Status Code: 404

## ValidationException

### exceptionMessage

The input fails to satisfy the constraints specified by an AWS service.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface V2](#)
- [AWS SDK for .NET V4](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for Kotlin](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# TagResource

Adds or updates tags for the AWS resource with the specified ARN.

## Request Syntax

```
POST /tags/resourceArn HTTP/1.1
Content-type: application/json
```

```
{
  "tags": {
    "string" : "string"
  }
}
```

## URI Request Parameters

The request uses the following URI parameters.

### resourceArn

The ARN of the resource to be tagged. The ARN must be URL-encoded.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `arn:aws:ivs:[a-z0-9-]+:[0-9]+:[a-z-]/[a-zA-Z0-9-]+`

Required: Yes

## Request Body

The request accepts the following data in JSON format.

### tags

Array of tags to be added or updated. Array of maps, each of the form `string:string` (key:value). See [Best practices and strategies](#) in *Tagging AWS Resources and Tag Editor* for details, including restrictions that apply to tags and "Tag naming limits and requirements"; Amazon IVS has no constraints on tags beyond what is documented there.

Type: String to string map

Map Entries: Minimum number of 0 items. Maximum number of 50 items.

Key Length Constraints: Minimum length of 1. Maximum length of 128.

Value Length Constraints: Minimum length of 0. Maximum length of 256.

Required: Yes

## Response Syntax

```
HTTP/1.1 200
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

## Errors

For information about the errors that are common to all actions, see [Common Error Types](#).

### InternalServerErrorException

#### exceptionMessage

Unexpected error during processing of request.

HTTP Status Code: 500

### ResourceNotFoundException

#### exceptionMessage

Request references a resource which does not exist.

HTTP Status Code: 404

### ValidationException

#### exceptionMessage

The input fails to satisfy the constraints specified by an AWS service.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface V2](#)
- [AWS SDK for .NET V4](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for Kotlin](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# UntagResource

Removes tags from the resource with the specified ARN.

## Request Syntax

```
DELETE /tags/resourceArn?tagKeys=tagKeys HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### resourceArn

The ARN of the resource to be untagged. The ARN must be URL-encoded.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `arn:aws:ivs:[a-z0-9-]+:[0-9]+:[a-z-]/[a-zA-Z0-9-]+`

Required: Yes

### tagKeys

Array of tag keys (strings) for the tags to be removed. See [Best practices and strategies in Tagging AWS Resources and Tag Editor](#) for details, including restrictions that apply to tags and "Tag naming limits and requirements"; Amazon IVS has no constraints on tags beyond what is documented there.

Array Members: Minimum number of 0 items. Maximum number of 50 items.

Length Constraints: Minimum length of 1. Maximum length of 128.

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

## Errors

For information about the errors that are common to all actions, see [Common Error Types](#).

### InternalServerErrorException

#### exceptionMessage

Unexpected error during processing of request.

HTTP Status Code: 500

### ResourceNotFoundException

#### exceptionMessage

Request references a resource which does not exist.

HTTP Status Code: 404

### ValidationException

#### exceptionMessage

The input fails to satisfy the constraints specified by an AWS service.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface V2](#)
- [AWS SDK for .NET V4](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)

- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for Kotlin](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# UpdateIngestConfiguration

Updates a specified IngestConfiguration. Only the stage ARN attached to the IngestConfiguration can be updated. An IngestConfiguration that is active cannot be updated.

## Request Syntax

```
POST /UpdateIngestConfiguration HTTP/1.1
Content-type: application/json
```

```
{
  "arn": "string",
  "redundantIngest": boolean,
  "stageArn": "string"
}
```

## URI Request Parameters

The request does not use any URI parameters.

## Request Body

The request accepts the following data in JSON format.

### arn

ARN of the IngestConfiguration, for which the related stage ARN needs to be updated.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `arn:aws:ivs:[a-z0-9-]+:[0-9]+:ingest-configuration/[a-zA-Z0-9-]+`

Required: Yes

### redundantIngest

Indicates whether redundant ingest is enabled for the ingest configuration. Default: `false`.

Type: Boolean

Required: No

### stageArn

Stage ARN that needs to be updated.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 128.

Pattern: `^$|^arn:aws:ivs:[a-z0-9-]+:[0-9]+:stage/[a-zA-Z0-9-]+$`

Required: No

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "ingestConfiguration": {
    "arn": "string",
    "attributes": {
      "string" : "string"
    },
    "ingestProtocol": "string",
    "name": "string",
    "participantId": "string",
    "redundantIngest": boolean,
    "redundantIngestCredentials": [
      {
        "participantId": "string",
        "streamKey": "string"
      }
    ],
    "stageArn": "string",
    "state": "string",
    "streamKey": "string",
    "tags": {
      "string" : "string"
    },
    "userId": "string"
  }
}
```

```
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### ingestConfiguration

The updated IngestConfiguration.

Type: [IngestConfiguration](#) object

## Errors

For information about the errors that are common to all actions, see [Common Error Types](#).

### AccessDeniedException

#### exceptionMessage

User does not have sufficient access to perform this action.

HTTP Status Code: 403

### ConflictException

#### exceptionMessage

Updating or deleting a resource can cause an inconsistent state.

HTTP Status Code: 409

### PendingVerification

#### exceptionMessage

Your account is pending verification.

HTTP Status Code: 403

### ResourceNotFoundException

## **exceptionMessage**

Request references a resource which does not exist.

HTTP Status Code: 404

## **ValidationException**

### **exceptionMessage**

The input fails to satisfy the constraints specified by an AWS service.

HTTP Status Code: 400

## **See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface V2](#)
- [AWS SDK for .NET V4](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for Kotlin](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# UpdateStage

Updates a stage's configuration.

## Request Syntax

```
POST /UpdateStage HTTP/1.1
Content-type: application/json

{
  "arn": "string",
  "autoParticipantRecordingConfiguration": {
    "hlsConfiguration": {
      "targetSegmentDurationSeconds": number
    },
    "mediaTypes": [ "string" ],
    "recordingReconnectWindowSeconds": number,
    "recordParticipantReplicas": boolean,
    "storageConfigurationArn": "string",
    "thumbnailConfiguration": {
      "recordingMode": "string",
      "storage": [ "string" ],
      "targetIntervalSeconds": number
    }
  },
  "name": "string"
}
```

## URI Request Parameters

The request does not use any URI parameters.

## Request Body

The request accepts the following data in JSON format.

### arn

ARN of the stage to be updated.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `arn:aws:ivs:[a-z0-9-]+:[0-9]+:stage/[a-zA-Z0-9-]+`

Required: Yes

### autoParticipantRecordingConfiguration

Configuration object for individual participant recording, to attach to the stage. Note that this cannot be updated while recording is active.

Type: [AutoParticipantRecordingConfiguration](#) object

Required: No

### name

Name of the stage to be updated.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 128.

Pattern: `[a-zA-Z0-9-_]*`

Required: No

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "stage": {
    "activeSessionId": "string",
    "arn": "string",
    "autoParticipantRecordingConfiguration": {
      "hlsConfiguration": {
        "targetSegmentDurationSeconds": number
      },
      "mediaTypes": [ "string" ],
      "recordingReconnectWindowSeconds": number,
      "recordParticipantReplicas": boolean,
      "storageConfigurationArn": "string",
```

```
    "thumbnailConfiguration": {
      "recordingMode": "string",
      "storage": [ "string" ],
      "targetIntervalSeconds": number
    }
  },
  "endpoints": {
    "events": "string",
    "rtmp": "string",
    "rtmps": "string",
    "whip": "string"
  },
  "name": "string",
  "tags": {
    "string" : "string"
  }
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### stage

The updated stage.

Type: [Stage](#) object

## Errors

For information about the errors that are common to all actions, see [Common Error Types](#).

### **AccessDeniedException**

#### **exceptionMessage**

User does not have sufficient access to perform this action.

HTTP Status Code: 403

## **ConflictException**

### **exceptionMessage**

Updating or deleting a resource can cause an inconsistent state.

HTTP Status Code: 409

## **PendingVerification**

### **exceptionMessage**

Your account is pending verification.

HTTP Status Code: 403

## **ResourceNotFoundException**

### **exceptionMessage**

Request references a resource which does not exist.

HTTP Status Code: 404

## **ServiceQuotaExceededException**

### **exceptionMessage**

Request would cause a service quota to be exceeded.

HTTP Status Code: 402

## **ValidationException**

### **exceptionMessage**

The input fails to satisfy the constraints specified by an AWS service.

HTTP Status Code: 400

## **See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface V2](#)
- [AWS SDK for .NET V4](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for Kotlin](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# Data Types

The Amazon Interactive Video Service RealTime API contains several data types that various actions use. This section describes each data type in detail.

## Note

The order of each element in a data type structure is not guaranteed. Applications should not assume a particular order.

The following data types are supported:

- [AutoParticipantRecordingConfiguration](#)
- [ChannelDestinationConfiguration](#)
- [Composition](#)
- [CompositionRecordingHlsConfiguration](#)
- [CompositionSummary](#)
- [CompositionThumbnailConfiguration](#)
- [Destination](#)
- [DestinationConfiguration](#)
- [DestinationDetail](#)
- [DestinationSummary](#)
- [EncoderConfiguration](#)
- [EncoderConfigurationSummary](#)
- [Event](#)
- [ExchangedParticipantToken](#)
- [GridConfiguration](#)
- [IngestConfiguration](#)
- [IngestConfigurationSummary](#)
- [LayoutConfiguration](#)
- [Participant](#)
- [ParticipantRecordingHlsConfiguration](#)

- [ParticipantReplica](#)
- [ParticipantSummary](#)
- [ParticipantThumbnailConfiguration](#)
- [ParticipantToken](#)
- [ParticipantTokenConfiguration](#)
- [PipConfiguration](#)
- [PublicKey](#)
- [PublicKeySummary](#)
- [RecordingConfiguration](#)
- [RedundantIngestCredential](#)
- [S3DestinationConfiguration](#)
- [S3Detail](#)
- [S3StorageConfiguration](#)
- [Stage](#)
- [StageEndpoints](#)
- [StageSession](#)
- [StageSessionSummary](#)
- [StageSummary](#)
- [StorageConfiguration](#)
- [StorageConfigurationSummary](#)
- [Video](#)

# AutoParticipantRecordingConfiguration

Object specifying a configuration for individual participant recording.

## Contents

### storageConfigurationArn

ARN of the [StorageConfiguration](#) resource to use for individual participant recording. Default: "" (empty string, no storage configuration is specified). Individual participant recording cannot be started unless a storage configuration is specified, when a [Stage](#) is created or updated. To disable individual participant recording, set this to ""; other fields in this object will get reset to their defaults when sending "".

Type: String

Length Constraints: Minimum length of 0. Maximum length of 128.

Pattern: `^$|^arn:aws:ivs:[a-z0-9-]+:[0-9]+:storage-configuration/[a-zA-Z0-9-]+$`

Required: Yes

### hlsConfiguration

HLS configuration object for individual participant recording.

Type: [ParticipantRecordingHlsConfiguration](#) object

Required: No

### mediaTypes

Types of media to be recorded. Default: AUDIO\_VIDEO.

Type: Array of strings

Array Members: Minimum number of 0 items. Maximum number of 1 item.

Valid Values: AUDIO\_VIDEO | AUDIO\_ONLY | NONE

Required: No

## **recordingReconnectWindowSeconds**

If a stage publisher disconnects and then reconnects within the specified interval, the multiple recordings will be considered a single recording and merged together.

The default value is 0, which disables merging.

Type: Integer

Valid Range: Minimum value of 0. Maximum value of 300.

Required: No

## **recordParticipantReplicas**

Optional field to disable replica participant recording. If this is set to `false` when a participant is a replica, replica participants are not recorded. Default: `true`.

Type: Boolean

Required: No

## **thumbnailConfiguration**

A complex type that allows you to enable/disable the recording of thumbnails for individual participant recording and modify the interval at which thumbnails are generated for the live session.

Type: [ParticipantThumbnailConfiguration](#) object

Required: No

## **See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

# ChannelDestinationConfiguration

Object specifying a channel as a destination.

## Contents

### channelArn

ARN of the channel to use for broadcasting. The channel and stage resources must be in the same AWS account and region. The channel must be offline (not broadcasting).

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `arn:aws:ivs:[a-z0-9-]+:[0-9]+:channel/[a-zA-Z0-9-]+`

Required: Yes

### encoderConfigurationArn

ARN of the [EncoderConfiguration](#) resource. The encoder configuration and stage resources must be in the same AWS account and region.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `arn:aws:ivs:[a-z0-9-]+:[0-9]+:encoder-configuration/[a-zA-Z0-9-]+`

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

# Composition

Object specifying a Composition resource.

## Contents

### arn

ARN of the Composition resource.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `arn:aws:ivs:[a-z0-9-]+:[0-9]+:composition/[a-zA-Z0-9-]+`

Required: Yes

### destinations

Array of Destination objects. A Composition can contain either one destination (channel or s3) or two (one channel and one s3).

Type: Array of [Destination](#) objects

Array Members: Minimum number of 1 item. Maximum number of 2 items.

Required: Yes

### layout

Layout object to configure composition parameters.

Type: [LayoutConfiguration](#) object

Required: Yes

### stageArn

ARN of the stage used as input

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `arn:aws:ivs:[a-z0-9-]+:[0-9]+:stage/[a-zA-Z0-9-]+`

Required: Yes

### **state**

State of the Composition.

Type: String

Valid Values: STARTING | ACTIVE | STOPPING | FAILED | STOPPED

Required: Yes

### **endTime**

UTC time of the Composition end. This is an ISO 8601 timestamp; *note that this is returned as a string.*

Type: Timestamp

Required: No

### **startTime**

UTC time of the Composition start. This is an ISO 8601 timestamp; *note that this is returned as a string.*

Type: Timestamp

Required: No

### **tags**

Tags attached to the resource. Array of maps, each of the form `string:string` (`key:value`). See [Best practices and strategies](#) in *Tagging AWS Resources and Tag Editor* for details, including restrictions that apply to tags and "Tag naming limits and requirements"; Amazon IVS has no constraints on tags beyond what is documented there.

Type: String to string map

Map Entries: Minimum number of 0 items. Maximum number of 50 items.

Key Length Constraints: Minimum length of 1. Maximum length of 128.

Value Length Constraints: Minimum length of 0. Maximum length of 256.

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

# CompositionRecordingHlsConfiguration

An object representing a configuration of HLS recordings for server-side composition.

## Contents

### targetSegmentDurationSeconds

Defines the target duration for recorded segments generated when using composite recording.  
Default: 2.

Type: Integer

Valid Range: Minimum value of 2. Maximum value of 10.

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

# CompositionSummary

Summary information about a Composition.

## Contents

### arn

ARN of the Composition resource.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `arn:aws:ivs:[a-z0-9-]+:[0-9]+:composition/[a-zA-Z0-9-]+`

Required: Yes

### destinations

Array of Destination objects.

Type: Array of [DestinationSummary](#) objects

Array Members: Minimum number of 1 item. Maximum number of 2 items.

Required: Yes

### stageArn

ARN of the attached stage.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `arn:aws:ivs:[a-z0-9-]+:[0-9]+:stage/[a-zA-Z0-9-]+`

Required: Yes

### state

State of the Composition resource.

Type: String

Valid Values: STARTING | ACTIVE | STOPPING | FAILED | STOPPED

Required: Yes

### **endTime**

UTC time of the Composition end. This is an ISO 8601 timestamp; *note that this is returned as a string.*

Type: Timestamp

Required: No

### **startTime**

UTC time of the Composition start. This is an ISO 8601 timestamp; *note that this is returned as a string.*

Type: Timestamp

Required: No

### **tags**

Tags attached to the resource. Array of maps, each of the form `string:string` (`key:value`). See [Best practices and strategies](#) in *Tagging AWS Resources and Tag Editor* for details, including restrictions that apply to tags and "Tag naming limits and requirements"; Amazon IVS has no constraints on tags beyond what is documented there.

Type: String to string map

Map Entries: Minimum number of 0 items. Maximum number of 50 items.

Key Length Constraints: Minimum length of 1. Maximum length of 128.

Value Length Constraints: Minimum length of 0. Maximum length of 256.

Required: No

## **See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

# CompositionThumbnailConfiguration

An object representing a configuration of thumbnails for recorded video for a [Composition](#).

## Contents

### storage

Indicates the format in which thumbnails are recorded. SEQUENTIAL records all generated thumbnails in a serial manner, to the `media/thumbnails/(width)x(height)` directory, where `(width)` and `(height)` are the width and height of the thumbnail. LATEST saves the latest thumbnail in `media/latest_thumbnail/(width)x(height)/thumb.jpg` and overwrites it at the interval specified by `targetIntervalSeconds`. You can enable both SEQUENTIAL and LATEST. Default: SEQUENTIAL.

Type: Array of strings

Array Members: Minimum number of 0 items. Maximum number of 2 items.

Valid Values: SEQUENTIAL | LATEST

Required: No

### targetIntervalSeconds

The targeted thumbnail-generation interval in seconds. Default: 60.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 86400.

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)



# Destination

Object specifying the status of a Destination.

## Contents

### configuration

Configuration used to create this destination.

Type: [DestinationConfiguration](#) object

Required: Yes

### id

Unique identifier for this destination, assigned by IVS.

Type: String

Required: Yes

### state

State of the Composition Destination.

Type: String

Valid Values: STARTING | ACTIVE | STOPPING | RECONNECTING | FAILED | STOPPED

Required: Yes

### detail

Optional details regarding the status of the destination.

Type: [DestinationDetail](#) object

Required: No

### endTime

UTC time of the destination end. This is an ISO 8601 timestamp; *note that this is returned as a string.*

Type: Timestamp

Required: No

### **startTime**

UTC time of the destination start. This is an ISO 8601 timestamp; *note that this is returned as a string.*

Type: Timestamp

Required: No

## **See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

# DestinationConfiguration

Complex data type that defines destination-configuration objects.

## Contents

### channel

An IVS channel to be used for broadcasting, for server-side composition. Either a `channel` or an `s3` must be specified.

Type: [ChannelDestinationConfiguration](#) object

Required: No

### name

Name that can be specified to help identify the destination.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 128.

Pattern: `[a-zA-Z0-9-_*]`

Required: No

### s3

An S3 storage configuration to be used for recording video data. Either a `channel` or an `s3` must be specified.

Type: [S3DestinationConfiguration](#) object

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)

- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

# DestinationDetail

Complex data type that defines destination-detail objects.

## Contents

### s3

An S3 detail object to return information about the S3 destination.

Type: [S3Detail](#) object

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

# DestinationSummary

Summary information about a Destination.

## Contents

### id

Unique identifier for this destination, assigned by IVS.

Type: String

Required: Yes

### state

State of the Composition Destination.

Type: String

Valid Values: STARTING | ACTIVE | STOPPING | RECONNECTING | FAILED | STOPPED

Required: Yes

### endTime

UTC time of the destination end. This is an ISO 8601 timestamp; *note that this is returned as a string.*

Type: Timestamp

Required: No

### startTime

UTC time of the destination start. This is an ISO 8601 timestamp; *note that this is returned as a string.*

Type: Timestamp

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

# EncoderConfiguration

Settings for transcoding.

## Contents

### arn

ARN of the EncoderConfiguration resource.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `arn:aws:ivs:[a-z0-9-]+:[0-9]+:encoder-configuration/[a-zA-Z0-9-]+`

Required: Yes

### name

Optional name to identify the resource.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 128.

Pattern: `[a-zA-Z0-9-]*`

Required: No

### tags

Tags attached to the resource. Array of maps, each of the form `string:string` (`key:value`). See [Best practices and strategies](#) in *Tagging AWS Resources and Tag Editor* for details, including restrictions that apply to tags and "Tag naming limits and requirements"; Amazon IVS has no constraints on tags beyond what is documented there.

Type: String to string map

Map Entries: Minimum number of 0 items. Maximum number of 50 items.

Key Length Constraints: Minimum length of 1. Maximum length of 128.

Value Length Constraints: Minimum length of 0. Maximum length of 256.

Required: No

## **video**

Video configuration. Default: video resolution 1280x720, bitrate 2500 kbps, 30 fps

Type: [Video](#) object

Required: No

## **See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

# EncoderConfigurationSummary

Summary information about an EncoderConfiguration.

## Contents

### arn

ARN of the EncoderConfiguration resource.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `arn:aws:ivs:[a-z0-9-]+:[0-9]+:encoder-configuration/[a-zA-Z0-9-]+`

Required: Yes

### name

Optional name to identify the resource.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 128.

Pattern: `[a-zA-Z0-9-]*`

Required: No

### tags

Tags attached to the resource. Array of maps, each of the form `string:string` (`key:value`). See [Best practices and strategies](#) in *Tagging AWS Resources and Tag Editor* for details, including restrictions that apply to tags and "Tag naming limits and requirements"; Amazon IVS has no constraints on tags beyond what is documented there.

Type: String to string map

Map Entries: Minimum number of 0 items. Maximum number of 50 items.

Key Length Constraints: Minimum length of 1. Maximum length of 128.

Value Length Constraints: Minimum length of 0. Maximum length of 256.

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

# Event

An occurrence during a stage session.

## Contents

### **destinationSessionId**

ID of the session within the destination stage. Applicable only if the event name is `REPLICATION_STARTED` or `REPLICATION_STOPPED`.

Type: String

Length Constraints: Fixed length of 16.

Pattern: `st-[a-zA-Z0-9]+`

Required: No

### **destinationStageArn**

ARN of the stage where the participant is replicated. Applicable only if the event name is `REPLICATION_STARTED` or `REPLICATION_STOPPED`.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `arn:aws:ivs:[a-z0-9-]+:[0-9]+:stage/[a-zA-Z0-9-]+`

Required: No

### **errorCode**

If the event is an error event, the error code is provided to give insight into the specific error that occurred. If the event is not an error event, this field is null.

- `B_FRAME_PRESENT` — The participant's stream includes B-frames. For details, see [IVS RTMP Publishing](#).
- `BITRATE_EXCEEDED` — The participant exceeded the maximum supported bitrate. For details, see [Service Quotas](#).
- `INSUFFICIENT_CAPABILITIES` — The participant tried to take an action that the participant's token is not allowed to do. For details on participant capabilities, see the `capabilities` field in [CreateParticipantToken](#).

- `INTERNAL_SERVER_EXCEPTION` — The participant failed to publish to the stage due to an internal server error.
- `INVALID_AUDIO_CODEC` — The participant is using an invalid audio codec. For details, see [Stream Ingest](#).
- `INVALID_INPUT` — The participant is using an invalid input stream.
- `INVALID_PROTOCOL` — The participant's `IngestConfiguration` resource is configured for RTMPS but they tried streaming with RTMP. For details, see [IVS RTMP Publishing](#).
- `INVALID_STREAM_KEY` — The participant is using an invalid stream key. For details, see [IVS RTMP Publishing](#).
- `INVALID_VIDEO_CODEC` — The participant is using an invalid video codec. For details, see [Stream Ingest](#).
- `PUBLISHER_NOT_FOUND` — The participant tried to subscribe to a publisher that doesn't exist.
- `QUOTA_EXCEEDED` — The number of participants who want to publish/subscribe to a stage exceeds the quota. For details, see [Service Quotas](#).
- `RESOLUTION_EXCEEDED` — The participant exceeded the maximum supported resolution. For details, see [Service Quotas](#).
- `REUSE_OF_STREAM_KEY` — The participant tried to use a stream key that is associated with another active stage session.
- `STREAM_DURATION_EXCEEDED` — The participant exceeded the maximum allowed stream duration. For details, see [Service Quotas](#).

Type: String

Valid Values: `INSUFFICIENT_CAPABILITIES` | `QUOTA_EXCEEDED` | `PUBLISHER_NOT_FOUND` | `BITRATE_EXCEEDED` | `RESOLUTION_EXCEEDED` | `STREAM_DURATION_EXCEEDED` | `INVALID_AUDIO_CODEC` | `INVALID_VIDEO_CODEC` | `INVALID_PROTOCOL` | `INVALID_STREAM_KEY` | `REUSE_OF_STREAM_KEY` | `B_FRAME_PRESENT` | `INVALID_INPUT` | `INTERNAL_SERVER_EXCEPTION`

Required: No

### **eventTime**

ISO 8601 timestamp (returned as a string) for when the event occurred.

Type: Timestamp

Required: No

### **name**

The name of the event.

Type: String

Valid Values: JOINED | LEFT | PUBLISH\_STARTED | PUBLISH\_STOPPED | SUBSCRIBE\_STARTED | SUBSCRIBE\_STOPPED | PUBLISH\_ERROR | SUBSCRIBE\_ERROR | JOIN\_ERROR | REPLICATION\_STARTED | REPLICATION\_STOPPED | TOKEN\_EXCHANGED

Required: No

### **newToken**

Participant token created during TOKEN\_EXCHANGED event.

Type: [ExchangedParticipantToken](#) object

Required: No

### **participantId**

Unique identifier for the participant who triggered the event. This is assigned by IVS.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 64.

Pattern: [a-zA-Z0-9-]\*

Required: No

### **previousToken**

Source participant token for TOKEN\_EXCHANGED event.

Type: [ExchangedParticipantToken](#) object

Required: No

### **remoteParticipantId**

Unique identifier for the remote participant. For a subscribe event, this is the publisher. For a publish or join event, this is null. This is assigned by IVS.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 64.

Pattern: [a-zA-Z0-9-]\*

Required: No

## replica

If true, this indicates the `participantId` is a replicated participant. If this is a subscribe event, then this flag refers to `remoteParticipantId`. Default: false.

Type: Boolean

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

# ExchangedParticipantToken

Object specifying an exchanged participant token in a stage, created when an original participant token is updated.

**Important:** Treat tokens as opaque; i.e., do not build functionality based on token contents. The format of tokens could change in the future.

## Contents

### attributes

Application-provided attributes to encode into the token and attach to a stage. Map keys and values can contain UTF-8 encoded text. The maximum length of this field is 1 KB total. *This field is exposed to all stage participants and should not be used for personally identifying, confidential, or sensitive information.*

Type: String to string map

Required: No

### capabilities

Set of capabilities that the user is allowed to perform in the stage.

Type: Array of strings

Array Members: Minimum number of 0 items. Maximum number of 2 items.

Valid Values: PUBLISH | SUBSCRIBE

Required: No

### expirationTime

ISO 8601 timestamp (returned as a string) for when this token expires.

Type: Timestamp

Required: No

### userId

Customer-assigned name to help identify the token; this can be used to link a participant to a user in the customer's own systems. This can be any UTF-8 encoded text. *This field is exposed to*

*all stage participants and should not be used for personally identifying, confidential, or sensitive information.*

Type: String

Length Constraints: Minimum length of 0. Maximum length of 128.

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

# GridConfiguration

Configuration information specific to Grid layout, for server-side composition. See "Layouts" in [Server-Side Composition](#).

## Contents

### featuredParticipantAttribute

This attribute name identifies the featured slot. A participant with this attribute set to "true" (as a string value) in [ParticipantTokenConfiguration](#) is placed in the featured slot. Default: "" (no featured participant).

Type: String

Length Constraints: Minimum length of 0. Maximum length of 128.

Pattern: [a-zA-Z0-9-\_\*]

Required: No

### gridGap

Specifies the spacing between participant tiles in pixels. Default: 2.

Type: Integer

Valid Range: Minimum value of 0.

Required: No

### omitStoppedVideo

Determines whether to omit participants with stopped video in the composition. Default: false.

Type: Boolean

Required: No

### participantOrderAttribute

Attribute name in [ParticipantTokenConfiguration](#) identifying the participant ordering key. Participants with participantOrderAttribute set to "" or not specified are ordered based on their arrival time into the stage.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 128.

Pattern: [a-zA-Z0-9-\_\*]

Required: No

### **videoAspectRatio**

Sets the non-featured participant display mode, to control the aspect ratio of video tiles. VIDEO is 16:9, SQUARE is 1:1, and PORTRAIT is 3:4. Default: VIDEO.

Type: String

Valid Values: AUTO | VIDEO | SQUARE | PORTRAIT

Required: No

### **videoFillMode**

Defines how video content fits within the participant tile: FILL (stretched), COVER (cropped), or CONTAIN (letterboxed). When not set, `videoFillMode` defaults to COVER fill mode for participants in the grid and to CONTAIN fill mode for featured participants.

Type: String

Valid Values: FILL | COVER | CONTAIN

Required: No

## **See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

# IngestConfiguration

Object specifying an ingest configuration.

## Contents

### **arn**

Ingest configuration ARN.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `arn:aws:ivs:[a-z0-9-]+:[0-9]+:ingest-configuration/[a-zA-Z0-9-]+`

Required: Yes

### **ingestProtocol**

Type of ingest protocol that the user employs for broadcasting.

Type: String

Valid Values: RTMP | RTMPS

Required: Yes

### **participantId**

ID of the participant within the stage.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 64.

Pattern: `[a-zA-Z0-9-]*`

Required: Yes

### **stageArn**

ARN of the stage with which the IngestConfiguration is associated.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 128.

Pattern: `^\$|^arn:aws:ivs:[a-z0-9-]+:[0-9]+:stage/[a-zA-Z0-9-]+\$`

Required: Yes

### **state**

State of the ingest configuration. It is ACTIVE if a publisher currently is publishing to the stage associated with the ingest configuration.

Type: String

Valid Values: ACTIVE | INACTIVE

Required: Yes

### **streamKey**

Ingest-key value for the RTMP(S) protocol.

Type: String

Pattern: `rt_[0-9]+_[a-z0-9-]+_[a-zA-Z0-9-]+_.*`

Required: Yes

### **attributes**

Application-provided attributes to store in the IngestConfiguration and attach to a stage. Map keys and values can contain UTF-8 encoded text. The maximum length of this field is 1 KB total. *This field is exposed to all stage participants and should not be used for personally identifying, confidential, or sensitive information.*

Type: String to string map

Required: No

### **name**

Ingest name

Type: String

Length Constraints: Minimum length of 0. Maximum length of 128.

Pattern: [a-zA-Z0-9-\_\*]

Required: No

### **redundantIngest**

Indicates whether redundant ingest is enabled for the ingest configuration.

Type: Boolean

Required: No

### **redundantIngestCredentials**

A list of redundant ingest credentials, present only when `redundantIngest` is set to `true`. See Redundant Ingest in IVS RTMP Publishing for details.

Type: Array of [RedundantIngestCredential](#) objects

Required: No

### **tags**

Tags attached to the resource. Array of maps, each of the form `string:string` (`key:value`). See [Best practices and strategies](#) in *Tagging AWS Resources and Tag Editor* for details, including restrictions that apply to tags and "Tag naming limits and requirements"; Amazon IVS has no constraints on tags beyond what is documented there.

Type: String to string map

Map Entries: Minimum number of 0 items. Maximum number of 50 items.

Key Length Constraints: Minimum length of 1. Maximum length of 128.

Value Length Constraints: Minimum length of 0. Maximum length of 256.

Required: No

### **userId**

Customer-assigned name to help identify the participant using the `IngestConfiguration`; this can be used to link a participant to a user in the customer's own systems. This can be any UTF-8 encoded text. *This field is exposed to all stage participants and should not be used for personally identifying, confidential, or sensitive information.*

Type: String

Length Constraints: Minimum length of 0. Maximum length of 128.

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

# IngestConfigurationSummary

Summary information about an IngestConfiguration.

## Contents

### arn

Ingest configuration ARN.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `arn:aws:ivs:[a-z0-9-]+:[0-9]+:ingest-configuration/[a-zA-Z0-9-]+`

Required: Yes

### ingestProtocol

Type of ingest protocol that the user employs for broadcasting.

Type: String

Valid Values: RTMP | RTMPS

Required: Yes

### participantId

ID of the participant within the stage.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 64.

Pattern: `[a-zA-Z0-9-]*`

Required: Yes

### stageArn

ARN of the stage with which the IngestConfiguration is associated.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 128.

Pattern: `^$|^arn:aws:ivs:[a-z0-9-]+:[0-9]+:stage/[a-zA-Z0-9-]+$`

Required: Yes

### **state**

State of the ingest configuration. It is ACTIVE if a publisher currently is publishing to the stage associated with the ingest configuration.

Type: String

Valid Values: ACTIVE | INACTIVE

Required: Yes

### **name**

Ingest name.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 128.

Pattern: `[a-zA-Z0-9-]*`

Required: No

### **redundantIngest**

Indicates whether redundant ingest is enabled for the ingest configuration.

Type: Boolean

Required: No

### **userId**

Customer-assigned name to help identify the participant using the IngestConfiguration; this can be used to link a participant to a user in the customer's own systems. This can be any UTF-8 encoded text. *This field is exposed to all stage participants and should not be used for personally identifying, confidential, or sensitive information.*

Type: String

Length Constraints: Minimum length of 0. Maximum length of 128.

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

# LayoutConfiguration

Configuration information of supported layouts for server-side composition.

## Contents

### grid

Configuration related to grid layout. Default: Grid layout.

Type: [GridConfiguration](#) object

Required: No

### pip

Configuration related to PiP layout.

Type: [PipConfiguration](#) object

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

# Participant

Object describing a participant that has joined a stage.

## Contents

### attributes

Application-provided attributes to encode into the token and attach to a stage. Map keys and values can contain UTF-8 encoded text. The maximum length of this field is 1 KB total. *This field is exposed to all stage participants and should not be used for personally identifying, confidential, or sensitive information.*

Type: String to string map

Required: No

### browserName

The participant's browser.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 128.

Pattern: `[a-zA-Z0-9-_. , ; \s]*`

Required: No

### browserVersion

The participant's browser version.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 128.

Pattern: `[a-zA-Z0-9-_. , ; \s]*`

Required: No

### firstJoinTime

ISO 8601 timestamp (returned as a string) when the participant first joined the stage session.

Type: Timestamp

Required: No

### **ingestConfigurationArn**

The participant's ingest configuration.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `arn:aws:ivs:[a-z0-9-]+:[0-9]+:ingest-configuration/[a-zA-Z0-9-]+`

Required: No

### **ispName**

The participant's Internet Service Provider.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 128.

Pattern: `[a-zA-Z0-9-_. , ; \s]*`

Required: No

### **osName**

The participant's operating system.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 128.

Pattern: `[a-zA-Z0-9-_. , ; \s]*`

Required: No

### **osVersion**

The participant's operating system version.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 128.

Pattern: `[a-zA-Z0-9-_. , ; \s]*`

Required: No

### **participantId**

Unique identifier for this participant, assigned by IVS.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 64.

Pattern: `[a-zA-Z0-9-]*`

Required: No

### **protocol**

Type of ingest protocol that the participant employs for broadcasting.

Type: String

Valid Values: UNKNOWN | WHIP | RTMP | RTMPS

Required: No

### **published**

Whether the participant ever published to the stage session.

Type: Boolean

Required: No

### **recordingS3BucketName**

Name of the S3 bucket to where the participant is being recorded, if individual participant recording is enabled, or "" (empty string), if recording is not enabled.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 63.

Pattern: `[a-z0-9- .]*`

Required: No

### **recordingS3Prefix**

S3 prefix of the S3 bucket where the participant is being recorded, if individual participant recording is enabled, or "" (empty string), if recording is not enabled. If individual participant recording merge is enabled, and if a stage publisher disconnects from a stage and then reconnects, IVS tries to record to the same S3 prefix as the previous session. See [Merge Fragmented Individual Participant Recordings](#).

Type: String

Length Constraints: Minimum length of 0. Maximum length of 256.

Pattern: [a-zA-Z0-9-]\*

Required: No

### **recordingState**

The participant's recording state.

Type: String

Valid Values: STARTING | ACTIVE | STOPPING | STOPPED | FAILED | DISABLED

Required: No

### **redundantIngest**

Indicates whether redundant ingest is enabled for the participant.

Type: Boolean

Required: No

### **replicationState**

The participant's replication state.

Type: String

Valid Values: ACTIVE | STOPPED

Required: No

## replicationType

Indicates if the participant has been replicated to another stage or is a replica from another stage. Default: NONE.

Type: String

Valid Values: SOURCE | REPLICICA | NONE

Required: No

## sdkVersion

The participant's SDK version.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 128.

Pattern: [a-zA-Z0-9-\_.,:;\s]\*

Required: No

## sourceSessionId

ID of the session within the source stage, if replicationType is REPLICICA.

Type: String

Length Constraints: Fixed length of 16.

Pattern: st-[a-zA-Z0-9]+

Required: No

## sourceStageArn

Source stage ARN from which this participant is replicated, if replicationType is REPLICICA.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: arn:aws:ivs:[a-z0-9-]+:[0-9]+:stage/[a-zA-Z0-9-]+

Required: No

## state

Whether the participant is connected to or disconnected from the stage.

Type: String

Valid Values: CONNECTED | DISCONNECTED

Required: No

## userId

Customer-assigned name to help identify the token; this can be used to link a participant to a user in the customer's own systems. This can be any UTF-8 encoded text. *This field is exposed to all stage participants and should not be used for personally identifying, confidential, or sensitive information.*

Type: String

Length Constraints: Minimum length of 0. Maximum length of 128.

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

# ParticipantRecordingHlsConfiguration

An object representing a configuration of participant HLS recordings for individual participant recording.

## Contents

### targetSegmentDurationSeconds

Defines the target duration for recorded segments generated when recording a stage participant. Segments may have durations longer than the specified value when needed to ensure each segment begins with a keyframe. Default: 6.

Type: Integer

Valid Range: Minimum value of 2. Maximum value of 10.

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

# ParticipantReplica

Information about the replicated destination stage for a participant.

## Contents

### **destinationSessionId**

ID of the session within the destination stage.

Type: String

Length Constraints: Fixed length of 16.

Pattern: `st-[a-zA-Z0-9]+`

Required: Yes

### **destinationStageArn**

ARN of the stage where the participant is replicated.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `arn:aws:ivs:[a-z0-9-]+:[0-9]+:stage/[a-zA-Z0-9-]+`

Required: Yes

### **participantId**

Participant ID of the publisher that will be replicated. This is assigned by IVS and returned by [CreateParticipantToken](#) or the `jti` (JWT ID) used to [create a self signed token](#).

Type: String

Length Constraints: Minimum length of 0. Maximum length of 64.

Pattern: `[a-zA-Z0-9-]*`

Required: Yes

### **replicationState**

Replica's current replication state.

Type: String

Valid Values: ACTIVE | STOPPED

Required: Yes

### **sourceSessionId**

ID of the session within the source stage.

Type: String

Length Constraints: Fixed length of 16.

Pattern: st-[a-zA-Z0-9]+

Required: Yes

### **sourceStageArn**

ARN of the stage from which this participant is replicated.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: arn:aws:ivs:[a-z0-9-]+:[0-9]+:stage/[a-zA-Z0-9-]+

Required: Yes

## **See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

# ParticipantSummary

Summary object describing a participant that has joined a stage.

## Contents

### **firstJoinTime**

ISO 8601 timestamp (returned as a string) when the participant first joined the stage session.

Type: Timestamp

Required: No

### **ingestConfigurationArn**

The participant's ingest configuration.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `arn:aws:ivs:[a-z0-9-]+:[0-9]+:ingest-configuration/[a-zA-Z0-9-]+`

Required: No

### **participantId**

Unique identifier for this participant, assigned by IVS.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 64.

Pattern: `[a-zA-Z0-9-]*`

Required: No

### **published**

Whether the participant ever published to the stage session.

Type: Boolean

Required: No

**recordingState**

The participant's recording state.

Type: String

Valid Values: STARTING | ACTIVE | STOPPING | STOPPED | FAILED | DISABLED

Required: No

**redundantIngest**

Indicates whether redundant ingest is enabled for the participant.

Type: Boolean

Required: No

**replicationState**

The participant's replication state.

Type: String

Valid Values: ACTIVE | STOPPED

Required: No

**replicationType**

Indicates if the participant has been replicated to another stage or is a replica from another stage. Default: NONE.

Type: String

Valid Values: SOURCE | REPLICIA | NONE

Required: No

**sourceSessionId**

ID of the session within the source stage, if `replicationType` is REPLICIA.

Type: String

Length Constraints: Fixed length of 16.

Pattern: `st-[a-zA-Z0-9]+`

Required: No

### **sourceStageArn**

Source stage ARN from which this participant is replicated, if `replicationType` is `REPLICA`.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `arn:aws:ivs:[a-z0-9-]+:[0-9]+:stage/[a-zA-Z0-9-]+`

Required: No

### **state**

Whether the participant is connected to or disconnected from the stage.

Type: String

Valid Values: `CONNECTED` | `DISCONNECTED`

Required: No

### **userId**

Customer-assigned name to help identify the token; this can be used to link a participant to a user in the customer's own systems. This can be any UTF-8 encoded text. *This field is exposed to all stage participants and should not be used for personally identifying, confidential, or sensitive information.*

Type: String

Length Constraints: Minimum length of 0. Maximum length of 128.

Required: No

## **See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

# ParticipantThumbnailConfiguration

An object representing a configuration of thumbnails for recorded video from an individual participant.

## Contents

### recordingMode

Thumbnail recording mode. Default: DISABLED.

Type: String

Valid Values: INTERVAL | DISABLED

Required: No

### storage

Indicates the format in which thumbnails are recorded. SEQUENTIAL records all generated thumbnails in a serial manner, to the media/thumbnails/high directory. LATEST saves the latest thumbnail in media/latest\_thumbnail/high/thumb.jpg and overwrites it at the interval specified by `targetIntervalSeconds`. You can enable both SEQUENTIAL and LATEST. Default: SEQUENTIAL.

Type: Array of strings

Array Members: Minimum number of 0 items. Maximum number of 2 items.

Valid Values: SEQUENTIAL | LATEST

Required: No

### targetIntervalSeconds

The targeted thumbnail-generation interval in seconds. This is configurable only if `recordingMode` is INTERVAL. Default: 60.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 86400.

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

# ParticipantToken

Object specifying a participant token in a stage.

**Important:** Treat tokens as opaque; i.e., do not build functionality based on token contents. The format of tokens could change in the future.

## Contents

### attributes

Application-provided attributes to encode into the token and attach to a stage. Map keys and values can contain UTF-8 encoded text. The maximum length of this field is 1 KB total. *This field is exposed to all stage participants and should not be used for personally identifying, confidential, or sensitive information.*

Type: String to string map

Required: No

### capabilities

Set of capabilities that the user is allowed to perform in the stage.

Type: Array of strings

Array Members: Minimum number of 0 items. Maximum number of 2 items.

Valid Values: PUBLISH | SUBSCRIBE

Required: No

### duration

Duration (in minutes), after which the participant token expires. Default: 720 (12 hours).

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 20160.

Required: No

### expirationTime

ISO 8601 timestamp (returned as a string) for when this token expires.

Type: Timestamp

Required: No

### **participantId**

Unique identifier for this participant token, assigned by IVS.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 64.

Pattern: [a-zA-Z0-9-\_\*]

Required: No

### **token**

The issued client token, encrypted.

Type: String

Required: No

### **userId**

Customer-assigned name to help identify the token; this can be used to link a participant to a user in the customer's own systems. This can be any UTF-8 encoded text. *This field is exposed to all stage participants and should not be used for personally identifying, confidential, or sensitive information.*

Type: String

Length Constraints: Minimum length of 0. Maximum length of 128.

Required: No

## **See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)

- [AWS SDK for Ruby V3](#)

# ParticipantTokenConfiguration

Object specifying a participant token configuration in a stage.

## Contents

### attributes

Application-provided attributes to encode into the corresponding participant token and attach to a stage. Map keys and values can contain UTF-8 encoded text. The maximum length of this field is 1 KB total. *This field is exposed to all stage participants and should not be used for personally identifying, confidential, or sensitive information.*

Type: String to string map

Required: No

### capabilities

Set of capabilities that the user is allowed to perform in the stage.

Type: Array of strings

Array Members: Minimum number of 0 items. Maximum number of 2 items.

Valid Values: PUBLISH | SUBSCRIBE

Required: No

### duration

Duration (in minutes), after which the corresponding participant token expires. Default: 720 (12 hours).

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 20160.

Required: No

### userId

Customer-assigned name to help identify the token; this can be used to link a participant to a user in the customer's own systems. This can be any UTF-8 encoded text. *This field is exposed to*

*all stage participants and should not be used for personally identifying, confidential, or sensitive information.*

Type: String

Length Constraints: Minimum length of 0. Maximum length of 128.

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

# PipConfiguration

Configuration information specific to Picture-in-Picture (PiP) layout, for [server-side composition](#).

## Contents

### featuredParticipantAttribute

This attribute name identifies the featured slot. A participant with this attribute set to "true" (as a string value) in [ParticipantTokenConfiguration](#) is placed in the featured slot. Default: "" (no featured participant).

Type: String

Length Constraints: Minimum length of 0. Maximum length of 128.

Pattern: [a-zA-Z0-9-\_\*]

Required: No

### gridGap

Specifies the spacing between participant tiles in pixels. Default: 0.

Type: Integer

Valid Range: Minimum value of 0.

Required: No

### omitStoppedVideo

Determines whether to omit participants with stopped video in the composition. Default: false.

Type: Boolean

Required: No

### participantOrderAttribute

Attribute name in [ParticipantTokenConfiguration](#) identifying the participant ordering key. Participants with participantOrderAttribute set to "" or not specified are ordered based on their arrival time into the stage.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 128.

Pattern: [a-zA-Z0-9-\_\*]

Required: No

### **pipBehavior**

Defines PiP behavior when all participants have left: `STATIC` (maintains original position/size) or `DYNAMIC` (expands to full composition). Default: `STATIC`.

Type: String

Valid Values: `STATIC` | `DYNAMIC`

Required: No

### **pipHeight**

Specifies the height of the PiP window in pixels. When this is not set explicitly, `pipHeight`'s value will be based on the size of the composition and the aspect ratio of the participant's video.

Type: Integer

Valid Range: Minimum value of 1.

Required: No

### **pipOffset**

Sets the PiP window's offset position in pixels from the closest edges determined by `PipPosition`. Default: 0.

Type: Integer

Valid Range: Minimum value of 0.

Required: No

### **pipParticipantAttribute**

Specifies the participant for the PiP window. A participant with this attribute set to `"true"` (as a string value) in [ParticipantTokenConfiguration](#) is placed in the PiP slot. Default: `""` (no PiP participant).

Type: String

Length Constraints: Minimum length of 0. Maximum length of 128.

Pattern: [a-zA-Z0-9-\_\*]

Required: No

### **pipPosition**

Determines the corner position of the PiP window. Default: BOTTOM\_RIGHT.

Type: String

Valid Values: TOP\_LEFT | TOP\_RIGHT | BOTTOM\_LEFT | BOTTOM\_RIGHT

Required: No

### **pipWidth**

Specifies the width of the PiP window in pixels. When this is not set explicitly, pipWidth's value will be based on the size of the composition and the aspect ratio of the participant's video.

Type: Integer

Valid Range: Minimum value of 1.

Required: No

### **videoFillMode**

Defines how video content fits within the participant tile: FILL (stretched), COVER (cropped), or CONTAIN (letterboxed). Default: COVER.

Type: String

Valid Values: FILL | COVER | CONTAIN

Required: No

## **See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

# PublicKey

Object specifying a public key used to sign stage participant tokens.

## Contents

### arn

Public key ARN.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `arn:aws:ivs:[a-z0-9-]+:[0-9]+:public-key/[a-zA-Z0-9-]+`

Required: No

### fingerprint

The public key fingerprint, a short string used to identify or verify the full public key.

Type: String

Required: No

### name

Public key name.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 128.

Pattern: `[a-zA-Z0-9-_]*`

Required: No

### publicKeyMaterial

Public key material.

Type: String

Pattern: `.*-----BEGIN PUBLIC KEY-----\r?\n([a-zA-Z0-9+/\=\r\n])+\r?\n-----  
END PUBLIC KEY-----(\r?\n)?.*`

Required: No

## tags

Tags attached to the resource. Array of maps, each of the form `string:string` (`key:value`). See [Best practices and strategies](#) in *Tagging AWS Resources and Tag Editor* for details, including restrictions that apply to tags and "Tag naming limits and requirements"; Amazon IVS has no constraints on tags beyond what is documented there.

Type: String to string map

Map Entries: Minimum number of 0 items. Maximum number of 50 items.

Key Length Constraints: Minimum length of 1. Maximum length of 128.

Value Length Constraints: Minimum length of 0. Maximum length of 256.

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

# PublicKeySummary

Summary information about a public key.

## Contents

### arn

Public key ARN.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `arn:aws:ivs:[a-z0-9-]+:[0-9]+:public-key/[a-zA-Z0-9-]+`

Required: No

### name

Public key name.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 128.

Pattern: `[a-zA-Z0-9-]*`

Required: No

### tags

Tags attached to the resource. Array of maps, each of the form `string:string` (`key:value`). See [Best practices and strategies](#) in *Tagging AWS Resources and Tag Editor* for details, including restrictions that apply to tags and "Tag naming limits and requirements"; Amazon IVS has no constraints on tags beyond what is documented there.

Type: String to string map

Map Entries: Minimum number of 0 items. Maximum number of 50 items.

Key Length Constraints: Minimum length of 1. Maximum length of 128.

Value Length Constraints: Minimum length of 0. Maximum length of 256.

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

# RecordingConfiguration

An object representing a configuration to record a stage stream.

## Contents

### format

The recording format for storing a recording in Amazon S3.

Type: String

Valid Values: HLS

Required: No

### hlsConfiguration

An HLS configuration object to return information about how the recording will be configured.

Type: [CompositionRecordingHlsConfiguration](#) object

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

# RedundantIngestCredential

An object representing a redundant ingest credential.

## Contents

### participantId

ID of the participant within the stage.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 64.

Pattern: [a-zA-Z0-9-]\*

Required: No

### streamKey

Ingest-key value.

Type: String

Pattern: rt\_[0-9]+\_[a-z0-9-]+\_[a-zA-Z0-9-]+\_.\*

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

# S3DestinationConfiguration

A complex type that describes an S3 location where recorded videos will be stored.

## Contents

### encoderConfigurationArns

ARNs of the [EncoderConfiguration](#) resource. The encoder configuration and stage resources must be in the same AWS account and region.

Type: Array of strings

Array Members: Fixed number of 1 item.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `arn:aws:ivs:[a-z0-9-]+:[0-9]+:encoder-configuration/[a-zA-Z0-9-]+`

Required: Yes

### storageConfigurationArn

ARN of the [StorageConfiguration](#) where recorded videos will be stored.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `arn:aws:ivs:[a-z0-9-]+:[0-9]+:storage-configuration/[a-zA-Z0-9-]+`

Required: Yes

### recordingConfiguration

Array of maps, each of the form `string:string` (key:value). This is an optional customer specification, currently used only to specify the recording format for storing a recording in Amazon S3.

Type: [RecordingConfiguration](#) object

Required: No

## thumbnailConfigurations

A complex type that allows you to enable/disable the recording of thumbnails for a [Composition](#) and modify the interval at which thumbnails are generated for the live session.

Type: Array of [CompositionThumbnailConfiguration](#) objects

Array Members: Minimum number of 0 items. Maximum number of 1 item.

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

# S3Detail

Complex data type that defines S3Detail objects.

## Contents

### recordingPrefix

The S3 bucket prefix under which the recording is stored.

Type: String

Required: Yes

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

# S3StorageConfiguration

A complex type that describes an S3 location where recorded videos will be stored.

## Contents

### bucketName

Location (S3 bucket name) where recorded videos will be stored. Note that the StorageConfiguration and S3 bucket must be in the same region as the Composition.

Type: String

Length Constraints: Minimum length of 3. Maximum length of 63.

Pattern: [a-z0-9-. ]+

Required: Yes

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

# Stage

Object specifying a stage.

## Contents

### **arn**

Stage ARN.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `arn:aws:ivs:[a-z0-9-]+:[0-9]+:stage/[a-zA-Z0-9-]+`

Required: Yes

### **activeSessionId**

ID of the active session within the stage.

Type: String

Length Constraints: Fixed length of 16.

Pattern: `st-[a-zA-Z0-9]+`

Required: No

### **autoParticipantRecordingConfiguration**

Configuration object for individual participant recording, attached to the stage.

Type: [AutoParticipantRecordingConfiguration](#) object

Required: No

### **endpoints**

Summary information about various endpoints for a stage.

Type: [StageEndpoints](#) object

Required: No

**name**

Stage name.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 128.

Pattern: `[a-zA-Z0-9-_*]`

Required: No

**tags**

Tags attached to the resource. Array of maps, each of the form `string:string` (key:value). See [Best practices and strategies](#) in *Tagging AWS Resources and Tag Editor* for details, including restrictions that apply to tags and "Tag naming limits and requirements"; Amazon IVS has no constraints on tags beyond what is documented there.

Type: String to string map

Map Entries: Minimum number of 0 items. Maximum number of 50 items.

Key Length Constraints: Minimum length of 1. Maximum length of 128.

Value Length Constraints: Minimum length of 0. Maximum length of 256.

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

# StageEndpoints

Summary information about various endpoints for a stage. We recommend that you cache these values at stage creation; the values can be cached for up to 14 days.

## Contents

### events

Events endpoint.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 2048.

Required: No

### rtmp

The endpoint to be used for IVS real-time streaming using the RTMP protocol.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 2048.

Required: No

### rtmps

The endpoint to be used for IVS real-time streaming using the RTMPS protocol.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 2048.

Required: No

### whip

The endpoint to be used for IVS real-time streaming using the WHIP protocol.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 2048.

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

# StageSession

A stage session begins when the first participant joins a stage and ends after the last participant leaves the stage. A stage session helps with debugging stages by grouping events and participants into shorter periods of time (i.e., a session), which is helpful when stages are used over long periods of time.

## Contents

### endTime

ISO 8601 timestamp (returned as a string) when the stage session ended. This is null if the stage is active.

Type: Timestamp

Required: No

### sessionId

ID of the session within the stage.

Type: String

Length Constraints: Fixed length of 16.

Pattern: `st-[a-zA-Z0-9]+`

Required: No

### startTime

ISO 8601 timestamp (returned as a string) when this stage session began.

Type: Timestamp

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

# StageSessionSummary

Summary information about a stage session.

## Contents

### endTime

ISO 8601 timestamp (returned as a string) when the stage session ended. This is null if the stage is active.

Type: Timestamp

Required: No

### sessionId

ID of the session within the stage.

Type: String

Length Constraints: Fixed length of 16.

Pattern: `st-[a-zA-Z0-9]+`

Required: No

### startTime

ISO 8601 timestamp (returned as a string) when this stage session began.

Type: Timestamp

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)

- [AWS SDK for Ruby V3](#)

# StageSummary

Summary information about a stage.

## Contents

### arn

Stage ARN.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `arn:aws:ivs:[a-z0-9-]+:[0-9]+:stage/[a-zA-Z0-9-]+`

Required: Yes

### activeSessionId

ID of the active session within the stage.

Type: String

Length Constraints: Fixed length of 16.

Pattern: `st-[a-zA-Z0-9-]+`

Required: No

### name

Stage name.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 128.

Pattern: `[a-zA-Z0-9-]*`

Required: No

### tags

Tags attached to the resource. Array of maps, each of the form `string:string` (key:value). See [Best practices and strategies](#) in *Tagging AWS Resources and Tag Editor* for

details, including restrictions that apply to tags and "Tag naming limits and requirements"; Amazon IVS has no constraints on tags beyond what is documented there.

Type: String to string map

Map Entries: Minimum number of 0 items. Maximum number of 50 items.

Key Length Constraints: Minimum length of 1. Maximum length of 128.

Value Length Constraints: Minimum length of 0. Maximum length of 256.

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

# StorageConfiguration

A complex type that describes a location where recorded videos will be stored.

## Contents

### arn

ARN of the storage configuration.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `arn:aws:ivs:[a-z0-9-]+:[0-9]+:storage-configuration/[a-zA-Z0-9-]+`

Required: Yes

### name

Name of the storage configuration.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 128.

Pattern: `[a-zA-Z0-9-_*]`

Required: No

### s3

An S3 destination configuration where recorded videos will be stored.

Type: [S3StorageConfiguration](#) object

Required: No

### tags

Tags attached to the resource. Array of maps, each of the form `string:string` (key:value). See [Best practices and strategies](#) in *Tagging AWS Resources and Tag Editor* for details, including restrictions that apply to tags and "Tag naming limits and requirements"; Amazon IVS has no constraints on tags beyond what is documented there.

Type: String to string map

Map Entries: Minimum number of 0 items. Maximum number of 50 items.

Key Length Constraints: Minimum length of 1. Maximum length of 128.

Value Length Constraints: Minimum length of 0. Maximum length of 256.

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

# StorageConfigurationSummary

Summary information about a storage configuration.

## Contents

### arn

ARN of the storage configuration.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `arn:aws:ivs:[a-z0-9-]+:[0-9]+:storage-configuration/[a-zA-Z0-9-]+`

Required: Yes

### name

Name of the storage configuration.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 128.

Pattern: `[a-zA-Z0-9-_]*`

Required: No

### s3

An S3 destination configuration where recorded videos will be stored.

Type: [S3StorageConfiguration](#) object

Required: No

### tags

Tags attached to the resource. Array of maps, each of the form `string:string` (key:value). See [Best practices and strategies](#) in *Tagging AWS Resources and Tag Editor* for details, including restrictions that apply to tags and "Tag naming limits and requirements"; Amazon IVS has no constraints on tags beyond what is documented there.

Type: String to string map

Map Entries: Minimum number of 0 items. Maximum number of 50 items.

Key Length Constraints: Minimum length of 1. Maximum length of 128.

Value Length Constraints: Minimum length of 0. Maximum length of 256.

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

# Video

Settings for video.

## Contents

### **bitrate**

Bitrate for generated output, in bps. Default: 2500000.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 8500000.

Required: No

### **framerate**

Video frame rate, in fps. Default: 30.

Type: Float

Valid Range: Minimum value of 1. Maximum value of 60.

Required: No

### **height**

Video-resolution height. This must be an even number. Note that the maximum value is determined by width times height, such that the maximum total pixels is 2073600 (1920x1080 or 1080x1920). Default: 720.

Type: Integer

Valid Range: Minimum value of 2. Maximum value of 1920.

Required: No

### **width**

Video-resolution width. This must be an even number. Note that the maximum value is determined by width times height, such that the maximum total pixels is 2073600 (1920x1080 or 1080x1920). Default: 1280.

Type: Integer

Valid Range: Minimum value of 2. Maximum value of 1920.

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

# Common Parameters

The following list contains the parameters that all actions use for signing Signature Version 4 requests with a query string. Any action-specific parameters are listed in the topic for that action. For more information about Signature Version 4, see [Signing AWS API requests](#) in the *IAM User Guide*.

## X-Amz-Algorithm

The hash algorithm that you used to create the request signature.

Condition: Specify this parameter when you include authentication information in a query string instead of in the HTTP authorization header.

Type: string

Valid Values: AWS4-HMAC-SHA256

Required: Conditional

## X-Amz-Credential

The credential scope value, which is a string that includes your access key, the date, the region you are targeting, the service you are requesting, and a termination string ("aws4\_request"). The value is expressed in the following format: *access\_key/YYYYMMDD/region/service/aws4\_request*.

For more information, see [Create a signed AWS API request](#) in the *IAM User Guide*.

Condition: Specify this parameter when you include authentication information in a query string instead of in the HTTP authorization header.

Type: string

Required: Conditional

## X-Amz-Date

The date that is used to create the signature. The format must be ISO 8601 basic format (YYYYMMDD'T'HHMMSS'Z'). For example, the following date time is a valid X-Amz-Date value: 20120325T120000Z.

Condition: X-Amz-Date is optional for all requests; it can be used to override the date used for signing requests. If the Date header is specified in the ISO 8601 basic format, X-Amz-Date is not required. When X-Amz-Date is used, it always overrides the value of the Date header. For more information, see [Elements of an AWS API request signature](#) in the *IAM User Guide*.

Type: string

Required: Conditional

### **X-Amz-Security-Token**

The temporary security token that was obtained through a call to AWS Security Token Service (AWS STS). For a list of services that support temporary security credentials from AWS STS, see [AWS services that work with IAM](#) in the *IAM User Guide*.

Condition: If you're using temporary security credentials from AWS STS, you must include the security token.

Type: string

Required: Conditional

### **X-Amz-Signature**

Specifies the hex-encoded signature that was calculated from the string to sign and the derived signing key.

Condition: Specify this parameter when you include authentication information in a query string instead of in the HTTP authorization header.

Type: string

Required: Conditional

### **X-Amz-SignedHeaders**

Specifies all the HTTP headers that were included as part of the canonical request. For more information about specifying signed headers, see [Create a signed AWS API request](#) in the *IAM User Guide*.

Condition: Specify this parameter when you include authentication information in a query string instead of in the HTTP authorization header.

Type: string

**Required: Conditional**

# Common Error Types

This section lists common error types that this AWS service may return. Not all services return all error types listed here. For errors specific to an API action for this service, see the topic for that API action.

## AccessDeniedException

You don't have permission to perform this action. Verify that your IAM policy includes the required permissions.

HTTP Status Code: 403

## ExpiredTokenException

The security token included in the request has expired. Request a new security token and try again.

HTTP Status Code: 403

## IncompleteSignature

The request signature doesn't conform to AWS standards. Verify that you're using valid AWS credentials and that your request is properly formatted. If you're using an SDK, ensure it's up to date.

HTTP Status Code: 403

## InternalFailure

The request can't be processed right now because of an internal server issue. Try again later. If the problem persists, contact AWS Support.

HTTP Status Code: 500

## MalformedHttpRequestException

The request body can't be processed. This typically happens when the request body can't be decompressed using the specified content encoding algorithm. Verify that the content encoding header matches the compression format used.

HTTP Status Code: 400

**NotAuthorized**

You don't have permissions to perform this action. Verify that your IAM policy includes the required permissions.

HTTP Status Code: 401

**OptInRequired**

Your AWS account needs a subscription for this service. Verify that you've enabled the service in your account.

HTTP Status Code: 403

**RequestAbortedException**

The request was aborted before a response could be returned. This typically happens when the client closes the connection.

HTTP Status Code: 400

**RequestEntityTooLargeException**

The request entity is too large. Reduce the size of the request body and try again.

HTTP Status Code: 413

**RequestTimeoutException**

The request timed out. The server didn't receive the complete request within the expected time frame. Try again.

HTTP Status Code: 408

**ServiceUnavailable**

The service is temporarily unavailable. Try again later.

HTTP Status Code: 503

**ThrottlingException**

Your request rate is too high. The AWS SDKs automatically retry requests that receive this exception. Reduce the frequency of requests.

HTTP Status Code: 400

### **UnknownOperationException**

The action or operation isn't recognized. Verify that the action name is spelled correctly and that it's supported by the API version you're using.

HTTP Status Code: 404

### **UnrecognizedClientException**

The X.509 certificate or AWS access key ID you provided doesn't exist in our records. Verify that you're using valid credentials and that they haven't expired.

HTTP Status Code: 403

### **ValidationError**

The input doesn't meet the required format or constraints. Check that all required parameters are included and that values are valid.

HTTP Status Code: 400