What Is AWS Elemental MediaConnect?

AWS Elemental MediaConnect is a service that lets you ingest live video content into the cloud and distribute it to destinations all over the world, both inside and outside the AWS cloud.

This is the API Reference for AWS Elemental MediaConnect. This guide is for developers who need detailed information about the AWS Elemental MediaConnect API actions, data types, and errors. For descriptions of AWS Elemental MediaStore features and step-by-step instructions on how to use them, see the AWS Elemental MediaConnect User Guide.

Alternatively, you can use one of the AWS SDKs to access an API that’s tailored to the programming language or platform that you’re using. For more information, see AWS SDKs.
Resources

The AWS Elemental MediaConnect REST API includes the following resources.

**Topics**
- ListTagsForResource, TagResource, UntagResource (p. 2)
- ListEntitlements (p. 6)
- ListFlows, CreateFlow (p. 10)
- StartFlow (p. 27)
- StopFlow (p. 30)
- DescribeFlow, DeleteFlow (p. 32)
- GrantFlowEntitlements (p. 43)
- UpdateFlowEntitlement, RevokeFlowEntitlement (p. 49)
- AddFlowOutputs (p. 56)
- UpdateFlowOutput, RemoveFlowOutput (p. 63)
- UpdateFlowSource (p. 72)

**ListTagsForResource, TagResource, UntagResource**

**URI**

/tags/resourceArn

**HTTP Methods**

**GET**

Operation ID: ListTagsForResource

Lists all tags associated with the resource.

**Path Parameters**

<table>
<thead>
<tr>
<th>Name</th>
<th>Type</th>
<th>Required</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>resourceArn</td>
<td>String</td>
<td>True</td>
<td>The Amazon Resource Name (ARN) of the resource that you want to view tags for.</td>
</tr>
</tbody>
</table>

**Responses**

<table>
<thead>
<tr>
<th>Status Code</th>
<th>Response Model</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>200</td>
<td>ListTagsForResourceResponse</td>
<td>AWS Elemental MediaConnect listed the tags associated with the resource.</td>
</tr>
</tbody>
</table>
### Status Codes

<table>
<thead>
<tr>
<th>Status Code</th>
<th>Response Model</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>400</td>
<td>ResponseError (p. 5)</td>
<td>The request that you submitted is not valid.</td>
</tr>
<tr>
<td>404</td>
<td>ResponseError (p. 5)</td>
<td>AWS Elemental MediaConnect did not find the resource that you specified in the request.</td>
</tr>
<tr>
<td>500</td>
<td>ResponseError (p. 5)</td>
<td>AWS Elemental MediaConnect can't fulfill your request because it encountered an unexpected condition.</td>
</tr>
</tbody>
</table>

### POST

**Operation ID: TagResource**

Associates the specified tags to a resource. If the request does not mention an existing tag associated with the resource, that tag is not changed.

**Path Parameters**

<table>
<thead>
<tr>
<th>Name</th>
<th>Type</th>
<th>Required</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>resourceArn</td>
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<tr>
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</thead>
<tbody>
<tr>
<td>204</td>
<td>None</td>
<td>If the action is successful, the service sends back an HTTP 204 response with an empty HTTP body.</td>
</tr>
<tr>
<td>400</td>
<td>ResponseError (p. 5)</td>
<td>The request that you submitted is not valid.</td>
</tr>
<tr>
<td>404</td>
<td>ResponseError (p. 5)</td>
<td>AWS Elemental MediaConnect did not find the resource that you specified in the request.</td>
</tr>
<tr>
<td>500</td>
<td>ResponseError (p. 5)</td>
<td>AWS Elemental MediaConnect can't fulfill your request because it encountered an unexpected condition.</td>
</tr>
</tbody>
</table>

### DELETE

**Operation ID: UntagResource**

Deletes the specified tags from a resource.
Path Parameters

<table>
<thead>
<tr>
<th>Name</th>
<th>Type</th>
<th>Required</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>resourceArn</td>
<td>String</td>
<td>True</td>
<td>The Amazon Resource Name (ARN) of the resource that you want to view tags for.</td>
</tr>
</tbody>
</table>

Query Parameters

<table>
<thead>
<tr>
<th>Name</th>
<th>Type</th>
<th>Required</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>tagKeys</td>
<td>String</td>
<td>True</td>
<td>The keys of the tags to be removed.</td>
</tr>
</tbody>
</table>

Responses

<table>
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<tr>
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<td>ResponseError (p. 5)</td>
<td>The request that you submitted is not valid.</td>
</tr>
<tr>
<td>404</td>
<td>ResponseError (p. 5)</td>
<td>AWS Elemental MediaConnect did not find the resource that you specified in the request.</td>
</tr>
<tr>
<td>500</td>
<td>ResponseError (p. 5)</td>
<td>AWS Elemental MediaConnect can't fulfill your request because it encountered an unexpected condition.</td>
</tr>
</tbody>
</table>

Schemas

Request Bodies

Example POST

```json
{
  "tags": {
  }
}
```

Response Bodies

Example ListTagsForResourceResponse

```json
{
  "tags": {
  }
}
Example ResponseError

```json
{
    "message": "string"
}
```

## Properties

### ListTagsForResourceResponse

AWS Elemental MediaConnect listed the tags associated with the resource.

**tags**

A map from tag keys to values. Tag keys can have a maximum character length of 128 characters, and tag values can have a maximum length of 256 characters.

- **Type**: object
- **Required**: True

### ResponseError

An exception raised by AWS Elemental MediaConnect when you submit a request that cannot be completed. For more information, see the error message and documentation for the operation.

**message**

The specific error message that AWS Elemental MediaConnect returns to help you understand the reason that the request did not succeed.

- **Type**: string
- **Required**: True

### TagResourceRequest

The tags to add to the resource. Tag keys can have a maximum character length of 128 characters, and tag values can have a maximum length of 256 characters.

**tags**

A map from tag keys to values. Tag keys can have a maximum character length of 128 characters, and tag values can have a maximum length of 256 characters.

- **Type**: object
- **Required**: True

## See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Go - Pilot
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2

TagResource

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Go - Pilot
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2

UntagResource

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Go - Pilot
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2

ListEntitlements

URI

/v1/entitlements
HTTP Methods

GET

Operation ID: ListEntitlements

Displays a list of all entitlements that have been granted to the account. This request returns 20 results per page.

Query Parameters

<table>
<thead>
<tr>
<th>Name</th>
<th>Type</th>
<th>Required</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>nextToken</td>
<td>String</td>
<td>False</td>
<td>The token that identifies which batch of results that you want to see. For example, you submit a ListEntitlements request with MaxResults set at 5. The service returns the first batch of results (up to 5) and a NextToken value. To see the next batch of results, you can submit the ListEntitlements request a second time and specify the NextToken value. The service might return fewer results than the MaxResults value. If MaxResults is not included in the request, the service defaults to pagination with a maximum of 20 results per page.</td>
</tr>
<tr>
<td>maxResults</td>
<td>String</td>
<td>False</td>
<td>The maximum number of results to return per API request. For example, you submit a ListEntitlements request with MaxResults set at 5. Although 20 items match your request, the service returns no more than the first 5 items. (The service also returns a NextToken value that you can use to fetch the next batch of results.) The service might return fewer results than the MaxResults value. If MaxResults is not included in the request, the service defaults to pagination with a maximum of 20 results per page.</td>
</tr>
</tbody>
</table>
Responses

<table>
<thead>
<tr>
<th>Status Code</th>
<th>Response Model</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>200</td>
<td>ListEntitlementsResponse (p. 8)</td>
<td>AWS Elemental MediaConnect returned the list of entitlements successfully.</td>
</tr>
<tr>
<td>400</td>
<td>ResponseError (p. 8)</td>
<td>The request that you submitted is not valid.</td>
</tr>
<tr>
<td>429</td>
<td>ResponseError (p. 8)</td>
<td>You have exceeded the service request rate limit for your AWS Elemental MediaConnect account.</td>
</tr>
<tr>
<td>500</td>
<td>ResponseError (p. 8)</td>
<td>AWS Elemental MediaConnect can't fulfill your request because it encountered an unexpected condition.</td>
</tr>
<tr>
<td>503</td>
<td>ResponseError (p. 8)</td>
<td>AWS Elemental MediaConnect is currently unavailable. Try again later.</td>
</tr>
</tbody>
</table>

Schemas

Response Bodies

Example ListEntitlementsResponse

```json
{
  "entitlements": [
    {
      "entitlementArn": "string",
      "entitlementName": "string"
    }
  ],
  "nextToken": "string"
}
```

Example ResponseError

```json
{
  "message": "string"
}
```

Properties

ListEntitlementsResponse

The result of a successful ListEntitlements request. The response includes the Amazon Resource Name (ARN) of each entitlement, the name of the associated flow, and the NextToken to use in a subsequent ListEntitlements request.
entitlements

A list of entitlements that have been granted to you from other AWS accounts.

Type: Array of type ListedEntitlement (p. 9)
Required: True

nextToken

The token that identifies which batch of results that you want to see. For example, you submit a ListEntitlements request with MaxResults set at 5. The service returns the first batch of results (up to 5) and a NextToken value. To see the next batch of results, you can submit the ListEntitlements request a second time and specify the NextToken value.

Type: string
Required: False

ListedEntitlement

An entitlement that has been granted to you from other AWS accounts.

entitlementArn

The ARN of the entitlement.

Type: string
Required: True

tenantedName

The name of the entitlement.

Type: string
Required: True

ResponseError

An exception raised by AWS Elemental MediaConnect when you submit a request that cannot be completed. For more information, see the error message and documentation for the operation.

message

The specific error message that AWS Elemental MediaConnect returns to help you understand the reason that the request did not succeed.

Type: string
Required: True

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Go - Pilot
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2

ListFlows, CreateFlow

URI

/v1/flows

HTTP Methods

GET

Operation ID: ListFlows

Displays a list of flows that are associated with the account. This request returns a paginated result.

Query Parameters

<table>
<thead>
<tr>
<th>Name</th>
<th>Type</th>
<th>Required</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>nextToken</td>
<td>String</td>
<td>False</td>
<td>The token that identifies which batch of results that you want to see. For example, you submit a ListEntitlements request with MaxResults set at 5. The service returns the first batch of results (up to 5) and a NextToken value. To see the next batch of results, you can submit the ListEntitlements request a second time and specify the NextToken value.</td>
</tr>
<tr>
<td>maxResults</td>
<td>String</td>
<td>False</td>
<td>The maximum number of results to return</td>
</tr>
</tbody>
</table>
AWS Elemental MediaConnect API Reference
HTTP Methods

<table>
<thead>
<tr>
<th>Name</th>
<th>Type</th>
<th>Required</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>per API request. For example, you submit a ListEntitlements request with MaxResults set at 5. Although 20 items match your request, the service returns no more than the first 5 items. (The service also returns a NextToken value that you can use to fetch the next batch of results.) The service might return fewer results than the MaxResults value. If MaxResults is not included in the request, the service defaults to pagination with a maximum of 20 results per page.</td>
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</table>

Responses

<table>
<thead>
<tr>
<th>Status Code</th>
<th>Response Model</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>200</td>
<td>ListFlowsResponse (p. 13)</td>
<td>AWS Elemental MediaConnect returned the list of flows successfully.</td>
</tr>
<tr>
<td>400</td>
<td>ResponseError (p. 15)</td>
<td>The request that you submitted is not valid.</td>
</tr>
<tr>
<td>429</td>
<td>ResponseError (p. 15)</td>
<td>You have exceeded the service request rate limit for your AWS Elemental MediaConnect account.</td>
</tr>
<tr>
<td>500</td>
<td>ResponseError (p. 15)</td>
<td>AWS Elemental MediaConnect can't fulfill your request because it encountered an unexpected condition.</td>
</tr>
<tr>
<td>503</td>
<td>ResponseError (p. 15)</td>
<td>AWS Elemental MediaConnect is currently unavailable. Try again later.</td>
</tr>
</tbody>
</table>

POST

Operation ID: CreateFlow

Creates a new flow. The request must include one source. The request optionally can include outputs (up to 20) and entitlements (up to 50).
Responses

<table>
<thead>
<tr>
<th>Status Code</th>
<th>Response Model</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>201</td>
<td>CreateFlowResponse (p. 13)</td>
<td>AWS Elemental MediaConnect created the new resource successfully.</td>
</tr>
<tr>
<td>400</td>
<td>ResponseError (p. 15)</td>
<td>The request that you submitted is not valid.</td>
</tr>
<tr>
<td>403</td>
<td>ResponseError (p. 15)</td>
<td>You don't have the required permissions to perform this operation.</td>
</tr>
<tr>
<td>420</td>
<td>ResponseError (p. 15)</td>
<td>Your account already contains the maximum number of 20 flows per account, per Region. For more information, contact AWS Customer Support.</td>
</tr>
<tr>
<td>429</td>
<td>ResponseError (p. 15)</td>
<td>You have exceeded the service request rate limit for your AWS Elemental MediaConnect account.</td>
</tr>
<tr>
<td>500</td>
<td>ResponseError (p. 15)</td>
<td>AWS Elemental MediaConnect can't fulfill your request because it encountered an unexpected condition.</td>
</tr>
<tr>
<td>503</td>
<td>ResponseError (p. 15)</td>
<td>AWS Elemental MediaConnect is currently unavailable. Try again later.</td>
</tr>
</tbody>
</table>

Schemas

Request Bodies

Example POST

```json
{
  "entitlements": [
    {
      "encryption": {
        "roleArn": "string",
        "secretArn": "string",
        "keyType": enum,
        "algorithm": enum
      },
      "subscribers": [
        "string"
      ],
      "name": "string",
      "description": "string"
    }
  ],
  "outputs": [
    {
      "name": "string",
      "destinationArn": "string",
      "outputs": [
        {
          "name": "string",
          "uri": "string",
          "isRemuxed": boolean
        }
      ]
    }
  ]
}
```
"protocol": enum,
"encryption": {
  "roleArn": "string",
  "secretArn": "string",
  "keyType": enum,
  "algorithm": enum
},
"streamId": "string",
"port": integer,
"destination": "string",
"maxLatency": integer,
"name": "string",
"description": "string",
"smoothingLatency": integer
}
],
"name": "string",
"source": {
  "protocol": enum,
  "streamId": "string",
  "maxLatency": integer,
  "name": "string",
  "description": "string",
  "maxBitrate": integer,
  "entitlementArn": "string",
  "decryption": {
    "roleArn": "string",
    "secretArn": "string",
    "keyType": enum,
    "algorithm": enum
  },
  "ingestPort": integer,
  "whitelistCidr": "string"
},
"availabilityZone": "string"

Response Bodies

Example ListFlowsResponse

{
  "flows": [
    {
      "flowArn": "string",
      "sourceType": enum,
      "name": "string",
      "description": "string",
      "availabilityZone": "string",
      "status": enum
    },
    "nextToken": "string"
  ]
}

Example CreateFlowResponse

{
  "flow": {
    "entitlements": [
      {
        "encryption": {
          "roleArn": "string",
          "secretArn": "string",
          "keyType": enum,
          "algorithm": enum
        }
      }
    ]
  }
}
"roleArn": "string",
"secretArn": "string",
"keyType": enum,
"algorithm": enum
},
"subscribers": [
"string"
],
"name": "string",
"description": "string",
"entitlementArn": "string"
],
"outputs": [
{
"outputArn": "string",
"encryption": {
"roleArn": "string",
"secretArn": "string",
"keyType": enum,
"algorithm": enum
},
"port": integer,
"destination": "string",
"name": "string",
"description": "string",
"entitlementArn": "string",
"transport": {
"protocol": enum,
"streamId": "string",
"maxLatency": integer,
"maxBitrate": integer,
"smoothingLatency": integer
},
"mediaLiveInputArn": "string"
}
],
"flowArn": "string",
"name": "string",
"description": "string",
"egressIp": "string",
"source": {
"sourceArn": "string",
"name": "string",
"description": "string",
"entitlementArn": "string",
"ingestIp": "string",
"transport": {
"protocol": enum,
"streamId": "string",
"maxLatency": integer,
"maxBitrate": integer,
"smoothingLatency": integer
},
"decryption": {
"roleArn": "string",
"secretArn": "string",
"keyType": enum,
"algorithm": enum
},
"ingestPort": integer,
"whitelistCidr": "string"
},
"availabilityZone": "string",
"status": enum
}
Properties

AddOutputRequest

The output that you want to add to the flow.

**protocol**

The protocol to use for the output.

- **Type:** string
- **Required:** True
- **Values:** zixi-push | rtp-fec | rtp

**encryption**

The encryption credentials that you want to use for the output.

- **Type:** Encryption (p. 17)
- **Required:** False

**streamId**

The stream ID that you want to use for the transport. This parameter applies only to Zixi-based streams.

- **Type:** string
- **Required:** False

**port**

The port to use when content is distributed to the output.

- **Type:** integer
- **Required:** True

**destination**

The IP address from which AWS Elemental MediaConnect sends video to output destinations.

- **Type:** string
- **Required:** True

**maxLatency**

The maximum latency in milliseconds for Zixi-based streams.

- **Type:** integer
Properties

name
The name of the output. This value must be unique within the current flow.

Type: string
Required: False

description
A description of the output. This description is not visible outside of the current AWS account even if the account grants entitlements to other accounts.

Type: string
Required: False

smoothingLatency
The smoothing latency in milliseconds for RTP and RTP-FEC streams.

Type: integer
Required: False
Format: int64

CreateFlowRequest
Creates a new flow. The request must include one source. The request optionally can include outputs (up to 20) and one entitlement.

entitlements
The entitlements that you want to grant on the flow.

Type: Array of type GrantEntitlementRequest (p. 20)
Required: False

outputs
The outputs that you want to add to the flow.

Type: Array of type AddOutputRequest (p. 15)
Required: False

name
The name of the flow.

Type: string
Required: True

source
The settings for the source of the flow.
Properties

**Type**: SetSourceRequest (p. 23)
**Required**: True

**availabilityZone**

The Availability Zone that you want to create the flow in. These options are limited to the Availability Zones within the current AWS Region.

**Type**: string
**Required**: False

**CreateFlowResponse**

The result of a successful CreateFlow request.

**flow**

The flow that you created.

**Type**: Flow (p. 18)
**Required**: True

**Encryption**

Information about the encryption of the flow.

**roleArn**

The Amazon Resource Name (ARN) of the role that you created during setup (when you set up AWS Elemental MediaConnect as a trusted entity).

**Type**: string
**Required**: True

**secretArn**

The ARN of the secret that you created in AWS Secrets Manager to store the encryption key.

**Type**: string
**Required**: True

**keyType**

The type of key that is used for the encryption. If you don't specify a keyType value, the service uses the default setting (static-key).

**Type**: string
**Required**: False
**Values**: static-key

**algorithm**

The type of algorithm that is used for the encryption (such as aes128, aes192, or aes256).

**Type**: string
Required: True
Values: aes128 | aes192 | aes256

**Entitlement**

The settings for a flow entitlement.

**encryption**

The type of encryption that AWS Elemental MediaConnect will use on the output that is associated with the entitlement.

Type: Encryption (p. 17)
Required: False

**subscribers**

The AWS account IDs that you want to share your content with. The receiving accounts (subscribers) will be allowed to create their own flow using your content as the source.

Type: Array of type string
Required: True

**name**

The name of the entitlement.

Type: string
Required: True

**description**

A description of the entitlement. This description appears only on the AWS Elemental MediaConnect console and is not visible outside of the current AWS account.

Type: string
Required: False

**entitlementArn**

The ARN of the entitlement.

Type: string
Required: True

**Flow**

The settings for a flow, including its source, outputs, and entitlements.

**entitlements**

The entitlements in the flow.

Type: Array of type Entitlement (p. 18)
Required: True
outputs
The outputs in the flow.
  Type: Array of type Output (p. 22)
  Required: True

flowArn
The Amazon Resource Name (ARN) of the flow.
  Type: string
  Required: True

name
The name of the flow.
  Type: string
  Required: True

description
A description of the flow. This description appears only on the AWS Elemental MediaConnect console and is not visible outside of the current AWS account.
  Type: string
  Required: False

egressIp
The outgoing IP address that AWS Elemental MediaConnect uses to send video from the flow.
  Type: string
  Required: False

source
The source for the flow.
  Type: Source (p. 25)
  Required: True

availabilityZone
The Availability Zone that you want to create the flow in. These options are limited to the Availability Zones within the current AWS Region.
  Type: string
  Required: True

status
The current status of the flow.
Properties

Type: string
Required: True
Values: STANDBY | ACTIVE | UPDATING | DELETING | STARTING | STOPPING | ERROR

GrantEntitlementRequest

The entitlements that you want to grant on the flow.

encryption

The type of encryption that AWS Elemental MediaConnect will use on the output that is associated with the entitlement.

  Type: Encryption (p. 17)
  Required: False

subscribers

The AWS account IDs that you want to share your content with. The receiving accounts (subscribers) will be allowed to create their own flows using your content as the source.

  Type: Array of type string
  Required: True

name

The name of the entitlement. This value must be unique within the current flow.

  Type: string
  Required: False

description

A description of the entitlement. This description appears only on the AWS Elemental MediaConnect console and is not visible outside of the current AWS account.

  Type: string
  Required: False

ListFlowsResponse

The result of a successful ListFlows request. The response includes flow summaries and the NextToken to use in a subsequent ListFlows request.

flows

A list of flow summaries.

  Type: Array of type ListedFlow (p. 21)
  Required: True

nextToken

The token that identifies which batch of results that you want to see. For example, you submit a ListFlows request with MaxResults set at 5. The service returns the first batch of results (up to 5) and a
NextToken value. To see the next batch of results, you can submit the ListFlows request a second time and specify the NextToken value.

- **Type**: string
- **Required**: False

### ListedFlow

Provides a summary of a flow, including its ARN, Availability Zone, and source type.

#### flowArn

The Amazon Resource Name (ARN) of the flow.

- **Type**: string
- **Required**: True

#### sourceType

The type of source. This value is either owned (originated somewhere other than an AWS Elemental MediaConnect flow owned by another AWS account) or entitled (originated at an AWS Elemental MediaConnect flow owned by another AWS account).

- **Type**: string
- **Required**: True
- **Values**: OWNED | ENTITLED

#### name

The name of the flow.

- **Type**: string
- **Required**: True

#### description

A description of the flow. This description appears only on the AWS Elemental MediaConnect console and is not visible outside of the current AWS account.

- **Type**: string
- **Required**: True

#### availabilityZone

The Availability Zone that the flow was created in.

- **Type**: string
- **Required**: True

#### status

The current status of the flow.

- **Type**: string
- **Required**: True
Values: STANDBY | ACTIVE | UPDATING | DELETING | STARTING | STOPPING | ERROR

Output

The settings for an output.

outputArn

The ARN of the output.

Type: string
Required: True

cipher

The encryption credentials that you want to use for the output.

Type: Encryption (p. 17)
Required: False

port

The port to use when content is distributed to the output.

Type: integer
Required: False

destination

The address where you want to send the output.

Type: string
Required: False

name

The name of the output. This value must be unique within the current flow.

Type: string
Required: True

description

A description of the output. This description is not visible outside of the current AWS account even if the account grants entitlements to other accounts.

Type: string
Required: False

entitlementArn

The ARN of the entitlement on the originator's flow. This value is relevant only on entitled flows.

Type: string
required: false

transport
Attributes that are related to the transport stream.

type: transport (p. 26)
required: false

mediaLiveInputArn
The input ARN of the AWS Elemental MediaLive channel. This parameter is relevant only for outputs that AWS Elemental MediaConnect added to send content to a MediaLive input.

type: string
required: false

responseError
An exception raised by AWS Elemental MediaConnect when you submit a request that cannot be completed. For more information, see the error message and documentation for the operation.

message
The specific error message that AWS Elemental MediaConnect returns to help you understand the reason that the request did not succeed.

type: string
required: true

setSourceRequest
The settings for the source of the flow.

protocol
The protocol that the source uses to deliver the content to AWS Elemental MediaConnect.

type: string
required: false
values: zixi-push | rtp-fec | rtp

streamId
The stream ID that you want to use for the transport. This parameter applies only to Zixi-based streams.

type: string
required: false

maxLatency
The maximum latency in milliseconds for Zixi-based streams.

type: integer
### Required: False
### Format: int64

**name**
The name of the source.

**Type:** string  
**Required:** False

**description**
A description of the source. This description is not visible outside of the current AWS account.

**Type:** string  
**Required:** False

**maxBitrate**
The smoothing max bitrate for RTP and RTP-FEC streams.

**Type:** integer  
**Required:** False  
**Format:** int64

**entitlementArn**
The ARN of the entitlement that allows you to subscribe to the flow. The content originator grants the entitlement, and the ARN is auto-generated as part of the originator’s flow.

**Type:** string  
**Required:** False

**decryption**
The type of encryption that is used on the content ingested from the source.

**Type:** Encryption (p. 17)  
**Required:** False

**ingestPort**
The port that the flow listens on for incoming content. If the protocol of the source is Zixi, the port must be set to 2088.

**Type:** integer  
**Required:** False

**whitelistCidr**
The range of IP addresses that are allowed to contribute content to your source. Use the form of a Classless Inter-Domain Routing (CIDR) block; for example, 10.0.0.0/16.

**Type:** string  
**Required:** False
Source
The settings for the source of the flow.

sourceArn
The ARN of the source.

Type: string
Required: True

name
The name of the source.

Type: string
Required: True

description
A description of the source. This description is not visible outside of the current AWS account.

Type: string
Required: False

entitlementArn
The ARN of the entitlement that allows you to subscribe to content that comes from another AWS account. The entitlement is set by the content originator and the ARN is generated as part of the originator’s flow.

Type: string
Required: False

ingestIp
The IP address that the flow listens on for incoming content.

Type: string
Required: False

transport
Attributes that are related to the transport stream.

Type: Transport (p. 26)
Required: False

decryption
The type of encryption that is used on the content ingested from the source.

Type: Encryption (p. 17)
Required: False
**ingestPort**

The port that the flow listens on for incoming content. If the protocol of the source is Zixi, the port must be set to 2088.

*Type:* integer  
*Required:* False

**whitelistCidr**

The range of IP addresses that are allowed to contribute content to your source. Use the form of a Classless Inter-Domain Routing (CIDR) block; for example, 10.0.0.0/16.

*Type:* string  
*Required:* False

**Transport**

Attributes that are related to the transport stream.

**protocol**

The protocol that is used by the source or output.

*Type:* string  
*Required:* True  
*Values:* zixi-push | rtp-fec | rtp

**streamId**

The stream ID that you want to use for the transport. This parameter applies only to Zixi-based streams.

*Type:* string  
*Required:* False

**maxLatency**

The maximum latency in milliseconds for Zixi-based streams.

*Type:* integer  
*Required:* False  
*Format:* int64

**maxBitrate**

The smoothing max bitrate for RTP and RTP-FEC streams.

*Type:* integer  
*Required:* False  
*Format:* int64

**smoothingLatency**

The smoothing latency in milliseconds for RTP and RTP-FEC streams.
**See Also**

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

**ListFlows**
- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Go - Pilot
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2

**CreateFlow**
- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Go - Pilot
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2

**StartFlow**

**URI**

/v1/flows/start/{flowArn}

**HTTP Methods**

POST

Operation ID: StartFlow
Starts a flow.

**Path Parameters**

<table>
<thead>
<tr>
<th>Name</th>
<th>Type</th>
<th>Required</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>flowArn</td>
<td>String</td>
<td>True</td>
<td>The Amazon Resource Name (ARN) of the flow.</td>
</tr>
</tbody>
</table>

**Responses**

<table>
<thead>
<tr>
<th>Status Code</th>
<th>Response Model</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>202</td>
<td>StartFlowResponse (p. 28)</td>
<td>AWS Elemental MediaConnect is starting the flow.</td>
</tr>
<tr>
<td>400</td>
<td>ResponseError (p. 28)</td>
<td>The request that you submitted is not valid.</td>
</tr>
<tr>
<td>403</td>
<td>ResponseError (p. 28)</td>
<td>You don’t have the required permissions to perform this operation.</td>
</tr>
<tr>
<td>404</td>
<td>ResponseError (p. 28)</td>
<td>AWS Elemental MediaConnect did not find the resource that you specified in the request.</td>
</tr>
<tr>
<td>429</td>
<td>ResponseError (p. 28)</td>
<td>You have exceeded the service request rate limit for your AWS Elemental MediaConnect account.</td>
</tr>
<tr>
<td>500</td>
<td>ResponseError (p. 28)</td>
<td>AWS Elemental MediaConnect can’t fulfill your request because it encountered an unexpected condition.</td>
</tr>
<tr>
<td>503</td>
<td>ResponseError (p. 28)</td>
<td>AWS Elemental MediaConnect is currently unavailable. Try again later.</td>
</tr>
</tbody>
</table>

**Schemas**

**Response Bodies**

**Example StartFlowResponse**

```json
{
    "flowArn": "string",
    "status": enum
}
```

**Example ResponseError**

```json
{
}
```
Properties

ResponseError

An exception raised by AWS Elemental MediaConnect when you submit a request that cannot be completed. For more information, see the error message and documentation for the operation.

message

The specific error message that AWS Elemental MediaConnect returns to help you understand the reason that the request did not succeed.

Type: string
Required: True

StartFlowResponse

The result of a successful StartFlow request.

flowArn

The ARN of the flow that you started.

Type: string
Required: True

status

The status of the flow when the StartFlow process begins.

Type: string
Required: True
Values: STANDBY | ACTIVE | UPDATING | DELETING | STARTING | STOPPING | ERROR

See Also

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

StartFlow

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Go - Pilot
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
StopFlow

URI

/v1/flows/stop/{flowArn}

HTTP Methods

POST

Operation ID: StopFlow

Stops a flow.

Path Parameters

<table>
<thead>
<tr>
<th>Name</th>
<th>Type</th>
<th>Required</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>{flowArn}</td>
<td>String</td>
<td>True</td>
<td>The Amazon Resource Name (ARN) of the flow.</td>
</tr>
</tbody>
</table>

Responses

<table>
<thead>
<tr>
<th>Status Code</th>
<th>Response Model</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>202</td>
<td>StopFlowResponse (p. 31)</td>
<td>AWS Elemental MediaConnect is stopping the flow.</td>
</tr>
<tr>
<td>400</td>
<td>ResponseError (p. 31)</td>
<td>The request that you submitted is not valid.</td>
</tr>
<tr>
<td>403</td>
<td>ResponseError (p. 31)</td>
<td>You don't have the required permissions to perform this operation.</td>
</tr>
<tr>
<td>404</td>
<td>ResponseError (p. 31)</td>
<td>AWS Elemental MediaConnect did not find the resource that you specified in the request.</td>
</tr>
<tr>
<td>429</td>
<td>ResponseError (p. 31)</td>
<td>You have exceeded the service request rate limit for your AWS Elemental MediaConnect account.</td>
</tr>
<tr>
<td>500</td>
<td>ResponseError (p. 31)</td>
<td>AWS Elemental MediaConnect can't fulfill your request because it encountered an unexpected condition.</td>
</tr>
<tr>
<td>503</td>
<td>ResponseError (p. 31)</td>
<td>AWS Elemental MediaConnect is currently unavailable. Try again later.</td>
</tr>
</tbody>
</table>
Schemas

Response Bodies

Example StopFlowResponse

```json
{
    "flowArn": "string",
    "status": enum
}
```

Example ResponseError

```json
{
    "message": "string"
}
```

Properties

ResponseError

An exception raised by AWS Elemental MediaConnect when you submit a request that cannot be completed. For more information, see the error message and documentation for the operation.

message

The specific error message that AWS Elemental MediaConnect returns to help you understand the reason that the request did not succeed.

Type: string
Required: True

StopFlowResponse

The result of a successful StopFlow request.

flowArn

The ARN of the flow that you stopped.

Type: string
Required: True

status

The status of the flow when the StopFlow process begins.

Type: string
Required: True
Values: STANDBY | ACTIVE | UPDATING | DELETING | STARTING | STOPPING | ERROR
DescribeFlow, DeleteFlow

URI

/v1/flows/flowArn

HTTP Methods

GET

Operation ID: DescribeFlow

Displays the details of a flow. The response includes the flow ARN, name, and Availability Zone, as well as details about the source, outputs, and entitlements.

Path Parameters

<table>
<thead>
<tr>
<th>Name</th>
<th>Type</th>
<th>Required</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>flowArn</td>
<td>String</td>
<td>True</td>
<td>The Amazon Resource Name (ARN) of the flow.</td>
</tr>
</tbody>
</table>

Responses

<table>
<thead>
<tr>
<th>Status Code</th>
<th>Response Model</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>200</td>
<td>DescribeFlowResponse (p. 34)</td>
<td>AWS Elemental MediaConnect returned the flow details successfully.</td>
</tr>
<tr>
<td>400</td>
<td>ResponseError (p. 35)</td>
<td>The request that you submitted is not valid.</td>
</tr>
</tbody>
</table>
DELETE

Operation ID: DeleteFlow

Deletes a flow. Before you can delete a flow, you must stop the flow.

Path Parameters

<table>
<thead>
<tr>
<th>Name</th>
<th>Type</th>
<th>Required</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>flowArn</td>
<td>String</td>
<td>True</td>
<td>The Amazon Resource Name (ARN) of the flow.</td>
</tr>
</tbody>
</table>

Responses

<table>
<thead>
<tr>
<th>Status Code</th>
<th>Response Model</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>202</td>
<td>DeleteFlowResponse (p. 35)</td>
<td>AWS Elemental MediaConnect is deleting the flow.</td>
</tr>
<tr>
<td>400</td>
<td>ResponseError (p. 35)</td>
<td>The request that you submitted is not valid.</td>
</tr>
<tr>
<td>403</td>
<td>ResponseError (p. 35)</td>
<td>You don't have the required permissions to perform this operation.</td>
</tr>
<tr>
<td>404</td>
<td>ResponseError (p. 35)</td>
<td>AWS Elemental MediaConnect did not find the resource that you specified in the request.</td>
</tr>
<tr>
<td>429</td>
<td>ResponseError (p. 35)</td>
<td>You have exceeded the service request rate limit for your AWS Elemental MediaConnect account.</td>
</tr>
</tbody>
</table>
### Status Code

<table>
<thead>
<tr>
<th>Status Code</th>
<th>Response Model</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>500</td>
<td>ResponseError (p. 35)</td>
<td>AWS Elemental MediaConnect can't fulfill your request because it encountered an unexpected condition.</td>
</tr>
<tr>
<td>503</td>
<td>ResponseError (p. 35)</td>
<td>AWS Elemental MediaConnect is currently unavailable. Try again later.</td>
</tr>
</tbody>
</table>

### Schemas

#### Response Bodies

**Example DescribeFlowResponse**

```json
{
  "messages": {
    "errors": [
      "string"
    ],
  },
  "flow": {
    "entitlements": [
      {
        "encryption": {
          "roleArn": "string",
          "secretArn": "string",
          "keyType": enum,
          "algorithm": enum
        },
        "subscribers": [
          "string"
        ],
        "name": "string",
        "description": "string",
        "entitlementArn": "string"
      }
    ],
    "outputs": [
      {
        "outputArn": "string",
        "encryption": {
          "roleArn": "string",
          "secretArn": "string",
          "keyType": enum,
          "algorithm": enum
        },
        "port": integer,
        "destination": "string",
        "name": "string",
        "description": "string",
        "entitlementArn": "string",
        "transport": {
          "protocol": enum,
          "streamId": "string",
          "maxLatency": integer,
```
"maxBitrate": integer,
"smoothingLatency": integer
},
"mediaLiveInputArn": "string"
],
"flowArn": "string",
"name": "string",
"description": "string",
"source": {
"sourceArn": "string",
"name": "string",
"description": "string",
"entitlementArn": "string",
"ingestIp": "string",
"transport": {
"protocol": enum,
"streamId": "string",
"maxLatency": integer,
"maxBitrate": integer,
"smoothingLatency": integer
},
"decryption": {
"roleArn": "string",
"secretArn": "string",
"keyType": enum,
"algorithm": enum
},
"ingestPort": integer,
"whitelistCidr": "string"
},
"availabilityZone": "string",
"status": enum
}

Example DeleteFlowResponse

{
"flowArn": "string",
"status": enum
}

Example ResponseError

{
"message": "string"
}

Properties

DeleteFlowResponse

The result of a successful DeleteFlow request.

flowArn

The ARN of the flow that you deleted.
**Type:** string  
**Required:** True

**status**

The status of the flow when the DeleteFlow process begins.

**Type:** string  
**Required:** True  
**Values:** STANDBY | ACTIVE | UPDATING | DELETING | STARTING | STOPPING | ERROR

**DescribeFlowResponse**

The result of a successful DescribeFlow request.

**messages**

Any errors that apply currently to the flow. If there are no errors, AWS Elemental MediaConnect will not include this field in the response.

**Type:** Messages (p. 39)  
**Required:** False

**flow**

The flow that you requested a description of.

**Type:** Flow (p. 38)  
**Required:** True

**Encryption**

Information about the encryption of the flow.

**roleArn**

The Amazon Resource Name (ARN) of the role that you created during setup (when you set up AWS Elemental MediaConnect as a trusted entity).

**Type:** string  
**Required:** True

**secretArn**

The ARN of the secret that you created in AWS Secrets Manager to store the encryption key.

**Type:** string  
**Required:** True

**keyType**

The type of key that is used for the encryption. If you don't specify a keyType value, the service uses the default setting (static-key).
**algorithm**

The type of algorithm that is used for the encryption (such as aes128, aes192, or aes256).

- **Type:** string
- **Required:** True
- **Values:** aes128 | aes192 | aes256

**Entitlement**

The settings for a flow entitlement.

**encryption**

The type of encryption that AWS Elemental MediaConnect will use on the output that is associated with the entitlement.

- **Type:** Encryption (p. 36)
- **Required:** False

**subscribers**

The AWS account IDs that you want to share your content with. The receiving accounts (subscribers) will be allowed to create their own flow using your content as the source.

- **Type:** Array of type string
- **Required:** True

**name**

The name of the entitlement.

- **Type:** string
- **Required:** True

**description**

A description of the entitlement. This description appears only on the AWS Elemental MediaConnect console and is not visible outside of the current AWS account.

- **Type:** string
- **Required:** False

**entitlementArn**

The ARN of the entitlement.

- **Type:** string
Required: True

Flow
The settings for a flow, including its source, outputs, and entitlements.

entitlements
The entitlements in the flow.

  Type: Array of type Entitlement (p. 37)
  Required: True

outputs
The outputs in the flow.

  Type: Array of type Output (p. 39)
  Required: True

flowArn
The Amazon Resource Name (ARN) of the flow.

  Type: string
  Required: True

name
The name of the flow.

  Type: string
  Required: True

description
A description of the flow. This description appears only on the AWS Elemental MediaConnect console and is not visible outside of the current AWS account.

  Type: string
  Required: False

egressIp
The outgoing IP address that AWS Elemental MediaConnect uses to send video from the flow.

  Type: string
  Required: False

source
The source for the flow.

  Type: Source (p. 41)
### Properties

**Required**: True

#### availabilityZone

The Availability Zone that you want to create the flow in. These options are limited to the Availability Zones within the current AWS Region.

**Type**: string  
**Required**: True

#### status

The current status of the flow.

**Type**: string  
**Required**: True  
**Values**: STANDBY | ACTIVE | UPDATING | DELETING | STARTING | STOPPING | ERROR

### Messages

Messages that provide the state of the flow.

#### errors

A list of errors that apply currently to the flow. If there are no errors, AWS Elemental MediaConnect will not include this field in the response.

**Type**: Array of type string  
**Required**: True

### Output

The settings for an output.

#### outputArn

The ARN of the output.

**Type**: string  
**Required**: True

#### encryption

The encryption credentials that you want to use for the output.

**Type**: Encryption (p. 36)  
**Required**: False

#### port

The port to use when content is distributed to the output.

**Type**: integer  
**Required**: False
destination
The address where you want to send the output.

   Type: string
   Required: False

name
The name of the output. This value must be unique within the current flow.

   Type: string
   Required: True

description
A description of the output. This description is not visible outside of the current AWS account even if the account grants entitlements to other accounts.

   Type: string
   Required: False

entitlementArn
The ARN of the entitlement on the originator’s flow. This value is relevant only on entitled flows.

   Type: string
   Required: False

transport
Attributes that are related to the transport stream.

   Type: Transport (p. 42)
   Required: False

mediaLiveInputArn
The input ARN of the AWS Elemental MediaLive channel. This parameter is relevant only for outputs that AWS Elemental MediaConnect added to send content to a MediaLive input.

   Type: string
   Required: False

ResponseError
An exception raised by AWS Elemental MediaConnect when you submit a request that cannot be completed. For more information, see the error message and documentation for the operation.

message
The specific error message that AWS Elemental MediaConnect returns to help you understand the reason that the request did not succeed.

   Type: string
   Required: True
Source

The settings for the source of the flow.

sourceArn

The ARN of the source.

Type: string
Required: True

name

The name of the source.

Type: string
Required: True

description

A description of the source. This description is not visible outside of the current AWS account.

Type: string
Required: False

entitlementArn

The ARN of the entitlement that allows you to subscribe to content that comes from another AWS account. The entitlement is set by the content originator and the ARN is generated as part of the originator’s flow.

Type: string
Required: False

ingestIp

The IP address that the flow listens on for incoming content.

Type: string
Required: False

transport

Attributes that are related to the transport stream.

Type: Transport (p. 42)
Required: False

decryption

The type of encryption that is used on the content ingested from the source.

Type: Encryption (p. 36)
Required: False
**ingestPort**

The port that the flow listens on for incoming content. If the protocol of the source is Zixi, the port must be set to 2088.

- **Type**: integer
- **Required**: False

**whitelistCidr**

The range of IP addresses that are allowed to contribute content to your source. Use the form of a Classless Inter-Domain Routing (CIDR) block; for example, 10.0.0.0/16.

- **Type**: string
- **Required**: False

**Transport**

Attributes that are related to the transport stream.

**protocol**

The protocol that is used by the source or output.

- **Type**: string
- **Required**: True
- **Values**: zixi-push | rtp-fec | rtp

**streamId**

The stream ID that you want to use for the transport. This parameter applies only to Zixi-based streams.

- **Type**: string
- **Required**: False

**maxLatency**

The maximum latency in milliseconds for Zixi-based streams.

- **Type**: integer
- **Required**: False
- **Format**: int64

**maxBitrate**

The smoothing max bitrate for RTP and RTP-FEC streams.

- **Type**: integer
- **Required**: False
- **Format**: int64

**smoothingLatency**

The smoothing latency in milliseconds for RTP and RTP-FEC streams.
See Also

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

DescribeFlow

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Go - Pilot
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2

DeleteFlow

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Go - Pilot
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2

GrantFlowEntitlements

URI

/v1/flows/flowArn/entitlements

HTTP Methods

POST

Operation ID: GrantFlowEntitlements
Grants entitlements to an existing flow.

**Path Parameters**

<table>
<thead>
<tr>
<th>Name</th>
<th>Type</th>
<th>Required</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>flowArn</td>
<td>String</td>
<td>True</td>
<td>The Amazon Resource Name (ARN) of the flow.</td>
</tr>
</tbody>
</table>

**Responses**

<table>
<thead>
<tr>
<th>Status Code</th>
<th>Response Model</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>200</td>
<td>GrantFlowEntitlementsResponse (p. 45)</td>
<td>AWS Elemental MediaConnect granted the entitlements successfully.</td>
</tr>
<tr>
<td>400</td>
<td>ResponseError (p. 45)</td>
<td>The request that you submitted is not valid.</td>
</tr>
<tr>
<td>403</td>
<td>ResponseError (p. 45)</td>
<td>You don't have the required permissions to perform this operation.</td>
</tr>
<tr>
<td>404</td>
<td>ResponseError (p. 45)</td>
<td>AWS Elemental MediaConnect did not find the resource that you specified in the request.</td>
</tr>
<tr>
<td>420</td>
<td>ResponseError (p. 45)</td>
<td>Your account already contains the maximum number of 20 flows per account, per Region. For more information, contact AWS Customer Support.</td>
</tr>
<tr>
<td>429</td>
<td>ResponseError (p. 45)</td>
<td>You have exceeded the service request rate limit for your AWS Elemental MediaConnect account.</td>
</tr>
<tr>
<td>500</td>
<td>ResponseError (p. 45)</td>
<td>AWS Elemental MediaConnect can't fulfill your request because it encountered an unexpected condition.</td>
</tr>
<tr>
<td>503</td>
<td>ResponseError (p. 45)</td>
<td>AWS Elemental MediaConnect is currently unavailable. Try again later.</td>
</tr>
</tbody>
</table>

**Schemas**

**Request Bodies**

**Example POST**

```json
{
    "entitlements": [
```
Properties

Encryption

Information about the encryption of the flow.

**roleArn**

The Amazon Resource Name (ARN) of the role that you created during setup (when you set up AWS Elemental MediaConnect as a trusted entity).

* Type: string
* Required: True
**secretArn**

The ARN of the secret that you created in AWS Secrets Manager to store the encryption key.

- **Type**: string
- **Required**: True

**keyType**

The type of key that is used for the encryption. If you don't specify a keyType value, the service uses the default setting (static-key).

- **Type**: string
- **Required**: False
- **Values**: static-key

**algorithm**

The type of algorithm that is used for the encryption (such as aes128, aes192, or aes256).

- **Type**: string
- **Required**: True
- **Values**: aes128 | aes192 | aes256

---

**Entitlement**

The settings for a flow entitlement.

**encryption**

The type of encryption that AWS Elemental MediaConnect will use on the output that is associated with the entitlement.

- **Type**: Encryption (p. 45)
- **Required**: False

**subscribers**

The AWS account IDs that you want to share your content with. The receiving accounts (subscribers) will be allowed to create their own flow using your content as the source.

- **Type**: Array of type string
- **Required**: True

**name**

The name of the entitlement.

- **Type**: string
- **Required**: True

**description**

A description of the entitlement. This description appears only on the AWS Elemental MediaConnect console and is not visible outside of the current AWS account.
Properties

**Type**: string  
**Required**: False

**entitlementArn**

The ARN of the entitlement.

**Type**: string  
**Required**: True

**GrantEntitlementRequest**

The entitlements that you want to grant on the flow.

**encryption**

The type of encryption that AWS Elemental MediaConnect will use on the output that is associated with the entitlement.

**Type**: Encryption (p. 45)  
**Required**: False

**subscribers**

The AWS account IDs that you want to share your content with. The receiving accounts (subscribers) will be allowed to create their own flows using your content as the source.

**Type**: Array of type string  
**Required**: True

**name**

The name of the entitlement. This value must be unique within the current flow.

**Type**: string  
**Required**: False

**description**

A description of the entitlement. This description appears only on the AWS Elemental MediaConnect console and is not visible outside of the current AWS account.

**Type**: string  
**Required**: False

**GrantFlowEntitlementsRequest**

Grants an entitlement on a flow.

**entitlements**

The list of entitlements that you want to grant.
GrantFlowEntitlementsResponse

The entitlements that you just granted.

entitlements

The entitlements that were just granted.

flowArn

The ARN of the flow that these entitlements were granted to.

ResponseError

An exception raised by AWS Elemental MediaConnect when you submit a request that cannot be completed. For more information, see the error message and documentation for the operation.

See Also

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

GrantFlowEntitlements

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Go - Pilot
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
UpdateFlowEntitlement, RevokeFlowEntitlement

URI

/v1/flows/{flowArn}/entitlements/{entitlementArn}

HTTP Methods

PUT

Operation ID: UpdateFlowEntitlement

Changes an entitlement on a flow. You can change an entitlement's description, subscriber account ID, and encryption. If you change the subscriber account ID, the service will remove the output that was generated when the original subscriber set up their flow.

Path Parameters

<table>
<thead>
<tr>
<th>Name</th>
<th>Type</th>
<th>Required</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>flowArn</td>
<td>String</td>
<td>True</td>
<td>The Amazon Resource Name (ARN) of the flow.</td>
</tr>
<tr>
<td>entitlementArn</td>
<td>String</td>
<td>True</td>
<td>The ARN of the entitlement that you want to update.</td>
</tr>
</tbody>
</table>

Responses

<table>
<thead>
<tr>
<th>Status Code</th>
<th>Response Model</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>202</td>
<td>UpdateFlowEntitlementResponse</td>
<td>AWS Elemental MediaConnect is updating the entitlement.</td>
</tr>
<tr>
<td>400</td>
<td>ErrorResponse (p. 51)</td>
<td>The request that you submitted is not valid.</td>
</tr>
<tr>
<td>403</td>
<td>ErrorResponse (p. 51)</td>
<td>You don't have the required permissions to perform this operation.</td>
</tr>
<tr>
<td>404</td>
<td>ErrorResponse (p. 51)</td>
<td>AWS Elemental MediaConnect did not find the resource that you specified in the request.</td>
</tr>
<tr>
<td>429</td>
<td>ErrorResponse (p. 51)</td>
<td>You have exceeded the service request rate limit for your AWS Elemental MediaConnect account.</td>
</tr>
<tr>
<td>500</td>
<td>ErrorResponse (p. 51)</td>
<td>AWS Elemental MediaConnect can't fulfill your request because</td>
</tr>
</tbody>
</table>
DELETE

Operation ID: RevokeFlowEntitlement

Revolves an entitlement from a flow. When you revoke an entitlement is revoked, the content becomes unavailable to the subscriber and AWS Elemental MediaConnect removes the associated output.

Path Parameters

<table>
<thead>
<tr>
<th>Name</th>
<th>Type</th>
<th>Required</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>flowArn</td>
<td>String</td>
<td>True</td>
<td>The Amazon Resource Name (ARN) of the flow.</td>
</tr>
<tr>
<td>entitlementArn</td>
<td>String</td>
<td>True</td>
<td>The ARN of the entitlement that you want to update.</td>
</tr>
</tbody>
</table>

Responses

<table>
<thead>
<tr>
<th>Status Code</th>
<th>Response Model</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>202</td>
<td>RevokeFlowEntitlementResponse (p. 51)</td>
<td>AWS Elemental MediaConnect is revoking the entitlement.</td>
</tr>
<tr>
<td>400</td>
<td>ResponseError (p. 51)</td>
<td>The request that you submitted is not valid.</td>
</tr>
<tr>
<td>403</td>
<td>ResponseError (p. 51)</td>
<td>You don't have the required permissions to perform this operation.</td>
</tr>
<tr>
<td>404</td>
<td>ResponseError (p. 51)</td>
<td>AWS Elemental MediaConnect did not find the resource that you specified in the request.</td>
</tr>
<tr>
<td>429</td>
<td>ResponseError (p. 51)</td>
<td>You have exceeded the service request rate limit for your AWS Elemental MediaConnect account.</td>
</tr>
<tr>
<td>500</td>
<td>ResponseError (p. 51)</td>
<td>AWS Elemental MediaConnect can't fulfill your request because it encountered an unexpected condition.</td>
</tr>
<tr>
<td>503</td>
<td>ResponseError (p. 51)</td>
<td>AWS Elemental MediaConnect is currently unavailable. Try again later.</td>
</tr>
</tbody>
</table>
Schemas

Request Bodies

Example PUT

```json
{
   "encryption": {
      "roleArn": "string",
      "secretArn": "string",
      "keyType": enum,
      "algorithm": enum
   },
   "subscribers": [
      "string"
   ],
   "description": "string"
}
```

Response Bodies

Example UpdateFlowEntitlementResponse

```json
{
   "flowArn": "string",
   "entitlement": {
      "encryption": {
         "roleArn": "string",
         "secretArn": "string",
         "keyType": enum,
         "algorithm": enum
      },
      "subscribers": [
         "string"
      ],
      "name": "string",
      "description": "string",
      "entitlementArn": "string"
   }
}
```

Example RevokeFlowEntitlementResponse

```json
{
   "flowArn": "string",
   "entitlementArn": "string"
}
```

Example ResponseError

```json
{
   "message": "string"
}
```
Properties

Encryption

Information about the encryption of the flow.

roleArn

The Amazon Resource Name (ARN) of the role that you created during setup (when you set up AWS Elemental MediaConnect as a trusted entity).

  Type: string
  Required: True

secretArn

The ARN of the secret that you created in AWS Secrets Manager to store the encryption key.

  Type: string
  Required: True

keyType

The type of key that is used for the encryption. If you don't specify a keyType value, the service uses the default setting (static-key).

  Type: string
  Required: False
  Values: static-key

algorithm

The type of algorithm that is used for the encryption (such as aes128, aes192, or aes256).

  Type: string
  Required: True
  Values: aes128 | aes192 | aes256

Entitlement

The settings for a flow entitlement.

encryption

The type of encryption that AWS Elemental MediaConnect will use on the output that is associated with the entitlement.

  Type: Encryption (p. 52)
  Required: False

subscribers

The AWS account IDs that you want to share your content with. The receiving accounts (subscribers) will be allowed to create their own flow using your content as the source.
Properties

name
The name of the entitlement.

Type: string  
Required: True

description
A description of the entitlement. This description appears only on the AWS Elemental MediaConnect console and is not visible outside of the current AWS account.

Type: string  
Required: False

entitlementArn
The ARN of the entitlement.

Type: string  
Required: True

ResponseError
An exception raised by AWS Elemental MediaConnect when you submit a request that cannot be completed. For more information, see the error message and documentation for the operation.

message
The specific error message that AWS Elemental MediaConnect returns to help you understand the reason that the request did not succeed.

Type: string  
Required: True

RevokeFlowEntitlementResponse
The result of a successful RevokeFlowEntitlement request. The response includes the ARN of the flow and the ARN of the entitlement that you revoked.

flowArn
The ARN of the flow that the entitlement was revoked from.

Type: string  
Required: True

entitlementArn
The ARN of the entitlement that you revoked.

Type: string
Required: True

**UpdateEncryption**

Information about the encryption of the flow.

**roleArn**

The ARN of the role that you created during setup (when you set up AWS Elemental MediaConnect as a trusted entity).

*Type:* string  
*Required:* False

**secretArn**

The ARN of the secret that you created in AWS Secrets Manager to store the encryption key.

*Type:* string  
*Required:* False

**keyType**

The type of key that is used for the encryption. If you don't specify a `keyType` value, the service uses the default setting (`static-key`).

*Type:* string  
*Required:* False  
*Values:* static-key

**algorithm**

The type of algorithm that is used for the encryption (such as aes128, aes192, or aes256).

*Type:* string  
*Required:* False  
*Values:* aes128 | aes192 | aes256

**UpdateFlowEntitlementRequest**

The updates that you want to make to a specific entitlement.

**encryption**

The type of encryption that AWS Elemental MediaConnect will use on the output that is associated with the entitlement.

*Type:* [UpdateEncryption](#)  
*Required:* False

**subscribers**

The AWS account IDs that you want to share your content with. The receiving accounts (subscribers) will be allowed to create their own flow using your content as the source.
**Type**: Array of type string  
**Required**: False

**description**

A description of the entitlement. This description appears only on the AWS Elemental MediaConnect console and is not visible outside of the current AWS account.

**Type**: string  
**Required**: False

---

**UpdateFlowEntitlementResponse**

The result of a successful UpdateFlowEntitlement request. The response includes the ARN of the flow that was updated and the updated entitlement configuration.

**flowArn**

The ARN of the flow that the entitlement was granted on.

**Type**: string  
**Required**: True

**entitlement**

**Type**: Entitlement (p. 52)  
**Required**: True

---

**See Also**

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

**UpdateFlowEntitlement**

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Go - Pilot
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2

**RevokeFlowEntitlement**

- AWS Command Line Interface
- AWS SDK for .NET
AddFlowOutputs

URI

/v1/flows/{flowArn}/outputs

HTTP Methods

POST

Operation ID: AddFlowOutputs

Adds outputs to an existing flow. You can create up to 20 outputs per flow.

Path Parameters

<table>
<thead>
<tr>
<th>Name</th>
<th>Type</th>
<th>Required</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>flowArn</td>
<td>String</td>
<td>True</td>
<td>The Amazon Resource Name (ARN) of the flow.</td>
</tr>
</tbody>
</table>

Responses

<table>
<thead>
<tr>
<th>Status Code</th>
<th>Response Model</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>201</td>
<td>AddFlowOutputsResponse (p. 57)</td>
<td>AWS Elemental MediaConnect created the new resource successfully.</td>
</tr>
<tr>
<td>400</td>
<td>ResponseError (p. 58)</td>
<td>The request that you submitted is not valid.</td>
</tr>
<tr>
<td>403</td>
<td>ResponseError (p. 58)</td>
<td>You don't have the required permissions to perform this operation.</td>
</tr>
<tr>
<td>404</td>
<td>ResponseError (p. 58)</td>
<td>AWS Elemental MediaConnect did not find the resource that you specified in the request.</td>
</tr>
<tr>
<td>420</td>
<td>ResponseError (p. 58)</td>
<td>Your account already contains the maximum number of 20 flows per account, per Region. For more information, contact AWS Customer Support.</td>
</tr>
</tbody>
</table>
### Status Code

<table>
<thead>
<tr>
<th>Status Code</th>
<th>Response Model</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>429</td>
<td>ResponseError (p. 58)</td>
<td>You have exceeded the service request rate limit for your AWS Elemental MediaConnect account.</td>
</tr>
<tr>
<td>500</td>
<td>ResponseError (p. 58)</td>
<td>AWS Elemental MediaConnect can't fulfill your request because it encountered an unexpected condition.</td>
</tr>
<tr>
<td>503</td>
<td>ResponseError (p. 58)</td>
<td>AWS Elemental MediaConnect is currently unavailable. Try again later.</td>
</tr>
</tbody>
</table>

### Schemas

#### Request Bodies

**Example POST**

```json
{
  "outputs": [
    {
      "protocol": enum,
      "encryption": {
        "roleArn": "string",
        "secretArn": "string",
        "keyType": enum,
        "algorithm": enum
      },
      "streamId": "string",
      "port": integer,
      "destination": "string",
      "maxLatency": integer,
      "name": "string",
      "description": "string",
      "smoothingLatency": integer
    }
  ]
}
```

#### Response Bodies

**Example AddFlowOutputsResponse**

```json
{
  "outputs": [
    {
      "outputArn": "string",
      "encryption": {
        "roleArn": "string",
        "secretArn": "string",
        "keyType": enum,
        "algorithm": enum
      }
    }
  ]
}
```
"port": integer,
"destination": "string",
"name": "string",
"description": "string",
"entitlementArn": "string",
"transport": {
  "protocol": enum,
  "streamId": "string",
  "maxLatency": integer,
  "maxBitrate": integer,
  "smoothingLatency": integer
},
"mediaLiveInputArn": "string"
}
],
"flowArn": "string"
}

Example ResponseError

{
  "message": "string"
}

Properties

AddFlowOutputsRequest

Adds outputs to an existing flow. You can create up to 20 outputs per flow.

outputs

A list of outputs that you want to add.

Type: Array of type AddOutputRequest (p. 59)
Required: True

AddFlowOutputsResponse

The result of a successful AddOutput request. The response includes the details of the newly added outputs.

outputs

The details of the newly added outputs.

Type: Array of type Output (p. 60)
Required: True

flowArn

The ARN of the flow that these outputs are associated with.

Type: string
Required: True
AddOutputRequest

The output that you want to add to the flow.

**protocol**

The protocol to use for the output.

- **Type**: string
- **Required**: True
- **Values**: zixi-push | rtp-fec | rtp

**encryption**

The encryption credentials that you want to use for the output.

- **Type**: Encryption (p. 60)
- **Required**: False

**streamId**

The stream ID that you want to use for the transport. This parameter applies only to Zixi-based streams.

- **Type**: string
- **Required**: False

**port**

The port to use when content is distributed to the output.

- **Type**: integer
- **Required**: True

**destination**

The IP address from which AWS Elemental MediaConnect sends video to output destinations.

- **Type**: string
- **Required**: True

**maxLatency**

The maximum latency in milliseconds for Zixi-based streams.

- **Type**: integer
- **Required**: False
- **Format**: int64

**name**

The name of the output. This value must be unique within the current flow.

- **Type**: string
- **Required**: False
description
A description of the output. This description is not visible outside of the current AWS account even if the account grants entitlements to other accounts.

   Type: string
   Required: False

smoothingLatency
The smoothing latency in milliseconds for RTP and RTP-FEC streams.

   Type: integer
   Required: False
   Format: int64

Encryption
Information about the encryption of the flow.

roleArn
The Amazon Resource Name (ARN) of the role that you created during setup (when you set up AWS Elemental MediaConnect as a trusted entity).

   Type: string
   Required: True

secretArn
The ARN of the secret that you created in AWS Secrets Manager to store the encryption key.

   Type: string
   Required: True

keyType
The type of key that is used for the encryption. If you don't specify a keyType value, the service uses the default setting (static-key).

   Type: string
   Required: False
   Values: static-key

algorithm
The type of algorithm that is used for the encryption (such as aes128, aes192, or aes256).

   Type: string
   Required: True
   Values: aes128 | aes192 | aes256

Output
The settings for an output.
Properties

**outputArn**
The ARN of the output.

Type: string
Required: True

**encryption**
The encryption credentials that you want to use for the output.

Type: Encryption (p. 60)
Required: False

**port**
The port to use when content is distributed to the output.

Type: integer
Required: False

**destination**
The address where you want to send the output.

Type: string
Required: False

**name**
The name of the output. This value must be unique within the current flow.

Type: string
Required: True

**description**
A description of the output. This description is not visible outside of the current AWS account even if the account grants entitlements to other accounts.

Type: string
Required: False

**entitlementArn**
The ARN of the entitlement on the originator’s flow. This value is relevant only on entitled flows.

Type: string
Required: False

**transport**
Attributes that are related to the transport stream.

Type: Transport (p. 62)
Required: False
**mediaLiveInputArn**

The input ARN of the AWS Elemental MediaLive channel. This parameter is relevant only for outputs that AWS Elemental MediaConnect added to send content to a MediaLive input.

- **Type:** string
- **Required:** False

**ResponseError**

An exception raised by AWS Elemental MediaConnect when you submit a request that cannot be completed. For more information, see the error message and documentation for the operation.

**message**

The specific error message that AWS Elemental MediaConnect returns to help you understand the reason that the request did not succeed.

- **Type:** string
- **Required:** True

**Transport**

Attributes that are related to the transport stream.

**protocol**

The protocol that is used by the source or output.

- **Type:** string
- **Required:** True
- **Values:** zixi-push | rtp-fec | rtp

**streamId**

The stream ID that you want to use for the transport. This parameter applies only to Zixi-based streams.

- **Type:** string
- **Required:** False

**maxLatency**

The maximum latency in milliseconds for Zixi-based streams.

- **Type:** integer
- **Required:** False
- **Format:** int64

**maxBitrate**

The smoothing max bitrate for RTP and RTP-FEC streams.

- **Type:** integer
- **Required:** False
- **Format:** int64
**smoothingLatency**

The smoothing latency in milliseconds for RTP and RTP-FEC streams.

- **Type:** integer
- **Required:** False
- **Format:** int64

**See Also**

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

**AddFlowOutputs**

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Go - Pilot
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2

**UpdateFlowOutput, RemoveFlowOutput**

**URI**

/v1/flows/flowArn/outputs/outputArn

**HTTP Methods**

**PUT**

Operation ID: UpdateFlowOutput

Updates an existing flow output.

**Path Parameters**

<table>
<thead>
<tr>
<th>Name</th>
<th>Type</th>
<th>Required</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>flowArn</td>
<td>String</td>
<td>True</td>
<td>The Amazon Resource Name (ARN) of the flow.</td>
</tr>
<tr>
<td>outputArn</td>
<td>String</td>
<td>True</td>
<td>The ARN of the output that you want to update.</td>
</tr>
</tbody>
</table>
## DELETE

**Operation ID: RemoveFlowOutput**

Removes an output from an existing flow. This request can be made only on an output that does not have an entitlement associated with it. If the output has an entitlement, you must revoke the entitlement instead. When an entitlement is revoked from a flow, the service automatically removes the associated output.

### Path Parameters

<table>
<thead>
<tr>
<th>Name</th>
<th>Type</th>
<th>Required</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>flowArn</td>
<td>String</td>
<td>True</td>
<td>The Amazon Resource Name (ARN) of the flow.</td>
</tr>
<tr>
<td>outputArn</td>
<td>String</td>
<td>True</td>
<td>The ARN of the output that you want to update.</td>
</tr>
</tbody>
</table>

### Responses

<table>
<thead>
<tr>
<th>Status Code</th>
<th>Response Model</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>202</td>
<td>RemoveFlowOutputResponse</td>
<td>AWS Elemental MediaConnect is removing the output.</td>
</tr>
<tr>
<td>400</td>
<td>ResponseError (p. 66)</td>
<td>The request that you submitted is not valid.</td>
</tr>
<tr>
<td>403</td>
<td>ResponseError (p. 66)</td>
<td>You don't have the required permissions to perform this operation.</td>
</tr>
<tr>
<td>404</td>
<td>ResponseError (p. 66)</td>
<td>AWS Elemental MediaConnect did not find the resource that you specified in the request.</td>
</tr>
<tr>
<td>429</td>
<td>ResponseError (p. 66)</td>
<td>You have exceeded the service request rate limit for your AWS Elemental MediaConnect account.</td>
</tr>
<tr>
<td>500</td>
<td>ResponseError (p. 66)</td>
<td>AWS Elemental MediaConnect can't fulfill your request because it encountered an unexpected condition.</td>
</tr>
<tr>
<td>503</td>
<td>ResponseError (p. 66)</td>
<td>AWS Elemental MediaConnect is currently unavailable. Try again later.</td>
</tr>
<tr>
<td>Status Code</td>
<td>Response Model</td>
<td>Description</td>
</tr>
<tr>
<td>-------------</td>
<td>----------------</td>
<td>-------------</td>
</tr>
<tr>
<td>400</td>
<td>ResponseError (p. 66)</td>
<td>The request that you submitted is not valid.</td>
</tr>
<tr>
<td>403</td>
<td>ResponseError (p. 66)</td>
<td>You don’t have the required permissions to perform this operation.</td>
</tr>
<tr>
<td>404</td>
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<tr>
<td>503</td>
<td>ResponseError (p. 66)</td>
<td>AWS Elemental MediaConnect is currently unavailable. Try again later.</td>
</tr>
</tbody>
</table>

### Schemas

#### Request Bodies

**Example PUT**

```json
{
  "protocol": enum,
  "encryption": {
    "roleArn": "string",
    "secretArn": "string",
    "keyType": enum,
    "algorithm": enum
  },
  "streamId": "string",
  "port": integer,
  "destination": "string",
  "maxLatency": integer,
  "description": "string",
  "smoothingLatency": integer
}
```

#### Response Bodies

**Example UpdateFlowOutputResponse**

```json
{
  "output": {
    "outputArn": "string",
```


"encryption": {
  "roleArn": "string",
  "secretArn": "string",
  "keyType": enum,
  "algorithm": enum
},
"port": integer,
"destination": "string",
"name": "string",
"description": "string",
"entitlementArn": "string",
"transport": {
  "protocol": enum,
  "streamId": "string",
  "maxLatency": integer,
  "maxBitrate": integer,
  "smoothingLatency": integer
},
"mediaLiveInputArn": "string"
},
"flowArn": "string"

Example RemoveFlowOutputResponse

{
  "outputArn": "string",
  "flowArn": "string"
}

Example ResponseError

{
  "message": "string"
}

Properties

Encryption

Information about the encryption of the flow.

roleArn

The Amazon Resource Name (ARN) of the role that you created during setup (when you set up AWS Elemental MediaConnect as a trusted entity).

  Type: string
  Required: True

secretArn

The ARN of the secret that you created in AWS Secrets Manager to store the encryption key.

  Type: string
  Required: True
keyType

The type of key that is used for the encryption. If you don't specify a keyType value, the service uses the default setting (static-key).

  Type: string
  Required: False
  Values: static-key

algorithm

The type of algorithm that is used for the encryption (such as aes128, aes192, or aes256).

  Type: string
  Required: True
  Values: aes128 | aes192 | aes256

Output

The settings for an output.

outputArn

The ARN of the output.

  Type: string
  Required: True

encryption

The encryption credentials that you want to use for the output.

  Type: Encryption (p. 66)
  Required: False

port

The port to use when content is distributed to the output.

  Type: integer
  Required: False

destination

The address where you want to send the output.

  Type: string
  Required: False

name

The name of the output. This value must be unique within the current flow.

  Type: string
  Required: True
description
A description of the output. This description is not visible outside of the current AWS account even if the account grants entitlements to other accounts.

Type: string
Required: False

entitlementArn
The ARN of the entitlement on the originator's flow. This value is relevant only on entitled flows.

Type: string
Required: False

transport
Attributes that are related to the transport stream.

Type: Transport (p. 69)
Required: False

mediaLiveInputArn
The input ARN of the AWS Elemental MediaLive channel. This parameter is relevant only for outputs that AWS Elemental MediaConnect added to send content to a MediaLive input.

Type: string
Required: False

RemoveFlowOutputResponse
The result of a successful RemoveFlowOutput request including the flow ARN and the output ARN that was removed.

outputArn
The ARN of the output that you removed.

Type: string
Required: True

flowArn
The ARN of the flow that is associated with the output you removed.

Type: string
Required: True

ResponseError
An exception raised by AWS Elemental MediaConnect when you submit a request that cannot be completed. For more information, see the error message and documentation for the operation.
**message**

The specific error message that AWS Elemental MediaConnect returns to help you understand the reason that the request did not succeed.

*Type:* string  
*Required:* True

**Transport**

Attributes that are related to the transport stream.

**protocol**

The protocol that is used by the source or output.

*Type:* string  
*Required:* True  
*Values:* zixi-push | rtp-fec | rtp

**streamId**

The stream ID that you want to use for the transport. This parameter applies only to Zixi-based streams.

*Type:* string  
*Required:* False

**maxLatency**

The maximum latency in milliseconds for Zixi-based streams.

*Type:* integer  
*Required:* False  
*Format:* int64

**maxBitrate**

The smoothing max bitrate for RTP and RTP-FEC streams.

*Type:* integer  
*Required:* False  
*Format:* int64

**smoothingLatency**

The smoothing latency in milliseconds for RTP and RTP-FEC streams.

*Type:* integer  
*Required:* False  
*Format:* int64

**UpdateEncryption**

Information about the encryption of the flow.
roleArn

The ARN of the role that you created during setup (when you set up AWS Elemental MediaConnect as a trusted entity).

  Type: string
  Required: False

secretArn

The ARN of the secret that you created in AWS Secrets Manager to store the encryption key.

  Type: string
  Required: False

keyType

The type of key that is used for the encryption. If you don't specify a keyType value, the service uses the default setting (static-key).

  Type: string
  Required: False
  Values: static-key

algorithm

The type of algorithm that is used for the encryption (such as aes128, aes192, or aes256).

  Type: string
  Required: False
  Values: aes128 | aes192 | aes256

UpdateFlowOutputRequest

The updates that you want to make to an existing output of an existing flow.

protocol

The protocol to use for the output.

  Type: string
  Required: False
  Values: zixi-push | rtp-fec | rtp

cryptocurrency

The encryption credentials that you want to use for the output.

  Type: UpdateEncryption (p. 69)
  Required: False

streamId

The stream ID that you want to use for the transport. This parameter applies only to Zixi-based streams.
Properties

Type: string
Required: False

port
The port to use when AWS Elemental MediaConnect distributes content to the output.
Type: integer
Required: False

destination
The IP address where you want to send the output.
Type: string
Required: False

maxLatency
The maximum latency in milliseconds for Zixi-based streams.
Type: integer
Required: False
Format: int64

description
A description of the output. This description is not visible outside of the current AWS account even if the account grants entitlements to other accounts.
Type: string
Required: False

smoothingLatency
The smoothing latency in milliseconds for RTP and RTP-FEC streams.
Type: integer
Required: False
Format: int64

UpdateFlowOutputResponse
The result of a successful UpdateFlowOutput request including the flow ARN and the updated output.

output
Type: Output (p. 67)
Required: True

flowArn
The ARN of the flow that is associated with the updated output.
See Also

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

**UpdateFlowOutput**

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Go - Pilot
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2

**RemoveFlowOutput**

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Go - Pilot
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2

**UpdateFlowSource**

**URI**

/v1/flows/{flowArn}/source/{sourceArn}

**HTTP Methods**

**PUT**

Operation ID: UpdateFlowSource
Updates the source of a flow.

Path Parameters

<table>
<thead>
<tr>
<th>Name</th>
<th>Type</th>
<th>Required</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>flowArn</td>
<td>String</td>
<td>True</td>
<td>The Amazon Resource Name (ARN) of the flow.</td>
</tr>
<tr>
<td>sourceArn</td>
<td>String</td>
<td>True</td>
<td>The ARN of the source that you want to update.</td>
</tr>
</tbody>
</table>

Responses

<table>
<thead>
<tr>
<th>Status Code</th>
<th>Response Model</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>202</td>
<td>UpdateFlowSourceResponse</td>
<td>AWS Elemental MediaConnect is updating the source.</td>
</tr>
<tr>
<td>400</td>
<td>ResponseError (p. 74)</td>
<td>The request that you submitted is not valid.</td>
</tr>
<tr>
<td>403</td>
<td>ResponseError (p. 74)</td>
<td>You don't have the required permissions to perform this operation.</td>
</tr>
<tr>
<td>404</td>
<td>ResponseError (p. 74)</td>
<td>AWS Elemental MediaConnect did not find the resource that you specified in the request.</td>
</tr>
<tr>
<td>429</td>
<td>ResponseError (p. 74)</td>
<td>You have exceeded the service request rate limit for your AWS Elemental MediaConnect account.</td>
</tr>
<tr>
<td>500</td>
<td>ResponseError (p. 74)</td>
<td>AWS Elemental MediaConnect can't fulfill your request because it encountered an unexpected condition.</td>
</tr>
<tr>
<td>503</td>
<td>ResponseError (p. 74)</td>
<td>AWS Elemental MediaConnect is currently unavailable. Try again later.</td>
</tr>
</tbody>
</table>

Schemas

Request Bodies

Example PUT

```json
{
    "protocol": enum,
    "streamId": "string",
    "maxLatency": integer,
    "description": "string",
    "maxBitrate": integer,
}```
Properties

Encryption

Information about the encryption of the flow.

roleArn

The Amazon Resource Name (ARN) of the role that you created during setup (when you set up AWS Elemental MediaConnect as a trusted entity).

Type: string
Properties

secretArn

The ARN of the secret that you created in AWS Secrets Manager to store the encryption key.

    Required: True

    Type: string

keyType

The type of key that is used for the encryption. If you don’t specify a keyType value, the service uses the default setting (static-key).

    Type: string
    Required: False
    Values: static-key

algorithm

The type of algorithm that is used for the encryption (such as aes128, aes192, or aes256).

    Type: string
    Required: True
    Values: aes128 | aes192 | aes256

ResponseError

An exception raised by AWS Elemental MediaConnect when you submit a request that cannot be completed. For more information, see the error message and documentation for the operation.

message

The specific error message that AWS Elemental MediaConnect returns to help you understand the reason that the request did not succeed.

    Type: string
    Required: True

Source

The settings for the source of the flow.

sourceArn

The ARN of the source.

    Type: string
    Required: True

name

The name of the source.
Type: string  
Required: True

description
A description of the source. This description is not visible outside of the current AWS account.

Type: string  
Required: False

etitlementArn
The ARN of the entitlement that allows you to subscribe to content that comes from another AWS account. The entitlement is set by the content originator and the ARN is generated as part of the originator’s flow.

Type: string  
Required: False

ingestIp
The IP address that the flow listens on for incoming content.

Type: string  
Required: False

transport
Attributes that are related to the transport stream.

Type: `Transport (p. 77)`  
Required: False

decryption
The type of encryption that is used on the content ingested from the source.

Type: `Encryption (p. 74)`  
Required: False

ingestPort
The port that the flow listens on for incoming content. If the protocol of the source is Zixi, the port must be set to 2088.

Type: integer  
Required: False

whitelistCidr
The range of IP addresses that are allowed to contribute content to your source. Use the form of a Classless Inter-Domain Routing (CIDR) block; for example, 10.0.0.0/16.

Type: string
Required: False

**Transport**

Attributes that are related to the transport stream.

**protocol**

The protocol that is used by the source or output.

Type: string  
Required: True  
Values: zixi-push | rtp-fec | rtp

**streamId**

The stream ID that you want to use for the transport. This parameter applies only to Zixi-based streams.

Type: string  
Required: False

**maxLatency**

The maximum latency in milliseconds for Zixi-based streams.

Type: integer  
Required: False  
Format: int64

**maxBitrate**

The smoothing max bitrate for RTP and RTP-FEC streams.

Type: integer  
Required: False  
Format: int64

**smoothingLatency**

The smoothing latency in milliseconds for RTP and RTP-FEC streams.

Type: integer  
Required: False  
Format: int64

**UpdateEncryption**

Information about the encryption of the flow.

**roleArn**

The ARN of the role that you created during setup (when you set up AWS Elemental MediaConnect as a trusted entity).
Type: string  
Required: False

secretArn

The ARN of the secret that you created in AWS Secrets Manager to store the encryption key.

Type: string  
Required: False

keyType

The type of key that is used for the encryption. If you don't specify a keyType value, the service uses the default setting (static-key).

Type: string  
Required: False  
Values: static-key

algorithm

The type of algorithm that is used for the encryption (such as aes128, aes192, or aes256).

Type: string  
Required: False  
Values: aes128 | aes192 | aes256

**UpdateFlowSourceRequest**

The settings for the updated source of the flow.

protocol

The protocol that the source uses to deliver the content to AWS Elemental MediaConnect.

Type: string  
Required: False  
Values: zixi-push | rtp-fec | rtp

streamId

The stream ID that you want to use for the transport. This parameter applies only to Zixi-based streams.

Type: string  
Required: False

maxLatency

The maximum latency in milliseconds for Zixi-based streams.

Type: integer  
Required: False  
Format: int64
**description**

A description of the source. This description is not visible outside of the current AWS account.

  *Type:* string  
  *Required:* False

**maxBitrate**

The smoothing max bitrate for RTP and RTP-FEC streams.

  *Type:* integer  
  *Required:* False  
  *Format:* int64

**entitlementArn**

The ARN of the entitlement that allows you to subscribe to the flow. The entitlement is set by the content originator, and the ARN is generated as part of the originator's flow.

  *Type:* string  
  *Required:* False

**decryption**

The type of encryption that is used on the content ingested from the source.

  *Type:* [UpdateEncryption](#)  
  *Required:* False

**ingestPort**

The port that the flow listens on for incoming content. If the protocol of the source is Zixi, the port must be set to 2088.

  *Type:* integer  
  *Required:* False

**whitelistCidr**

The range of IP addresses that are allowed to contribute content to your source. Use the form of a Classless Inter-Domain Routing (CIDR) block; for example, 10.0.0.0/16.

  *Type:* string  
  *Required:* False

**UpdateFlowSourceResponse**

The result of a successful UpdateFlowSource request. The response includes the ARN of the flow that was updated and the updated source configuration.

**flowArn**

The ARN of the flow that you want to update.
Type: string
Required: True

source

The settings for the source of the flow.

Type: Source (p. 75)
Required: True

See Also

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

UpdateFlowSource

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Go - Pilot
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
Document History for API Reference

The following table describes important changes to this documentation.

<table>
<thead>
<tr>
<th>Change</th>
<th>Description</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tagging</td>
<td>Added support for tagging, untagging, and listing tags for existing AWS Elemental MediaConnect resources.</td>
<td>February 4, 2019</td>
</tr>
<tr>
<td>New service and guide</td>
<td>This is the initial release of the media ingest and transport service, AWS Elemental MediaConnect, and the AWS Elemental MediaConnect API Reference.</td>
<td>November 27, 2018</td>
</tr>
</tbody>
</table>
AWS Glossary

For the latest AWS terminology, see the AWS Glossary in the AWS General Reference.