



API Reference

# AWS Elemental MediaConnect



# AWS Elemental MediaConnect: API Reference

Copyright © 2024 Amazon Web Services, Inc. and/or its affiliates. All rights reserved.

Amazon's trademarks and trade dress may not be used in connection with any product or service that is not Amazon's, in any manner that is likely to cause confusion among customers, or in any manner that disparages or discredits Amazon. All other trademarks not owned by Amazon are the property of their respective owners, who may or may not be affiliated with, connected to, or sponsored by Amazon.

# Table of Contents

<b>What is MediaConnect?</b> .....	<b>1</b>
<b>Resources</b> .....	<b>2</b>
Entitlements: grant .....	3
URI .....	3
HTTP methods .....	3
Schemas .....	4
Properties .....	6
See also .....	12
Entitlements: list .....	13
URI .....	13
HTTP methods .....	13
Schemas .....	15
Properties .....	16
See also .....	17
Entitlements: update, revoke .....	18
URI .....	18
HTTP methods .....	18
Schemas .....	21
Properties .....	22
See also .....	30
Flow source metadata: describe .....	31
Messages .....	31
Programs .....	31
Streams .....	32
URI .....	32
HTTP methods .....	33
Schemas .....	34
Properties .....	35
See also .....	39
Flows: create, list .....	39
URI .....	39
HTTP methods .....	39
Schemas .....	43
Properties .....	55

See also .....	106
Flows: describe, update, delete .....	107
URI .....	107
HTTP methods .....	107
Schemas .....	111
Properties .....	125
See also .....	156
Flows: start .....	158
URI .....	158
HTTP methods .....	158
Schemas .....	159
Properties .....	160
See also .....	160
Flows: stop .....	161
URI .....	161
HTTP methods .....	161
Schemas .....	162
Properties .....	163
See also .....	164
Gateway bridge outputs: add .....	164
URI .....	164
HTTP methods .....	164
Schemas .....	166
Properties .....	167
See also .....	172
Gateway bridge outputs: update, remove .....	172
URI .....	172
HTTP methods .....	172
Schemas .....	175
Properties .....	177
See also .....	181
Gateway bridge sources: add .....	182
URI .....	182
HTTP methods .....	182
Schemas .....	184
Properties .....	185

See also .....	191
Gateway bridge sources: update, remove .....	191
URI .....	191
HTTP methods .....	192
Schemas .....	194
Properties .....	196
See also .....	201
Gateway bridge state: update .....	202
URI .....	202
HTTP methods .....	202
Schemas .....	204
Properties .....	204
See also .....	206
Gateway bridge: create, list .....	206
URI .....	206
HTTP methods .....	206
Schemas .....	210
Properties .....	214
See also .....	231
Gateway bridge: describe, update, delete .....	232
URI .....	232
HTTP methods .....	232
Schemas .....	236
Properties .....	241
See also .....	254
Gateway endpoints: list .....	255
URI .....	255
HTTP methods .....	255
Schemas .....	257
Properties .....	257
See also .....	258
Gateway instance: describe, update, deregister .....	258
URI .....	258
HTTP methods .....	259
Schemas .....	263
Properties .....	264

See also .....	269
Gateway instance: list .....	270
URI .....	270
HTTP methods .....	270
Schemas .....	273
Properties .....	274
See also .....	276
Gateway: describe, delete .....	276
URI .....	276
HTTP methods .....	276
Schemas .....	279
Properties .....	280
See also .....	283
Gateway: list, create .....	284
URI .....	284
HTTP methods .....	284
Schemas .....	288
Properties .....	290
See also .....	294
Media streams: add .....	295
URI .....	295
HTTP methods .....	296
Schemas .....	297
Properties .....	298
See also .....	307
Media streams: update, remove .....	307
URI .....	307
HTTP methods .....	308
Schemas .....	310
Properties .....	312
See also .....	320
Outputs: add .....	321
URI .....	321
HTTP methods .....	321
Schemas .....	322
Properties .....	326

See also .....	344
Outputs: update, remove .....	344
URI .....	344
HTTP methods .....	344
Schemas .....	347
Properties .....	351
See also .....	371
Reservation offerings: describe, purchase .....	372
URI .....	372
HTTP methods .....	372
Schemas .....	374
Properties .....	376
See also .....	382
Reservation offerings: list .....	383
URI .....	383
HTTP methods .....	383
Schemas .....	386
Properties .....	387
See also .....	390
Reservations: describe .....	390
URI .....	390
HTTP methods .....	390
Schemas .....	392
Properties .....	392
See also .....	396
Reservations: list .....	397
URI .....	397
HTTP methods .....	397
Schemas .....	400
Properties .....	401
See also .....	405
Source: update, remove .....	406
URI .....	406
HTTP methods .....	406
Schemas .....	409
Properties .....	412

See also .....	431
Sources: add .....	432
URI .....	432
HTTP methods .....	432
Schemas .....	434
Properties .....	437
See also .....	454
Tags: list, tag, untag .....	455
URI .....	455
HTTP methods .....	455
Schemas .....	458
Properties .....	459
See also .....	460
VPC interfaces: add .....	461
URI .....	461
HTTP methods .....	461
Schemas .....	463
Properties .....	464
See also .....	468
VPC interfaces: remove .....	468
URI .....	468
HTTP methods .....	468
Schemas .....	470
Properties .....	470
See also .....	471
<b>Document history .....</b>	<b>473</b>
<b>AWS Glossary .....</b>	<b>477</b>



# 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 MediaConnect. This guide is for developers who need detailed information about the MediaConnect API actions, data types, and errors. To access MediaConnect using the REST API endpoint:

```
https://mediaconnect.<region>.amazonaws.com
```

For descriptions of MediaConnect 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

- [Entitlements: grant](#)
- [Entitlements: list](#)
- [Entitlements: update, revoke](#)
- [Flow source metadata: describe](#)
- [Flows: create, list](#)
- [Flows: describe, update, delete](#)
- [Flows: start](#)
- [Flows: stop](#)
- [Gateway bridge outputs: add](#)
- [Gateway bridge outputs: update, remove](#)
- [Gateway bridge sources: add](#)
- [Gateway bridge sources: update, remove](#)
- [Gateway bridge state: update](#)
- [Gateway bridge: create, list](#)
- [Gateway bridge: describe, update, delete](#)
- [Gateway endpoints: list](#)
- [Gateway instance: describe, update, deregister](#)
- [Gateway instance: list](#)
- [Gateway: describe, delete](#)
- [Gateway: list, create](#)
- [Media streams: add](#)
- [Media streams: update, remove](#)
- [Outputs: add](#)
- [Outputs: update, remove](#)
- [Reservation offerings: describe, purchase](#)
- [Reservation offerings: list](#)

- [Reservations: describe](#)
- [Reservations: list](#)
- [Source: update, remove](#)
- [Sources: add](#)
- [Tags: list, tag, untag](#)
- [VPC interfaces: add](#)
- [VPC interfaces: remove](#)

## Entitlements: grant

### URI

/v1/flows/*flowArn*/entitlements

### HTTP methods

#### POST

**Operation ID:** GrantFlowEntitlements

Grants entitlements to an existing flow.

#### Path parameters

Name	Type	Required	Description
<i>flowArn</i>	String	True	The Amazon Resource Name (ARN) of the flow.

#### Responses

Status code	Response model	Description
200	<a href="#">GrantFlowEntitlementsResponse</a>	MediaConnect granted the entitlements successfully.

Status code	Response model	Description
400	<a href="#">ResponseError</a>	The request that you submitted is not valid.
403	<a href="#">ResponseError</a>	You don't have the required permissions to perform this operation.
404	<a href="#">ResponseError</a>	MediaConnect did not find the resource that you specified in the request.
420	<a href="#">ResponseError</a>	Your account already contains the maximum number of 20 flows per account, per Region. For more information, contact AWS Support.
429	<a href="#">ResponseError</a>	You have exceeded the service request rate limit for your MediaConnect account.
500	<a href="#">ResponseError</a>	MediaConnect can't fulfill your request because it encountered an unexpected condition.
503	<a href="#">ResponseError</a>	MediaConnect is currently unavailable. Try again later.

## Schemas

## Request bodies

## POST schema

```
{
  "entitlements": [
```

```
{
  "entitlementStatus": enum,
  "encryption": {
    "resourceId": "string",
    "roleArn": "string",
    "secretArn": "string",
    "constantInitializationVector": "string",
    "keyType": enum,
    "region": "string",
    "deviceId": "string",
    "url": "string",
    "algorithm": enum
  },
  "subscribers": [
    "string"
  ],
  "name": "string",
  "description": "string",
  "dataTransferSubscriberFeePercent": integer
}
```

## Response bodies

### GrantFlowEntitlementsResponse schema

```
{
  "entitlements": [
    {
      "entitlementStatus": enum,
      "encryption": {
        "resourceId": "string",
        "roleArn": "string",
        "secretArn": "string",
        "constantInitializationVector": "string",
        "keyType": enum,
        "region": "string",
        "deviceId": "string",
        "url": "string",
        "algorithm": enum
      },
      "subscribers": [
```

```
    "string"
  ],
  "name": "string",
  "description": "string",
  "dataTransferSubscriberFeePercent": integer,
  "entitlementArn": "string"
}
],
"flowArn": "string"
}
```

## ResponseError schema

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

## Properties

### Encryption

Information about the encryption of the flow.

#### resourceId

An identifier for the content. The service sends this value to the key server to identify the current endpoint. The resource ID is also known as the content ID. This parameter is required for SPEKE encryption and is not valid for static key encryption.

**Type:** string

**Required:** False

#### roleArn

The Amazon Resource Name (ARN) of the role that you created during setup (when you set up 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:** False

## **constantInitializationVector**

A 128-bit, 16-byte hex value represented by a 32-character string, to be used with the key for encrypting content. This parameter is not valid for static key encryption.

**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:** `speke` | `static-key` | `srt-password`

## **region**

The AWS Region that the API Gateway proxy endpoint was created in. This parameter is required for SPEKE encryption and is not valid for static key encryption.

**Type:** string

**Required:** False

## **deviceId**

The value of one of the devices that you configured with your digital rights management (DRM) platform key provider. This parameter is required for SPEKE encryption and is not valid for static key encryption.

**Type:** string

**Required:** False

## url

The URL from the API Gateway proxy that you set up to talk to your key server. This parameter is required for SPEKE encryption and is not valid for static key encryption.

**Type:** string

**Required:** False

## 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

## Entitlement

The settings for a flow entitlement.

### entitlementStatus

An indication of whether the entitlement is enabled.

**Type:** string

**Required:** False

**Values:** ENABLED | DISABLED

## encryption

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

**Type:** [Encryption](#)

**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 MediaConnect console and is not visible outside of the current AWS account.

**Type:** string

**Required:** False

## dataTransferSubscriberFeePercent

The percentage of the entitlement data transfer fee that you want the subscriber to be responsible for.

**Type:** integer

**Required:** False

## entitlementArn

The ARN of the entitlement.

**Type:** string

**Required:** True

## GrantEntitlementRequest

The entitlements that you want to grant on the flow.

### entitlementStatus

An indication of whether the new entitlement should be enabled or disabled as soon as it is created. If you don't specify the entitlementStatus field in your request, MediaConnect sets it to ENABLED.

**Type:** string

**Required:** False

**Values:** ENABLED | DISABLED

### encryption

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

**Type:** [Encryption](#)

**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 MediaConnect console and is not visible outside of the current AWS account.

**Type:** string

**Required:** False

## dataTransferSubscriberFeePercent

The percentage of the entitlement data transfer fee that you want the subscriber to be responsible for.

**Type:** integer

**Required:** False

## GrantFlowEntitlementsRequest

Grants an entitlement on a flow.

### entitlements

The list of entitlements that you want to grant.

**Type:** Array of type [GrantEntitlementRequest](#)

**Required:** True

## GrantFlowEntitlementsResponse

The entitlements that you just granted.

### entitlements

The entitlements that were just granted.

**Type:** Array of type [Entitlement](#)

**Required:** True

## flowArn

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

**Type:** string

**Required:** True

## ResponseError

An exception raised by 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 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:

### GrantFlowEntitlements

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

# Entitlements: list

## 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

Name	Type	Required	Description
nextToken	String	False	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.

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

## Responses

Status code	Response model	Description
200	<a href="#">ListEntitlementsResponse</a>	MediaConnect returned the list of entitlements successfully.

Status code	Response model	Description
400	<a href="#">ResponseError</a>	The request that you submitted is not valid.
429	<a href="#">ResponseError</a>	You have exceeded the service request rate limit for your MediaConnect account.
500	<a href="#">ResponseError</a>	MediaConnect can't fulfill your request because it encountered an unexpected condition.
503	<a href="#">ResponseError</a>	MediaConnect is currently unavailable. Try again later.

## Schemas

### Response bodies

#### ListEntitlementsResponse schema

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

#### ResponseError schema

```
{
  "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](#)

**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.

### dataTransferSubscriberFeePercent

The percentage of the entitlement data transfer fee that you are responsible for.

**Type:** integer

**Required:** False

### entitlementArn

The ARN of the entitlement.



**Type:** string

**Required:** True

## entitlementName

The name of the entitlement.

**Type:** string

**Required:** True

## ResponseError

An exception raised by 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 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 v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)

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

## Entitlements: update, revoke

### 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

Name	Type	Required	Description
<i>flowArn</i>	String	True	The Amazon Resource Name (ARN) of the flow.
<i>entitlementArn</i>	String	True	The ARN of the entitlement that you want to update.

#### Responses

Status code	Response model	Description
202	<a href="#">UpdateFlowEntitlementResponse</a>	MediaConnect is updating the entitlement.

Status code	Response model	Description
400	<a href="#">ResponseError</a>	The request that you submitted is not valid.
403	<a href="#">ResponseError</a>	You don't have the required permissions to perform this operation.
404	<a href="#">ResponseError</a>	MediaConnect did not find the resource that you specified in the request.
429	<a href="#">ResponseError</a>	You have exceeded the service request rate limit for your MediaConnect account.
500	<a href="#">ResponseError</a>	MediaConnect can't fulfill your request because it encountered an unexpected condition.
503	<a href="#">ResponseError</a>	MediaConnect is currently unavailable. Try again later.

## DELETE

### Operation ID: RevokeFlowEntitlement

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

### Path parameters

Name	Type	Required	Description
<i>flowArn</i>	String	True	The Amazon Resource Name (ARN) of the flow.

Name	Type	Required	Description
<i>entitlementArn</i>	String	True	The ARN of the entitlement that you want to update.

## Responses

Status code	Response model	Description
202	<a href="#">RevokeFlowEntitlementResponse</a>	MediaConnect is revoking the entitlement.
400	<a href="#">ResponseError</a>	The request that you submitted is not valid.
403	<a href="#">ResponseError</a>	You don't have the required permissions to perform this operation.
404	<a href="#">ResponseError</a>	MediaConnect did not find the resource that you specified in the request.
429	<a href="#">ResponseError</a>	You have exceeded the service request rate limit for your MediaConnect account.
500	<a href="#">ResponseError</a>	MediaConnect can't fulfill your request because it encountered an unexpected condition.
503	<a href="#">ResponseError</a>	MediaConnect is currently unavailable. Try again later.

# Schemas

## Request bodies

### PUT schema

```
{
  "entitlementStatus": enum,
  "encryption": {
    "resourceId": "string",
    "roleArn": "string",
    "secretArn": "string",
    "constantInitializationVector": "string",
    "keyType": enum,
    "region": "string",
    "deviceId": "string",
    "url": "string",
    "algorithm": enum
  },
  "subscribers": [
    "string"
  ],
  "description": "string"
}
```

## Response bodies

### UpdateFlowEntitlementResponse schema

```
{
  "flowArn": "string",
  "entitlement": {
    "entitlementStatus": enum,
    "encryption": {
      "resourceId": "string",
      "roleArn": "string",
      "secretArn": "string",
      "constantInitializationVector": "string",
      "keyType": enum,
      "region": "string",
      "deviceId": "string",
      "url": "string",

```

```
    "algorithm": enum
  },
  "subscribers": [
    "string"
  ],
  "name": "string",
  "description": "string",
  "dataTransferSubscriberFeePercent": integer,
  "entitlementArn": "string"
}
```

### RevokeFlowEntitlementResponse schema

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

### ResponseError schema

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

## Properties

### Encryption

Information about the encryption of the flow.

#### resourceId

An identifier for the content. The service sends this value to the key server to identify the current endpoint. The resource ID is also known as the content ID. This parameter is required for SPEKE encryption and is not valid for static key encryption.

**Type:** string

**Required:** False

## roleArn

The Amazon Resource Name (ARN) of the role that you created during setup (when you set up 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:** False

## constantInitializationVector

A 128-bit, 16-byte hex value represented by a 32-character string, to be used with the key for encrypting content. This parameter is not valid for static key encryption.

**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:** speke | static-key | srt-password

## region

The AWS Region that the API Gateway proxy endpoint was created in. This parameter is required for SPEKE encryption and is not valid for static key encryption.

**Type:** string

**Required:** False

## deviceId

The value of one of the devices that you configured with your digital rights management (DRM) platform key provider. This parameter is required for SPEKE encryption and is not valid for static key encryption.

**Type:** string

**Required:** False

## url

The URL from the API Gateway proxy that you set up to talk to your key server. This parameter is required for SPEKE encryption and is not valid for static key encryption.

**Type:** string

**Required:** False

## 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

## Entitlement

The settings for a flow entitlement.

### entitlementStatus

An indication of whether the entitlement is enabled.

**Type:** string

**Required:** False

**Values:** ENABLED | DISABLED



## encryption

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

**Type:** [Encryption](#)

**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 MediaConnect console and is not visible outside of the current AWS account.

**Type:** string

**Required:** False

## dataTransferSubscriberFeePercent

The percentage of the entitlement data transfer fee that you want the subscriber to be responsible for.

**Type:** integer

**Required:** False

## **entitlementArn**

The ARN of the entitlement.

**Type:** string

**Required:** True

## **ResponseError**

An exception raised by 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 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.

### **resourceId**

An identifier for the content. The service sends this value to the key server to identify the current endpoint. The resource ID is also known as the content ID. This parameter is required for SPEKE encryption and is not valid for static key encryption.

**Type:** string

**Required:** False

### **roleArn**

The ARN of the role that you created during setup (when you set up 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

### **constantInitializationVector**

A 128-bit, 16-byte hex value represented by a 32-character string, to be used with the key for encrypting content. This parameter is not valid for static key encryption.

**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:** speke | static-key | srt-password

## region

The AWS Region that the API Gateway proxy endpoint was created in. This parameter is required for SPEKE encryption and is not valid for static key encryption.

**Type:** string

**Required:** False

## deviceId

The value of one of the devices that you configured with your digital rights management (DRM) platform key provider. This parameter is required for SPEKE encryption and is not valid for static key encryption.

**Type:** string

**Required:** False

## url

The URL from the API Gateway proxy that you set up to talk to your key server. This parameter is required for SPEKE encryption and is not valid for static key encryption.

**Type:** string

**Required:** False

## 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.

### entitlementStatus

An indication of whether you want to activate the entitlement to allow access, or deactivate it to stop streaming content to the subscriber's flow temporarily. If you don't specify the entitlementStatus field in your request, MediaConnect leaves the value unchanged.

**Type:** string

**Required:** False

**Values:** ENABLED | DISABLED

### encryption

The type of encryption that 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 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

The new configuration of the entitlement that you updated.

**Type:** [Entitlement](#)

**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 v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

## RevokeFlowEntitlement

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

## Flow source metadata: describe

The DescribeFlowSourceMetadata API is used to view information about the flow's source transport stream and programs. This API displays status messages about the flow's source as well as details about the program's video, audio, and other data.

The following sections contain details of the information provided by DescribeFlowSourceMetadata.

### Messages

The messages section of the DescribeFlowSourceMetadata response can contain status codes with more information about the transport stream. If MediaConnect detects an issue or cannot retrieve the source stream metadata, an associated status code and message will be displayed.

### Programs

The programs section of the DescribeFlowSourceMetadata response contains information about each program in the transport stream.

Field	Details
ProgramNumber	The program number of this program.

Field	Details
ProgramPid	The program Packet Identifier (PID).
PcrPid	The Program Clock Reference (PCR) PID of this program.
ProgramName	The name of this program.
Streams	The nested sections contain info about the video, audio, and data stream types.

## Streams

The streams section of the `DescribeFlowSourceMetadata` response contains information about the video, audio, and data streams of each program. The streams section is found within the programs section of the response.

Field	Details
StreamType	The type of content that this stream contains. This value can be video, audio, data, or unknown.
Codec	The codec of the stream. This value will vary depending on the type of stream. For example, a video stream type might display a H264 value while an audio stream type displays AAC.
Pid	The Packet Identifier (PID) of the stream.

## URI

`/v1/flows/flowArn/source-metadata`



## HTTP methods

### GET

**Operation ID:** DescribeFlowSourceMetadata

#### Path parameters

Name	Type	Required	Description
<i>flowArn</i>	String	True	The Amazon Resource Name (ARN) of the flow.

#### Responses

Status code	Response model	Description
200	<a href="#">DescribeFlowSourceMetadataResponse</a>	MediaConnect returned the flow details successfully.
400	<a href="#">ResponseError</a>	The request that you submitted is not valid.
403	<a href="#">ResponseError</a>	You don't have the required permissions to perform this operation.
404	<a href="#">ResponseError</a>	MediaConnect did not find the resource that you specified in the request.
429	<a href="#">ResponseError</a>	You have exceeded the service request rate limit for your MediaConnect account.
500	<a href="#">ResponseError</a>	MediaConnect can't fulfill your request because it

Status code	Response model	Description
503	<a href="#">ResponseError</a>	encountered an unexpected condition.  MediaConnect is currently unavailable. Try again later.

## Schemas

### Response bodies

#### DescribeFlowSourceMetadataResponse schema

```
{
  "flowArn": "string",
  "messages": [
    {
      "code": "string",
      "resourceName": "string",
      "message": "string"
    }
  ],
  "timestamp": "string",
  "transportMediaInfo": {
    "programs": [
      {
        "programName": "string",
        "programPid": integer,
        "streams": [
          {
            "streamType": "string",
            "codec": "string",
            "pid": integer
          }
        ],
        "programNumber": integer,
        "pcrPid": integer
      }
    ]
  }
}
```

```
}
```

## ResponseError schema

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

## Properties

### DescribeFlowSourceMetadataResponse

The result of a successful DescribeFlowSourceMetadata request.

#### flowArn

The ARN of the flow that DescribeFlowSourceMetadata was performed on.

**Type:** string

**Required:** True

#### messages

Provides a status code and message regarding issues found with the flow source metadata.

**Type:** Array of type [MessageDetail](#)

**Required:** True

#### timestamp

The timestamp of the most recent change in metadata for this flow's source.

**Type:** string

**Required:** True

**Format:** date-time

#### transportMediaInfo

**Type:** [TransportMediaInfo](#)

**Required:** False

## MessageDetail

### code

The error code.

**Type:** string

**Required:** True

### resourceName

The name of the resource.

**Type:** string

**Required:** False

### message

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

**Type:** string

**Required:** True

## ResponseError

An exception raised by 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 MediaConnect returns to help you understand the reason that the request did not succeed.

**Type:** string

**Required:** True

## TransportMediaInfo

The metadata of the transport stream in the current flow's source.

### programs

The list of transport stream programs in the current flow's source.

**Type:** Array of type [TransportStreamProgram](#)

**Required:** True

## TransportStream

The metadata of an elementary transport stream.

### streamType

The Stream Type as it is reported in the Program Map Table.

**Type:** string

**Required:** True

### codec

The codec used by the stream.

**Type:** string

**Required:** False

### pid

The Packet ID (PID) as it is reported in the Program Map Table.

**Type:** integer

**Required:** True

## TransportStreamProgram

The metadata of a single transport stream program.

## programName

The program name as it is reported in the Program Association Table.

**Type:** string

**Required:** False

## programPid

The program Packet ID (PID) as it is reported in the Program Association Table.

**Type:** integer

**Required:** True

## streams

The list of elementary transport streams in the program. The list includes video, audio, and data streams.

**Type:** Array of type [TransportStream](#)

**Required:** True

## programNumber

The program number as it is reported in the Program Association Table.

**Type:** integer

**Required:** True

## pcrPid

The Program Clock Reference (PCR) Packet ID (PID) as it is reported in the Program Association Table.

**Type:** integer

**Required:** True

## See also

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

### DescribeFlowSourceMetadata

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

## Flows: create, list

### 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

Name	Type	Required	Description
nextToken	String	False	The token that identifies which

Name	Type	Required	Description
			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.



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

## Responses

Status code	Response model	Description
200	<a href="#">ListFlowsResponse</a>	MediaConnect returned the list of flows successfully.

Status code	Response model	Description
400	<a href="#">ResponseError</a>	The request that you submitted is not valid.
429	<a href="#">ResponseError</a>	You have exceeded the service request rate limit for your MediaConnect account.
500	<a href="#">ResponseError</a>	MediaConnect can't fulfill your request because it encountered an unexpected condition.
503	<a href="#">ResponseError</a>	MediaConnect is currently unavailable. Try again later.

## POST

### Operation ID: CreateFlow

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

### Responses

Status code	Response model	Description
201	<a href="#">CreateFlowResponse</a>	MediaConnect created the new resource successfully.
400	<a href="#">ResponseError</a>	The request that you submitted is not valid.
403	<a href="#">ResponseError</a>	You don't have the required permissions to perform this operation.
420	<a href="#">ResponseError</a>	Your account already contains the maximum number of 20

Status code	Response model	Description
		flows per account, per Region. For more information, contact AWS Support.
429	<a href="#">ResponseError</a>	You have exceeded the service request rate limit for your MediaConnect account.
500	<a href="#">ResponseError</a>	MediaConnect can't fulfill your request because it encountered an unexpected condition.
503	<a href="#">ResponseError</a>	MediaConnect is currently unavailable. Try again later.

## Schemas

### Request bodies

#### POST schema

```
{
  "entitlements": [
    {
      "entitlementStatus": enum,
      "encryption": {
        "resourceId": "string",
        "roleArn": "string",
        "secretArn": "string",
        "constantInitializationVector": "string",
        "keyType": enum,
        "region": "string",
        "deviceId": "string",
        "url": "string",
        "algorithm": enum
      },
    },
    "subscribers": [
```

```

    "string"
  ],
  "name": "string",
  "description": "string",
  "dataTransferSubscriberFeePercent": integer
}
],
"outputs": [
{
  "mediaStreamOutputConfigurations": [
    {
      "encodingParameters": {
        "encoderProfile": enum,
        "compressionFactor": number
      },
      "mediaStreamName": "string",
      "encodingName": enum,
      "destinationConfigurations": [
        {
          "destinationIp": "string",
          "destinationPort": integer,
          "interface": {
            "name": "string"
          }
        }
      ]
    }
  ],
  "streamId": "string",
  "minLatency": integer,
  "destination": "string",
  "maxLatency": integer,
  "description": "string",
  "smoothingLatency": integer,
  "vpcInterfaceAttachment": {
    "vpcInterfaceName": "string"
  },
  "remoteId": "string",
  "protocol": enum,
  "encryption": {
    "resourceId": "string",
    "roleArn": "string",
    "secretArn": "string",
    "constantInitializationVector": "string",

```

```

    "keyType": enum,
    "region": "string",
    "deviceId": "string",
    "url": "string",
    "algorithm": enum
  },
  "port": integer,
  "senderControlPort": integer,
  "name": "string",
  "cidrAllowList": [
    "string"
  ]
}
],
"mediaStreams": [
  {
    "mediaStreamId": integer,
    "mediaStreamType": enum,
    "videoFormat": "string",
    "mediaStreamName": "string",
    "description": "string",
    "attributes": {
      "fmt": {
        "colorimetry": enum,
        "par": "string",
        "tcs": enum,
        "scanMode": enum,
        "range": enum,
        "channelOrder": "string",
        "exactFramerate": "string"
      },
      "lang": "string"
    },
    "clockRate": integer
  }
],
"sources": [
  {
    "streamId": "string",
    "minLatency": integer,
    "vpcInterfaceName": "string",
    "maxLatency": integer,
    "description": "string",
    "maxBitrate": integer,

```

```
"entitlementArn": "string",
"sourceListenerPort": integer,
"mediaStreamSourceConfigurations": [
  {
    "mediaStreamName": "string",
    "encodingName": enum,
    "inputConfigurations": [
      {
        "inputPort": integer,
        "interface": {
          "name": "string"
        }
      }
    ]
  }
],
"sourceListenerAddress": "string",
"whitelistCidr": "string",
"senderIpAddress": "string",
"protocol": enum,
"senderControlPort": integer,
"name": "string",
"gatewayBridgeSource": {
  "bridgeArn": "string",
  "vpcInterfaceAttachment": {
    "vpcInterfaceName": "string"
  }
},
"decryption": {
  "resourceId": "string",
  "roleArn": "string",
  "secretArn": "string",
  "constantInitializationVector": "string",
  "keyType": enum,
  "region": "string",
  "deviceId": "string",
  "url": "string",
  "algorithm": enum
},
"ingestPort": integer,
"maxSyncBuffer": integer
}
],
"name": "string",
```

```

"sourceFailoverConfig": {
  "failoverMode": enum,
  "recoveryWindow": integer,
  "state": enum,
  "sourcePriority": {
    "primarySource": "string"
  }
},
"source": {
  "streamId": "string",
  "minLatency": integer,
  "vpcInterfaceName": "string",
  "maxLatency": integer,
  "description": "string",
  "maxBitrate": integer,
  "entitlementArn": "string",
  "sourceListenerPort": integer,
  "mediaStreamSourceConfigurations": [
    {
      "mediaStreamName": "string",
      "encodingName": enum,
      "inputConfigurations": [
        {
          "inputPort": integer,
          "interface": {
            "name": "string"
          }
        }
      ]
    }
  ],
  "sourceListenerAddress": "string",
  "whitelistCidr": "string",
  "senderIpAddress": "string",
  "protocol": enum,
  "senderControlPort": integer,
  "name": "string",
  "gatewayBridgeSource": {
    "bridgeArn": "string",
    "vpcInterfaceAttachment": {
      "vpcInterfaceName": "string"
    }
  },
  "decryption": {

```

```
    "resourceId": "string",
    "roleArn": "string",
    "secretArn": "string",
    "constantInitializationVector": "string",
    "keyType": enum,
    "region": "string",
    "deviceId": "string",
    "url": "string",
    "algorithm": enum
  },
  "ingestPort": integer,
  "maxSyncBuffer": integer
},
"vpcInterfaces": [
  {
    "subnetId": "string",
    "roleArn": "string",
    "securityGroupIds": [
      "string"
    ],
    "name": "string",
    "networkInterfaceType": enum
  }
],
"availabilityZone": "string",
"maintenance": {
  "maintenanceDay": enum,
  "maintenanceStartHour": "string"
}
}
```

## Response bodies

### ListFlowsResponse schema

```
{
  "flows": [
    {
      "flowArn": "string",
      "sourceType": enum,
      "name": "string",
      "description": "string",
      "availabilityZone": "string",
```



```

    "maintenance": {
      "maintenanceScheduledDate": "string",
      "maintenanceDeadline": "string",
      "maintenanceDay": enum,
      "maintenanceStartHour": "string"
    },
    "status": enum
  },
  "nextToken": "string"
}

```

## CreateFlowResponse schema

```

{
  "flow": {
    "entitlements": [
      {
        "entitlementStatus": enum,
        "encryption": {
          "resourceId": "string",
          "roleArn": "string",
          "secretArn": "string",
          "constantInitializationVector": "string",
          "keyType": enum,
          "region": "string",
          "deviceId": "string",
          "url": "string",
          "algorithm": enum
        },
        "subscribers": [
          "string"
        ],
        "name": "string",
        "description": "string",
        "dataTransferSubscriberFeePercent": integer,
        "entitlementArn": "string"
      }
    ],
    "outputs": [
      {
        "listenerAddress": "string",
        "mediaStreamOutputConfigurations": [

```

```

{
  "encodingParameters": {
    "encoderProfile": enum,
    "compressionFactor": number
  },
  "mediaStreamName": "string",
  "encodingName": enum,
  "destinationConfigurations": [
    {
      "destinationIp": "string",
      "destinationPort": integer,
      "outboundIp": "string",
      "interface": {
        "name": "string"
      }
    }
  ]
},
"destination": "string",
"description": "string",
"entitlementArn": "string",
"transport": {
  "streamId": "string",
  "minLatency": integer,
  "maxLatency": integer,
  "maxBitrate": integer,
  "sourceListenerPort": integer,
  "smoothingLatency": integer,
  "remoteId": "string",
  "sourceListenerAddress": "string",
  "senderIpAddress": "string",
  "protocol": enum,
  "senderControlPort": integer,
  "cidrAllowList": [
    "string"
  ],
  "maxSyncBuffer": integer
},
"vpcInterfaceAttachment": {
  "vpcInterfaceName": "string"
},
"bridgeArn": "string",
"outputArn": "string",

```

```

    "encryption": {
      "resourceId": "string",
      "roleArn": "string",
      "secretArn": "string",
      "constantInitializationVector": "string",
      "keyType": enum,
      "region": "string",
      "deviceId": "string",
      "url": "string",
      "algorithm": enum
    },
    "port": integer,
    "bridgePorts": [
      integer
    ],
    "name": "string",
    "dataTransferSubscriberFeePercent": integer,
    "mediaLiveInputArn": "string"
  }
],
"sources": [
  {
    "sourceArn": "string",
    "vpcInterfaceName": "string",
    "description": "string",
    "entitlementArn": "string",
    "transport": {
      "streamId": "string",
      "minLatency": integer,
      "maxLatency": integer,
      "maxBitrate": integer,
      "sourceListenerPort": integer,
      "smoothingLatency": integer,
      "remoteId": "string",
      "sourceListenerAddress": "string",
      "senderIpAddress": "string",
      "protocol": enum,
      "senderControlPort": integer,
      "cidrAllowList": [
        "string"
      ],
      "maxSyncBuffer": integer
    },
    "mediaStreamSourceConfigurations": [

```

```

    {
      "mediaStreamName": "string",
      "encodingName": enum,
      "inputConfigurations": [
        {
          "inputIp": "string",
          "inputPort": integer,
          "interface": {
            "name": "string"
          }
        }
      ]
    }
  ],
  "whitelistCidr": "string",
  "senderIpAddress": "string",
  "senderControlPort": integer,
  "name": "string",
  "gatewayBridgeSource": {
    "bridgeArn": "string",
    "vpcInterfaceAttachment": {
      "vpcInterfaceName": "string"
    }
  },
  "dataTransferSubscriberFeePercent": integer,
  "ingestIp": "string",
  "decryption": {
    "resourceId": "string",
    "roleArn": "string",
    "secretArn": "string",
    "constantInitializationVector": "string",
    "keyType": enum,
    "region": "string",
    "deviceId": "string",
    "url": "string",
    "algorithm": enum
  },
  "ingestPort": integer
}
],
"description": "string",
"sourceFailoverConfig": {
  "failoverMode": enum,
  "recoveryWindow": integer,

```

```

    "state": enum,
    "sourcePriority": {
      "primarySource": "string"
    }
  },
  "source": {
    "sourceArn": "string",
    "vpcInterfaceName": "string",
    "description": "string",
    "entitlementArn": "string",
    "transport": {
      "streamId": "string",
      "minLatency": integer,
      "maxLatency": integer,
      "maxBitrate": integer,
      "sourceListenerPort": integer,
      "smoothingLatency": integer,
      "remoteId": "string",
      "sourceListenerAddress": "string",
      "senderIpAddress": "string",
      "protocol": enum,
      "senderControlPort": integer,
      "cidrAllowList": [
        "string"
      ],
      "maxSyncBuffer": integer
    },
    "mediaStreamSourceConfigurations": [
      {
        "mediaStreamName": "string",
        "encodingName": enum,
        "inputConfigurations": [
          {
            "inputIp": "string",
            "inputPort": integer,
            "interface": {
              "name": "string"
            }
          }
        ]
      }
    ],
    "whitelistCidr": "string",
    "senderIpAddress": "string",

```

```

    "senderControlPort": integer,
    "name": "string",
    "gatewayBridgeSource": {
        "bridgeArn": "string",
        "vpcInterfaceAttachment": {
            "vpcInterfaceName": "string"
        }
    },
    "dataTransferSubscriberFeePercent": integer,
    "ingestIp": "string",
    "decryption": {
        "resourceId": "string",
        "roleArn": "string",
        "secretArn": "string",
        "constantInitializationVector": "string",
        "keyType": enum,
        "region": "string",
        "deviceId": "string",
        "url": "string",
        "algorithm": enum
    },
    "ingestPort": integer
},
"availabilityZone": "string",
"mediaStreams": [
    {
        "mediaStreamId": integer,
        "mediaStreamType": enum,
        "videoFormat": "string",
        "mediaStreamName": "string",
        "description": "string",
        "attributes": {
            "fmt": {
                "colorimetry": enum,
                "par": "string",
                "tcs": enum,
                "scanMode": enum,
                "range": enum,
                "channelOrder": "string",
                "exactFramerate": "string"
            },
            "lang": "string"
        }
    },
    "fmt": integer,

```

```
    "clockRate": integer
  },
  "flowArn": "string",
  "name": "string",
  "egressIp": "string",
  "vpcInterfaces": [
    {
      "subnetId": "string",
      "roleArn": "string",
      "securityGroupIds": [
        "string"
      ],
      "name": "string",
      "networkInterfaceType": enum,
      "networkInterfaceIds": [
        "string"
      ]
    }
  ],
  "maintenance": {
    "maintenanceScheduledDate": "string",
    "maintenanceDeadline": "string",
    "maintenanceDay": enum,
    "maintenanceStartHour": "string"
  },
  "status": enum
}
```

## ResponseError schema

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

## Properties

### AddMaintenance

Create maintenance setting for a flow.

## **maintenanceDay**

A day of a week when the maintenance will happen. Use Monday/Tuesday/Wednesday/Thursday/Friday/Saturday/Sunday.

**Type:** string

**Required:** True

**Values:** Monday | Tuesday | Wednesday | Thursday | Friday | Saturday | Sunday

## **maintenanceStartHour**

UTC time when the maintenance will happen. Use 24-hour HH:MM format. Minutes must be 00. Example: 13:00. The default value is 02:00.

**Type:** string

**Required:** True

## **AddMediaStreamRequest**

The media stream that you want to add to the flow.

### **mediaStreamId**

A unique identifier for the media stream.

**Type:** integer

**Required:** True

**Format:** int32

### **mediaStreamType**

The type of media stream.

**Type:** string

**Required:** True

**Values:** video | audio | ancillary-data



## videoFormat

The resolution of the video.

**Type:** string

**Required:** False

## mediaStreamName

A name that helps you distinguish one media stream from another.

**Type:** string

**Required:** True

## description

A description that can help you quickly identify what your media stream is used for.

**Type:** string

**Required:** False

## attributes

The attributes that you want to assign to the new media stream.

**Type:** [MediaStreamAttributesRequest](#)

**Required:** False

## clockRate

The sample rate (in kHz) for the stream. If the media stream type is video or ancillary data, set this value to 90000. If the media stream type is audio, set this value to either 48000 or 96000.

**Type:** integer

**Required:** False

**Format:** int32

## AddOutputRequest

The output that you want to add to the flow.

### mediaStreamOutputConfigurations

The definition for each media stream that is associated with the output.

**Type:** Array of type [MediaStreamOutputConfigurationRequest](#)

**Required:** False

### streamId

The stream ID that you want to use for this transport. This parameter applies only to Zixi and SRT caller-based streams.

**Type:** string

**Required:** False

### minLatency

The minimum latency in milliseconds for SRT-based streams. In streams that use the SRT protocol, this value that you set on your MediaConnect source or output represents the minimal potential latency of that connection. The latency of the stream is set to the highest number between the sender's minimum latency and the receiver's minimum latency.

**Type:** integer

**Required:** False

**Format:** int64

### destination

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

**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 RIST, RTP, and RTP-FEC streams.

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

### vpclInterfaceAttachment

The VPC interface that you want to send your output to.

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

### remoteld

The identifier that is assigned to the Zixi receiver. This parameter applies only to outputs that use Zixi pull.

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

### protocol

The protocol to use for the output.

**Type:** string

**Required:** True

**Values:** zixi-push | rtp-fec | rtp | zixi-pull | rist | st2110-jpegxs | cdi  
| srt-listener | srt-caller | fujitsu-qos | udp

## encryption

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

**Type:** [Encryption](#)

**Required:** False

## port

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

**Type:** integer

**Required:** False

## senderControlPort

The port that the flow uses to send outbound requests to initiate connection with the sender.

**Type:** integer

**Required:** False

**Format:** int32

## name

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

**Type:** string

**Required:** False

## cidrAllowList

The range of IP addresses that are allowed to initiate output requests to this flow. Format the IP addresses as a Classless Inter-Domain Routing (CIDR) block; for example, 10.0.0.0/16.

**Type:** Array of type string

**Required:** False

## CreateFlowRequest

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

### entitlements

The entitlements that you want to grant on the flow.

**Type:** Array of type [GrantEntitlementRequest](#)

**Required:** False

### outputs

The outputs that you want to add to the flow.

**Type:** Array of type [AddOutputRequest](#)

**Required:** False

### mediaStreams

The media streams that you want to add to the flow. Later, you can associate these media streams with sources and outputs on the flow.

**Type:** Array of type [AddMediaStreamRequest](#)

**Required:** False

### sources

The sources that are assigned to the flow.

**Type:** Array of type [SetSourceRequest](#)

**Required:** False

**name**

The name of the flow.

**Type:** string

**Required:** True

**sourceFailoverConfig**

The settings for source failover.

**Type:** [FailoverConfig](#)

**Required:** False

**source**

The settings for the source that you want to use for the new flow.

**Type:** [SetSourceRequest](#)

**Required:** False

**vpcInterfaces**

The VPC interfaces that you want to add to the flow. This connection allows you to route traffic directly between MediaConnect and your corporate network via a virtual private cloud (VPC).

**Type:** Array of type [VpcInterfaceRequest](#)

**Required:** False

**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

## **maintenance**

The maintenance settings you want to use for the flow.

**Type:** [AddMaintenance](#)

**Required:** False

## **CreateFlowResponse**

The result of a successful CreateFlow request.

### **flow**

The flow that you created.

**Type:** [Flow](#)

**Required:** True

## **DestinationConfiguration**

The definition of a media stream that is associated with the output.

### **destinationIp**

The IP address where contents of the media stream will be sent.

**Type:** string

**Required:** True

### **destinationPort**

The port to use when the content of the media stream is distributed to the output.

**Type:** integer

**Required:** True

**Format:** int32

## outboundIp

The IP address that the receiver requires in order to establish a connection with the flow. This value is represented by the elastic network interface IP address of the VPC. This field applies only to outputs that use the CDI or ST 2110 JPEG XS or protocol.

**Type:** string

**Required:** True

## interface

The VPC interface that is used for the media stream associated with the output.

**Type:** [Interface](#)

**Required:** True

## DestinationConfigurationRequest

The definition of a media stream that you want to associate with the output.

### destinationIp

The IP address where you want MediaConnect to send contents of the media stream.

**Type:** string

**Required:** True

### destinationPort

The port that you want MediaConnect to use when it distributes the media stream to the output.

**Type:** integer

**Required:** True

**Format:** int32

## interface

The VPC interface that you want to use for the media stream associated with the output.



**Type:** [InterfaceRequest](#)

**Required:** True

## EncodingParameters

A collection of parameters that determine how MediaConnect will convert the content. These fields only apply to outputs on flows that have a CDI source.

### encoderProfile

A setting on the encoder that drives compression settings. This property only applies to video media streams associated with outputs that use the ST 2110 JPEG XS protocol, with a flow source that uses the CDI protocol.

**Type:** string

**Required:** True

**Values:** main | high

### compressionFactor

A value that is used to calculate compression for an output. The bitrate of the output is calculated as follows:

Output bitrate = (1 / compressionFactor) \* (source bitrate)

This property only applies to outputs that use the ST 2110 JPEG XS protocol, with a flow source that uses the CDI protocol. Valid values are in the range of 3.0 to 10.0, inclusive.

**Type:** number

**Required:** True

**Format:** float

## EncodingParametersRequest

A collection of parameters that determine how MediaConnect will convert the content. These fields only apply to outputs on flows that have a CDI source.

## encoderProfile

A setting on the encoder that drives compression settings. This property only applies to video media streams associated with outputs that use the ST 2110 JPEG XS protocol, if at least one source on the flow uses the CDI protocol.

**Type:** string

**Required:** True

**Values:** main | high

## compressionFactor

A value that is used to calculate compression for an output. The bitrate of the output is calculated as follows:

Output bitrate =  $(1 / \text{compressionFactor}) * (\text{source bitrate})$

This property only applies to outputs that use the ST 2110 JPEG XS protocol, with a flow source that uses the CDI protocol. Valid values are in the range of 3.0 to 10.0, inclusive.

**Type:** number

**Required:** True

**Format:** float

## Encryption

Information about the encryption of the flow.

### resourceId

An identifier for the content. The service sends this value to the key server to identify the current endpoint. The resource ID is also known as the content ID. This parameter is required for SPEKE encryption and is not valid for static key encryption.

**Type:** string

**Required:** False

## roleArn

The Amazon Resource Name (ARN) of the role that you created during setup (when you set up 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:** False

## constantInitializationVector

A 128-bit, 16-byte hex value represented by a 32-character string, to be used with the key for encrypting content. This parameter is not valid for static key encryption.

**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:** speke | static-key | srt-password

## region

The AWS Region that the API Gateway proxy endpoint was created in. This parameter is required for SPEKE encryption and is not valid for static key encryption.

**Type:** string

**Required:** False

## deviceId

The value of one of the devices that you configured with your digital rights management (DRM) platform key provider. This parameter is required for SPEKE encryption and is not valid for static key encryption.

**Type:** string

**Required:** False

## url

The URL from the API Gateway proxy that you set up to talk to your key server. This parameter is required for SPEKE encryption and is not valid for static key encryption.

**Type:** string

**Required:** False

## 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

## Entitlement

The settings for a flow entitlement.

### entitlementStatus

An indication of whether the entitlement is enabled.

**Type:** string

**Required:** False

**Values:** ENABLED | DISABLED

## encryption

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

**Type:** [Encryption](#)

**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 MediaConnect console and is not visible outside of the current AWS account.

**Type:** string

**Required:** False

## dataTransferSubscriberFeePercent

The percentage of the entitlement data transfer fee that you want the subscriber to be responsible for.

**Type:** integer

**Required:** False

## **entitlementArn**

The ARN of the entitlement.

**Type:** string

**Required:** True

## **FailoverConfig**

The settings for source failover.

### **failoverMode**

The type of failover you choose for this flow. MERGE combines the source streams into a single stream, allowing graceful recovery from any single-source loss. FAILOVER allows switching between different streams.

**Type:** string

**Required:** False

**Values:** MERGE | FAILOVER

### **recoveryWindow**

The size of the buffer (delay) that the service maintains. A larger buffer means a longer delay in transmitting the stream, but more room for error correction. A smaller buffer means a shorter delay, but less room for error correction. You can choose a value from 100-500 ms. If you keep this field blank, the service uses the default value of 200 ms. This setting only applies when Failover Mode is set to MERGE.

**Type:** integer

**Required:** False

### **state**

The state of source failover on the flow. If the state is inactive, the flow can have only one source. If the state is active, the flow can have one or two sources.

**Type:** string

**Required:** False

**Values:** ENABLED | DISABLED

## sourcePriority

The priority you want to assign to a source. You can have a primary stream and a backup stream or two equally prioritized streams. This setting only applies when Failover Mode is set to FAILOVER.

**Type:** [SourcePriority](#)

**Required:** False

## Flow

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

### entitlements

The entitlements in the flow.

**Type:** Array of type [Entitlement](#)

**Required:** True

### outputs

The outputs in the flow.

**Type:** Array of type [Output](#)

**Required:** True

### sources

The settings for the sources that are assigned to the flow.

**Type:** Array of type [Source](#)

**Required:** False

## description

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

**Type:** string

**Required:** False

### **sourceFailoverConfig**

The settings for source failover.

**Type:** [FailoverConfig](#)

**Required:** False

### **source**

The source for the flow.

**Type:** [Source](#)

**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

### **mediaStreams**

The media streams associated with the flow. You can associate any of these media streams with sources and outputs on the flow.

**Type:** Array of type [MediaStream](#)

**Required:** False

### **flowArn**

The Amazon Resource Name (ARN) of the flow.

**Type:** string

**Required:** True



**name**

The name of the flow.

**Type:** string

**Required:** True

**egressIp**

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

**Type:** string

**Required:** False

**vpcInterfaces**

The VPC interfaces that you added to this flow.

**Type:** Array of type [VpcInterface](#)

**Required:** False

**maintenance**

**Type:** [Maintenance](#)

**Required:** False

**status**

The current status of the flow.

**Type:** string

**Required:** True

**Values:** STANDBY | ACTIVE | UPDATING | DELETING | STARTING | STOPPING | ERROR

**FmtP**

A set of parameters that define the media stream.

## colorimetry

The format used for the representation of color.

**Type:** string

**Required:** False

**Values:** BT601 | BT709 | BT2020 | BT2100 | ST2065-1 | ST2065-3 | XYZ

## par

The pixel aspect ratio (PAR) of the video.

**Type:** string

**Required:** False

## tcs

The transfer characteristic system (TCS) that is used in the video.

**Type:** string

**Required:** False

**Values:** SDR | PQ | HLG | LINEAR | BT2100LINPQ | BT2100LINHLG | ST2065-1 | ST428-1 | DENSITY

## scanMode

The type of compression that was used to smooth the video's appearance.

**Type:** string

**Required:** False

**Values:** progressive | interlace | progressive-segmented-frame

## range

The encoding range of the video.

**Type:** string

**Required:** False

**Values:** NARROW | FULL | FULLPROTECT

## channelOrder

The format of the audio channel.

**Type:** string

**Required:** False

## exactFramerate

The frame rate for the video stream, in frames/second. For example: 60000/1001.

**Type:** string

**Required:** False

## FmtpRequest

The settings that you want to use to define the media stream.

## colorimetry

The format that is used for the representation of color.

**Type:** string

**Required:** False

**Values:** BT601 | BT709 | BT2020 | BT2100 | ST2065-1 | ST2065-3 | XYZ

## par

The pixel aspect ratio (PAR) of the video.

**Type:** string

**Required:** False

## tcs

The transfer characteristic system (TCS) that is used in the video.

**Type:** string

**Required:** False

**Values:** SDR | PQ | HLG | LINEAR | BT2100LINPQ | BT2100LINHLG | ST2065-1 | ST428-1 | DENSITY

## scanMode

The type of compression that was used to smooth the video's appearance

**Type:** string

**Required:** False

**Values:** progressive | interlace | progressive-segmented-frame

## range

The encoding range of the video.

**Type:** string

**Required:** False

**Values:** NARROW | FULL | FULLPROTECT

## channelOrder

The format of the audio channel.

**Type:** string

**Required:** False

## exactFramerate

The frame rate for the video stream, in frames/second. For example: 60000/1001.

**Type:** string

**Required:** False

## GatewayBridgeSource

The source configuration for cloud flows receiving a stream from a bridge.

## bridgeArn

The ARN of the bridge feeding this flow.

**Type:** string

**Required:** True

## vpcInterfaceAttachment

The name of the VPC interface attachment to use for this bridge source.

**Type:** [VpcInterfaceAttachment](#)

**Required:** False

## GrantEntitlementRequest

The entitlements that you want to grant on the flow.

### entitlementStatus

An indication of whether the new entitlement should be enabled or disabled as soon as it is created. If you don't specify the entitlementStatus field in your request, MediaConnect sets it to ENABLED.

**Type:** string

**Required:** False

**Values:** ENABLED | DISABLED

## encryption

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

**Type:** [Encryption](#)

**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 MediaConnect console and is not visible outside of the current AWS account.

**Type:** string

**Required:** False

## dataTransferSubscriberFeePercent

The percentage of the entitlement data transfer fee that you want the subscriber to be responsible for.

**Type:** integer

**Required:** False

## InputConfiguration

The transport parameters associated with an incoming media stream.

### inputIp

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

**Type:** string

**Required:** True

## inputPort

The port that the flow listens on for an incoming media stream.

**Type:** integer  
**Required:** True  
**Format:** int32

## interface

The VPC interface where the media stream comes in from.

**Type:** [Interface](#)  
**Required:** True

## InputConfigurationRequest

The transport parameters that you want to associate with an incoming media stream.

### inputPort

The port that you want the flow to listen on for an incoming media stream.

**Type:** integer  
**Required:** True  
**Format:** int32

### interface

The VPC interface that you want to use for the incoming media stream.

**Type:** [InterfaceRequest](#)  
**Required:** True

## Interface

The VPC interface that you want to use for the media stream associated with the output.

**name**

The name of the VPC interface that you want to use for the media stream associated with the output.

**Type:** string

**Required:** True

**InterfaceRequest**

The VPC interface that you want to designate where the media stream is coming from or going to.

**name**

The name of the VPC interface.

**Type:** string

**Required:** True

**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](#)

**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 a MediaConnect flow owned by another AWS account) or entitled (originated at a 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 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

## **maintenance**

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

## **status**

The current status of the flow.

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

## **Maintenance**

The maintenance setting of a flow. MediaConnect routinely performs maintenance on underlying systems for security, reliability, and operational performance. The maintenance activities include actions such as patching the operating system, updating drivers, or installing software and patches.

You can select the day and time that maintenance events occur. This is called a maintenance window and is used every time a maintenance event is required. To change the day and time, you can edit the maintenance window using `MaintenanceDay` and `MaintenanceStartHour`.

## **maintenanceScheduledDate**

A scheduled date in ISO UTC format when the maintenance will happen. Use YYYY-MM-DD format. Example: 2021-01-30.

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

## **maintenanceDeadline**

The Maintenance has to be performed before this deadline in ISO UTC format. Example: 2021-01-30T08:30:00Z.

**Type:** string

**Required:** False

### **maintenanceDay**

A day of a week when the maintenance will happen. Use Monday/Tuesday/Wednesday/Thursday/Friday/Saturday/Sunday.

**Type:** string

**Required:** False

**Values:** Monday | Tuesday | Wednesday | Thursday | Friday | Saturday | Sunday

### **maintenanceStartHour**

UTC time when the maintenance will happen. Use 24-hour HH:MM format. Minutes must be 00. Example: 13:00. The default value is 02:00.

**Type:** string

**Required:** False

## **MediaStream**

A single track or stream of media that contains video, audio, or ancillary data. After you add a media stream to a flow, you can associate it with sources and outputs on that flow, as long as they use the CDI protocol or the ST 2110 JPEG XS protocol. Each source or output can consist of one or many media streams.

### **mediaStreamId**

A unique identifier for the media stream.

**Type:** integer

**Required:** True

**Format:** int32

### **mediaStreamType**

The type of media stream.

**Type:** string

**Required:** True

**Values:** video | audio | ancillary-data

## videoFormat

The resolution of the video.

**Type:** string

**Required:** False

## mediaStreamName

A name that helps you distinguish one media stream from another.

**Type:** string

**Required:** True

## description

A description that can help you quickly identify what your media stream is used for.

**Type:** string

**Required:** False

## attributes

Attributes that are related to the media stream.

**Type:** [MediaStreamAttributes](#)

**Required:** False

## fmt

The format type number (sometimes referred to as RTP payload type) of the media stream. MediaConnect assigns this value to the media stream. For ST 2110 JPEG XS outputs, you need to provide this value to the receiver.

**Type:** integer

**Required:** True

**Format:** int32

## clockRate

The sample rate for the stream. This value is measured in kHz.

**Type:** integer

**Required:** False

**Format:** int32

## MediaStreamAttributes

Attributes that are related to the media stream.

### fntp

A set of parameters that define the media stream.

**Type:** [Fntp](#)

**Required:** True

### lang

The audio language, in a format that is recognized by the receiver.

**Type:** string

**Required:** False

## MediaStreamAttributesRequest

Attributes that are related to the media stream.

### fntp

The settings that you want to use to define the media stream.

**Type:** [FntpRequest](#)

**Required:** False

## lang

The audio language, in a format that is recognized by the receiver.

**Type:** string

**Required:** False

## MediaStreamOutputConfiguration

The media stream that is associated with the output, and the parameters for that association.

### encodingParameters

A collection of parameters that determine how MediaConnect will convert the content. These fields only apply to outputs on flows that have a CDI source.

**Type:** [EncodingParameters](#)

**Required:** False

### mediaStreamName

A name that helps you distinguish one media stream from another.

**Type:** string

**Required:** True

### encodingName

The format that will be used to encode the data.

For ancillary data streams, set the encoding name to `smpte291`.

For audio streams, set the encoding name to `pcm`.

For video streams on sources or outputs that use the CDI protocol, set the encoding name to `raw`.

For video streams on sources or outputs that use the ST 2110 JPEG XS protocol, set the encoding name to `jxsv`.

**Type:** string

**Required:** True

**Values:** jxsv | raw | smpte291 | pcm

## destinationConfigurations

The media streams that you want to associate with the output.

**Type:** Array of type [DestinationConfiguration](#)

**Required:** False

## MediaStreamOutputConfigurationRequest

The media stream that you want to associate with the output, and the parameters for that association.

### encodingParameters

A collection of parameters that determine how MediaConnect will convert the content. These fields only apply to outputs on flows that have a CDI source.

**Type:** [EncodingParametersRequest](#)

**Required:** False

### mediaStreamName

The name of the media stream that is associated with the output.

**Type:** string

**Required:** True

### encodingName

The format that will be used to encode the data.

For ancillary data streams, set the encoding name to smpte291.

For audio streams, set the encoding name to pcm.

For video, 2110 streams, set the encoding name to raw.

For video, JPEG XS streams, set the encoding name to `jxsv`.

**Type:** string

**Required:** True

**Values:** `jxsv` | `raw` | `smpte291` | `pcm`

## **destinationConfigurations**

The media streams that you want to associate with the output.

**Type:** Array of type [DestinationConfigurationRequest](#)

**Required:** False

## **MediaStreamSourceConfiguration**

The media stream that is associated with the source, and the parameters for that association.

### **mediaStreamName**

A name that helps you distinguish one media stream from another.

**Type:** string

**Required:** True

### **encodingName**

The format that was used to encode the data.

For ancillary data streams, set the encoding name to `smpte291`.

For audio streams, set the encoding name to `pcm`.

For video, 2110 streams, set the encoding name to `raw`.

For video, JPEG XS streams, set the encoding name to `jxsv`.

**Type:** string

**Required:** True

**Values:** `jxsv` | `raw` | `smpte291` | `pcm`



## inputConfigurations

The media streams that you want to associate with the source.

**Type:** Array of type [InputConfiguration](#)

**Required:** False

## MediaStreamSourceConfigurationRequest

The media stream that you want to associate with the source, and the parameters for that association.

### mediaStreamName

The name of the media stream.

**Type:** string

**Required:** True

### encodingName

The format that was used to encode the data.

For ancillary data streams, set the encoding name to `smpte291`.

For audio streams, set the encoding name to `pcm`.

For video, 2110 streams, set the encoding name to `raw`.

For video, JPEG XS streams, set the encoding name to `jxsv`.

**Type:** string

**Required:** True

**Values:** `jxsv` | `raw` | `smpte291` | `pcm`

## inputConfigurations

The media streams that you want to associate with the source.

**Type:** Array of type [InputConfigurationRequest](#)

**Required:** False

## Output

The settings for an output.

### listenerAddress

The IP address that the receiver requires in order to establish a connection with the flow. For public networking, the ListenerAddress is represented by the elastic IP address of the flow. For private networking, the ListenerAddress is represented by the elastic network interface IP address of the VPC. This field applies only to outputs that use a pull protocol, such as Zixi pull or SRT listener.

**Type:** string

**Required:** False

### mediaStreamOutputConfigurations

The configuration for each media stream that is associated with the output.

**Type:** Array of type [MediaStreamOutputConfiguration](#)

**Required:** False

### destination

The IP address where you want to send the output. This field applies only to outputs that use a push protocol, such as RIST or Zixi push.

**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

**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](#)

**Required:** False

**vpcInterfaceAttachment**

The VPC interface that you want to send your output to.

**Type:** [VpcInterfaceAttachment](#)

**Required:** False

**bridgeArn**

The ARN of the bridge that added this output.

**Type:** string

**Required:** False

**outputArn**

The ARN of the output.

**Type:** string

**Required:** True

**encryption**

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

**Type:** [Encryption](#)

**Required:** False

## port

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

**Type:** integer

**Required:** False

## bridgePorts

The bridge output ports currently in use.

**Type:** Array of type integer

**Required:** False

## name

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

**Type:** string

**Required:** True

## dataTransferSubscriberFeePercent

The percentage of the entitlement data transfer fee that the subscriber is responsible for.

**Type:** integer

**Required:** False

## mediaLiveInputArn

The input ARN of the AWS Elemental MediaLive channel. This parameter is relevant only for outputs that were added by creating a MediaLive input.

**Type:** string

**Required:** False

## ResponseError

An exception raised by 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 MediaConnect returns to help you understand the reason that the request did not succeed.

**Type:** string

**Required:** True

## SetGatewayBridgeSourceRequest

The source configuration for cloud flows receiving a stream from a bridge.

### bridgeArn

The ARN of the bridge feeding this flow.

**Type:** string

**Required:** True

### vpcInterfaceAttachment

The name of the VPC interface attachment to use for this bridge source.

**Type:** [VpcInterfaceAttachment](#)

**Required:** False

## SetSourceRequest

The settings for the source that you want to use for the new flow.

### streamId

The stream ID that you want to use for this transport. This parameter applies only to Zixi and SRT caller-based streams.

**Type:** string

**Required:** False

### **minLatency**

The minimum latency in milliseconds for SRT-based streams. In streams that use the SRT protocol, this value that you set on your MediaConnect source or output represents the minimal potential latency of that connection. The latency of the stream is set to the highest number between the sender's minimum latency and the receiver's minimum latency.

**Type:** integer

**Required:** False

**Format:** int64

### **vpcInterfaceName**

The name of the VPC interface that you want to use for the source.

**Type:** string

**Required:** False

### **maxLatency**

The maximum latency in milliseconds. This parameter applies only to RIST-based, Zixi-based, and Fujitsu-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 maximum bitrate for RIST, 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

**sourceListenerPort**

Source port for SRT-caller protocol.

**Type:** integer

**Required:** False

**mediaStreamSourceConfigurations**

The media stream that is associated with the source, and the parameters for that association.

**Type:** Array of type [MediaStreamSourceConfigurationRequest](#)

**Required:** False

**sourceListenerAddress**

Source IP or domain name for SRT-caller protocol.

**Type:** string

**Required:** False

## **whitelistCidr**

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

**Type:** string

**Required:** False

## **senderIpAddress**

The IP address that the flow communicates with to initiate connection with the sender.

**Type:** string

**Required:** False

## **protocol**

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

**Type:** string

**Required:** False

**Values:** zixi-push | rtp-fec | rtp | zixi-pull | rist | st2110-jpegxs | cdi  
| srt-listener | srt-caller | fujitsu-qos | udp

## **senderControlPort**

The port that the flow uses to send outbound requests to initiate connection with the sender.

**Type:** integer

**Required:** False

## **name**

The name of the source.

**Type:** string

**Required:** False



## gatewayBridgeSource

The source configuration for cloud flows receiving a stream from a bridge.

**Type:** [SetGatewayBridgeSourceRequest](#)

**Required:** False

## decryption

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

**Type:** [Encryption](#)

**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

## maxSyncBuffer

The size of the buffer (in milliseconds) to use to sync incoming source data.

**Type:** integer

**Required:** False

## Source

The details of the sources of the flow.

### sourceArn

The ARN of the source.

**Type:** string

**Required:** True

### **vpcInterfaceName**

The name of the VPC interface that the source content comes from.

**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

### **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

### **transport**

Attributes that are related to the transport stream.

**Type:** [Transport](#)

**Required:** False

### **mediaStreamSourceConfigurations**

The media stream that is associated with the source, and the parameters for that association.

**Type:** Array of type [MediaStreamSourceConfiguration](#)

**Required:** False

**whitelistCidr**

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

**Type:** string

**Required:** False

**senderIpAddress**

The IP address that the flow communicates with to initiate connection with the sender.

**Type:** string

**Required:** False

**senderControlPort**

The port that the flow uses to send outbound requests to initiate connection with the sender.

**Type:** integer

**Required:** False

**Format:** int32

**name**

The name of the source.

**Type:** string

**Required:** True

**gatewayBridgeSource**

The source configuration for cloud flows receiving a stream from a bridge.

**Type:** [GatewayBridgeSource](#)

**Required:** False

**dataTransferSubscriberFeePercent**

The percentage of the entitlement data transfer fee that you want the subscriber to be responsible for.

**Type:** integer

**Required:** False

**ingestIp**

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

**Type:** string

**Required:** False

**decryption**

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

**Type:** [Encryption](#)

**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

**SourcePriority**

The priority you want to assign to a source. You can have a primary stream and a backup stream or two equally prioritized streams. This setting only applies when Failover Mode is set to FAILOVER.

**primarySource**

The name of the source you choose as the primary source for this flow.

**Type:** string

**Required:** False

## Transport

Attributes that are related to the transport stream.

### **streamId**

The stream ID that you want to use for this transport. This parameter applies only to Zixi and SRT caller-based streams.

**Type:** string

**Required:** False

### **minLatency**

The minimum latency in milliseconds for SRT-based streams. In streams that use the SRT protocol, this value that you set on your MediaConnect source or output represents the minimal potential latency of that connection. The latency of the stream is set to the highest number between the sender's minimum latency and the receiver's minimum latency.

**Type:** integer

**Required:** False

**Format:** int64

### **maxLatency**

The maximum latency in milliseconds for a RIST source, a Zixi-based source, a Fujitsu-based source, or a Zixi-based output.

**Type:** integer

**Required:** False

**Format:** int64

### **maxBitrate**

The maximum bitrate for RIST, RTP, and RTP-FEC streams.

**Type:** integer

**Required:** False

**Format:** int64

### **sourceListenerPort**

Source port for SRT-caller protocol.

**Type:** integer

**Required:** False

### **smoothingLatency**

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

**Type:** integer

**Required:** False

**Format:** int64

### **remoteld**

The identifier that is assigned to the Zixi receiver. This parameter applies only to outputs that use Zixi pull.

**Type:** string

**Required:** False

### **sourceListenerAddress**

Source IP or domain name for SRT-caller protocol.

**Type:** string

**Required:** False

### **senderIpAddress**

The IP address that the flow communicates with to initiate connection with the sender.

**Type:** string

**Required:** False

## protocol

The protocol that is used by the source or output.

**Type:** string

**Required:** True

**Values:** zixi-push | rtp-fec | rtp | zixi-pull | rist | st2110-jpegxs | cdi  
| srt-listener | srt-caller | fujitsu-qos | udp

## senderControlPort

The port that the flow uses to send outbound requests to initiate connection with the sender.

**Type:** integer

**Required:** False

**Format:** int32

## cidrAllowList

The range of IP addresses that are allowed to initiate output requests to this flow. Format the IP addresses as a Classless Inter-Domain Routing (CIDR) block; for example, 10.0.0.0/16.

**Type:** Array of type string

**Required:** False

## maxSyncBuffer

The size of the buffer (in milliseconds) to use to sync incoming source data.

**Type:** integer

**Required:** False

**Format:** int32

## VpcInterface

The details of a VPC interface.

### subnetId

The subnet IDs that you specified for your VPC interface.

A subnet ID is a range of IP addresses in your VPC. When you create your VPC, you specify a range of IPv4 addresses for the VPC in the form of a Classless Inter-Domain Routing (CIDR) block; for example, 10.0.0.0/16. This is the primary CIDR block for your VPC. When you create a subnet for your VPC, you specify the CIDR block for the subnet, which is a subset of the VPC CIDR block.

The subnets that you use across all VPC interfaces on the flow must be in the same Availability Zone as the flow.

**Type:** string

**Required:** True

### **roleArn**

The ARN of the IAM role that you created when you set up MediaConnect as a trusted service.

**Type:** string

**Required:** True

### **securityGroupIds**

A virtual firewall to control inbound and outbound traffic.

**Type:** Array of type string

**Required:** True

### **name**

The name for the VPC interface. This name must be unique within the flow.

**Type:** string

**Required:** True

### **networkInterfaceType**

The type of network interface.

**Type:** string

**Required:** True

**Values:** ena | efa



## **networkInterfaceIds**

The IDs of the network interfaces that MediaConnect created in your account.

**Type:** Array of type string

**Required:** True

## **VpcInterfaceAttachment**

The VPC interface that you want to send your output to.

### **vpcInterfaceName**

The name of the VPC interface that you want to send your output to.

**Type:** string

**Required:** False

## **VpcInterfaceRequest**

The details of the VPC interfaces that you want to add to the flow.

### **subnetId**

The subnet IDs that you want to use for your VPC interface.

A range of IP addresses in your VPC. When you create your VPC, you specify a range of IPv4 addresses for the VPC in the form of a Classless Inter-Domain Routing (CIDR) block; for example, 10.0.0.0/16. This is the primary CIDR block for your VPC. When you create a subnet for your VPC, you specify the CIDR block for the subnet, which is a subset of the VPC CIDR block.

The subnets that you use across all VPC interfaces on the flow must be in the same Availability Zone as the flow.

**Type:** string

**Required:** True

### **roleArn**

The Amazon Resource Name (ARN) of the role that you created when you set up MediaConnect as a trusted service.

**Type:** string

**Required:** True

### **securityGroupIds**

The VPC security groups that you want MediaConnect to use for your VPC configuration. You must include at least one security group in the request.

**Type:** Array of type string

**Required:** True

### **name**

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

**Type:** string

**Required:** True

### **networkInterfaceType**

The type of network adapter that you want MediaConnect to use on this interface. If you don't set this value, it defaults to ENA.

**Type:** string

**Required:** False

**Values:** ena | efa

## **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 v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

## CreateFlow

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

## Flows: describe, update, delete

### 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

Name	Type	Required	Description
<i>flowArn</i>	String	True	The Amazon Resource Name (ARN) of the flow.

## Responses

Status code	Response model	Description
200	<a href="#">DescribeFlowResponse</a>	MediaConnect returned the flow details successfully.
400	<a href="#">ResponseError</a>	The request that you submitted is not valid.
403	<a href="#">ResponseError</a>	You don't have the required permissions to perform this operation.
404	<a href="#">ResponseError</a>	MediaConnect did not find the resource that you specified in the request.
429	<a href="#">ResponseError</a>	You have exceeded the service request rate limit for your MediaConnect account.
500	<a href="#">ResponseError</a>	MediaConnect can't fulfill your request because it encountered an unexpected condition.
503	<a href="#">ResponseError</a>	MediaConnect is currently unavailable. Try again later.

## PUT

### Operation ID: UpdateFlow

Updates the properties of the flow, including the source failover configuration.

#### Path parameters

Name	Type	Required	Description
<i>flowArn</i>	String	True	The Amazon Resource Name (ARN) of the flow.

#### Responses

Status code	Response model	Description
202	<a href="#">UpdateFlowResponse</a>	MediaConnect is starting the flow.
400	<a href="#">ResponseError</a>	The request that you submitted is not valid.
403	<a href="#">ResponseError</a>	You don't have the required permissions to perform this operation.
404	<a href="#">ResponseError</a>	MediaConnect did not find the resource that you specified in the request.
429	<a href="#">ResponseError</a>	You have exceeded the service request rate limit for your MediaConnect account.
500	<a href="#">ResponseError</a>	MediaConnect can't fulfill your request because it encountered an unexpected condition.

Status code	Response model	Description
503	<a href="#">ResponseError</a>	MediaConnect is currently unavailable. Try again later.

## DELETE

**Operation ID:** DeleteFlow

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

### Path parameters

Name	Type	Required	Description
<i>flowArn</i>	String	True	The Amazon Resource Name (ARN) of the flow.

### Responses

Status code	Response model	Description
202	<a href="#">DeleteFlowResponse</a>	MediaConnect is deleting the flow.
400	<a href="#">ResponseError</a>	The request that you submitted is not valid.
403	<a href="#">ResponseError</a>	You don't have the required permissions to perform this operation.
404	<a href="#">ResponseError</a>	MediaConnect did not find the resource that you specified in the request.

Status code	Response model	Description
429	<a href="#">ResponseError</a>	You have exceeded the service request rate limit for your MediaConnect account.
500	<a href="#">ResponseError</a>	MediaConnect can't fulfill your request because it encountered an unexpected condition.
503	<a href="#">ResponseError</a>	MediaConnect is currently unavailable. Try again later.

## Schemas

### Request bodies

#### PUT schema

```
{
  "sourceFailoverConfig": {
    "failoverMode": enum,
    "recoveryWindow": integer,
    "state": enum,
    "sourcePriority": {
      "primarySource": "string"
    }
  },
  "maintenance": {
    "maintenanceScheduledDate": "string",
    "maintenanceDay": enum,
    "maintenanceStartHour": "string"
  }
}
```

### Response bodies

## DescribeFlowResponse schema

```
{
  "messages": {
    "errors": [
      "string"
    ]
  },
  "flow": {
    "entitlements": [
      {
        "entitlementStatus": enum,
        "encryption": {
          "resourceId": "string",
          "roleArn": "string",
          "secretArn": "string",
          "constantInitializationVector": "string",
          "keyType": enum,
          "region": "string",
          "deviceId": "string",
          "url": "string",
          "algorithm": enum
        },
        "subscribers": [
          "string"
        ],
        "name": "string",
        "description": "string",
        "dataTransferSubscriberFeePercent": integer,
        "entitlementArn": "string"
      }
    ],
    "outputs": [
      {
        "listenerAddress": "string",
        "mediaStreamOutputConfigurations": [
          {
            "encodingParameters": {
              "encoderProfile": enum,
              "compressionFactor": number
            },
            "mediaStreamName": "string",
            "encodingName": enum,
            "destinationConfigurations": [
```



```

        {
            "destinationIp": "string",
            "destinationPort": integer,
            "outboundIp": "string",
            "interface": {
                "name": "string"
            }
        }
    ],
    "destination": "string",
    "description": "string",
    "entitlementArn": "string",
    "transport": {
        "streamId": "string",
        "minLatency": integer,
        "maxLatency": integer,
        "maxBitrate": integer,
        "sourceListenerPort": integer,
        "smoothingLatency": integer,
        "remoteId": "string",
        "sourceListenerAddress": "string",
        "senderIpAddress": "string",
        "protocol": enum,
        "senderControlPort": integer,
        "cidrAllowList": [
            "string"
        ],
        "maxSyncBuffer": integer
    },
    "vpcInterfaceAttachment": {
        "vpcInterfaceName": "string"
    },
    "bridgeArn": "string",
    "outputArn": "string",
    "encryption": {
        "resourceId": "string",
        "roleArn": "string",
        "secretArn": "string",
        "constantInitializationVector": "string",
        "keyType": enum,
        "region": "string",
        "deviceId": "string",

```

```

    "url": "string",
    "algorithm": enum
  },
  "port": integer,
  "bridgePorts": [
    integer
  ],
  "name": "string",
  "dataTransferSubscriberFeePercent": integer,
  "mediaLiveInputArn": "string"
}
],
"sources": [
  {
    "sourceArn": "string",
    "vpcInterfaceName": "string",
    "description": "string",
    "entitlementArn": "string",
    "transport": {
      "streamId": "string",
      "minLatency": integer,
      "maxLatency": integer,
      "maxBitrate": integer,
      "sourceListenerPort": integer,
      "smoothingLatency": integer,
      "remoteId": "string",
      "sourceListenerAddress": "string",
      "senderIpAddress": "string",
      "protocol": enum,
      "senderControlPort": integer,
      "cidrAllowList": [
        "string"
      ],
      "maxSyncBuffer": integer
    },
    "mediaStreamSourceConfigurations": [
      {
        "mediaStreamName": "string",
        "encodingName": enum,
        "inputConfigurations": [
          {
            "inputIp": "string",
            "inputPort": integer,
            "interface": {

```

```

        "name": "string"
      }
    }
  ]
}
],
"whitelistCidr": "string",
"senderIpAddress": "string",
"senderControlPort": integer,
"name": "string",
"gatewayBridgeSource": {
  "bridgeArn": "string",
  "vpcInterfaceAttachment": {
    "vpcInterfaceName": "string"
  }
},
"dataTransferSubscriberFeePercent": integer,
"ingestIp": "string",
"decryption": {
  "resourceId": "string",
  "roleArn": "string",
  "secretArn": "string",
  "constantInitializationVector": "string",
  "keyType": enum,
  "region": "string",
  "deviceId": "string",
  "url": "string",
  "algorithm": enum
},
"ingestPort": integer
}
],
"description": "string",
"sourceFailoverConfig": {
  "failoverMode": enum,
  "recoveryWindow": integer,
  "state": enum,
  "sourcePriority": {
    "primarySource": "string"
  }
},
"source": {
  "sourceArn": "string",
  "vpcInterfaceName": "string",

```

```

    "description": "string",
    "entitlementArn": "string",
    "transport": {
        "streamId": "string",
        "minLatency": integer,
        "maxLatency": integer,
        "maxBitrate": integer,
        "sourceListenerPort": integer,
        "smoothingLatency": integer,
        "remoteId": "string",
        "sourceListenerAddress": "string",
        "senderIpAddress": "string",
        "protocol": enum,
        "senderControlPort": integer,
        "cidrAllowList": [
            "string"
        ],
        "maxSyncBuffer": integer
    },
    "mediaStreamSourceConfigurations": [
        {
            "mediaStreamName": "string",
            "encodingName": enum,
            "inputConfigurations": [
                {
                    "inputIp": "string",
                    "inputPort": integer,
                    "interface": {
                        "name": "string"
                    }
                }
            ]
        }
    ],
    "whitelistCidr": "string",
    "senderIpAddress": "string",
    "senderControlPort": integer,
    "name": "string",
    "gatewayBridgeSource": {
        "bridgeArn": "string",
        "vpcInterfaceAttachment": {
            "vpcInterfaceName": "string"
        }
    }
},

```

```

    "dataTransferSubscriberFeePercent": integer,
    "ingestIp": "string",
    "decryption": {
        "resourceId": "string",
        "roleArn": "string",
        "secretArn": "string",
        "constantInitializationVector": "string",
        "keyType": enum,
        "region": "string",
        "deviceId": "string",
        "url": "string",
        "algorithm": enum
    },
    "ingestPort": integer
},
"availabilityZone": "string",
"mediaStreams": [
    {
        "mediaStreamId": integer,
        "mediaStreamType": enum,
        "videoFormat": "string",
        "mediaStreamName": "string",
        "description": "string",
        "attributes": {
            "fmt": {
                "colorimetry": enum,
                "par": "string",
                "tcs": enum,
                "scanMode": enum,
                "range": enum,
                "channelOrder": "string",
                "exactFramerate": "string"
            },
            "lang": "string"
        },
        "fmt": integer,
        "clockRate": integer
    }
],
"flowArn": "string",
"name": "string",
"egressIp": "string",
"vpcInterfaces": [
    {

```

```

    "subnetId": "string",
    "roleArn": "string",
    "securityGroupIds": [
        "string"
    ],
    "name": "string",
    "networkInterfaceType": enum,
    "networkInterfaceIds": [
        "string"
    ]
}
],
"maintenance": {
    "maintenanceScheduledDate": "string",
    "maintenanceDeadline": "string",
    "maintenanceDay": enum,
    "maintenanceStartHour": "string"
},
"status": enum
}
}

```

## UpdateFlowResponse schema

```

{
  "flow": {
    "entitlements": [
      {
        "entitlementStatus": enum,
        "encryption": {
          "resourceId": "string",
          "roleArn": "string",
          "secretArn": "string",
          "constantInitializationVector": "string",
          "keyType": enum,
          "region": "string",
          "deviceId": "string",
          "url": "string",
          "algorithm": enum
        },
        "subscribers": [
          "string"
        ],
      },
    ],
  },
}

```

```

    "name": "string",
    "description": "string",
    "dataTransferSubscriberFeePercent": integer,
    "entitlementArn": "string"
  }
],
"outputs": [
  {
    "listenerAddress": "string",
    "mediaStreamOutputConfigurations": [
      {
        "encodingParameters": {
          "encoderProfile": enum,
          "compressionFactor": number
        },
        "mediaStreamName": "string",
        "encodingName": enum,
        "destinationConfigurations": [
          {
            "destinationIp": "string",
            "destinationPort": integer,
            "outboundIp": "string",
            "interface": {
              "name": "string"
            }
          }
        ]
      }
    ]
  }
],
"destination": "string",
"description": "string",
"entitlementArn": "string",
"transport": {
  "streamId": "string",
  "minLatency": integer,
  "maxLatency": integer,
  "maxBitrate": integer,
  "sourceListenerPort": integer,
  "smoothingLatency": integer,
  "remoteId": "string",
  "sourceListenerAddress": "string",
  "senderIpAddress": "string",
  "protocol": enum,
  "senderControlPort": integer,

```

```

    "cidrAllowList": [
        "string"
    ],
    "maxSyncBuffer": integer
},
"vpcInterfaceAttachment": {
    "vpcInterfaceName": "string"
},
"bridgeArn": "string",
"outputArn": "string",
"encryption": {
    "resourceId": "string",
    "roleArn": "string",
    "secretArn": "string",
    "constantInitializationVector": "string",
    "keyType": enum,
    "region": "string",
    "deviceId": "string",
    "url": "string",
    "algorithm": enum
},
"port": integer,
"bridgePorts": [
    integer
],
"name": "string",
"dataTransferSubscriberFeePercent": integer,
"mediaLiveInputArn": "string"
}
],
"sources": [
    {
        "sourceArn": "string",
        "vpcInterfaceName": "string",
        "description": "string",
        "entitlementArn": "string",
        "transport": {
            "streamId": "string",
            "minLatency": integer,
            "maxLatency": integer,
            "maxBitrate": integer,
            "sourceListenerPort": integer,
            "smoothingLatency": integer,
            "remoteId": "string",

```



```

    "sourceListenerAddress": "string",
    "senderIpAddress": "string",
    "protocol": enum,
    "senderControlPort": integer,
    "cidrAllowList": [
        "string"
    ],
    "maxSyncBuffer": integer
},
"mediaStreamSourceConfigurations": [
    {
        "mediaStreamName": "string",
        "encodingName": enum,
        "inputConfigurations": [
            {
                "inputIp": "string",
                "inputPort": integer,
                "interface": {
                    "name": "string"
                }
            }
        ]
    }
],
"whitelistCidr": "string",
"senderIpAddress": "string",
"senderControlPort": integer,
"name": "string",
"gatewayBridgeSource": {
    "bridgeArn": "string",
    "vpcInterfaceAttachment": {
        "vpcInterfaceName": "string"
    }
},
"dataTransferSubscriberFeePercent": integer,
"ingestIp": "string",
"decryption": {
    "resourceId": "string",
    "roleArn": "string",
    "secretArn": "string",
    "constantInitializationVector": "string",
    "keyType": enum,
    "region": "string",
    "deviceId": "string",

```

```

        "url": "string",
        "algorithm": enum
    },
    "ingestPort": integer
}
],
"description": "string",
"sourceFailoverConfig": {
    "failoverMode": enum,
    "recoveryWindow": integer,
    "state": enum,
    "sourcePriority": {
        "primarySource": "string"
    }
},
"source": {
    "sourceArn": "string",
    "vpcInterfaceName": "string",
    "description": "string",
    "entitlementArn": "string",
    "transport": {
        "streamId": "string",
        "minLatency": integer,
        "maxLatency": integer,
        "maxBitrate": integer,
        "sourceListenerPort": integer,
        "smoothingLatency": integer,
        "remoteId": "string",
        "sourceListenerAddress": "string",
        "senderIpAddress": "string",
        "protocol": enum,
        "senderControlPort": integer,
        "cidrAllowList": [
            "string"
        ],
        "maxSyncBuffer": integer
    },
    "mediaStreamSourceConfigurations": [
        {
            "mediaStreamName": "string",
            "encodingName": enum,
            "inputConfigurations": [
                {
                    "inputIp": "string",

```

```

        "inputPort": integer,
        "interface": {
            "name": "string"
        }
    }
]
},
"whitelistCidr": "string",
"senderIpAddress": "string",
"senderControlPort": integer,
"name": "string",
"gatewayBridgeSource": {
    "bridgeArn": "string",
    "vpcInterfaceAttachment": {
        "vpcInterfaceName": "string"
    }
},
"dataTransferSubscriberFeePercent": integer,
"ingestIp": "string",
"decryption": {
    "resourceId": "string",
    "roleArn": "string",
    "secretArn": "string",
    "constantInitializationVector": "string",
    "keyType": enum,
    "region": "string",
    "deviceId": "string",
    "url": "string",
    "algorithm": enum
},
"ingestPort": integer
},
"availabilityZone": "string",
"mediaStreams": [
    {
        "mediaStreamId": integer,
        "mediaStreamType": enum,
        "videoFormat": "string",
        "mediaStreamName": "string",
        "description": "string",
        "attributes": {
            "fmt": {
                "colorimetry": enum,

```

```

        "par": "string",
        "tcs": enum,
        "scanMode": enum,
        "range": enum,
        "channelOrder": "string",
        "exactFramerate": "string"
    },
    "lang": "string"
},
"fmt": integer,
"clockRate": integer
}
],
"flowArn": "string",
"name": "string",
"egressIp": "string",
"vpcInterfaces": [
{
    "subnetId": "string",
    "roleArn": "string",
    "securityGroupIds": [
        "string"
    ],
    "name": "string",
    "networkInterfaceType": enum,
    "networkInterfaceIds": [
        "string"
    ]
}
],
"maintenance": {
    "maintenanceScheduledDate": "string",
    "maintenanceDeadline": "string",
    "maintenanceDay": enum,
    "maintenanceStartHour": "string"
},
"status": enum
}
}

```

## DeleteFlowResponse schema

```
{
```

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

## ResponseError schema

```
{  
  "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, MediaConnect will not include this field in the response.

**Type:** [Messages](#)

**Required:** False

## flow

The flow that you requested a description of.

**Type:** [Flow](#)

**Required:** True

## DestinationConfiguration

The definition of a media stream that is associated with the output.

### destinationIp

The IP address where contents of the media stream will be sent.

**Type:** string

**Required:** True

### destinationPort

The port to use when the content of the media stream is distributed to the output.

**Type:** integer

**Required:** True

**Format:** int32

### outboundIp

The IP address that the receiver requires in order to establish a connection with the flow. This value is represented by the elastic network interface IP address of the VPC. This field applies only to outputs that use the CDI or ST 2110 JPEG XS or protocol.

**Type:** string

**Required:** True

## interface

The VPC interface that is used for the media stream associated with the output.

**Type:** [Interface](#)

**Required:** True

## EncodingParameters

A collection of parameters that determine how MediaConnect will convert the content. These fields only apply to outputs on flows that have a CDI source.

### encoderProfile

A setting on the encoder that drives compression settings. This property only applies to video media streams associated with outputs that use the ST 2110 JPEG XS protocol, with a flow source that uses the CDI protocol.

**Type:** string

**Required:** True

**Values:** main | high

### compressionFactor

A value that is used to calculate compression for an output. The bitrate of the output is calculated as follows:

Output bitrate = (1 / compressionFactor) \* (source bitrate)

This property only applies to outputs that use the ST 2110 JPEG XS protocol, with a flow source that uses the CDI protocol. Valid values are in the range of 3.0 to 10.0, inclusive.

**Type:** number

**Required:** True

**Format:** float

## Encryption

Information about the encryption of the flow.

## resourceId

An identifier for the content. The service sends this value to the key server to identify the current endpoint. The resource ID is also known as the content ID. This parameter is required for SPEKE encryption and is not valid for static key encryption.

**Type:** string

**Required:** False

## roleArn

The Amazon Resource Name (ARN) of the role that you created during setup (when you set up 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:** False

## constantInitializationVector

A 128-bit, 16-byte hex value represented by a 32-character string, to be used with the key for encrypting content. This parameter is not valid for static key encryption.

**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:** speke | static-key | srt-password

## region

The AWS Region that the API Gateway proxy endpoint was created in. This parameter is required for SPEKE encryption and is not valid for static key encryption.

**Type:** string

**Required:** False

## deviceId

The value of one of the devices that you configured with your digital rights management (DRM) platform key provider. This parameter is required for SPEKE encryption and is not valid for static key encryption.

**Type:** string

**Required:** False

## url

The URL from the API Gateway proxy that you set up to talk to your key server. This parameter is required for SPEKE encryption and is not valid for static key encryption.

**Type:** string

**Required:** False

## 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

## Entitlement

The settings for a flow entitlement.

## entitlementStatus

An indication of whether the entitlement is enabled.

**Type:** string

**Required:** False

**Values:** ENABLED | DISABLED

## encryption

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

**Type:** [Encryption](#)

**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 MediaConnect console and is not visible outside of the current AWS account.

**Type:** string

**Required:** False

## **dataTransferSubscriberFeePercent**

The percentage of the entitlement data transfer fee that you want the subscriber to be responsible for.

**Type:** integer

**Required:** False

## **entitlementArn**

The ARN of the entitlement.

**Type:** string

**Required:** True

## **FailoverConfig**

The settings for source failover.

### **failoverMode**

The type of failover you choose for this flow. MERGE combines the source streams into a single stream, allowing graceful recovery from any single-source loss. FAILOVER allows switching between different streams.

**Type:** string

**Required:** False

**Values:** MERGE | FAILOVER

### **recoveryWindow**

The size of the buffer (delay) that the service maintains. A larger buffer means a longer delay in transmitting the stream, but more room for error correction. A smaller buffer means a shorter delay, but less room for error correction. You can choose a value from 100-500 ms. If you keep this field blank, the service uses the default value of 200 ms. This setting only applies when Failover Mode is set to MERGE.

**Type:** integer

**Required:** False

## state

The state of source failover on the flow. If the state is inactive, the flow can have only one source. If the state is active, the flow can have one or two sources.

**Type:** string

**Required:** False

**Values:** ENABLED | DISABLED

## sourcePriority

The priority you want to assign to a source. You can have a primary stream and a backup stream or two equally prioritized streams. This setting only applies when Failover Mode is set to FAILOVER.

**Type:** [SourcePriority](#)

**Required:** False

## Flow

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

### entitlements

The entitlements in the flow.

**Type:** Array of type [Entitlement](#)

**Required:** True

### outputs

The outputs in the flow.

**Type:** Array of type [Output](#)

**Required:** True

### sources

The settings for the sources that are assigned to the flow.

**Type:** Array of type [Source](#)

**Required:** False

## description

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

**Type:** string

**Required:** False

## sourceFailoverConfig

The settings for source failover.

**Type:** [FailoverConfig](#)

**Required:** False

## source

The source for the flow.

**Type:** [Source](#)

**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

## mediaStreams

The media streams associated with the flow. You can associate any of these media streams with sources and outputs on the flow.

**Type:** Array of type [MediaStream](#)

**Required:** False

## flowArn

The Amazon Resource Name (ARN) of the flow.

**Type:** string

**Required:** True

## name

The name of the flow.

**Type:** string

**Required:** True

## egressIp

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

**Type:** string

**Required:** False

## vpcInterfaces

The VPC interfaces that you added to this flow.

**Type:** Array of type [VpcInterface](#)

**Required:** False

## maintenance

**Type:** [Maintenance](#)

**Required:** False

## status

The current status of the flow.

**Type:** string

**Required:** True

**Values:** STANDBY | ACTIVE | UPDATING | DELETING | STARTING | STOPPING | ERROR

## Fmtp

A set of parameters that define the media stream.

### colorimetry

The format used for the representation of color.

**Type:** string

**Required:** False

**Values:** BT601 | BT709 | BT2020 | BT2100 | ST2065-1 | ST2065-3 | XYZ

### par

The pixel aspect ratio (PAR) of the video.

**Type:** string

**Required:** False

### tcs

The transfer characteristic system (TCS) that is used in the video.

**Type:** string

**Required:** False

**Values:** SDR | PQ | HLG | LINEAR | BT2100LINPQ | BT2100LINHLG | ST2065-1 | ST428-1 | DENSITY

### scanMode

The type of compression that was used to smooth the video's appearance.

**Type:** string

**Required:** False

**Values:** progressive | interlace | progressive-segmented-frame

## range

The encoding range of the video.

**Type:** string

**Required:** False

**Values:** NARROW | FULL | FULLPROTECT

## channelOrder

The format of the audio channel.

**Type:** string

**Required:** False

## exactFramerate

The frame rate for the video stream, in frames/second. For example: 60000/1001.

**Type:** string

**Required:** False

## GatewayBridgeSource

The source configuration for cloud flows receiving a stream from a bridge.

### bridgeArn

The ARN of the bridge feeding this flow.

**Type:** string

**Required:** True

### vpcInterfaceAttachment

The name of the VPC interface attachment to use for this bridge source.



**Type:** [VpcInterfaceAttachment](#)

**Required:** False

## InputConfiguration

The transport parameters associated with an incoming media stream.

### inputIp

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

**Type:** string

**Required:** True

### inputPort

The port that the flow listens on for an incoming media stream.

**Type:** integer

**Required:** True

**Format:** int32

### interface

The VPC interface where the media stream comes in from.

**Type:** [Interface](#)

**Required:** True

## Interface

The VPC interface that you want to use for the media stream associated with the output.

### name

The name of the VPC interface that you want to use for the media stream associated with the output.

**Type:** string

**Required:** True

## Maintenance

The maintenance setting of a flow. MediaConnect routinely performs maintenance on underlying systems for security, reliability, and operational performance. The maintenance activities include actions such as patching the operating system, updating drivers, or installing software and patches.

You can select the day and time that maintenance events occur. This is called a maintenance window and is used every time a maintenance event is required. To change the day and time, you can edit the maintenance window using `MaintenanceDay` and `MaintenanceStartHour`.

### `maintenanceScheduledDate`

A scheduled date in ISO UTC format when the maintenance will happen. Use YYYY-MM-DD format. Example: 2021-01-30.

**Type:** string

**Required:** False

### `maintenanceDeadline`

The Maintenance has to be performed before this deadline in ISO UTC format. Example: 2021-01-30T08:30:00Z.

**Type:** string

**Required:** False

### `maintenanceDay`

A day of a week when the maintenance will happen. Use Monday/Tuesday/Wednesday/Thursday/Friday/Saturday/Sunday.

**Type:** string

**Required:** False

**Values:** Monday | Tuesday | Wednesday | Thursday | Friday | Saturday | Sunday

### `maintenanceStartHour`

UTC time when the maintenance will happen. Use 24-hour HH:MM format. Minutes must be 00. Example: 13:00. The default value is 02:00.

**Type:** string

**Required:** False

## MediaStream

A single track or stream of media that contains video, audio, or ancillary data. After you add a media stream to a flow, you can associate it with sources and outputs on that flow, as long as they use the CDI protocol or the ST 2110 JPEG XS protocol. Each source or output can consist of one or many media streams.

### mediaStreamId

A unique identifier for the media stream.

**Type:** integer

**Required:** True

**Format:** int32

### mediaStreamType

The type of media stream.

**Type:** string

**Required:** True

**Values:** video | audio | ancillary-data

### videoFormat

The resolution of the video.

**Type:** string

**Required:** False

### mediaStreamName

A name that helps you distinguish one media stream from another.

**Type:** string

**Required:** True

## description

A description that can help you quickly identify what your media stream is used for.

**Type:** string

**Required:** False

## attributes

Attributes that are related to the media stream.

**Type:** [MediaStreamAttributes](#)

**Required:** False

## fmt

The format type number (sometimes referred to as RTP payload type) of the media stream. MediaConnect assigns this value to the media stream. For ST 2110 JPEG XS outputs, you need to provide this value to the receiver.

**Type:** integer

**Required:** True

**Format:** int32

## clockRate

The sample rate for the stream. This value is measured in kHz.

**Type:** integer

**Required:** False

**Format:** int32

## MediaStreamAttributes

Attributes that are related to the media stream.

### fmtp

A set of parameters that define the media stream.

**Type:** [Fmtp](#)

**Required:** True

## lang

The audio language, in a format that is recognized by the receiver.

**Type:** string

**Required:** False

## MediaStreamOutputConfiguration

The media stream that is associated with the output, and the parameters for that association.

### encodingParameters

A collection of parameters that determine how MediaConnect will convert the content. These fields only apply to outputs on flows that have a CDI source.

**Type:** [EncodingParameters](#)

**Required:** False

### mediaStreamName

A name that helps you distinguish one media stream from another.

**Type:** string

**Required:** True

### encodingName

The format that will be used to encode the data.

For ancillary data streams, set the encoding name to `smpte291`.

For audio streams, set the encoding name to `pcm`.

For video streams on sources or outputs that use the CDI protocol, set the encoding name to `raw`.

For video streams on sources or outputs that use the ST 2110 JPEG XS protocol, set the encoding name to `jxsv`.

**Type:** string

**Required:** True

**Values:** jxsv | raw | smpte291 | pcm

## destinationConfigurations

The media streams that you want to associate with the output.

**Type:** Array of type [DestinationConfiguration](#)

**Required:** False

## MediaStreamSourceConfiguration

The media stream that is associated with the source, and the parameters for that association.

### mediaStreamName

A name that helps you distinguish one media stream from another.

**Type:** string

**Required:** True

### encodingName

The format that was used to encode the data.

For ancillary data streams, set the encoding name to smpte291.

For audio streams, set the encoding name to pcm.

For video, 2110 streams, set the encoding name to raw.

For video, JPEG XS streams, set the encoding name to jxsv.

**Type:** string

**Required:** True

**Values:** jxsv | raw | smpte291 | pcm

## inputConfigurations

The media streams that you want to associate with the source.

**Type:** Array of type [InputConfiguration](#)

**Required:** False

## 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, MediaConnect will not include this field in the response.

**Type:** Array of type string

**Required:** True

## Output

The settings for an output.

### listenerAddress

The IP address that the receiver requires in order to establish a connection with the flow. For public networking, the ListenerAddress is represented by the elastic IP address of the flow. For private networking, the ListenerAddress is represented by the elastic network interface IP address of the VPC. This field applies only to outputs that use a pull protocol, such as Zixi pull or SRT listener.

**Type:** string

**Required:** False

### mediaStreamOutputConfigurations

The configuration for each media stream that is associated with the output.

**Type:** Array of type [MediaStreamOutputConfiguration](#)

**Required:** False

### destination

The IP address where you want to send the output. This field applies only to outputs that use a push protocol, such as RIST or Zixi push.

**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

### 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](#)

**Required:** False

### vpcInterfaceAttachment

The VPC interface that you want to send your output to.

**Type:** [VpcInterfaceAttachment](#)

**Required:** False

### bridgeArn

The ARN of the bridge that added this output.

**Type:** string

**Required:** False



**outputArn**

The ARN of the output.

**Type:** string

**Required:** True

**encryption**

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

**Type:** [Encryption](#)

**Required:** False

**port**

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

**Type:** integer

**Required:** False

**bridgePorts**

The bridge output ports currently in use.

**Type:** Array of type integer

**Required:** False

**name**

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

**Type:** string

**Required:** True

**dataTransferSubscriberFeePercent**

The percentage of the entitlement data transfer fee that the subscriber is responsible for.

**Type:** integer

**Required:** False

### **mediaLiveInputArn**

The input ARN of the AWS Elemental MediaLive channel. This parameter is relevant only for outputs that were added by creating a MediaLive input.

**Type:** string

**Required:** False

## **ResponseError**

An exception raised by 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 MediaConnect returns to help you understand the reason that the request did not succeed.

**Type:** string

**Required:** True

## **Source**

The details of the sources of the flow.

### **sourceArn**

The ARN of the source.

**Type:** string

**Required:** True

### **vpcInterfaceName**

The name of the VPC interface that the source content comes from.

**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

## 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

## transport

Attributes that are related to the transport stream.

**Type:** [Transport](#)

**Required:** False

## mediaStreamSourceConfigurations

The media stream that is associated with the source, and the parameters for that association.

**Type:** Array of type [MediaStreamSourceConfiguration](#)

**Required:** False

## whitelistCidr

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

**Type:** string

**Required:** False

### **senderIpAddress**

The IP address that the flow communicates with to initiate connection with the sender.

**Type:** string

**Required:** False

### **senderControlPort**

The port that the flow uses to send outbound requests to initiate connection with the sender.

**Type:** integer

**Required:** False

**Format:** int32

### **name**

The name of the source.

**Type:** string

**Required:** True

### **gatewayBridgeSource**

The source configuration for cloud flows receiving a stream from a bridge.

**Type:** [GatewayBridgeSource](#)

**Required:** False

### **dataTransferSubscriberFeePercent**

The percentage of the entitlement data transfer fee that you want the subscriber to be responsible for.

**Type:** integer

**Required:** False

## **ingestIp**

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

**Type:** string

**Required:** False

## **decryption**

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

**Type:** [Encryption](#)

**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

## **SourcePriority**

The priority you want to assign to a source. You can have a primary stream and a backup stream or two equally prioritized streams. This setting only applies when Failover Mode is set to FAILOVER.

## **primarySource**

The name of the source you choose as the primary source for this flow.

**Type:** string

**Required:** False

## **Transport**

Attributes that are related to the transport stream.

## streamId

The stream ID that you want to use for this transport. This parameter applies only to Zixi and SRT caller-based streams.

**Type:** string

**Required:** False

## minLatency

The minimum latency in milliseconds for SRT-based streams. In streams that use the SRT protocol, this value that you set on your MediaConnect source or output represents the minimal potential latency of that connection. The latency of the stream is set to the highest number between the sender's minimum latency and the receiver's minimum latency.

**Type:** integer

**Required:** False

**Format:** int64

## maxLatency

The maximum latency in milliseconds for a RIST source, a Zixi-based source, a Fujitsu-based source, or a Zixi-based output.

**Type:** integer

**Required:** False

**Format:** int64

## maxBitrate

The maximum bitrate for RIST, RTP, and RTP-FEC streams.

**Type:** integer

**Required:** False

**Format:** int64

## sourceListenerPort

Source port for SRT-caller protocol.

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

### **smoothingLatency**

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

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

### **remoteld**

The identifier that is assigned to the Zixi receiver. This parameter applies only to outputs that use Zixi pull.

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

### **sourceListenerAddress**

Source IP or domain name for SRT-caller protocol.

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

### **senderIpAddress**

The IP address that the flow communicates with to initiate connection with the sender.

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

### **protocol**

The protocol that is used by the source or output.

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

**Values:** zixi-push | rtp-fec | rtp | zixi-pull | rist | st2110-jpegxs | cdi  
| srt-listener | srt-caller | fujitsu-qos | udp

### **senderControlPort**

The port that the flow uses to send outbound requests to initiate connection with the sender.

**Type:** integer  
**Required:** False  
**Format:** int32

### **cidrAllowList**

The range of IP addresses that are allowed to initiate output requests to this flow. Format the IP addresses as a Classless Inter-Domain Routing (CIDR) block; for example, 10.0.0.0/16.

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

### **maxSyncBuffer**

The size of the buffer (in milliseconds) to use to sync incoming source data.

**Type:** integer  
**Required:** False  
**Format:** int32

## **UpdateFailoverConfig**

The settings for source failover.

### **failoverMode**

The type of failover you choose for this flow. MERGE combines the source streams into a single stream, allowing graceful recovery from any single-source loss. FAILOVER allows switching between different streams.

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



**Values:** MERGE | FAILOVER

## recoveryWindow

The size of the buffer (delay) that you want the service to maintain. A larger buffer means a longer delay in transmitting the stream, but more room for error correction. A smaller buffer means a shorter delay, but less room for error correction. You can choose a value from 100-500 ms. If you keep this field blank, the service uses the default value of 200 ms. This setting only applies when Failover Mode is set to MERGE.

**Type:** integer

**Required:** False

## state

The state of source failover on the flow. If the state is inactive, the flow can have only one source. If the state is active, the flow can have one or two sources.

**Type:** string

**Required:** False

**Values:** ENABLED | DISABLED

## sourcePriority

The priority you want to assign to a source. You can have a primary stream and a backup stream or two equally prioritized streams. This setting only applies when Failover Mode is set to FAILOVER.

**Type:** [SourcePriority](#)

**Required:** False

## UpdateFlowRequest

Updates an existing flow.

## sourceFailoverConfig

The settings for source failover.

**Type:** [UpdateFailoverConfig](#)

**Required:** False

## **maintenance**

**Type:** [UpdateMaintenance](#)

**Required:** False

## **UpdateFlowResponse**

The result of a successful UpdateFlow request.

## **flow**

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

**Type:** [Flow](#)

**Required:** True

## **UpdateMaintenance**

Update maintenance setting for a flow.

## **maintenanceScheduledDate**

A scheduled date in ISO UTC format when the maintenance will happen. Use YYYY-MM-DD format. Example: 2021-01-30.

**Type:** string

**Required:** False

## **maintenanceDay**

A day of a week when the maintenance will happen. use Monday/Tuesday/Wednesday/Thursday/Friday/Saturday/Sunday.

**Type:** string

**Required:** False

**Values:** Monday | Tuesday | Wednesday | Thursday | Friday | Saturday | Sunday

## **maintenanceStartHour**

UTC time when the maintenance will happen. Use 24-hour HH:MM format. Minutes must be 00. Example: 13:00. The default value is 02:00.

**Type:** string

**Required:** False

## **VpcInterface**

The details of a VPC interface.

### **subnetId**

The subnet IDs that you specified for your VPC interface.

A subnet ID is a range of IP addresses in your VPC. When you create your VPC, you specify a range of IPv4 addresses for the VPC in the form of a Classless Inter-Domain Routing (CIDR) block; for example, 10.0.0.0/16. This is the primary CIDR block for your VPC. When you create a subnet for your VPC, you specify the CIDR block for the subnet, which is a subset of the VPC CIDR block.

The subnets that you use across all VPC interfaces on the flow must be in the same Availability Zone as the flow.

**Type:** string

**Required:** True

### **roleArn**

The ARN of the IAM role that you created when you set up MediaConnect as a trusted service.

**Type:** string

**Required:** True

### **securityGroupIds**

A virtual firewall to control inbound and outbound traffic.

**Type:** Array of type string

**Required:** True

### **name**

The name for the VPC interface. This name must be unique within the flow.

**Type:** string

**Required:** True

### **networkInterfaceType**

The type of network interface.

**Type:** string

**Required:** True

**Values:** ena | efa

### **networkInterfaceIds**

The IDs of the network interfaces that MediaConnect created in your account.

**Type:** Array of type string

**Required:** True

### **VpcInterfaceAttachment**

The VPC interface that you want to send your output to.

#### **vpcInterfaceName**

The name of the VPC interface that you want to send your output to.

**Type:** string

**Required:** False

## **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 v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

## UpdateFlow

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

## DeleteFlow

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

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

## Flows: start

### URI

/v1/flows/start/*flowArn*

### HTTP methods

#### POST

**Operation ID:** StartFlow

Starts a flow.

#### Path parameters

Name	Type	Required	Description
<i>flowArn</i>	String	True	The Amazon Resource Name (ARN) of the flow.

#### Responses

Status code	Response model	Description
202	<a href="#">StartFlowResponse</a>	MediaConnect is starting the flow.
400	<a href="#">ResponseError</a>	The request that you submitted is not valid.
403	<a href="#">ResponseError</a>	You don't have the required permissions to perform this operation.

Status code	Response model	Description
404	<a href="#">ResponseError</a>	MediaConnect did not find the resource that you specified in the request.
429	<a href="#">ResponseError</a>	You have exceeded the service request rate limit for your MediaConnect account.
500	<a href="#">ResponseError</a>	MediaConnect can't fulfill your request because it encountered an unexpected condition.
503	<a href="#">ResponseError</a>	MediaConnect is currently unavailable. Try again later.

## Schemas

### Response bodies

#### StartFlowResponse schema

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

#### ResponseError schema

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

# Properties

## ResponseError

An exception raised by 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 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 v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

## Flows: stop

### URI

/v1/flows/stop/*flowArn*

### HTTP methods

#### POST

**Operation ID:** StopFlow

Stops a flow.

#### Path parameters

Name	Type	Required	Description
<i>flowArn</i>	String	True	The Amazon Resource Name (ARN) of the flow.

## Responses

Status code	Response model	Description
202	<a href="#">StopFlowResponse</a>	MediaConnect is stopping the flow.
400	<a href="#">ResponseError</a>	The request that you submitted is not valid.
403	<a href="#">ResponseError</a>	You don't have the required permissions to perform this operation.
404	<a href="#">ResponseError</a>	MediaConnect did not find the resource that you specified in the request.
429	<a href="#">ResponseError</a>	You have exceeded the service request rate limit for your MediaConnect account.
500	<a href="#">ResponseError</a>	MediaConnect can't fulfill your request because it encountered an unexpected condition.
503	<a href="#">ResponseError</a>	MediaConnect is currently unavailable. Try again later.

## Schemas

### Response bodies

#### StopFlowResponse schema

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

```
}
```

## ResponseError schema

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

## Properties

### ResponseError

An exception raised by 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 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

## See also

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

## StopFlow

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

## Gateway bridge outputs: add

### URI

/v1/bridges/*bridgeArn*/outputs

### HTTP methods

#### POST

**Operation ID:** AddBridgeOutputs

Adds outputs to an existing bridge.

## Path parameters

Name	Type	Required	Description
<i>bridgeArn</i>	String	True	The ARN of the bridge that you want to describe.

## Responses

Status code	Response model	Description
202	<a href="#">AddBridgeOutputsResponse</a>	MediaConnect is starting the flow.
400	<a href="#">ResponseError</a>	The request that you submitted is not valid.
403	<a href="#">ResponseError</a>	You don't have the required permissions to perform this operation.
404	<a href="#">ResponseError</a>	MediaConnect did not find the resource that you specified in the request.
409	<a href="#">ResponseError</a>	There was a conflict when trying to add the requested output
429	<a href="#">ResponseError</a>	You have exceeded the service request rate limit for your MediaConnect account.
500	<a href="#">ResponseError</a>	MediaConnect can't fulfill your request because it encountered an unexpected condition.

Status code	Response model	Description
503	<a href="#">ResponseError</a>	MediaConnect is currently unavailable. Try again later.

## Schemas

### Request bodies

#### POST schema

```
{
  "outputs": [
    {
      "networkOutput": {
        "protocol": enum,
        "port": integer,
        "ipAddress": "string",
        "name": "string",
        "networkName": "string",
        "ttl": integer
      }
    }
  ]
}
```

### Response bodies

#### AddBridgeOutputsResponse schema

```
{
  "outputs": [
    {
      "flowOutput": {
        "flowArn": "string",
        "name": "string",
        "flowSourceArn": "string"
      },
      "networkOutput": {
        "protocol": enum,
```

```
    "port": integer,  
    "ipAddress": "string",  
    "name": "string",  
    "networkName": "string",  
    "ttl": integer  
  }  
},  
"bridgeArn": "string"  
}
```

## ResponseError schema

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

## Properties

### AddBridgeNetworkOutputRequest

Add a network output to an existing bridge.

#### protocol

The network output protocol.

**Type:** string

**Required:** True

**Values:** zixi-push | rtp-fec | rtp | zixi-pull | rist | st2110-jpegxs | cdi  
| srt-listener | srt-caller | fujitsu-qos | udp

#### port

The network output port.

**Type:** integer

**Required:** True

## ipAddress

The network output IP Address.

**Type:** string

**Required:** True

## name

The network output name. This name is used to reference the output and must be unique among outputs in this bridge.

**Type:** string

**Required:** True

## networkName

The network output's gateway network name.

**Type:** string

**Required:** True

## ttl

The network output TTL.

**Type:** integer

**Required:** True

## AddBridgeOutputRequest

Add an output to a bridge.

### networkOutput

**Type:** [AddBridgeNetworkOutputRequest](#)

**Required:** False



## AddBridgeOutputsRequest

Adds outputs to an existing bridge.

### outputs

The outputs that you want to add to this bridge.

**Type:** Array of type [AddBridgeOutputRequest](#)

**Required:** True

## AddBridgeOutputsResponse

The outputs were successfully added to the bridge.

### outputs

The outputs that you added to this bridge.

**Type:** Array of type [BridgeOutput](#)

**Required:** True

### bridgeArn

The Amazon Resource Number (ARN) of the bridge.

**Type:** string

**Required:** True

## BridgeFlowOutput

The output of the bridge. A flow output is delivered to the AWS cloud.

### flowArn

The Amazon Resource Number (ARN) of the cloud flow.

**Type:** string

**Required:** True

**name**

The name of the bridge's output.

**Type:** string

**Required:** True

**flowSourceArn**

The Amazon Resource Number (ARN) of the flow source.

**Type:** string

**Required:** True

**BridgeNetworkOutput**

The output of the bridge. A network output is delivered to your premises.

**protocol**

The network output protocol.

**Type:** string

**Required:** True

**Values:** zixi-push | rtp-fec | rtp | zixi-pull | rist | st2110-jpegxs | cdi  
| srt-listener | srt-caller | fujitsu-qos | udp

**port**

The network output port.

**Type:** integer

**Required:** True

**ipAddress**

The network output IP Address.

**Type:** string

**Required:** True

**name**

The network output name.

**Type:** string

**Required:** True

**networkName**

The network output's gateway network name.

**Type:** string

**Required:** True

**ttl**

The network output TTL.

**Type:** integer

**Required:** True

**BridgeOutput**

The output of the bridge.

**flowOutput**

**Type:** [BridgeFlowOutput](#)

**Required:** False

**networkOutput**

**Type:** [BridgeNetworkOutput](#)

**Required:** False

**ResponseError**

An exception raised by 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 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:

### AddBridgeOutputs

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

## Gateway bridge outputs: update, remove

### URI

/v1/bridges/*bridgeArn*/outputs/*outputName*

### HTTP methods

#### PUT

**Operation ID:** UpdateBridgeOutput

Updates an existing bridge output.

### Path parameters

Name	Type	Required	Description
<i>outputName</i>	String	True	The name of the bridge output that you want to update.
<i>bridgeArn</i>	String	True	The ARN of the bridge that you want to describe.

### Responses

Status code	Response model	Description
202	<a href="#">UpdateBridgeOutputResponse</a>	MediaConnect is starting the flow.
400	<a href="#">ResponseError</a>	The request that you submitted is not valid.
403	<a href="#">ResponseError</a>	You don't have the required permissions to perform this operation.
404	<a href="#">ResponseError</a>	MediaConnect did not find the resource that you specified in the request.
409	<a href="#">ResponseError</a>	There was a conflict when trying to add the requested output
429	<a href="#">ResponseError</a>	You have exceeded the service request rate limit for your MediaConnect account.

Status code	Response model	Description
500	<a href="#">ResponseError</a>	MediaConnect can't fulfill your request because it encountered an unexpected condition.
503	<a href="#">ResponseError</a>	MediaConnect is currently unavailable. Try again later.

## DELETE

**Operation ID:** RemoveBridgeOutput

Removes an output from a bridge.

### Path parameters

Name	Type	Required	Description
<i>outputName</i>	String	True	The name of the bridge output that you want to update.
<i>bridgeArn</i>	String	True	The ARN of the bridge that you want to describe.

### Responses

Status code	Response model	Description
202	<a href="#">RemoveBridgeOutputResponse</a>	MediaConnect is starting the flow.
400	<a href="#">ResponseError</a>	The request that you submitted is not valid.

Status code	Response model	Description
403	<a href="#">ResponseError</a>	You don't have the required permissions to perform this operation.
404	<a href="#">ResponseError</a>	MediaConnect did not find the resource that you specified in the request.
409	<a href="#">ResponseError</a>	There was a conflict when trying to add the requested output
429	<a href="#">ResponseError</a>	You have exceeded the service request rate limit for your MediaConnect account.
500	<a href="#">ResponseError</a>	MediaConnect can't fulfill your request because it encountered an unexpected condition.
503	<a href="#">ResponseError</a>	MediaConnect is currently unavailable. Try again later.

## Schemas

### Request bodies

#### PUT schema

```
{
  "networkOutput": {
    "protocol": enum,
    "port": integer,
    "ipAddress": "string",
    "networkName": "string",
    "ttl": integer
  }
}
```

```
}  
}
```

## Response bodies

### UpdateBridgeOutputResponse schema

```
{  
  "output": {  
    "flowOutput": {  
      "flowArn": "string",  
      "name": "string",  
      "flowSourceArn": "string"  
    },  
    "networkOutput": {  
      "protocol": enum,  
      "port": integer,  
      "ipAddress": "string",  
      "name": "string",  
      "networkName": "string",  
      "ttl": integer  
    }  
  },  
  "bridgeArn": "string"  
}
```

### RemoveBridgeOutputResponse schema

```
{  
  "bridgeArn": "string",  
  "outputName": "string"  
}
```

### ResponseError schema

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



## Properties

### BridgeFlowOutput

The output of the bridge. A flow output is delivered to the AWS cloud.

#### flowArn

The Amazon Resource Number (ARN) of the cloud flow.

**Type:** string

**Required:** True

#### name

The name of the bridge's output.

**Type:** string

**Required:** True

#### flowSourceArn

The Amazon Resource Number (ARN) of the flow source.

**Type:** string

**Required:** True

### BridgeNetworkOutput

The output of the bridge. A network output is delivered to your premises.

#### protocol

The network output protocol.

**Type:** string

**Required:** True

**Values:** zixi-push | rtp-fec | rtp | zixi-pull | rist | st2110-jpegxs | cdi  
| srt-listener | srt-caller | fujitsu-qos | udp

## port

The network output port.

**Type:** integer

**Required:** True

## ipAddress

The network output IP Address.

**Type:** string

**Required:** True

## name

The network output name.

**Type:** string

**Required:** True

## networkName

The network output's gateway network name.

**Type:** string

**Required:** True

## ttl

The network output TTL.

**Type:** integer

**Required:** True

## BridgeOutput

The output of the bridge.

## flowOutput

**Type:** [BridgeFlowOutput](#)

**Required:** False

## networkOutput

**Type:** [BridgeNetworkOutput](#)

**Required:** False

## RemoveBridgeOutputResponse

The bridge output was successfully removed.

### bridgeArn

**Type:** string

**Required:** True

### outputName

**Type:** string

**Required:** True

## ResponseError

An exception raised by 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 MediaConnect returns to help you understand the reason that the request did not succeed.

**Type:** string

**Required:** True

## UpdateBridgeNetworkOutputRequest

Update an existing network output.

### protocol

The network output protocol.

**Type:** string

**Required:** False

**Values:** zixi-push | rtp-fec | rtp | zixi-pull | rist | st2110-jpegxs | cdi  
| srt-listener | srt-caller | fujitsu-qos | udp

### port

The network output port.

**Type:** integer

**Required:** False

### ipAddress

The network output IP Address.

**Type:** string

**Required:** False

### networkName

The network output's gateway network name.

**Type:** string

**Required:** False

### ttl

The network output TTL.

**Type:** integer

**Required:** False

## UpdateBridgeOutputRequest

Update an existing bridge output.

### networkOutput

**Type:** [UpdateBridgeNetworkOutputRequest](#)

**Required:** False

## UpdateBridgeOutputResponse

The bridge output was successfully updated.

### output

The output that you updated.

**Type:** [BridgeOutput](#)

**Required:** True

### bridgeArn

The Amazon Resource Number (ARN) of the bridge.

**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:

## UpdateBridgeOutput

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)

- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

## RemoveBridgeOutput

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

## Gateway bridge sources: add

### URI

/v1/bridges/*bridgeArn*/sources

### HTTP methods

#### POST

**Operation ID:** AddBridgeSources

Adds sources to an existing bridge.

## Path parameters

Name	Type	Required	Description
<i>bridgeArn</i>	String	True	The ARN of the bridge that you want to describe.

## Responses

Status code	Response model	Description
202	<a href="#">AddBridgeSourcesResponse</a>	MediaConnect is starting the flow.
400	<a href="#">ResponseError</a>	The request that you submitted is not valid.
403	<a href="#">ResponseError</a>	You don't have the required permissions to perform this operation.
404	<a href="#">ResponseError</a>	MediaConnect did not find the resource that you specified in the request.
409	<a href="#">ResponseError</a>	There was a conflict when trying to add the requested output
429	<a href="#">ResponseError</a>	You have exceeded the service request rate limit for your MediaConnect account.
500	<a href="#">ResponseError</a>	MediaConnect can't fulfill your request because it encountered an unexpected condition.

Status code	Response model	Description
503	<a href="#">ResponseError</a>	MediaConnect is currently unavailable. Try again later.

## Schemas

### Request bodies

#### POST schema

```
{
  "sources": [
    {
      "networkSource": {
        "protocol": enum,
        "port": integer,
        "name": "string",
        "networkName": "string",
        "multicastIp": "string"
      },
      "flowSource": {
        "flowArn": "string",
        "name": "string",
        "flowVpcInterfaceAttachment": {
          "vpcInterfaceName": "string"
        }
      }
    }
  ]
}
```

### Response bodies

#### AddBridgeSourcesResponse schema

```
{
  "bridgeArn": "string",
  "sources": [
    {
      "networkSource": {
```



```
    "protocol": enum,
    "port": integer,
    "name": "string",
    "networkName": "string",
    "multicastIp": "string"
  },
  "flowSource": {
    "outputArn": "string",
    "flowArn": "string",
    "name": "string",
    "flowVpcInterfaceAttachment": {
      "vpcInterfaceName": "string"
    }
  }
}
```

## ResponseError schema

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

## Properties

### AddBridgeFlowSourceRequest

Add a flow source to an existing bridge.

#### flowArn

The Amazon Resource Number (ARN) of the cloud flow to use as a source of this bridge.

**Type:** string

**Required:** True

#### name

The name of the flow source. This name is used to reference the source and must be unique among sources in this bridge.

**Type:** string

**Required:** True

## flowVpcInterfaceAttachment

The name of the VPC interface attachment to use for this source.

**Type:** [VpcInterfaceAttachment](#)

**Required:** False

## AddBridgeNetworkSourceRequest

Add a network source to an existing bridge.

### protocol

The network source protocol.

**Type:** string

**Required:** True

**Values:** zixi-push | rtp-fec | rtp | zixi-pull | rist | st2110-jpegxs | cdi  
| srt-listener | srt-caller | fujitsu-qos | udp

### port

The network source port.

**Type:** integer

**Required:** True

### name

The name of the network source. This name is used to reference the source and must be unique among sources in this bridge.

**Type:** string

**Required:** True

**networkName**

The network source's gateway network name.

**Type:** string

**Required:** True

**multicastIp**

The network source multicast IP.

**Type:** string

**Required:** True

**AddBridgeSourceRequest**

Add a source to an existing bridge.

**networkSource**

**Type:** [AddBridgeNetworkSourceRequest](#)

**Required:** False

**flowSource**

**Type:** [AddBridgeFlowSourceRequest](#)

**Required:** False

**AddBridgeSourcesRequest**

Add sources to an existing bridge. You can create up to 2 sources per bridge.

**sources**

The sources that you want to add to this bridge.

**Type:** Array of type [AddBridgeSourceRequest](#)

**Required:** True

## AddBridgeSourcesResponse

The sources were successfully added to the bridge.

### bridgeArn

The Amazon Resource Number (ARN) of the bridge.

**Type:** string

**Required:** True

### sources

The sources that you added to this bridge.

**Type:** Array of type [BridgeSource](#)

**Required:** True

## BridgeFlowSource

The source of the bridge. A flow source originates in MediaConnect as an existing cloud flow.

### outputArn

The Amazon Resource Number (ARN) of the output.

**Type:** string

**Required:** False

### flowArn

The ARN of the cloud flow used as a source of this bridge.

**Type:** string

**Required:** True

### name

The name of the flow source.

**Type:** string

**Required:** True

## flowVpcInterfaceAttachment

The name of the VPC interface attachment to use for this source.

**Type:** [VpcInterfaceAttachment](#)

**Required:** False

## BridgeNetworkSource

The source of the bridge. A network source originates at your premises.

### protocol

The network source protocol.

**Type:** string

**Required:** True

**Values:** zixi-push | rtp-fec | rtp | zixi-pull | rist | st2110-jpegxs | cdi  
| srt-listener | srt-caller | fujitsu-qos | udp

### port

The network source port.

**Type:** integer

**Required:** True

### name

The name of the network source. This name is used to reference the source and must be unique among sources in this bridge.

**Type:** string

**Required:** True

## networkName

The network source's gateway network name.

**Type:** string

**Required:** True

## multicastIp

The network source multicast IP.

**Type:** string

**Required:** True

## BridgeSource

The bridge's source.

### networkSource

**Type:** [BridgeNetworkSource](#)

**Required:** False

### flowSource

**Type:** [BridgeFlowSource](#)

**Required:** False

## ResponseError

An exception raised by 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 MediaConnect returns to help you understand the reason that the request did not succeed.

**Type:** string

**Required:** True

## VpcInterfaceAttachment

The VPC interface that you want to send your output to.

### vpcInterfaceName

The name of the VPC interface that you want to send your output to.

**Type:** string

**Required:** False

## See also

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

## AddBridgeSources

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

## Gateway bridge sources: update, remove

### URI

/v1/bridges/*bridgeArn*/sources/*sourceName*

# HTTP methods

## PUT

**Operation ID:** UpdateBridgeSource

Updates an existing bridge source.

### Path parameters

Name	Type	Required	Description
<i>bridgeArn</i>	String	True	The ARN of the bridge that you want to describe.
<i>sourceName</i>	String	True	The name of the source that you want to update.

### Responses

Status code	Response model	Description
202	<a href="#">UpdateBridgeSourceResponse</a>	MediaConnect is starting the flow.
400	<a href="#">ResponseError</a>	The request that you submitted is not valid.
403	<a href="#">ResponseError</a>	You don't have the required permissions to perform this operation.
404	<a href="#">ResponseError</a>	MediaConnect did not find the resource that you specified in the request.



Status code	Response model	Description
409	<a href="#">ResponseError</a>	There was a conflict when trying to add the requested output
429	<a href="#">ResponseError</a>	You have exceeded the service request rate limit for your MediaConnect account.
500	<a href="#">ResponseError</a>	MediaConnect can't fulfill your request because it encountered an unexpected condition.
503	<a href="#">ResponseError</a>	MediaConnect is currently unavailable. Try again later.

## DELETE

### Operation ID: RemoveBridgeSource

Removes a source from a bridge.

### Path parameters

Name	Type	Required	Description
<i>bridgeArn</i>	String	True	The ARN of the bridge that you want to describe.
<i>sourceName</i>	String	True	The name of the source that you want to update.

## Responses

Status code	Response model	Description
202	<a href="#">RemoveBridgeSourceResponse</a>	MediaConnect is starting the flow.
400	<a href="#">ResponseError</a>	The request that you submitted is not valid.
403	<a href="#">ResponseError</a>	You don't have the required permissions to perform this operation.
404	<a href="#">ResponseError</a>	MediaConnect did not find the resource that you specified in the request.
409	<a href="#">ResponseError</a>	There was a conflict when trying to add the requested output
429	<a href="#">ResponseError</a>	You have exceeded the service request rate limit for your MediaConnect account.
500	<a href="#">ResponseError</a>	MediaConnect can't fulfill your request because it encountered an unexpected condition.
503	<a href="#">ResponseError</a>	MediaConnect is currently unavailable. Try again later.

## Schemas

### Request bodies

## PUT schema

```
{
  "networkSource": {
    "protocol": enum,
    "port": integer,
    "networkName": "string",
    "multicastIp": "string"
  },
  "flowSource": {
    "flowArn": "string",
    "flowVpcInterfaceAttachment": {
      "vpcInterfaceName": "string"
    }
  }
}
```

## Response bodies

### UpdateBridgeSourceResponse schema

```
{
  "bridgeArn": "string",
  "source": {
    "networkSource": {
      "protocol": enum,
      "port": integer,
      "name": "string",
      "networkName": "string",
      "multicastIp": "string"
    },
    "flowSource": {
      "outputArn": "string",
      "flowArn": "string",
      "name": "string",
      "flowVpcInterfaceAttachment": {
        "vpcInterfaceName": "string"
      }
    }
  }
}
```

## RemoveBridgeSourceResponse schema

```
{
  "bridgeArn": "string",
  "sourceName": "string"
}
```

## ResponseError schema

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

## Properties

### BridgeFlowSource

The source of the bridge. A flow source originates in MediaConnect as an existing cloud flow.

#### outputArn

The Amazon Resource Number (ARN) of the output.

**Type:** string

**Required:** False

#### flowArn

The ARN of the cloud flow used as a source of this bridge.

**Type:** string

**Required:** True

#### name

The name of the flow source.

**Type:** string

**Required:** True

## flowVpcInterfaceAttachment

The name of the VPC interface attachment to use for this source.

**Type:** [VpcInterfaceAttachment](#)

**Required:** False

## BridgeNetworkSource

The source of the bridge. A network source originates at your premises.

### protocol

The network source protocol.

**Type:** string

**Required:** True

**Values:** zixi-push | rtp-fec | rtp | zixi-pull | rist | st2110-jpegxs | cdi  
| srt-listener | srt-caller | fujitsu-qos | udp

### port

The network source port.

**Type:** integer

**Required:** True

### name

The name of the network source. This name is used to reference the source and must be unique among sources in this bridge.

**Type:** string

**Required:** True

### networkName

The network source's gateway network name.

**Type:** string

**Required:** True

### **multicastIp**

The network source multicast IP.

**Type:** string

**Required:** True

## **BridgeSource**

The bridge's source.

### **networkSource**

**Type:** [BridgeNetworkSource](#)

**Required:** False

### **flowSource**

**Type:** [BridgeFlowSource](#)

**Required:** False

## **RemoveBridgeSourceResponse**

The bridge source has been successfully removed.

### **bridgeArn**

**Type:** string

**Required:** True

### **sourceName**

**Type:** string

**Required:** True

## ResponseError

An exception raised by 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 MediaConnect returns to help you understand the reason that the request did not succeed.

**Type:** string

**Required:** True

## UpdateBridgeFlowSourceRequest

Update the flow source of the bridge.

### flowArn

The ARN of the cloud flow to use as a source of this bridge.

**Type:** string

**Required:** False

### flowVpcInterfaceAttachment

The name of the VPC interface attachment to use for this source.

**Type:** [VpcInterfaceAttachment](#)

**Required:** False

## UpdateBridgeNetworkSourceRequest

Update the network source of the bridge.

### protocol

The network source protocol.

**Type:** string

**Required:** False

**Values:** zixi-push | rtp-fec | rtp | zixi-pull | rist | st2110-jpegxs | cdi  
| srt-listener | srt-caller | fujitsu-qos | udp

## port

The network source port.

**Type:** integer

**Required:** False

## networkName

The network source's gateway network name.

**Type:** string

**Required:** False

## multicastIp

The network source multicast IP.

**Type:** string

**Required:** False

# UpdateBridgeSourceRequest

Update the bridge source.

## networkSource

**Type:** [UpdateBridgeNetworkSourceRequest](#)

**Required:** False

## flowSource

**Type:** [UpdateBridgeFlowSourceRequest](#)

**Required:** False



## UpdateBridgeSourceResponse

The bridge source has been successfully updated.

### bridgeArn

The Amazon Resource Number (ARN) of the bridge.

**Type:** string

**Required:** True

### source

**Type:** [BridgeSource](#)

**Required:** True

## VpcInterfaceAttachment

The VPC interface that you want to send your output to.

### vpcInterfaceName

The name of the VPC interface that you want to send your output to.

**Type:** string

**Required:** False

## See also

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

## UpdateBridgeSource

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

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

## RemoveBridgeSource

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

## Gateway bridge state: update

### URI

/v1/bridges/*bridgeArn*/state

### HTTP methods

#### PUT

**Operation ID:** UpdateBridgeState

Updates the bridge state.

We recommend activating no more than 10 bridges at one time. If you need to activate more than 10 bridges, use multiple requests.

## Path parameters

Name	Type	Required	Description
<i>bridgeArn</i>	String	True	The ARN of the bridge that you want to describe.

## Responses

Status code	Response model	Description
202	<a href="#">UpdateBridgeStateResponse</a>	MediaConnect is starting the flow.
400	<a href="#">ResponseError</a>	The request that you submitted is not valid.
403	<a href="#">ResponseError</a>	You don't have the required permissions to perform this operation.
404	<a href="#">ResponseError</a>	MediaConnect did not find the resource that you specified in the request.
409	<a href="#">ResponseError</a>	There was a conflict when trying to add the requested output
429	<a href="#">ResponseError</a>	You have exceeded the service request rate limit for your MediaConnect account.
500	<a href="#">ResponseError</a>	MediaConnect can't fulfill your request because it encountered an unexpected condition.

Status code	Response model	Description
503	<a href="#">ResponseError</a>	MediaConnect is currently unavailable. Try again later.

## Schemas

### Request bodies

#### PUT schema

```
{
  "desiredState": enum
}
```

### Response bodies

#### UpdateBridgeStateResponse schema

```
{
  "bridgeArn": "string",
  "desiredState": enum
}
```

#### ResponseError schema

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

## Properties

### ResponseError

An exception raised by 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 MediaConnect returns to help you understand the reason that the request did not succeed.

**Type:** string

**Required:** True

## UpdateBridgeStateRequest

Update the state of a bridge. ACTIVE or STANDBY.

### desiredState

**Type:** string

**Required:** True

**Values:** ACTIVE | STANDBY | DELETED

## UpdateBridgeStateResponse

The bridge state has been updated.

### bridgeArn

The Amazon Resource Number (ARN) of the bridge.

**Type:** string

**Required:** True

### desiredState

The state of the bridge. ACTIVE or STANDBY.

**Type:** string

**Required:** True

**Values:** ACTIVE | STANDBY | DELETED

## See also

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

### UpdateBridgeState

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

## Gateway bridge: create, list

### URI

/v1/bridges

### HTTP methods

#### GET

**Operation ID:** ListBridges

Displays a list of bridges that are associated with this account and an optionally specified Arn. This request returns a paginated result.

#### Query parameters

Name	Type	Required	Description
filterArn	String	False	Filter the list results to display only the

Name	Type	Required	Description
			bridges associated with the selected ARN.
nextToken	String	False	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.

Name	Type	Required	Description
maxResults	String	False	<p>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.)</p> <p>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.</p>

## Responses

Status code	Response model	Description
200	<a href="#">ListBridgesResponse</a>	AWS Elemental MediaConnect returned the list of bridges successfully.



Status code	Response model	Description
400	<a href="#">ResponseError</a>	The request that you submitted is not valid.
409	<a href="#">ResponseError</a>	There was a conflict when trying to add the requested output
429	<a href="#">ResponseError</a>	You have exceeded the service request rate limit for your MediaConnect account.
500	<a href="#">ResponseError</a>	MediaConnect can't fulfill your request because it encountered an unexpected condition.
503	<a href="#">ResponseError</a>	MediaConnect is currently unavailable. Try again later.

## POST

### Operation ID: CreateBridge

Creates a new bridge. The request must include one source.

### Responses

Status code	Response model	Description
201	<a href="#">CreateBridgeResponse</a>	MediaConnect created the new resource successfully.
400	<a href="#">ResponseError</a>	The request that you submitted is not valid.

Status code	Response model	Description
403	<a href="#">ResponseError</a>	You don't have the required permissions to perform this operation.
409	<a href="#">ResponseError</a>	There was a conflict when trying to add the requested output
420	<a href="#">ResponseError</a>	Your account already contains the maximum number of 20 flows per account, per Region. For more information, contact AWS Support.
429	<a href="#">ResponseError</a>	You have exceeded the service request rate limit for your MediaConnect account.
500	<a href="#">ResponseError</a>	MediaConnect can't fulfill your request because it encountered an unexpected condition.
503	<a href="#">ResponseError</a>	MediaConnect is currently unavailable. Try again later.

## Schemas

### Request bodies

#### POST schema

```
{
  "ingressGatewayBridge": {
    "maxOutputs": integer,
    "maxBitrate": integer
  },
}
```

```
"outputs": [
  {
    "networkOutput": {
      "protocol": enum,
      "port": integer,
      "ipAddress": "string",
      "name": "string",
      "networkName": "string",
      "ttl": integer
    }
  }
],
"placementArn": "string",
"egressGatewayBridge": {
  "maxBitrate": integer
},
"sources": [
  {
    "networkSource": {
      "protocol": enum,
      "port": integer,
      "name": "string",
      "networkName": "string",
      "multicastIp": "string"
    },
    "flowSource": {
      "flowArn": "string",
      "name": "string",
      "flowVpcInterfaceAttachment": {
        "vpcInterfaceName": "string"
      }
    }
  }
],
"name": "string",
"sourceFailoverConfig": {
  "failoverMode": enum,
  "recoveryWindow": integer,
  "state": enum,
  "sourcePriority": {
    "primarySource": "string"
  }
}
```

```
}
```

## Response bodies

### ListBridgesResponse schema

```
{
  "nextToken": "string",
  "bridges": [
    {
      "bridgeArn": "string",
      "placementArn": "string",
      "bridgeState": enum,
      "bridgeType": "string",
      "name": "string"
    }
  ]
}
```

### CreateBridgeResponse schema

```
{
  "bridge": {
    "ingressGatewayBridge": {
      "instanceId": "string",
      "maxOutputs": integer,
      "maxBitrate": integer
    },
    "outputs": [
      {
        "flowOutput": {
          "flowArn": "string",
          "name": "string",
          "flowSourceArn": "string"
        },
        "networkOutput": {
          "protocol": enum,
          "port": integer,
          "ipAddress": "string",
          "name": "string",
          "networkName": "string",
          "ttl": integer
        }
      }
    ]
  }
}
```

```

    }
  }
],
"bridgeArn": "string",
"placementArn": "string",
"bridgeState": enum,
"egressGatewayBridge": {
  "instanceId": "string",
  "maxBitrate": integer
},
"sources": [
  {
    "networkSource": {
      "protocol": enum,
      "port": integer,
      "name": "string",
      "networkName": "string",
      "multicastIp": "string"
    },
    "flowSource": {
      "outputArn": "string",
      "flowArn": "string",
      "name": "string",
      "flowVpcInterfaceAttachment": {
        "vpcInterfaceName": "string"
      }
    }
  }
],
"name": "string",
"sourceFailoverConfig": {
  "failoverMode": enum,
  "recoveryWindow": integer,
  "state": enum,
  "sourcePriority": {
    "primarySource": "string"
  }
},
"bridgeMessages": [
  {
    "code": "string",
    "resourceName": "string",
    "message": "string"
  }
]

```

```
]
}
}
```

## ResponseError schema

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

## Properties

### AddBridgeFlowSourceRequest

Add a flow source to an existing bridge.

#### flowArn

The Amazon Resource Number (ARN) of the cloud flow to use as a source of this bridge.

**Type:** string

**Required:** True

#### name

The name of the flow source. This name is used to reference the source and must be unique among sources in this bridge.

**Type:** string

**Required:** True

#### flowVpcInterfaceAttachment

The name of the VPC interface attachment to use for this source.

**Type:** [VpcInterfaceAttachment](#)

**Required:** False

## AddBridgeNetworkOutputRequest

Add a network output to an existing bridge.

### protocol

The network output protocol.

**Type:** string

**Required:** True

**Values:** zixi-push | rtp-fec | rtp | zixi-pull | rist | st2110-jpegxs | cdi  
| srt-listener | srt-caller | fujitsu-qos | udp

### port

The network output port.

**Type:** integer

**Required:** True

### ipAddress

The network output IP Address.

**Type:** string

**Required:** True

### name

The network output name. This name is used to reference the output and must be unique among outputs in this bridge.

**Type:** string

**Required:** True

### networkName

The network output's gateway network name.

**Type:** string

**Required:** True

## ttl

The network output TTL.

**Type:** integer

**Required:** True

## AddBridgeNetworkSourceRequest

Add a network source to an existing bridge.

### protocol

The network source protocol.

**Type:** string

**Required:** True

**Values:** zixi-push | rtp-fec | rtp | zixi-pull | rist | st2110-jpegxs | cdi  
| srt-listener | srt-caller | fujitsu-qos | udp

### port

The network source port.

**Type:** integer

**Required:** True

### name

The name of the network source. This name is used to reference the source and must be unique among sources in this bridge.

**Type:** string

**Required:** True



**networkName**

The network source's gateway network name.

**Type:** string

**Required:** True

**multicastIp**

The network source multicast IP.

**Type:** string

**Required:** True

**AddBridgeOutputRequest**

Add an output to a bridge.

**networkOutput**

**Type:** [AddBridgeNetworkOutputRequest](#)

**Required:** False

**AddBridgeSourceRequest**

Add a source to an existing bridge.

**networkSource**

**Type:** [AddBridgeNetworkSourceRequest](#)

**Required:** False

**flowSource**

**Type:** [AddBridgeFlowSourceRequest](#)

**Required:** False

## AddEgressGatewayBridgeRequest

### maxBitrate

The maximum expected bitrate (in bps).

**Type:** integer

**Required:** True

**Format:** int64

## AddIngressGatewayBridgeRequest

### maxOutputs

The maximum number of expected outputs.

**Type:** integer

**Required:** True

### maxBitrate

The maximum expected bitrate (in bps).

**Type:** integer

**Required:** True

**Format:** int64

## Bridge

A Bridge is the connection between your data center's Instances and the AWS cloud. A bridge can be used to send video from the AWS cloud to your data center or from your data center to the AWS cloud.

### ingressGatewayBridge

**Type:** [IngressGatewayBridge](#)

**Required:** False

## outputs

The outputs on this bridge.

**Type:** Array of type [BridgeOutput](#)

**Required:** False

## bridgeArn

The Amazon Resource Number (ARN) of the bridge.

**Type:** string

**Required:** True

## placementArn

The placement ARN of the bridge.

**Type:** string

**Required:** True

## bridgeState

**Type:** string

**Required:** True

**Values:** CREATING | STANDBY | STARTING | DEPLOYING | ACTIVE | STOPPING  
| DELETING | DELETED | START\_FAILED | START\_PENDING | STOP\_FAILED |  
UPDATING

## egressGatewayBridge

**Type:** [EgressGatewayBridge](#)

**Required:** False

## sources

The sources on this bridge.

**Type:** Array of type [BridgeSource](#)

**Required:** False

### name

The name of the bridge.

**Type:** string

**Required:** True

### sourceFailoverConfig

**Type:** [FailoverConfig](#)

**Required:** False

### bridgeMessages

**Type:** Array of type [MessageDetail](#)

**Required:** False

## BridgeFlowOutput

The output of the bridge. A flow output is delivered to the AWS cloud.

### flowArn

The Amazon Resource Number (ARN) of the cloud flow.

**Type:** string

**Required:** True

### name

The name of the bridge's output.

**Type:** string

**Required:** True

**flowSourceArn**

The Amazon Resource Number (ARN) of the flow source.

**Type:** string

**Required:** True

**BridgeFlowSource**

The source of the bridge. A flow source originates in MediaConnect as an existing cloud flow.

**outputArn**

The Amazon Resource Number (ARN) of the output.

**Type:** string

**Required:** False

**flowArn**

The ARN of the cloud flow used as a source of this bridge.

**Type:** string

**Required:** True

**name**

The name of the flow source.

**Type:** string

**Required:** True

**flowVpcInterfaceAttachment**

The name of the VPC interface attachment to use for this source.

**Type:** [VpcInterfaceAttachment](#)

**Required:** False

## BridgeNetworkOutput

The output of the bridge. A network output is delivered to your premises.

### protocol

The network output protocol.

**Type:** string

**Required:** True

**Values:** zixi-push | rtp-fec | rtp | zixi-pull | rist | st2110-jpegxs | cdi  
| srt-listener | srt-caller | fujitsu-qos | udp

### port

The network output port.

**Type:** integer

**Required:** True

### ipAddress

The network output IP Address.

**Type:** string

**Required:** True

### name

The network output name.

**Type:** string

**Required:** True

### networkName

The network output's gateway network name.

**Type:** string

**Required:** True

**ttl**

The network output TTL.

**Type:** integer

**Required:** True

**BridgeNetworkSource**

The source of the bridge. A network source originates at your premises.

**protocol**

The network source protocol.

**Type:** string

**Required:** True

**Values:** zixi-push | rtp-fec | rtp | zixi-pull | rist | st2110-jpegxs | cdi  
| srt-listener | srt-caller | fujitsu-qos | udp

**port**

The network source port.

**Type:** integer

**Required:** True

**name**

The name of the network source. This name is used to reference the source and must be unique among sources in this bridge.

**Type:** string

**Required:** True

**networkName**

The network source's gateway network name.

**Type:** string

**Required:** True

## multicastIp

The network source multicast IP.

**Type:** string

**Required:** True

## BridgeOutput

The output of the bridge.

### flowOutput

**Type:** [BridgeFlowOutput](#)

**Required:** False

### networkOutput

**Type:** [BridgeNetworkOutput](#)

**Required:** False

## BridgeSource

The bridge's source.

### networkSource

**Type:** [BridgeNetworkSource](#)

**Required:** False

### flowSource

**Type:** [BridgeFlowSource](#)

**Required:** False



## CreateBridgeRequest

Creates a new bridge. The request must include one source.

### ingressGatewayBridge

Create a bridge with the ingress bridge type. An ingress bridge is a ground-to-cloud bridge. The content originates at your premises and is delivered to the cloud.

**Type:** [AddIngressGatewayBridgeRequest](#)

**Required:** False

### outputs

The outputs that you want to add to this bridge.

**Type:** Array of type [AddBridgeOutputRequest](#)

**Required:** False

### placementArn

The bridge placement Amazon Resource Number (ARN).

**Type:** string

**Required:** True

### egressGatewayBridge

Create a bridge with the egress bridge type. An egress bridge is a cloud-to-ground bridge. The content comes from an existing MediaConnect flow and is delivered to your premises.

**Type:** [AddEgressGatewayBridgeRequest](#)

**Required:** False

### sources

The sources that you want to add to this bridge.

**Type:** Array of type [AddBridgeSourceRequest](#)

**Required:** True

**name**

The name of the bridge. This name can not be modified after the bridge is created.

**Type:** string

**Required:** True

**sourceFailoverConfig**

The settings for source failover.

**Type:** [FailoverConfig](#)

**Required:** False

**CreateBridgeResponse**

The bridge was successfully created.

**bridge**

**Type:** [Bridge](#)

**Required:** False

**EgressGatewayBridge****instanceId**

The ID of the instance running this bridge.

**Type:** string

**Required:** False

**maxBitrate**

The maximum expected bitrate (in bps) of the egress bridge.

**Type:** integer

**Required:** True

**Format:** int64

## FailoverConfig

The settings for source failover.

### failoverMode

The type of failover you choose for this flow. MERGE combines the source streams into a single stream, allowing graceful recovery from any single-source loss. FAILOVER allows switching between different streams.

**Type:** string

**Required:** False

**Values:** MERGE | FAILOVER

### recoveryWindow

The size of the buffer (delay) that the service maintains. A larger buffer means a longer delay in transmitting the stream, but more room for error correction. A smaller buffer means a shorter delay, but less room for error correction. You can choose a value from 100-500 ms. If you keep this field blank, the service uses the default value of 200 ms. This setting only applies when Failover Mode is set to MERGE.

**Type:** integer

**Required:** False

### state

The state of source failover on the flow. If the state is inactive, the flow can have only one source. If the state is active, the flow can have one or two sources.

**Type:** string

**Required:** False

**Values:** ENABLED | DISABLED

### sourcePriority

The priority you want to assign to a source. You can have a primary stream and a backup stream or two equally prioritized streams. This setting only applies when Failover Mode is set to FAILOVER.

**Type:** [SourcePriority](#)

**Required:** False

## IngressGatewayBridge

### instanceId

The ID of the instance running this bridge.

**Type:** string

**Required:** False

### maxOutputs

The maximum number of outputs on the ingress bridge.

**Type:** integer

**Required:** True

### maxBitrate

The maximum expected bitrate (in bps) of the ingress bridge.

**Type:** integer

**Required:** True

**Format:** int64

## ListBridgesResponse

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

### nextToken

The token that identifies which batch of results that you want to see. For example, you submit a ListBridges 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 ListBridges request a second time and specify the NextToken value.

**Type:** string

**Required:** False

## bridges

A list of bridge summaries.

**Type:** Array of type [ListedBridge](#)

**Required:** True

## ListedBridge

Displays details of the selected bridge.

### bridgeArn

The ARN of the bridge.

**Type:** string

**Required:** True

### placementArn

The ARN of the gateway associated with the bridge.

**Type:** string

**Required:** True

### bridgeState

**Type:** string

**Required:** True

**Values:** CREATING | STANDBY | STARTING | DEPLOYING | ACTIVE | STOPPING  
| DELETING | DELETED | START\_FAILED | START\_PENDING | STOP\_FAILED |  
UPDATING

### bridgeType

The type of the bridge.

**Type:** string

**Required:** True

## name

The name of the bridge.

**Type:** string

**Required:** True

## MessageDetail

### code

The error code.

**Type:** string

**Required:** True

### resourceName

The name of the resource.

**Type:** string

**Required:** False

### message

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

**Type:** string

**Required:** True

## ResponseError

An exception raised by 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 MediaConnect returns to help you understand the reason that the request did not succeed.

**Type:** string

**Required:** True

## SourcePriority

The priority you want to assign to a source. You can have a primary stream and a backup stream or two equally prioritized streams. This setting only applies when Failover Mode is set to FAILOVER.

## primarySource

The name of the source you choose as the primary source for this flow.

**Type:** string

**Required:** False

## VpcInterfaceAttachment

The VPC interface that you want to send your output to.

## vpcInterfaceName

The name of the VPC interface that you want to send your output to.

**Type:** string

**Required:** False

## See also

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

## ListBridges

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)

- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

## CreateBridge

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

## Gateway bridge: describe, update, delete

### URI

/v1/bridges/*bridgeArn*

### HTTP methods

#### GET

**Operation ID:** DescribeBridge

Displays the details of a bridge. The response includes the bridge ARN, name, and current state, as well as details about the sources, outputs, and failover configuration.



## Path parameters

Name	Type	Required	Description
<i>bridgeArn</i>	String	True	The ARN of the bridge that you want to describe.

## Responses

Status code	Response model	Description
200	<a href="#">DescribeBridgeResponse</a>	AWS Elemental MediaConnect returned the bridge details successfully.
400	<a href="#">ResponseError</a>	The request that you submitted is not valid.
403	<a href="#">ResponseError</a>	You don't have the required permissions to perform this operation.
404	<a href="#">ResponseError</a>	MediaConnect did not find the resource that you specified in the request.
409	<a href="#">ResponseError</a>	There was a conflict when trying to add the requested output
429	<a href="#">ResponseError</a>	You have exceeded the service request rate limit for your MediaConnect account.
500	<a href="#">ResponseError</a>	MediaConnect can't fulfill your request because it encountered an unexpected condition.

Status code	Response model	Description
503	<a href="#">ResponseError</a>	MediaConnect is currently unavailable. Try again later.

## PUT

### Operation ID: UpdateBridge

Updates the bridge.

We recommend activating no more than 10 bridges at one time. If you need to activate more than 10 bridges, use multiple requests.

### Path parameters

Name	Type	Required	Description
<i>bridgeArn</i>	String	True	The ARN of the bridge that you want to describe.

## Responses

Status code	Response model	Description
202	<a href="#">UpdateBridgeResponse</a>	MediaConnect is starting the flow.
400	<a href="#">ResponseError</a>	The request that you submitted is not valid.
403	<a href="#">ResponseError</a>	You don't have the required permissions to perform this operation.
404	<a href="#">ResponseError</a>	MediaConnect did not find the resource that you specified in the request.

Status code	Response model	Description
409	<a href="#">ResponseError</a>	There was a conflict when trying to add the requested output
429	<a href="#">ResponseError</a>	You have exceeded the service request rate limit for your MediaConnect account.
500	<a href="#">ResponseError</a>	MediaConnect can't fulfill your request because it encountered an unexpected condition.
503	<a href="#">ResponseError</a>	MediaConnect is currently unavailable. Try again later.

## DELETE

**Operation ID:** DeleteBridge

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

### Path parameters

Name	Type	Required	Description
<i>bridgeArn</i>	String	True	The ARN of the bridge that you want to describe.

### Responses

Status code	Response model	Description
200	<a href="#">DeleteBridgeResponse</a>	AWS Elemental MediaConnect deleted the bridge.

Status code	Response model	Description
202	<a href="#">DeleteBridgeResponse</a>	MediaConnect is starting the flow.
400	<a href="#">ResponseError</a>	The request that you submitted is not valid.
403	<a href="#">ResponseError</a>	You don't have the required permissions to perform this operation.
404	<a href="#">ResponseError</a>	MediaConnect did not find the resource that you specified in the request.
409	<a href="#">ResponseError</a>	There was a conflict when trying to add the requested output
429	<a href="#">ResponseError</a>	You have exceeded the service request rate limit for your MediaConnect account.
500	<a href="#">ResponseError</a>	MediaConnect can't fulfill your request because it encountered an unexpected condition.
503	<a href="#">ResponseError</a>	MediaConnect is currently unavailable. Try again later.

## Schemas

### Request bodies

#### PUT schema

```
{
```

```
{
  "ingressGatewayBridge": {
    "maxOutputs": integer,
    "maxBitrate": integer
  },
  "egressGatewayBridge": {
    "maxBitrate": integer
  },
  "sourceFailoverConfig": {
    "failoverMode": enum,
    "recoveryWindow": integer,
    "state": enum,
    "sourcePriority": {
      "primarySource": "string"
    }
  }
}
```

## Response bodies

### DescribeBridgeResponse schema

```
{
  "bridge": {
    "ingressGatewayBridge": {
      "instanceId": "string",
      "maxOutputs": integer,
      "maxBitrate": integer
    },
    "outputs": [
      {
        "flowOutput": {
          "flowArn": "string",
          "name": "string",
          "flowSourceArn": "string"
        },
        "networkOutput": {
          "protocol": enum,
          "port": integer,
          "ipAddress": "string",
          "name": "string",
          "networkName": "string",
          "ttl": integer
        }
      }
    ]
  }
}
```

```
    }
  ],
  "bridgeArn": "string",
  "placementArn": "string",
  "bridgeState": enum,
  "egressGatewayBridge": {
    "instanceId": "string",
    "maxBitrate": integer
  },
  "sources": [
    {
      "networkSource": {
        "protocol": enum,
        "port": integer,
        "name": "string",
        "networkName": "string",
        "multicastIp": "string"
      },
      "flowSource": {
        "outputArn": "string",
        "flowArn": "string",
        "name": "string",
        "flowVpcInterfaceAttachment": {
          "vpcInterfaceName": "string"
        }
      }
    }
  ],
  "name": "string",
  "sourceFailoverConfig": {
    "failoverMode": enum,
    "recoveryWindow": integer,
    "state": enum,
    "sourcePriority": {
      "primarySource": "string"
    }
  },
  "bridgeMessages": [
    {
      "code": "string",
      "resourceName": "string",
      "message": "string"
    }
  ]
]
```

```
}  
}
```

## DeleteBridgeResponse schema

```
{  
  "bridgeArn": "string"  
}
```

## UpdateBridgeResponse schema

```
{  
  "bridge": {  
    "ingressGatewayBridge": {  
      "instanceId": "string",  
      "maxOutputs": integer,  
      "maxBitrate": integer  
    },  
    "outputs": [  
      {  
        "flowOutput": {  
          "flowArn": "string",  
          "name": "string",  
          "flowSourceArn": "string"  
        },  
        "networkOutput": {  
          "protocol": enum,  
          "port": integer,  
          "ipAddress": "string",  
          "name": "string",  
          "networkName": "string",  
          "ttl": integer  
        }  
      }  
    ],  
    "bridgeArn": "string",  
    "placementArn": "string",  
    "bridgeState": enum,  
    "egressGatewayBridge": {  
      "instanceId": "string",  
      "maxBitrate": integer  
    }  
  }  
}
```

```

    },
    "sources": [
      {
        "networkSource": {
          "protocol": enum,
          "port": integer,
          "name": "string",
          "networkName": "string",
          "multicastIp": "string"
        },
        "flowSource": {
          "outputArn": "string",
          "flowArn": "string",
          "name": "string",
          "flowVpcInterfaceAttachment": {
            "vpcInterfaceName": "string"
          }
        }
      }
    ],
    "name": "string",
    "sourceFailoverConfig": {
      "failoverMode": enum,
      "recoveryWindow": integer,
      "state": enum,
      "sourcePriority": {
        "primarySource": "string"
      }
    },
    "bridgeMessages": [
      {
        "code": "string",
        "resourceName": "string",
        "message": "string"
      }
    ]
  }
}

```

## ResponseError schema

```

{
  "message": "string"
}

```



```
}
```

## Properties

### Bridge

A Bridge is the connection between your data center's Instances and the AWS cloud. A bridge can be used to send video from the AWS cloud to your data center or from your data center to the AWS cloud.

#### ingressGatewayBridge

**Type:** [IngressGatewayBridge](#)

**Required:** False

#### outputs

The outputs on this bridge.

**Type:** Array of type [BridgeOutput](#)

**Required:** False

#### bridgeArn

The Amazon Resource Number (ARN) of the bridge.

**Type:** string

**Required:** True

#### placementArn

The placement ARN of the bridge.

**Type:** string

**Required:** True

#### bridgeState

**Type:** string

**Required:** True

**Values:** CREATING | STANDBY | STARTING | DEPLOYING | ACTIVE | STOPPING  
| DELETING | DELETED | START\_FAILED | START\_PENDING | STOP\_FAILED |  
UPDATING

## egressGatewayBridge

**Type:** [EgressGatewayBridge](#)

**Required:** False

## sources

The sources on this bridge.

**Type:** Array of type [BridgeSource](#)

**Required:** False

## name

The name of the bridge.

**Type:** string

**Required:** True

## sourceFailoverConfig

**Type:** [FailoverConfig](#)

**Required:** False

## bridgeMessages

**Type:** Array of type [MessageDetail](#)

**Required:** False

## BridgeFlowOutput

The output of the bridge. A flow output is delivered to the AWS cloud.

**flowArn**

The Amazon Resource Number (ARN) of the cloud flow.

**Type:** string

**Required:** True

**name**

The name of the bridge's output.

**Type:** string

**Required:** True

**flowSourceArn**

The Amazon Resource Number (ARN) of the flow source.

**Type:** string

**Required:** True

**BridgeFlowSource**

The source of the bridge. A flow source originates in MediaConnect as an existing cloud flow.

**outputArn**

The Amazon Resource Number (ARN) of the output.

**Type:** string

**Required:** False

**flowArn**

The ARN of the cloud flow used as a source of this bridge.

**Type:** string

**Required:** True

**name**

The name of the flow source.

**Type:** string

**Required:** True

**flowVpcInterfaceAttachment**

The name of the VPC interface attachment to use for this source.

**Type:** [VpcInterfaceAttachment](#)

**Required:** False

**BridgeNetworkOutput**

The output of the bridge. A network output is delivered to your premises.

**protocol**

The network output protocol.

**Type:** string

**Required:** True

**Values:** zixi-push | rtp-fec | rtp | zixi-pull | rist | st2110-jpegxs | cdi  
| srt-listener | srt-caller | fujitsu-qos | udp

**port**

The network output port.

**Type:** integer

**Required:** True

**ipAddress**

The network output IP Address.

**Type:** string

**Required:** True

**name**

The network output name.

**Type:** string

**Required:** True

**networkName**

The network output's gateway network name.

**Type:** string

**Required:** True

**ttl**

The network output TTL.

**Type:** integer

**Required:** True

**BridgeNetworkSource**

The source of the bridge. A network source originates at your premises.

**protocol**

The network source protocol.

**Type:** string

**Required:** True

**Values:** zixi-push | rtp-fec | rtp | zixi-pull | rist | st2110-jpegxs | cdi  
| srt-listener | srt-caller | fujitsu-qos | udp

**port**

The network source port.

**Type:** integer

**Required:** True

**name**

The name of the network source. This name is used to reference the source and must be unique among sources in this bridge.

**Type:** string

**Required:** True

**networkName**

The network source's gateway network name.

**Type:** string

**Required:** True

**multicastIp**

The network source multicast IP.

**Type:** string

**Required:** True

**BridgeOutput**

The output of the bridge.

**flowOutput**

**Type:** [BridgeFlowOutput](#)

**Required:** False

**networkOutput**

**Type:** [BridgeNetworkOutput](#)

**Required:** False

**BridgeSource**

The bridge's source.

## networkSource

**Type:** [BridgeNetworkSource](#)

**Required:** False

## flowSource

**Type:** [BridgeFlowSource](#)

**Required:** False

## DeleteBridgeResponse

The bridge was successfully deleted.

### bridgeArn

The Amazon Resource Number (ARN) of the deleted bridge.

**Type:** string

**Required:** True

## DescribeBridgeResponse

Describe bridge was successful.

### bridge

**Type:** [Bridge](#)

**Required:** True

## EgressGatewayBridge

### instanceId

The ID of the instance running this bridge.

**Type:** string

**Required:** False

## maxBitrate

The maximum expected bitrate (in bps) of the egress bridge.

**Type:** integer  
**Required:** True  
**Format:** int64

## FailoverConfig

The settings for source failover.

### failoverMode

The type of failover you choose for this flow. MERGE combines the source streams into a single stream, allowing graceful recovery from any single-source loss. FAILOVER allows switching between different streams.

**Type:** string  
**Required:** False  
**Values:** MERGE | FAILOVER

### recoveryWindow

The size of the buffer (delay) that the service maintains. A larger buffer means a longer delay in transmitting the stream, but more room for error correction. A smaller buffer means a shorter delay, but less room for error correction. You can choose a value from 100-500 ms. If you keep this field blank, the service uses the default value of 200 ms. This setting only applies when Failover Mode is set to MERGE.

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

### state

The state of source failover on the flow. If the state is inactive, the flow can have only one source. If the state is active, the flow can have one or two sources.

**Type:** string



**Required:** False

**Values:** ENABLED | DISABLED

### sourcePriority

The priority you want to assign to a source. You can have a primary stream and a backup stream or two equally prioritized streams. This setting only applies when Failover Mode is set to FAILOVER.

**Type:** [SourcePriority](#)

**Required:** False

## IngressGatewayBridge

### instanceId

The ID of the instance running this bridge.

**Type:** string

**Required:** False

### maxOutputs

The maximum number of outputs on the ingress bridge.

**Type:** integer

**Required:** True

### maxBitrate

The maximum expected bitrate (in bps) of the ingress bridge.

**Type:** integer

**Required:** True

**Format:** int64

## MessageDetail

### code

The error code.

**Type:** string

**Required:** True

### resourceName

The name of the resource.

**Type:** string

**Required:** False

### message

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

**Type:** string

**Required:** True

## ResponseError

An exception raised by 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 MediaConnect returns to help you understand the reason that the request did not succeed.

**Type:** string

**Required:** True

## SourcePriority

The priority you want to assign to a source. You can have a primary stream and a backup stream or two equally prioritized streams. This setting only applies when Failover Mode is set to FAILOVER.

### primarySource

The name of the source you choose as the primary source for this flow.

**Type:** string

**Required:** False

## UpdateBridgeRequest

Update an existing bridge.

### ingressGatewayBridge

**Type:** [UpdateIngressGatewayBridgeRequest](#)

**Required:** False

### egressGatewayBridge

**Type:** [UpdateEgressGatewayBridgeRequest](#)

**Required:** False

### sourceFailoverConfig

**Type:** [UpdateFailoverConfig](#)

**Required:** False

## UpdateBridgeResponse

The bridge has been successfully updated.

### bridge

**Type:** [Bridge](#)

**Required:** True

## UpdateEgressGatewayBridgeRequest

### maxBitrate

Update an existing egress-type bridge.

**Type:** integer

**Required:** False

**Format:** int64

## UpdateFailoverConfig

The settings for source failover.

### failoverMode

The type of failover you choose for this flow. MERGE combines the source streams into a single stream, allowing graceful recovery from any single-source loss. FAILOVER allows switching between different streams.

**Type:** string

**Required:** False

**Values:** MERGE | FAILOVER

### recoveryWindow

The size of the buffer (delay) that you want the service to maintain. A larger buffer means a longer delay in transmitting the stream, but more room for error correction. A smaller buffer means a shorter delay, but less room for error correction. You can choose a value from 100-500 ms. If you keep this field blank, the service uses the default value of 200 ms. This setting only applies when Failover Mode is set to MERGE.

**Type:** integer

**Required:** False

### state

The state of source failover on the flow. If the state is inactive, the flow can have only one source. If the state is active, the flow can have one or two sources.

**Type:** string

**Required:** False

**Values:** ENABLED | DISABLED

## sourcePriority

The priority you want to assign to a source. You can have a primary stream and a backup stream or two equally prioritized streams. This setting only applies when Failover Mode is set to FAILOVER.

**Type:** [SourcePriority](#)

**Required:** False

## UpdateIngressGatewayBridgeRequest

### maxOutputs

The maximum number of expected outputs.

**Type:** integer

**Required:** False

### maxBitrate

The maximum expected bitrate (in bps).

**Type:** integer

**Required:** False

**Format:** int64

## VpcInterfaceAttachment

The VPC interface that you want to send your output to.

### vpcInterfaceName

The name of the VPC interface that you want to send your output to.

**Type:** string

**Required:** False

## See also

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

### DescribeBridge

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

### UpdateBridge

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

### DeleteBridge

- [AWS Command Line Interface](#)

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

## Gateway endpoints: list


### URI

/v1/endpoints/gateway/*gatewayArn*

### HTTP methods

### GET

**Operation ID:** DiscoverGatewayPollEndpoint

 **Note**

This action is only used by the MediaConnect Gateway agent, and it is not intended for use outside of the agent.

Return the gateway poll endpoint(s) for the specified gateway.

### Path parameters

Name	Type	Required	Description
<i>gatewayArn</i>	String	True	The Amazon Resource Name (ARN) that

Name	Type	Required	Description
			identifies the AWS Elemental MediaConnect Gateway.

## Responses

Status code	Response model	Description
200	<a href="#">DiscoverGatewayPolicyEndpointResponse</a>	The endpoints for the specified gateway
400	<a href="#">ResponseError</a>	The request that you submitted is not valid.
403	<a href="#">ResponseError</a>	You don't have the required permissions to perform this operation.
404	<a href="#">ResponseError</a>	MediaConnect did not find the resource that you specified in the request.
409	<a href="#">ResponseError</a>	There was a conflict when trying to add the requested output
429	<a href="#">ResponseError</a>	You have exceeded the service request rate limit for your MediaConnect account.
500	<a href="#">ResponseError</a>	MediaConnect can't fulfill your request because it encountered an unexpected condition.
503	<a href="#">ResponseError</a>	MediaConnect is currently unavailable. Try again later.



# Schemas

## Response bodies

### DiscoverGatewayPollEndpointResponse schema

```
{
  "websocketEndpoint": "string",
  "httpEndpoint": "string"
}
```

### ResponseError schema

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

## Properties

### DiscoverGatewayPollEndpointResponse

The result of a successful DiscoverGatewayPollEndpoint request.

#### websocketEndpoint

The websocket endpoint.

**Type:** string

**Required:** True

#### httpEndpoint

The http endpoint.

**Type:** string

**Required:** True

## ResponseError

An exception raised by 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 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:

### DiscoverGatewayPollEndpoint

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

## Gateway instance: describe, update, deregister

### URI

/v1/gateway-instances/*gatewayInstanceArn*

## HTTP methods

### GET

**Operation ID:** DescribeGatewayInstance

Displays the details of an instance.

#### Path parameters

Name	Type	Required	Description
<i>gatewayInstanceArn</i>	String	True	The ARN of the gateway instance that you want to describe.

#### Responses

Status code	Response model	Description
200	<a href="#">DescribeGatewayInstanceResponse</a>	AWS Elemental MediaConnect returned the instance details successfully.
400	<a href="#">ResponseError</a>	The request that you submitted is not valid.
403	<a href="#">ResponseError</a>	You don't have the required permissions to perform this operation.
404	<a href="#">ResponseError</a>	MediaConnect did not find the resource that you specified in the request.
409	<a href="#">ResponseError</a>	There was a conflict when trying to add the requested output

Status code	Response model	Description
429	<a href="#">ResponseError</a>	You have exceeded the service request rate limit for your MediaConnect account.
500	<a href="#">ResponseError</a>	MediaConnect can't fulfill your request because it encountered an unexpected condition.
503	<a href="#">ResponseError</a>	MediaConnect is currently unavailable. Try again later.

## PUT

**Operation ID:** UpdateGatewayInstance

Updates the configuration of an existing Gateway Instance.

### Path parameters

Name	Type	Required	Description
<i>gatewayInstanceArn</i>	String	True	The ARN of the gateway instance that you want to describe.

### Responses

Status code	Response model	Description
200	<a href="#">UpdateGatewayInstanceResponse</a>	AWS Elemental MediaConnect is applying the instance state.
400	<a href="#">ResponseError</a>	The request that you submitted is not valid.

Status code	Response model	Description
403	<a href="#">ResponseError</a>	You don't have the required permissions to perform this operation.
404	<a href="#">ResponseError</a>	MediaConnect did not find the resource that you specified in the request.
409	<a href="#">ResponseError</a>	There was a conflict when trying to add the requested output
429	<a href="#">ResponseError</a>	You have exceeded the service request rate limit for your MediaConnect account.
500	<a href="#">ResponseError</a>	MediaConnect can't fulfill your request because it encountered an unexpected condition.
503	<a href="#">ResponseError</a>	MediaConnect is currently unavailable. Try again later.

## DELETE

### Operation ID: DeregisterGatewayInstance

Deregisters an instance. Before you deregister an instance, all bridges running on the instance must be stopped. If you want to deregister an instance without stopping the bridges, you must use the `--force` option.

## Path parameters

Name	Type	Required	Description
<i>gatewayInstanceArn</i>	String	True	The ARN of the gateway instance that you want to describe.

## Query parameters

Name	Type	Required	Description
force	String	False	Force the deregistration of an instance. Force will deregister an instance, even if there are bridges running on it.

## Responses

Status code	Response model	Description
202	<a href="#">DeregisterGatewayInstanceResponse</a>	MediaConnect is starting the flow.
400	<a href="#">ResponseError</a>	The request that you submitted is not valid.
403	<a href="#">ResponseError</a>	You don't have the required permissions to perform this operation.
404	<a href="#">ResponseError</a>	MediaConnect did not find the resource that you specified in the request.

Status code	Response model	Description
409	<a href="#">ResponseError</a>	There was a conflict when trying to add the requested output
429	<a href="#">ResponseError</a>	You have exceeded the service request rate limit for your MediaConnect account.
500	<a href="#">ResponseError</a>	MediaConnect can't fulfill your request because it encountered an unexpected condition.
503	<a href="#">ResponseError</a>	MediaConnect is currently unavailable. Try again later.

## Schemas

### Request bodies

#### PUT schema

```
{
  "bridgePlacement": enum
}
```

### Response bodies

#### DescribeGatewayInstanceResponse schema

```
{
  "gatewayInstance": {
    "instanceId": "string",
    "instanceState": enum,
    "instanceMessages": [
      {
        "code": "string",
        "resourceName": "string",
```

```
    "message": "string"
  }
],
"connectionStatus": enum,
"gatewayInstanceArn": "string",
"runningBridgeCount": integer,
"bridgePlacement": enum,
"gatewayArn": "string"
}
```

## UpdateGatewayInstanceResponse schema

```
{
  "gatewayInstanceArn": "string",
  "bridgePlacement": enum
}
```

## DeregisterGatewayInstanceResponse schema

```
{
  "instanceState": enum,
  "gatewayInstanceArn": "string"
}
```

## ResponseError schema

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

# Properties

## DeregisterGatewayInstanceResponse

The gateway instance deregistration was successful.

### instanceState

The status of the instance.



**Type:** string

**Required:** True

**Values:** REGISTERING | ACTIVE | DEREGISTERING | DEREGISTERED |  
REGISTRATION\_ERROR | DEREGISTRATION\_ERROR

### **gatewayInstanceArn**

The Amazon Resource Name (ARN) of the instance.

**Type:** string

**Required:** True

## **DescribeGatewayInstanceResponse**

The result of a successful DescribeGatewayInstance request.

### **gatewayInstance**

**Type:** [GatewayInstance](#)

**Required:** True

## **GatewayInstance**

The settings for an instance in a gateway.

### **instanceId**

The instance ID generated by the SSM install. This will begin with "mi-".

**Type:** string

**Required:** True

### **instanceState**

The status of the instance.

**Type:** string

**Required:** True

**Values:** REGISTERING | ACTIVE | DEREGISTERING | DEREGISTERED |  
REGISTRATION\_ERROR | DEREGISTRATION\_ERROR

### instanceMessages

**Type:** Array of type [MessageDetail](#)

**Required:** False

### connectionStatus

The connection state of the instance.

**Type:** string

**Required:** True

**Values:** CONNECTED | DISCONNECTED

### gatewayInstanceArn

The ARN of the gateway.

**Type:** string

**Required:** True

### runningBridgeCount

The running bridge count.

**Type:** integer

**Required:** True

### bridgePlacement

The availability of the instance to host new bridges. The bridgePlacement property can be LOCKED or AVAILABLE. If it is LOCKED, no new bridges can be deployed to this instance. If it is AVAILABLE, new bridges can be deployed to this instance.

**Type:** string

**Required:** True

**Values:** AVAILABLE | LOCKED

## gatewayArn

The Amazon Resource Name (ARN) of the instance.

**Type:** string

**Required:** True

## MessageDetail

### code

The error code.

**Type:** string

**Required:** True

### resourceName

The name of the resource.

**Type:** string

**Required:** False

### message

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

**Type:** string

**Required:** True

## ResponseError

An exception raised by 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 MediaConnect returns to help you understand the reason that the request did not succeed.

**Type:** string

**Required:** True

## UpdateGatewayInstanceRequest

The state update that you want to make to an existing gateway instance.

### bridgePlacement

The state of the instance. ACTIVE or INACTIVE.

**Type:** string

**Required:** False

**Values:** AVAILABLE | LOCKED

## UpdateGatewayInstanceResponse

The gateway instance update was successful.

### gatewayInstanceArn

The Amazon Resource Name (ARN) of the instance.

**Type:** string

**Required:** True

### bridgePlacement

The state of the instance. ACTIVE or INACTIVE.

**Type:** string

**Required:** True

**Values:** AVAILABLE | LOCKED

## See also

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

### DescribeGatewayInstance

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

### UpdateGatewayInstance

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

### DeregisterGatewayInstance

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)

- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

## Gateway instance: list

### URI

/v1/gateway-instances

### HTTP methods

#### GET

#### Operation ID: ListGatewayInstances

Displays a list of instances associated with the AWS account. This request returns a paginated result. You can use the `filterArn` property to display only the instances associated with the selected Gateway Amazon Resource Name (ARN).

#### Query parameters

Name	Type	Required	Description
<code>filterArn</code>	String	False	Filter the list results to display only the bridges associated with the selected ARN.
<code>nextToken</code>	String	False	The token that identifies which batch of results that

Name	Type	Required	Description
			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.

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

## Responses

Status code	Response model	Description
200	<a href="#">ListGatewayInstancesResponse</a>	AWS Elemental MediaConnect returned the list of instances in the gateway successfully.



Status code	Response model	Description
400	<a href="#">ResponseError</a>	The request that you submitted is not valid.
409	<a href="#">ResponseError</a>	There was a conflict when trying to add the requested output
429	<a href="#">ResponseError</a>	You have exceeded the service request rate limit for your MediaConnect account.
500	<a href="#">ResponseError</a>	MediaConnect can't fulfill your request because it encountered an unexpected condition.
503	<a href="#">ResponseError</a>	MediaConnect is currently unavailable. Try again later.

## Schemas

### Response bodies

#### ListGatewayInstancesResponse schema

```
{
  "instances": [
    {
      "instanceId": "string",
      "instanceState": enum,
      "gatewayInstanceArn": "string",
      "gatewayArn": "string"
    }
  ],
  "nextToken": "string"
}
```

## ResponseError schema

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

## Properties

### ListGatewayInstancesResponse

The result of a successful ListGatewayInstances request. The response includes instance summaries and the NextToken to use in a subsequent ListInstances request.

#### instances

A list of instance summaries.

**Type:** Array of type [ListedGatewayInstance](#)

**Required:** True

#### nextToken

The token that identifies which batch of results that you want to see. For example, you submit a ListInstances 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 ListInstances request a second time and specify the NextToken value.

**Type:** string

**Required:** False

### ListedGatewayInstance

Provides a summary of an instance.

#### instanceId

The instance ID generated by the SSM install. This will begin with "mi-".

**Type:** string

**Required:** True

## instanceState

The status of the instance.

**Type:** string

**Required:** False

**Values:** REGISTERING | ACTIVE | DEREGISTERING | DEREGISTERED |  
REGISTRATION\_ERROR | DEREGISTRATION\_ERROR

## gatewayInstanceArn

The Amazon Resource Name (ARN) of the instance.

**Type:** string

**Required:** True

## gatewayArn

The Amazon Resource Name (ARN) of the gateway.

**Type:** string

**Required:** True

## ResponseError

An exception raised by 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 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:

### ListGatewayInstances

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

## Gateway: describe, delete

### URI

/v1/gateways/*gatewayArn*

### HTTP methods

#### GET

**Operation ID:** DescribeGateway

Displays the details of a gateway. The response includes the gateway ARN, name, and CIDR blocks, as well as details about the networks.

#### Path parameters

Name	Type	Required	Description
<i>gatewayArn</i>	String	True	The Amazon Resource Name (ARN) that

Name	Type	Required	Description
			identifies the AWS Elemental MediaConnect Gateway.

## Responses

Status code	Response model	Description
200	<a href="#">DescribeGatewayResponse</a>	AWS Elemental MediaConnect returned the gateway details successfully.
400	<a href="#">ResponseError</a>	The request that you submitted is not valid.
403	<a href="#">ResponseError</a>	You don't have the required permissions to perform this operation.
404	<a href="#">ResponseError</a>	MediaConnect did not find the resource that you specified in the request.
409	<a href="#">ResponseError</a>	There was a conflict when trying to add the requested output
429	<a href="#">ResponseError</a>	You have exceeded the service request rate limit for your MediaConnect account.
500	<a href="#">ResponseError</a>	MediaConnect can't fulfill your request because it encountered an unexpected condition.

Status code	Response model	Description
503	<a href="#">ResponseError</a>	MediaConnect is currently unavailable. Try again later.

## DELETE

**Operation ID:** DeleteGateway

Deletes a gateway. Before you can delete a gateway, you must deregister its instances and delete its bridges.

### Path parameters

Name	Type	Required	Description
<i>gatewayArn</i>	String	True	The Amazon Resource Name (ARN) that identifies the AWS Elemental MediaConnect Gateway.

### Responses

Status code	Response model	Description
200	<a href="#">DeleteGatewayResponse</a>	AWS Elemental MediaConnect deleted the gateway.
202	<a href="#">DeleteGatewayResponse</a>	MediaConnect is starting the flow.
400	<a href="#">ResponseError</a>	The request that you submitted is not valid.
403	<a href="#">ResponseError</a>	You don't have the required permissions to perform this operation.

Status code	Response model	Description
404	<a href="#">ResponseError</a>	MediaConnect did not find the resource that you specified in the request.
409	<a href="#">ResponseError</a>	There was a conflict when trying to add the requested output
429	<a href="#">ResponseError</a>	You have exceeded the service request rate limit for your MediaConnect account.
500	<a href="#">ResponseError</a>	MediaConnect can't fulfill your request because it encountered an unexpected condition.
503	<a href="#">ResponseError</a>	MediaConnect is currently unavailable. Try again later.

## Schemas

### Response bodies

#### DescribeGatewayResponse schema

```
{
  "gateway": {
    "egressCidrBlocks": [
      "string"
    ],
    "gatewayMessages": [
      {
        "code": "string",
        "resourceName": "string",
        "message": "string"
      }
    ]
  },
}
```

```
{
  "name": "string",
  "networks": [
    {
      "cidrBlock": "string",
      "name": "string"
    }
  ],
  "gatewayArn": "string",
  "gatewayState": enum
}
```

### DeleteGatewayResponse schema

```
{
  "gatewayArn": "string"
}
```

### ResponseError schema

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

## Properties

### DeleteGatewayResponse

The result of a successful DeleteGateway request.

#### gatewayArn

The ARN of the gateway that was deleted.

**Type:** string

**Required:** True

### DescribeGatewayResponse

The result of a successful DescribeGateway request.



## gateway

**Type:** [Gateway](#)

**Required:** True

## Gateway

The settings for a gateway, including its networks.

## egressCidrBlocks

The range of IP addresses that contribute content or initiate output requests for flows communicating with this gateway. These IP addresses should be in the form of a Classless Inter-Domain Routing (CIDR) block; for example, 10.0.0.0/16.

**Type:** Array of type string

**Required:** True

## gatewayMessages

**Type:** Array of type [MessageDetail](#)

**Required:** False

## name

The name of the gateway. This name can not be modified after the gateway is created.

**Type:** string

**Required:** True

## networks

The list of networks in the gateway.

**Type:** Array of type [GatewayNetwork](#)

**Required:** True

## gatewayArn

The Amazon Resource Name (ARN) of the gateway.

**Type:** string

**Required:** True

## gatewayState

The current status of the gateway.

**Type:** string

**Required:** False

**Values:** CREATING | ACTIVE | UPDATING | ERROR | DELETING | DELETED

## GatewayNetwork

The network settings for a gateway.

### cidrBlock

A unique IP address range to use for this network. These IP addresses should be in the form of a Classless Inter-Domain Routing (CIDR) block; for example, 10.0.0.0/16.

**Type:** string

**Required:** True

### name

The name of the network. This name is used to reference the network and must be unique among networks in this gateway.

**Type:** string

**Required:** True

## MessageDetail

### code

The error code.

**Type:** string

**Required:** True

### **resourceName**

The name of the resource.

**Type:** string

**Required:** False

### **message**

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

**Type:** string

**Required:** True

## **ResponseError**

An exception raised by 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 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:

### **DescribeGateway**

- [AWS Command Line Interface](#)

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

## DeleteGateway

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

## Gateway: list, create

### URI

/v1/gateways

### HTTP methods

### GET

**Operation ID:** ListGateways

Displays a list of gateways that are associated with this account. This request returns a paginated result.

### Query parameters

Name	Type	Required	Description
nextToken	String	False	The token that identifies which batch of results that you want to see. For example, you submit a <code>ListEntitlements</code> request with <code>MaxResults</code> set at 5. The service returns the first batch of results (up to 5) and a <code>NextToken</code> value. To see the next batch of results, you can submit the <code>ListEntitlements</code> request a second time and specify the <code>NextToken</code> value.
maxResults	String	False	The maximum number of results to return per API request. For example, you submit a <code>ListEntitlements</code> request with <code>MaxResults</code> set at 5. Although 20 items match your request, the service returns no more than the

Name	Type	Required	Description
			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.

## Responses

Status code	Response model	Description
200	<a href="#">ListGatewaysResponse</a>	AWS Elemental MediaConnect returned the list of gateways successfully.
400	<a href="#">ResponseError</a>	The request that you submitted is not valid.
409	<a href="#">ResponseError</a>	There was a conflict when trying to add the requested output
429	<a href="#">ResponseError</a>	You have exceeded the service request rate limit for your MediaConnect account.

Status code	Response model	Description
500	<a href="#">ResponseError</a>	MediaConnect can't fulfill your request because it encountered an unexpected condition.
503	<a href="#">ResponseError</a>	MediaConnect is currently unavailable. Try again later.

## POST

### Operation ID: CreateGateway

Creates a new gateway. The request must include at least one network.

### Responses

Status code	Response model	Description
201	<a href="#">DescribeGatewayResponse</a>	MediaConnect created the new resource successfully.
400	<a href="#">ResponseError</a>	The request that you submitted is not valid.
403	<a href="#">ResponseError</a>	You don't have the required permissions to perform this operation.
409	<a href="#">ResponseError</a>	There was a conflict when trying to add the requested output
420	<a href="#">ResponseError</a>	Your account already contains the maximum number of 20 flows per account, per Region. For more information, contact AWS Support.

Status code	Response model	Description
429	<a href="#">ResponseError</a>	You have exceeded the service request rate limit for your MediaConnect account.
500	<a href="#">ResponseError</a>	MediaConnect can't fulfill your request because it encountered an unexpected condition.
503	<a href="#">ResponseError</a>	MediaConnect is currently unavailable. Try again later.

## Schemas

### Request bodies

#### POST schema

```
{
  "egressCidrBlocks": [
    "string"
  ],
  "name": "string",
  "networks": [
    {
      "cidrBlock": "string",
      "name": "string"
    }
  ]
}
```

### Response bodies

#### ListGatewaysResponse schema

```
{
  "gateways": [
```



```
{
  "name": "string",
  "gatewayArn": "string",
  "gatewayState": enum
},
"nextToken": "string"
}
```

## DescribeGatewayResponse schema

```
{
  "gateway": {
    "egressCidrBlocks": [
      "string"
    ],
    "gatewayMessages": [
      {
        "code": "string",
        "resourceName": "string",
        "message": "string"
      }
    ],
    "name": "string",
    "networks": [
      {
        "cidrBlock": "string",
        "name": "string"
      }
    ],
    "gatewayArn": "string",
    "gatewayState": enum
  }
}
```

## ResponseError schema

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

# Properties

## CreateGatewayRequest

Creates a new gateway. The request must include one network (up to 4).

### egressCidrBlocks

The range of IP addresses that are allowed to contribute content or initiate output requests for flows communicating with this gateway. These IP addresses should be in the form of a Classless Inter-Domain Routing (CIDR) block; for example, 10.0.0.0/16.

**Type:** Array of type string

**Required:** True

### name

The name of the gateway. This name can not be modified after the gateway is created.

**Type:** string

**Required:** True

### networks

The list of networks that you want to add.

**Type:** Array of type [GatewayNetwork](#)

**Required:** True

## DescribeGatewayResponse

The result of a successful DescribeGateway request.

### gateway

**Type:** [Gateway](#)

**Required:** True

## Gateway

The settings for a gateway, including its networks.

### **egressCidrBlocks**

The range of IP addresses that contribute content or initiate output requests for flows communicating with this gateway. These IP addresses should be in the form of a Classless Inter-Domain Routing (CIDR) block; for example, 10.0.0.0/16.

**Type:** Array of type string

**Required:** True

### **gatewayMessages**

**Type:** Array of type [MessageDetail](#)

**Required:** False

### **name**

The name of the gateway. This name can not be modified after the gateway is created.

**Type:** string

**Required:** True

### **networks**

The list of networks in the gateway.

**Type:** Array of type [GatewayNetwork](#)

**Required:** True

### **gatewayArn**

The Amazon Resource Name (ARN) of the gateway.

**Type:** string

**Required:** True

## gatewayState

The current status of the gateway.

**Type:** string

**Required:** False

**Values:** CREATING | ACTIVE | UPDATING | ERROR | DELETING | DELETED

## GatewayNetwork

The network settings for a gateway.

### cidrBlock

A unique IP address range to use for this network. These IP addresses should be in the form of a Classless Inter-Domain Routing (CIDR) block; for example, 10.0.0.0/16.

**Type:** string

**Required:** True

### name

The name of the network. This name is used to reference the network and must be unique among networks in this gateway.

**Type:** string

**Required:** True

## ListGatewaysResponse

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

### gateways

A list of gateway summaries.

**Type:** Array of type [ListedGateway](#)

**Required:** True

## nextToken

The token that identifies which batch of results that you want to see. For example, you submit a ListGateways 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 ListGateways request a second time and specify the NextToken value.

**Type:** string

**Required:** False

## ListedGateway

Provides a summary of a gateway, including its name, ARN, and status.

### name

The name of the gateway.

**Type:** string

**Required:** True

### gatewayArn

The ARN of the gateway.

**Type:** string

**Required:** True

### gatewayState

**Type:** string

**Required:** True

**Values:** CREATING | ACTIVE | UPDATING | ERROR | DELETING | DELETED

## MessageDetail

### code

The error code.

**Type:** string

**Required:** True

### resourceName

The name of the resource.

**Type:** string

**Required:** False

### message

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

**Type:** string

**Required:** True

## ResponseError

An exception raised by 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 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:

### ListGateways

- [AWS Command Line Interface](#)

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

## CreateGateway

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

## Media streams: add

Each media stream represents one component of your content, such as video, audio, or ancillary data. You can add multiple media streams of each type to your flow and then associate those media streams with sources and outputs that use the ST 2110 JPEG XS or CDI protocol.

## URI

/v1/flows/*flowArn*/mediaStreams

# HTTP methods

## POST

### Operation ID: AddFlowMediaStreams

Adds media streams to an existing flow. After you add a media stream to a flow, you can associate it with a source and/or an output that uses the ST 2110 JPEG XS or CDI protocol.

### Path parameters

Name	Type	Required	Description
<i>flowArn</i>	String	True	The Amazon Resource Name (ARN) of the flow.

### Responses

Status code	Response model	Description
201	<a href="#">AddFlowMediaStreamsResponse</a>	MediaConnect created the new resource successfully.
400	<a href="#">ResponseError</a>	The request that you submitted is not valid.
403	<a href="#">ResponseError</a>	You don't have the required permissions to perform this operation.
404	<a href="#">ResponseError</a>	MediaConnect did not find the resource that you specified in the request.
429	<a href="#">ResponseError</a>	You have exceeded the service request rate limit for your MediaConnect account.



Status code	Response model	Description
500	<a href="#">ResponseError</a>	MediaConnect can't fulfill your request because it encountered an unexpected condition.
503	<a href="#">ResponseError</a>	MediaConnect is currently unavailable. Try again later.

## Schemas

### Request bodies

#### POST schema

```
{
  "mediaStreams": [
    {
      "mediaStreamId": integer,
      "mediaStreamType": enum,
      "videoFormat": "string",
      "mediaStreamName": "string",
      "description": "string",
      "attributes": {
        "fmtp": {
          "colorimetry": enum,
          "par": "string",
          "tcs": enum,
          "scanMode": enum,
          "range": enum,
          "channelOrder": "string",
          "exactFramerate": "string"
        },
        "lang": "string"
      },
      "clockRate": integer
    }
  ]
}
```

## Response bodies

### AddFlowMediaStreamsResponse schema

```
{
  "mediaStreams": [
    {
      "mediaStreamId": integer,
      "mediaStreamType": enum,
      "videoFormat": "string",
      "mediaStreamName": "string",
      "description": "string",
      "attributes": {
        "fmtp": {
          "colorimetry": enum,
          "par": "string",
          "tcs": enum,
          "scanMode": enum,
          "range": enum,
          "channelOrder": "string",
          "exactFramerate": "string"
        },
        "lang": "string"
      },
      "fmt": integer,
      "clockRate": integer
    }
  ],
  "flowArn": "string"
}
```

### ResponseError schema

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

## Properties

### AddFlowMediaStreamsRequest

Adds media streams to an existing flow.

## mediaStreams

The media streams that you want to add to the flow.

**Type:** Array of type [AddMediaStreamRequest](#)

**Required:** True

## AddFlowMediaStreamsResponse

The result of a successful AddFlowMediaStreams request. The response includes the details of the newly added media streams.

### mediaStreams

The media streams that you added to the flow.

**Type:** Array of type [MediaStream](#)

**Required:** True

### flowArn

The ARN of the flow that you added media streams to.

**Type:** string

**Required:** True

## AddMediaStreamRequest

The media stream that you want to add to the flow.

### mediaStreamId

A unique identifier for the media stream.

**Type:** integer

**Required:** True

**Format:** int32

## mediaStreamType

The type of media stream.

**Type:** string

**Required:** True

**Values:** video | audio | ancillary-data

## videoFormat

The resolution of the video.

**Type:** string

**Required:** False

## mediaStreamName

A name that helps you distinguish one media stream from another.

**Type:** string

**Required:** True

## description

A description that can help you quickly identify what your media stream is used for.

**Type:** string

**Required:** False

## attributes

The attributes that you want to assign to the new media stream.

**Type:** [MediaStreamAttributesRequest](#)

**Required:** False

## clockRate

The sample rate (in kHz) for the stream. If the media stream type is video or ancillary data, set this value to 90000. If the media stream type is audio, set this value to either 48000 or 96000.

**Type:** integer

**Required:** False

**Format:** int32

## Fmtp

A set of parameters that define the media stream.

## colorimetry

The format used for the representation of color.

**Type:** string

**Required:** False

**Values:** BT601 | BT709 | BT2020 | BT2100 | ST2065-1 | ST2065-3 | XYZ

## par

The pixel aspect ratio (PAR) of the video.

**Type:** string

**Required:** False

## tcs

The transfer characteristic system (TCS) that is used in the video.

**Type:** string

**Required:** False

**Values:** SDR | PQ | HLG | LINEAR | BT2100LINPQ | BT2100LINHLG | ST2065-1 | ST428-1 | DENSITY

## scanMode

The type of compression that was used to smooth the video's appearance.

**Type:** string

**Required:** False

**Values:** progressive | interlace | progressive-segmented-frame

## range

The encoding range of the video.

**Type:** string

**Required:** False

**Values:** NARROW | FULL | FULLPROTECT

## channelOrder

The format of the audio channel.

**Type:** string

**Required:** False

## exactFramerate

The frame rate for the video stream, in frames/second. For example: 60000/1001.

**Type:** string

**Required:** False

## FmtpRequest

The settings that you want to use to define the media stream.

## colorimetry

The format that is used for the representation of color.

**Type:** string

**Required:** False

**Values:** BT601 | BT709 | BT2020 | BT2100 | ST2065-1 | ST2065-3 | XYZ

## par

The pixel aspect ratio (PAR) of the video.

**Type:** string

**Required:** False

## tcs

The transfer characteristic system (TCS) that is used in the video.

**Type:** string

**Required:** False

**Values:** SDR | PQ | HLG | LINEAR | BT2100LINPQ | BT2100LINHLG | ST2065-1 | ST428-1 | DENSITY

## scanMode

The type of compression that was used to smooth the video's appearance

**Type:** string

**Required:** False

**Values:** progressive | interlace | progressive-segmented-frame

## range

The encoding range of the video.

**Type:** string

**Required:** False

**Values:** NARROW | FULL | FULLPROTECT

## channelOrder

The format of the audio channel.

**Type:** string

**Required:** False

## **exactFramerate**

The frame rate for the video stream, in frames/second. For example: 60000/1001.

**Type:** string

**Required:** False

## **MediaStream**

A single track or stream of media that contains video, audio, or ancillary data. After you add a media stream to a flow, you can associate it with sources and outputs on that flow, as long as they use the CDI protocol or the ST 2110 JPEG XS protocol. Each source or output can consist of one or many media streams.

### **mediaStreamId**

A unique identifier for the media stream.

**Type:** integer

**Required:** True

**Format:** int32

### **mediaStreamType**

The type of media stream.

**Type:** string

**Required:** True

**Values:** video | audio | ancillary-data

### **videoFormat**

The resolution of the video.

**Type:** string

**Required:** False

### **mediaStreamName**

A name that helps you distinguish one media stream from another.



**Type:** string

**Required:** True

## description

A description that can help you quickly identify what your media stream is used for.

**Type:** string

**Required:** False

## attributes

Attributes that are related to the media stream.

**Type:** [MediaStreamAttributes](#)

**Required:** False

## fmt

The format type number (sometimes referred to as RTP payload type) of the media stream. MediaConnect assigns this value to the media stream. For ST 2110 JPEG XS outputs, you need to provide this value to the receiver.

**Type:** integer

**Required:** True

**Format:** int32

## clockRate

The sample rate for the stream. This value is measured in kHz.

**Type:** integer

**Required:** False

**Format:** int32

## MediaStreamAttributes

Attributes that are related to the media stream.

## fmtp

A set of parameters that define the media stream.

**Type:** [Fmtp](#)

**Required:** True

## lang

The audio language, in a format that is recognized by the receiver.

**Type:** string

**Required:** False

## MediaStreamAttributesRequest

Attributes that are related to the media stream.

### fmtp

The settings that you want to use to define the media stream.

**Type:** [FmtpRequest](#)

**Required:** False

### lang

The audio language, in a format that is recognized by the receiver.

**Type:** string

**Required:** False

## ResponseError

An exception raised by 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 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:

### AddFlowMediaStreams

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

## Media streams: update, remove

A media stream represents one component of your content, such as video, audio, or ancillary data. After you add a media stream to your flow, you can associate it with sources and outputs that use the ST 2110 JPEG XS or CDI protocol.

## URI

/v1/flows/*flowArn*/mediaStreams/*mediaStreamName*

# HTTP methods

## PUT

**Operation ID:** UpdateFlowMediaStream

Updates an existing media stream.

### Path parameters

Name	Type	Required	Description
<i>flowArn</i>	String	True	The Amazon Resource Name (ARN) of the flow.
<i>mediaStreamName</i>	String	True	The name of the media stream that you want to update.

### Responses

Status code	Response model	Description
202	<a href="#">UpdateFlowMediaStreamResponse</a>	MediaConnect is starting the flow.
400	<a href="#">ResponseError</a>	The request that you submitted is not valid.
403	<a href="#">ResponseError</a>	You don't have the required permissions to perform this operation.
404	<a href="#">ResponseError</a>	MediaConnect did not find the resource that you specified in the request.

Status code	Response model	Description
429	<a href="#">ResponseError</a>	You have exceeded the service request rate limit for your MediaConnect account.
500	<a href="#">ResponseError</a>	MediaConnect can't fulfill your request because it encountered an unexpected condition.
503	<a href="#">ResponseError</a>	MediaConnect is currently unavailable. Try again later.

## DELETE

### Operation ID: RemoveFlowMediaStream

Removes a media stream from a flow. If the media stream is already associated with a source or output, that association is also removed.

### Path parameters

Name	Type	Required	Description
<i>flowArn</i>	String	True	The Amazon Resource Name (ARN) of the flow.
<i>mediaStreamName</i>	String	True	The name of the media stream that you want to update.

## Responses

Status code	Response model	Description
200	<a href="#">RemoveFlowMediaStreamResponse</a>	The media stream was successfully removed from the flow.
400	<a href="#">ResponseError</a>	The request that you submitted is not valid.
403	<a href="#">ResponseError</a>	You don't have the required permissions to perform this operation.
404	<a href="#">ResponseError</a>	MediaConnect did not find the resource that you specified in the request.
429	<a href="#">ResponseError</a>	You have exceeded the service request rate limit for your MediaConnect account.
500	<a href="#">ResponseError</a>	MediaConnect can't fulfill your request because it encountered an unexpected condition.
503	<a href="#">ResponseError</a>	MediaConnect is currently unavailable. Try again later.

## Schemas

### Request bodies

#### PUT schema

```
{
  "mediaStreamType": enum,
  "videoFormat": "string",
```

```
"description": "string",
"attributes": {
  "fmt": {
    "colorimetry": enum,
    "par": "string",
    "tcs": enum,
    "scanMode": enum,
    "range": enum,
    "channelOrder": "string",
    "exactFramerate": "string"
  },
  "lang": "string"
},
"clockRate": integer
}
```

## Response bodies

### RemoveFlowMediaStreamResponse schema

```
{
  "flowArn": "string",
  "mediaStreamName": "string"
}
```

### UpdateFlowMediaStreamResponse schema

```
{
  "mediaStream": {
    "mediaStreamId": integer,
    "mediaStreamType": enum,
    "videoFormat": "string",
    "mediaStreamName": "string",
    "description": "string",
    "attributes": {
      "fmt": {
        "colorimetry": enum,
        "par": "string",
        "tcs": enum,
        "scanMode": enum,
        "range": enum,
        "channelOrder": "string",
```

```
    "exactFramerate": "string",
  },
  "lang": "string",
},
"fmt": integer,
"clockRate": integer
},
"flowArn": "string"
}
```

## ResponseError schema

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

# Properties

## Fmt

A set of parameters that define the media stream.

### colorimetry

The format used for the representation of color.

**Type:** string

**Required:** False

**Values:** BT601 | BT709 | BT2020 | BT2100 | ST2065-1 | ST2065-3 | XYZ

## par

The pixel aspect ratio (PAR) of the video.

**Type:** string

**Required:** False

## tcs

The transfer characteristic system (TCS) that is used in the video.



**Type:** string

**Required:** False

**Values:** SDR | PQ | HLG | LINEAR | BT2100LINPQ | BT2100LINHLG | ST2065-1 | ST428-1 | DENSITY

## scanMode

The type of compression that was used to smooth the video's appearance.

**Type:** string

**Required:** False

**Values:** progressive | interlace | progressive-segmented-frame

## range

The encoding range of the video.

**Type:** string

**Required:** False

**Values:** NARROW | FULL | FULLPROTECT

## channelOrder

The format of the audio channel.

**Type:** string

**Required:** False

## exactFramerate

The frame rate for the video stream, in frames/second. For example: 60000/1001.

**Type:** string

**Required:** False

## FmtRequest

The settings that you want to use to define the media stream.

## colorimetry

The format that is used for the representation of color.

**Type:** string

**Required:** False

**Values:** BT601 | BT709 | BT2020 | BT2100 | ST2065-1 | ST2065-3 | XYZ

## par

The pixel aspect ratio (PAR) of the video.

**Type:** string

**Required:** False

## tcs

The transfer characteristic system (TCS) that is used in the video.

**Type:** string

**Required:** False

**Values:** SDR | PQ | HLG | LINEAR | BT2100LINPQ | BT2100LINHLG | ST2065-1 | ST428-1 | DENSITY

## scanMode

The type of compression that was used to smooth the video's appearance

**Type:** string

**Required:** False

**Values:** progressive | interlace | progressive-segmented-frame

## range

The encoding range of the video.

**Type:** string

**Required:** False

**Values:** NARROW | FULL | FULLPROTECT

## channelOrder

The format of the audio channel.

**Type:** string

**Required:** False

## exactFramerate

The frame rate for the video stream, in frames/second. For example: 60000/1001.

**Type:** string

**Required:** False

## MediaStream

A single track or stream of media that contains video, audio, or ancillary data. After you add a media stream to a flow, you can associate it with sources and outputs on that flow, as long as they use the CDI protocol or the ST 2110 JPEG XS protocol. Each source or output can consist of one or many media streams.

### mediaStreamId

A unique identifier for the media stream.

**Type:** integer

**Required:** True

**Format:** int32

### mediaStreamType

The type of media stream.

**Type:** string

**Required:** True

**Values:** video | audio | ancillary-data

### videoFormat

The resolution of the video.

**Type:** string

**Required:** False

## mediaStreamName

A name that helps you distinguish one media stream from another.

**Type:** string

**Required:** True

## description

A description that can help you quickly identify what your media stream is used for.

**Type:** string

**Required:** False

## attributes

Attributes that are related to the media stream.

**Type:** [MediaStreamAttributes](#)

**Required:** False

## fmt

The format type number (sometimes referred to as RTP payload type) of the media stream. MediaConnect assigns this value to the media stream. For ST 2110 JPEG XS outputs, you need to provide this value to the receiver.

**Type:** integer

**Required:** True

**Format:** int32

## clockRate

The sample rate for the stream. This value is measured in kHz.

**Type:** integer

**Required:** False

**Format:** int32

## MediaStreamAttributes

Attributes that are related to the media stream.

### fmtp

A set of parameters that define the media stream.

**Type:** [Fmtp](#)

**Required:** True

### lang

The audio language, in a format that is recognized by the receiver.

**Type:** string

**Required:** False

## MediaStreamAttributesRequest

Attributes that are related to the media stream.

### fmtp

The settings that you want to use to define the media stream.

**Type:** [FmtpRequest](#)

**Required:** False

### lang

The audio language, in a format that is recognized by the receiver.

**Type:** string

**Required:** False

## RemoveFlowMediaStreamResponse

The result of a successful RemoveFlowMediaStream request.

### flowArn

The Amazon Resource Name (ARN) of the flow.

**Type:** string

**Required:** True

### mediaStreamName

A name that helps you distinguish one media stream from another.

**Type:** string

**Required:** True

## ResponseError

An exception raised by 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 MediaConnect returns to help you understand the reason that the request did not succeed.

**Type:** string

**Required:** True

## UpdateFlowMediaStreamRequest

Update a media stream on a flow.

### mediaStreamType

The type of media stream.

**Type:** string

**Required:** False

**Values:** video | audio | ancillary-data

### videoFormat

The resolution of the video.

**Type:** string

**Required:** False

### description

Description

**Type:** string

**Required:** False

### attributes

The attributes that you want to assign to the media stream.

**Type:** [MediaStreamAttributesRequest](#)

**Required:** False

### clockRate

The sample rate (in kHz) for the stream. If the media stream type is video or ancillary data, set this value to 90000. If the media stream type is audio, set this value to either 48000 or 96000.

**Type:** integer

**Required:** False

**Format:** int32

## UpdateFlowMediaStreamResponse

The result of a successful UpdateFlowMediaStream request.

### mediaStream

The media stream that you updated.

**Type:** [MediaStream](#)

**Required:** True

## flowArn

The ARN of the flow that is associated with the media stream that you updated.

**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:

### UpdateFlowMediaStream

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

### RemoveFlowMediaStream

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



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

## Outputs: add

### URI

/v1/flows/*flowArn*/outputs

### HTTP methods

#### POST

**Operation ID:** AddFlowOutputs

Adds outputs to an existing flow. You can create up to 50 outputs per flow.

#### Path parameters

Name	Type	Required	Description
<i>flowArn</i>	String	True	The Amazon Resource Name (ARN) of the flow.

#### Responses

Status code	Response model	Description
201	<a href="#">AddFlowOutputsResponse</a>	MediaConnect created the new resource successfully.
400	<a href="#">ResponseError</a>	The request that you submitted is not valid.
403	<a href="#">ResponseError</a>	You don't have the required permissions to perform this operation.

Status code	Response model	Description
404	<a href="#">ResponseError</a>	MediaConnect did not find the resource that you specified in the request.
420	<a href="#">ResponseError</a>	Your account already contains the maximum number of 20 flows per account, per Region. For more information, contact AWS Support.
429	<a href="#">ResponseError</a>	You have exceeded the service request rate limit for your MediaConnect account.
500	<a href="#">ResponseError</a>	MediaConnect can't fulfill your request because it encountered an unexpected condition.
503	<a href="#">ResponseError</a>	MediaConnect is currently unavailable. Try again later.

## Schemas

### Request bodies

#### POST schema

```
{
  "outputs": [
    {
      "mediaStreamOutputConfigurations": [
        {
          "encodingParameters": {
            "encoderProfile": enum,
            "compressionFactor": number
          },

```

```

    "mediaStreamName": "string",
    "encodingName": enum,
    "destinationConfigurations": [
      {
        "destinationIp": "string",
        "destinationPort": integer,
        "interface": {
          "name": "string"
        }
      }
    ]
  },
  "streamId": "string",
  "minLatency": integer,
  "destination": "string",
  "maxLatency": integer,
  "description": "string",
  "smoothingLatency": integer,
  "vpcInterfaceAttachment": {
    "vpcInterfaceName": "string"
  },
  "remoteId": "string",
  "protocol": enum,
  "encryption": {
    "resourceId": "string",
    "roleArn": "string",
    "secretArn": "string",
    "constantInitializationVector": "string",
    "keyType": enum,
    "region": "string",
    "deviceId": "string",
    "url": "string",
    "algorithm": enum
  },
  "port": integer,
  "senderControlPort": integer,
  "name": "string",
  "cidrAllowList": [
    "string"
  ]
}
]

```

```
}
```

## Response bodies

### AddFlowOutputsResponse schema

```
{
  "outputs": [
    {
      "listenerAddress": "string",
      "mediaStreamOutputConfigurations": [
        {
          "encodingParameters": {
            "encoderProfile": enum,
            "compressionFactor": number
          },
          "mediaStreamName": "string",
          "encodingName": enum,
          "destinationConfigurations": [
            {
              "destinationIp": "string",
              "destinationPort": integer,
              "outboundIp": "string",
              "interface": {
                "name": "string"
              }
            }
          ]
        }
      ],
      "destination": "string",
      "description": "string",
      "entitlementArn": "string",
      "transport": {
        "streamId": "string",
        "minLatency": integer,
        "maxLatency": integer,
        "maxBitrate": integer,
        "sourceListenerPort": integer,
        "smoothingLatency": integer,
        "remoteId": "string",
        "sourceListenerAddress": "string",
        "senderIpAddress": "string",

```

```
    "protocol": enum,
    "senderControlPort": integer,
    "cidrAllowList": [
        "string"
    ],
    "maxSyncBuffer": integer
},
"vpcInterfaceAttachment": {
    "vpcInterfaceName": "string"
},
"bridgeArn": "string",
"outputArn": "string",
"encryption": {
    "resourceId": "string",
    "roleArn": "string",
    "secretArn": "string",
    "constantInitializationVector": "string",
    "keyType": enum,
    "region": "string",
    "deviceId": "string",
    "url": "string",
    "algorithm": enum
},
"port": integer,
"bridgePorts": [
    integer
],
"name": "string",
"dataTransferSubscriberFeePercent": integer,
"mediaLiveInputArn": "string"
}
],
"flowArn": "string"
}
```

## ResponseError schema

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

## Properties

### AddFlowOutputsRequest

Adds outputs to an existing flow. You can create up to 50 outputs per flow.

#### outputs

A list of outputs that you want to add.

**Type:** Array of type [AddOutputRequest](#)

**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](#)

**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.

#### mediaStreamOutputConfigurations

The definition for each media stream that is associated with the output.

**Type:** Array of type [MediaStreamOutputConfigurationRequest](#)

**Required:** False

### **streamId**

The stream ID that you want to use for this transport. This parameter applies only to Zixi and SRT caller-based streams.

**Type:** string

**Required:** False

### **minLatency**

The minimum latency in milliseconds for SRT-based streams. In streams that use the SRT protocol, this value that you set on your MediaConnect source or output represents the minimal potential latency of that connection. The latency of the stream is set to the highest number between the sender's minimum latency and the receiver's minimum latency.

**Type:** integer

**Required:** False

**Format:** int64

### **destination**

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

**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 RIST, RTP, and RTP-FEC streams.

**Type:** integer

**Required:** False

**Format:** int64

## vpcInterfaceAttachment

The VPC interface that you want to send your output to.

**Type:** [VpcInterfaceAttachment](#)

**Required:** False

## remoteld

The identifier that is assigned to the Zixi receiver. This parameter applies only to outputs that use Zixi pull.

**Type:** string

**Required:** False

## protocol

The protocol to use for the output.

**Type:** string

**Required:** True

**Values:** zixi-push | rtp-fec | rtp | zixi-pull | rist | st2110-jpegxs | cdi  
| srt-listener | srt-caller | fujitsu-qos | udp



## encryption

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

**Type:** [Encryption](#)

**Required:** False

## port

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

**Type:** integer

**Required:** False

## senderControlPort

The port that the flow uses to send outbound requests to initiate connection with the sender.

**Type:** integer

**Required:** False

**Format:** int32

## name

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

**Type:** string

**Required:** False

## cidrAllowList

The range of IP addresses that are allowed to initiate output requests to this flow. Format the IP addresses as a Classless Inter-Domain Routing (CIDR) block; for example, 10.0.0.0/16.

**Type:** Array of type string

**Required:** False

## DestinationConfiguration

The definition of a media stream that is associated with the output.

### destinationIp

The IP address where contents of the media stream will be sent.

**Type:** string

**Required:** True

### destinationPort

The port to use when the content of the media stream is distributed to the output.

**Type:** integer

**Required:** True

**Format:** int32

### outboundIp

The IP address that the receiver requires in order to establish a connection with the flow. This value is represented by the elastic network interface IP address of the VPC. This field applies only to outputs that use the CDI or ST 2110 JPEG XS or protocol.

**Type:** string

**Required:** True

### interface

The VPC interface that is used for the media stream associated with the output.

**Type:** [Interface](#)

**Required:** True

## DestinationConfigurationRequest

The definition of a media stream that you want to associate with the output.

## destinationIp

The IP address where you want MediaConnect to send contents of the media stream.

**Type:** string

**Required:** True

## destinationPort

The port that you want MediaConnect to use when it distributes the media stream to the output.

**Type:** integer

**Required:** True

**Format:** int32

## interface

The VPC interface that you want to use for the media stream associated with the output.

**Type:** [InterfaceRequest](#)

**Required:** True

## EncodingParameters

A collection of parameters that determine how MediaConnect will convert the content. These fields only apply to outputs on flows that have a CDI source.

### encoderProfile

A setting on the encoder that drives compression settings. This property only applies to video media streams associated with outputs that use the ST 2110 JPEG XS protocol, with a flow source that uses the CDI protocol.

**Type:** string

**Required:** True

**Values:** main | high

## **compressionFactor**

A value that is used to calculate compression for an output. The bitrate of the output is calculated as follows:

$$\text{Output bitrate} = (1 / \text{compressionFactor}) * (\text{source bitrate})$$

This property only applies to outputs that use the ST 2110 JPEG XS protocol, with a flow source that uses the CDI protocol. Valid values are in the range of 3.0 to 10.0, inclusive.

**Type:** number

**Required:** True

**Format:** float

## **EncodingParametersRequest**

A collection of parameters that determine how MediaConnect will convert the content. These fields only apply to outputs on flows that have a CDI source.

### **encoderProfile**

A setting on the encoder that drives compression settings. This property only applies to video media streams associated with outputs that use the ST 2110 JPEG XS protocol, if at least one source on the flow uses the CDI protocol.

**Type:** string

**Required:** True

**Values:** main | high

## **compressionFactor**

A value that is used to calculate compression for an output. The bitrate of the output is calculated as follows:

$$\text{Output bitrate} = (1 / \text{compressionFactor}) * (\text{source bitrate})$$

This property only applies to outputs that use the ST 2110 JPEG XS protocol, with a flow source that uses the CDI protocol. Valid values are in the range of 3.0 to 10.0, inclusive.

**Type:** number

**Required:** True

**Format:** float

## Encryption

Information about the encryption of the flow.

### resourceId

An identifier for the content. The service sends this value to the key server to identify the current endpoint. The resource ID is also known as the content ID. This parameter is required for SPEKE encryption and is not valid for static key encryption.

**Type:** string

**Required:** False

### roleArn

The Amazon Resource Name (ARN) of the role that you created during setup (when you set up 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:** False

### constantInitializationVector

A 128-bit, 16-byte hex value represented by a 32-character string, to be used with the key for encrypting content. This parameter is not valid for static key encryption.

**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:** speke | static-key | srt-password

## region

The AWS Region that the API Gateway proxy endpoint was created in. This parameter is required for SPEKE encryption and is not valid for static key encryption.

**Type:** string

**Required:** False

## deviceId

The value of one of the devices that you configured with your digital rights management (DRM) platform key provider. This parameter is required for SPEKE encryption and is not valid for static key encryption.

**Type:** string

**Required:** False

## url

The URL from the API Gateway proxy that you set up to talk to your key server. This parameter is required for SPEKE encryption and is not valid for static key encryption.

**Type:** string

**Required:** False

## 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

## Interface

The VPC interface that you want to use for the media stream associated with the output.

### name

The name of the VPC interface that you want to use for the media stream associated with the output.

**Type:** string

**Required:** True

## InterfaceRequest

The VPC interface that you want to designate where the media stream is coming from or going to.

### name

The name of the VPC interface.

**Type:** string

**Required:** True

## MediaStreamOutputConfiguration

The media stream that is associated with the output, and the parameters for that association.

### encodingParameters

A collection of parameters that determine how MediaConnect will convert the content. These fields only apply to outputs on flows that have a CDI source.

**Type:** [EncodingParameters](#)

**Required:** False

## mediaStreamName

A name that helps you distinguish one media stream from another.

**Type:** string

**Required:** True

## encodingName

The format that will be used to encode the data.

For ancillary data streams, set the encoding name to `smpte291`.

For audio streams, set the encoding name to `pcm`.

For video streams on sources or outputs that use the CDI protocol, set the encoding name to `raw`.

For video streams on sources or outputs that use the ST 2110 JPEG XS protocol, set the encoding name to `jxsv`.

**Type:** string

**Required:** True

**Values:** `jxsv` | `raw` | `smpte291` | `pcm`

## destinationConfigurations

The media streams that you want to associate with the output.

**Type:** Array of type [DestinationConfiguration](#)

**Required:** False

## MediaStreamOutputConfigurationRequest

The media stream that you want to associate with the output, and the parameters for that association.

### encodingParameters

A collection of parameters that determine how MediaConnect will convert the content. These fields only apply to outputs on flows that have a CDI source.



**Type:** [EncodingParametersRequest](#)

**Required:** False

### **mediaStreamName**

The name of the media stream that is associated with the output.

**Type:** string

**Required:** True

### **encodingName**

The format that will be used to encode the data.

For ancillary data streams, set the encoding name to `smpte291`.

For audio streams, set the encoding name to `pcm`.

For video, 2110 streams, set the encoding name to `raw`.

For video, JPEG XS streams, set the encoding name to `jxsv`.

**Type:** string

**Required:** True

**Values:** `jxsv` | `raw` | `smpte291` | `pcm`

### **destinationConfigurations**

The media streams that you want to associate with the output.

**Type:** Array of type [DestinationConfigurationRequest](#)

**Required:** False

## **Output**

The settings for an output.

### **listenerAddress**

The IP address that the receiver requires in order to establish a connection with the flow. For public networking, the ListenerAddress is represented by the elastic IP address of the flow. For private

networking, the ListenerAddress is represented by the elastic network interface IP address of the VPC. This field applies only to outputs that use a pull protocol, such as Zixi pull or SRT listener.

**Type:** string

**Required:** False

### mediaStreamOutputConfigurations

The configuration for each media stream that is associated with the output.

**Type:** Array of type [MediaStreamOutputConfiguration](#)

**Required:** False

### destination

The IP address where you want to send the output. This field applies only to outputs that use a push protocol, such as RIST or Zixi push.

**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

### 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](#)

**Required:** False

### **vpcInterfaceAttachment**

The VPC interface that you want to send your output to.

**Type:** [VpcInterfaceAttachment](#)

**Required:** False

### **bridgeArn**

The ARN of the bridge that added this output.

**Type:** string

**Required:** False

### **outputArn**

The ARN of the output.

**Type:** string

**Required:** True

### **encryption**

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

**Type:** [Encryption](#)

**Required:** False

### **port**

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

**Type:** integer

**Required:** False

## bridgePorts

The bridge output ports currently in use.

**Type:** Array of type integer

**Required:** False

## name

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

**Type:** string

**Required:** True

## dataTransferSubscriberFeePercent

The percentage of the entitlement data transfer fee that the subscriber is responsible for.

**Type:** integer

**Required:** False

## mediaLiveInputArn

The input ARN of the AWS Elemental MediaLive channel. This parameter is relevant only for outputs that were added by creating a MediaLive input.

**Type:** string

**Required:** False

## ResponseError

An exception raised by 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 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.

### **streamId**

The stream ID that you want to use for this transport. This parameter applies only to Zixi and SRT caller-based streams.

**Type:** string

**Required:** False

### **minLatency**

The minimum latency in milliseconds for SRT-based streams. In streams that use the SRT protocol, this value that you set on your MediaConnect source or output represents the minimal potential latency of that connection. The latency of the stream is set to the highest number between the sender's minimum latency and the receiver's minimum latency.

**Type:** integer

**Required:** False

**Format:** int64

### **maxLatency**

The maximum latency in milliseconds for a RIST source, a Zixi-based source, a Fujitsu-based source, or a Zixi-based output.

**Type:** integer

**Required:** False

**Format:** int64

### **maxBitrate**

The maximum bitrate for RIST, RTP, and RTP-FEC streams.

**Type:** integer

**Required:** False

**Format:** int64

### **sourceListenerPort**

Source port for SRT-caller protocol.

**Type:** integer

**Required:** False

### **smoothingLatency**

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

**Type:** integer

**Required:** False

**Format:** int64

### **remoteld**

The identifier that is assigned to the Zixi receiver. This parameter applies only to outputs that use Zixi pull.

**Type:** string

**Required:** False

### **sourceListenerAddress**

Source IP or domain name for SRT-caller protocol.

**Type:** string

**Required:** False

### **senderIpAddress**

The IP address that the flow communicates with to initiate connection with the sender.

**Type:** string

**Required:** False

## protocol

The protocol that is used by the source or output.

**Type:** string

**Required:** True

**Values:** zixi-push | rtp-fec | rtp | zixi-pull | rist | st2110-jpegxs | cdi  
| srt-listener | srt-caller | fujitsu-qos | udp

## senderControlPort

The port that the flow uses to send outbound requests to initiate connection with the sender.

**Type:** integer

**Required:** False

**Format:** int32

## cidrAllowList

The range of IP addresses that are allowed to initiate output requests to this flow. Format the IP addresses as a Classless Inter-Domain Routing (CIDR) block; for example, 10.0.0.0/16.

**Type:** Array of type string

**Required:** False

## maxSyncBuffer

The size of the buffer (in milliseconds) to use to sync incoming source data.

**Type:** integer

**Required:** False

**Format:** int32

## VpcInterfaceAttachment

The VPC interface that you want to send your output to.

### vpcInterfaceName

The name of the VPC interface that you want to send your output to.

**Type:** string

**Required:** False

## 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 v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

## Outputs: update, remove

### URI

/v1/flows/*flowArn*/outputs/*outputArn*

### HTTP methods

#### PUT

**Operation ID:** UpdateFlowOutput

Updates an existing flow output.



## Path parameters

Name	Type	Required	Description
<i>flowArn</i>	String	True	The Amazon Resource Name (ARN) of the flow.
<i>outputArn</i>	String	True	The ARN of the output that you want to update.

## Responses

Status code	Response model	Description
202	<a href="#">UpdateFlowOutputResponse</a>	MediaConnect is updating the output.
400	<a href="#">ResponseError</a>	The request that you submitted is not valid.
403	<a href="#">ResponseError</a>	You don't have the required permissions to perform this operation.
404	<a href="#">ResponseError</a>	MediaConnect did not find the resource that you specified in the request.
429	<a href="#">ResponseError</a>	You have exceeded the service request rate limit for your MediaConnect account.
500	<a href="#">ResponseError</a>	MediaConnect can't fulfill your request because it encountered an unexpected condition.

Status code	Response model	Description
503	<a href="#">ResponseError</a>	MediaConnect is currently unavailable. Try again later.

## 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

Name	Type	Required	Description
<i>flowArn</i>	String	True	The Amazon Resource Name (ARN) of the flow.
<i>outputArn</i>	String	True	The ARN of the output that you want to update.

### Responses

Status code	Response model	Description
202	<a href="#">RemoveFlowOutputResponse</a>	MediaConnect is removing the output.
400	<a href="#">ResponseError</a>	The request that you submitted is not valid.

Status code	Response model	Description
403	<a href="#">ResponseError</a>	You don't have the required permissions to perform this operation.
404	<a href="#">ResponseError</a>	MediaConnect did not find the resource that you specified in the request.
429	<a href="#">ResponseError</a>	You have exceeded the service request rate limit for your MediaConnect account.
500	<a href="#">ResponseError</a>	MediaConnect can't fulfill your request because it encountered an unexpected condition.
503	<a href="#">ResponseError</a>	MediaConnect is currently unavailable. Try again later.

## Schemas

### Request bodies

#### PUT schema

```
{
  "mediaStreamOutputConfigurations": [
    {
      "encodingParameters": {
        "encoderProfile": enum,
        "compressionFactor": number
      },
      "mediaStreamName": "string",
      "encodingName": enum,
      "destinationConfigurations": [
        {
          "destinationIp": "string",
```

```

        "destinationPort": integer,
        "interface": {
            "name": "string"
        }
    ]
}
],
"streamId": "string",
"minLatency": integer,
"destination": "string",
"maxLatency": integer,
"description": "string",
"smoothingLatency": integer,
"vpcInterfaceAttachment": {
    "vpcInterfaceName": "string"
},
"remoteId": "string",
"senderIpAddress": "string",
"protocol": enum,
"encryption": {
    "resourceId": "string",
    "roleArn": "string",
    "secretArn": "string",
    "constantInitializationVector": "string",
    "keyType": enum,
    "region": "string",
    "deviceId": "string",
    "url": "string",
    "algorithm": enum
},
"port": integer,
"senderControlPort": integer,
"cidrAllowList": [
    "string"
]
}

```

## Response bodies

### UpdateFlowOutputResponse schema

```
{
```

```
"output": {
  "listenerAddress": "string",
  "mediaStreamOutputConfigurations": [
    {
      "encodingParameters": {
        "encoderProfile": enum,
        "compressionFactor": number
      },
      "mediaStreamName": "string",
      "encodingName": enum,
      "destinationConfigurations": [
        {
          "destinationIp": "string",
          "destinationPort": integer,
          "outboundIp": "string",
          "interface": {
            "name": "string"
          }
        }
      ]
    }
  ],
  "destination": "string",
  "description": "string",
  "entitlementArn": "string",
  "transport": {
    "streamId": "string",
    "minLatency": integer,
    "maxLatency": integer,
    "maxBitrate": integer,
    "sourceListenerPort": integer,
    "smoothingLatency": integer,
    "remoteId": "string",
    "sourceListenerAddress": "string",
    "senderIpAddress": "string",
    "protocol": enum,
    "senderControlPort": integer,
    "cidrAllowList": [
      "string"
    ],
    "maxSyncBuffer": integer
  },
  "vpcInterfaceAttachment": {
    "vpcInterfaceName": "string"
```

```
    },
    "bridgeArn": "string",
    "outputArn": "string",
    "encryption": {
      "resourceId": "string",
      "roleArn": "string",
      "secretArn": "string",
      "constantInitializationVector": "string",
      "keyType": enum,
      "region": "string",
      "deviceId": "string",
      "url": "string",
      "algorithm": enum
    },
    "port": integer,
    "bridgePorts": [
      integer
    ],
    "name": "string",
    "dataTransferSubscriberFeePercent": integer,
    "mediaLiveInputArn": "string"
  },
  "flowArn": "string"
}
```

### RemoveFlowOutputResponse schema

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

### ResponseError schema

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

## Properties

### DestinationConfiguration

The definition of a media stream that is associated with the output.

#### destinationIp

The IP address where contents of the media stream will be sent.

**Type:** string

**Required:** True

#### destinationPort

The port to use when the content of the media stream is distributed to the output.

**Type:** integer

**Required:** True

**Format:** int32

#### outboundIp

The IP address that the receiver requires in order to establish a connection with the flow. This value is represented by the elastic network interface IP address of the VPC. This field applies only to outputs that use the CDI or ST 2110 JPEG XS or protocol.

**Type:** string

**Required:** True

#### interface

The VPC interface that is used for the media stream associated with the output.

**Type:** [Interface](#)

**Required:** True

### DestinationConfigurationRequest

The definition of a media stream that you want to associate with the output.

## destinationIp

The IP address where you want MediaConnect to send contents of the media stream.

**Type:** string

**Required:** True

## destinationPort

The port that you want MediaConnect to use when it distributes the media stream to the output.

**Type:** integer

**Required:** True

**Format:** int32

## interface

The VPC interface that you want to use for the media stream associated with the output.

**Type:** [InterfaceRequest](#)

**Required:** True

## EncodingParameters

A collection of parameters that determine how MediaConnect will convert the content. These fields only apply to outputs on flows that have a CDI source.

### encoderProfile

A setting on the encoder that drives compression settings. This property only applies to video media streams associated with outputs that use the ST 2110 JPEG XS protocol, with a flow source that uses the CDI protocol.

**Type:** string

**Required:** True

**Values:** main | high



## **compressionFactor**

A value that is used to calculate compression for an output. The bitrate of the output is calculated as follows:

$$\text{Output bitrate} = (1 / \text{compressionFactor}) * (\text{source bitrate})$$

This property only applies to outputs that use the ST 2110 JPEG XS protocol, with a flow source that uses the CDI protocol. Valid values are in the range of 3.0 to 10.0, inclusive.

**Type:** number

**Required:** True

**Format:** float

## **EncodingParametersRequest**

A collection of parameters that determine how MediaConnect will convert the content. These fields only apply to outputs on flows that have a CDI source.

### **encoderProfile**

A setting on the encoder that drives compression settings. This property only applies to video media streams associated with outputs that use the ST 2110 JPEG XS protocol, if at least one source on the flow uses the CDI protocol.

**Type:** string

**Required:** True

**Values:** main | high

## **compressionFactor**

A value that is used to calculate compression for an output. The bitrate of the output is calculated as follows:

$$\text{Output bitrate} = (1 / \text{compressionFactor}) * (\text{source bitrate})$$

This property only applies to outputs that use the ST 2110 JPEG XS protocol, with a flow source that uses the CDI protocol. Valid values are in the range of 3.0 to 10.0, inclusive.

**Type:** number

**Required:** True

**Format:** float

## Encryption

Information about the encryption of the flow.

### **resourceId**

An identifier for the content. The service sends this value to the key server to identify the current endpoint. The resource ID is also known as the content ID. This parameter is required for SPEKE encryption and is not valid for static key encryption.

**Type:** string

**Required:** False

### **roleArn**

The Amazon Resource Name (ARN) of the role that you created during setup (when you set up 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:** False

### **constantInitializationVector**

A 128-bit, 16-byte hex value represented by a 32-character string, to be used with the key for encrypting content. This parameter is not valid for static key encryption.

**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:** `speke` | `static-key` | `srt-password`

## region

The AWS Region that the API Gateway proxy endpoint was created in. This parameter is required for SPEKE encryption and is not valid for static key encryption.

**Type:** string

**Required:** False

## deviceId

The value of one of the devices that you configured with your digital rights management (DRM) platform key provider. This parameter is required for SPEKE encryption and is not valid for static key encryption.

**Type:** string

**Required:** False

## url

The URL from the API Gateway proxy that you set up to talk to your key server. This parameter is required for SPEKE encryption and is not valid for static key encryption.

**Type:** string

**Required:** False

## 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

## Interface

The VPC interface that you want to use for the media stream associated with the output.

### name

The name of the VPC interface that you want to use for the media stream associated with the output.

**Type:** string

**Required:** True

## InterfaceRequest

The VPC interface that you want to designate where the media stream is coming from or going to.

### name

The name of the VPC interface.

**Type:** string

**Required:** True

## MediaStreamOutputConfiguration

The media stream that is associated with the output, and the parameters for that association.

### encodingParameters

A collection of parameters that determine how MediaConnect will convert the content. These fields only apply to outputs on flows that have a CDI source.

**Type:** [EncodingParameters](#)

**Required:** False

## mediaStreamName

A name that helps you distinguish one media stream from another.

**Type:** string

**Required:** True

## encodingName

The format that will be used to encode the data.

For ancillary data streams, set the encoding name to `smpte291`.

For audio streams, set the encoding name to `pcm`.

For video streams on sources or outputs that use the CDI protocol, set the encoding name to `raw`.

For video streams on sources or outputs that use the ST 2110 JPEG XS protocol, set the encoding name to `jxsv`.

**Type:** string

**Required:** True

**Values:** `jxsv` | `raw` | `smpte291` | `pcm`

## destinationConfigurations

The media streams that you want to associate with the output.

**Type:** Array of type [DestinationConfiguration](#)

**Required:** False

## MediaStreamOutputConfigurationRequest

The media stream that you want to associate with the output, and the parameters for that association.

### encodingParameters

A collection of parameters that determine how MediaConnect will convert the content. These fields only apply to outputs on flows that have a CDI source.

**Type:** [EncodingParametersRequest](#)

**Required:** False

### **mediaStreamName**

The name of the media stream that is associated with the output.

**Type:** string

**Required:** True

### **encodingName**

The format that will be used to encode the data.

For ancillary data streams, set the encoding name to `smpte291`.

For audio streams, set the encoding name to `pcm`.

For video, 2110 streams, set the encoding name to `raw`.

For video, JPEG XS streams, set the encoding name to `jxsv`.

**Type:** string

**Required:** True

**Values:** `jxsv` | `raw` | `smpte291` | `pcm`

### **destinationConfigurations**

The media streams that you want to associate with the output.

**Type:** Array of type [DestinationConfigurationRequest](#)

**Required:** False

## **Output**

The settings for an output.

### **listenerAddress**

The IP address that the receiver requires in order to establish a connection with the flow. For public networking, the `ListenerAddress` is represented by the elastic IP address of the flow. For private

networking, the ListenerAddress is represented by the elastic network interface IP address of the VPC. This field applies only to outputs that use a pull protocol, such as Zixi pull or SRT listener.

**Type:** string

**Required:** False

### **mediaStreamOutputConfigurations**

The configuration for each media stream that is associated with the output.

**Type:** Array of type [MediaStreamOutputConfiguration](#)

**Required:** False

### **destination**

The IP address where you want to send the output. This field applies only to outputs that use a push protocol, such as RIST or Zixi push.

**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

### **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](#)

**Required:** False

### **vpcInterfaceAttachment**

The VPC interface that you want to send your output to.

**Type:** [VpcInterfaceAttachment](#)

**Required:** False

### **bridgeArn**

The ARN of the bridge that added this output.

**Type:** string

**Required:** False

### **outputArn**

The ARN of the output.

**Type:** string

**Required:** True

### **encryption**

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

**Type:** [Encryption](#)

**Required:** False

### **port**

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

**Type:** integer

**Required:** False



## bridgePorts

The bridge output ports currently in use.

**Type:** Array of type integer

**Required:** False

## name

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

**Type:** string

**Required:** True

## dataTransferSubscriberFeePercent

The percentage of the entitlement data transfer fee that the subscriber is responsible for.

**Type:** integer

**Required:** False

## mediaLiveInputArn

The input ARN of the AWS Elemental MediaLive channel. This parameter is relevant only for outputs that were added by creating 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 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 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.

## streamId

The stream ID that you want to use for this transport. This parameter applies only to Zixi and SRT caller-based streams.

**Type:** string

**Required:** False

## minLatency

The minimum latency in milliseconds for SRT-based streams. In streams that use the SRT protocol, this value that you set on your MediaConnect source or output represents the minimal potential

latency of that connection. The latency of the stream is set to the highest number between the sender's minimum latency and the receiver's minimum latency.

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

### **maxLatency**

The maximum latency in milliseconds for a RIST source, a Zixi-based source, a Fujitsu-based source, or a Zixi-based output.

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

### **maxBitrate**

The maximum bitrate for RIST, RTP, and RTP-FEC streams.

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

### **sourceListenerPort**

Source port for SRT-caller protocol.

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

### **smoothingLatency**

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

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

## remoteld

The identifier that is assigned to the Zixi receiver. This parameter applies only to outputs that use Zixi pull.

**Type:** string

**Required:** False

## sourceListenerAddress

Source IP or domain name for SRT-caller protocol.

**Type:** string

**Required:** False

## senderIpAddress

The IP address that the flow communicates with to initiate connection with the sender.

**Type:** string

**Required:** False

## protocol

The protocol that is used by the source or output.

**Type:** string

**Required:** True

**Values:** zixi-push | rtp-fec | rtp | zixi-pull | rist | st2110-jpegxs | cdi  
| srt-listener | srt-caller | fujitsu-qos | udp

## senderControlPort

The port that the flow uses to send outbound requests to initiate connection with the sender.

**Type:** integer

**Required:** False

**Format:** int32

## **cidrAllowList**

The range of IP addresses that are allowed to initiate output requests to this flow. Format the IP addresses as a Classless Inter-Domain Routing (CIDR) block; for example, 10.0.0.0/16.

**Type:** Array of type string

**Required:** False

## **maxSyncBuffer**

The size of the buffer (in milliseconds) to use to sync incoming source data.

**Type:** integer

**Required:** False

**Format:** int32

## **UpdateEncryption**

Information about the encryption of the flow.

### **resourceId**

An identifier for the content. The service sends this value to the key server to identify the current endpoint. The resource ID is also known as the content ID. This parameter is required for SPEKE encryption and is not valid for static key encryption.

**Type:** string

**Required:** False

### **roleArn**

The ARN of the role that you created during setup (when you set up 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

### **constantInitializationVector**

A 128-bit, 16-byte hex value represented by a 32-character string, to be used with the key for encrypting content. This parameter is not valid for static key encryption.

**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:** `speke` | `static-key` | `srt-password`

### **region**

The AWS Region that the API Gateway proxy endpoint was created in. This parameter is required for SPEKE encryption and is not valid for static key encryption.

**Type:** string

**Required:** False

### **deviceId**

The value of one of the devices that you configured with your digital rights management (DRM) platform key provider. This parameter is required for SPEKE encryption and is not valid for static key encryption.

**Type:** string

**Required:** False

## url

The URL from the API Gateway proxy that you set up to talk to your key server. This parameter is required for SPEKE encryption and is not valid for static key encryption.

**Type:** string

**Required:** False

## 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.

## mediaStreamOutputConfigurations

The configuration for each media stream that is associated with the output.

**Type:** Array of type [MediaStreamOutputConfigurationRequest](#)

**Required:** False

## streamId

The stream ID that you want to use for this transport. This parameter applies only to Zixi and SRT caller-based streams.

**Type:** string

**Required:** False

## minLatency

The minimum latency in milliseconds for SRT-based streams. In streams that use the SRT protocol, this value that you set on your MediaConnect source or output represents the minimal potential

latency of that connection. The latency of the stream is set to the highest number between the sender's minimum latency and the receiver's minimum latency.

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

### **destination**

The IP address where you want to send the output.

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

### **maxLatency**

The maximum latency in milliseconds. This parameter applies only to RIST-based, Zixi-based, and Fujitsu-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 RIST, RTP, and RTP-FEC streams.

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



## **vpcInterfaceAttachment**

The VPC interface that you want to send your output to.

**Type:** [VpcInterfaceAttachment](#)

**Required:** False

## **remotId**

The identifier that is assigned to the Zixi receiver. This parameter applies only to outputs that use Zixi pull.

**Type:** string

**Required:** False

## **senderIpAddress**

The IP address that the flow communicates with to initiate connection with the sender.

**Type:** string

**Required:** False

## **protocol**

The protocol to use for the output.

**Type:** string

**Required:** False

**Values:** zixi-push | rtp-fec | rtp | zixi-pull | rist | st2110-jpegxs | cdi  
| srt-listener | srt-caller | fujitsu-qos | udp

## **encryption**

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

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

**Required:** False

## port

The port to use when MediaConnect distributes content to the output.

**Type:** integer

**Required:** False

## senderControlPort

The port that the flow uses to send outbound requests to initiate connection with the sender.

**Type:** integer

**Required:** False

**Format:** int32

## cidrAllowList

The range of IP addresses that are allowed to initiate output requests to this flow. Format the IP addresses as a Classless Inter-Domain Routing (CIDR) block; for example, 10.0.0.0/16.

**Type:** Array of type string

**Required:** False

## UpdateFlowOutputResponse

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

### output

The new settings of the output that you updated.

**Type:** [Output](#)

**Required:** True

### flowArn

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

**Type:** string

**Required:** True

## VpcInterfaceAttachment

The VPC interface that you want to send your output to.

### vpcInterfaceName

The name of the VPC interface that you want to send your output to.

**Type:** string

**Required:** False

## 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 v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

## RemoveFlowOutput

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

- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

## Reservation offerings: describe, purchase

### URI

/v1/offerings/*offeringArn*

### HTTP methods

#### GET

**Operation ID:** DescribeOffering

Displays the details of an offering. The response includes the offering description, duration, outbound bandwidth, price, and Amazon Resource Name (ARN).

#### Path parameters

Name	Type	Required	Description
<i>offeringArn</i>	String	True	The Amazon Resource Name (ARN) of the offering.

#### Responses

Status code	Response model	Description
200	<a href="#">DescribeOfferingResponse</a>	MediaConnect returned the offering details successfully.

Status code	Response model	Description
400	<a href="#">ResponseError</a>	The request that you submitted is not valid.
404	<a href="#">ResponseError</a>	MediaConnect did not find the resource that you specified in the request.
429	<a href="#">ResponseError</a>	You have exceeded the service request rate limit for your MediaConnect account.
500	<a href="#">ResponseError</a>	MediaConnect can't fulfill your request because it encountered an unexpected condition.
503	<a href="#">ResponseError</a>	MediaConnect is currently unavailable. Try again later.

## POST

### Operation ID: PurchaseOffering

Submits a request to purchase an offering. If you already have an active reservation, you can't purchase another offering.

### Path parameters

Name	Type	Required	Description
<i>offeringArn</i>	String	True	The Amazon Resource Name (ARN) of the offering.

## Responses

Status code	Response model	Description
201	<a href="#">PurchaseOfferingResponse</a>	MediaConnect created the new resource successfully.
400	<a href="#">ResponseError</a>	The request that you submitted is not valid.
403	<a href="#">ResponseError</a>	You don't have the required permissions to perform this operation.
404	<a href="#">ResponseError</a>	MediaConnect did not find the resource that you specified in the request.
429	<a href="#">ResponseError</a>	You have exceeded the service request rate limit for your MediaConnect account.
500	<a href="#">ResponseError</a>	MediaConnect can't fulfill your request because it encountered an unexpected condition.
503	<a href="#">ResponseError</a>	MediaConnect is currently unavailable. Try again later.

## Schemas

### Request bodies

#### POST schema

```
{
  "start": "string",
  "reservationName": "string"
```

```
}
```

## Response bodies

### DescribeOfferingResponse schema

```
{
  "offering": {
    "duration": integer,
    "resourceSpecification": {
      "reservedBitrate": integer,
      "resourceType": enum
    },
    "durationUnits": enum,
    "offeringDescription": "string",
    "priceUnits": enum,
    "currencyCode": "string",
    "offeringArn": "string",
    "pricePerUnit": "string"
  }
}
```

### PurchaseOfferingResponse schema

```
{
  "reservation": {
    "reservationState": enum,
    "resourceSpecification": {
      "reservedBitrate": integer,
      "resourceType": enum
    },
    "start": "string",
    "durationUnits": enum,
    "reservationArn": "string",
    "reservationName": "string",
    "offeringArn": "string",
    "pricePerUnit": "string",
    "duration": integer,
    "end": "string",
    "offeringDescription": "string",
    "priceUnits": enum,
    "currencyCode": "string"
  }
}
```

```
}  
}
```

## ResponseError schema

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

## Properties

### DescribeOfferingResponse

The result of a successful DescribeOffering request.

#### offering

The offering that you requested a description of.

**Type:** [Offering](#)

**Required:** True

#### Offering

A savings plan that reserves a certain amount of outbound bandwidth usage at a discounted rate each month over a period of time.

#### duration

The length of time that your reservation would be active.

**Type:** integer

**Required:** True

#### resourceSpecification

A definition of the amount of outbound bandwidth that you would be reserving if you purchase the offering.



**Type:** [ResourceSpecification](#)

**Required:** True

### **durationUnits**

The unit of measurement for the duration of the offering.

**Type:** string

**Required:** True

**Values:** MONTHS

### **offeringDescription**

A description of the offering.

**Type:** string

**Required:** True

### **priceUnits**

The unit of measurement that is used for billing. This value, in combination with pricePerUnit, makes up the rate.

**Type:** string

**Required:** True

**Values:** HOURLY

### **currencyCode**

The type of currency that is used for billing. The currencyCode used for all reservations is US dollars.

**Type:** string

**Required:** True

### **offeringArn**

The Amazon Resource Name (ARN) that MediaConnect assigns to the offering.

**Type:** string

**Required:** True

### **pricePerUnit**

The cost of a single unit. This value, in combination with priceUnits, makes up the rate.

**Type:** string

**Required:** True

## **PurchaseOfferingRequest**

Submits a request to purchase an offering, which creates a reservation in your AWS account. If you already have an active reservation, you can't purchase another offering.

### **start**

The date and time that you want the reservation to begin, in Coordinated Universal Time (UTC). You can specify any date and time between 12:00am on the first day of the current month to the current time on today's date, inclusive.

Specify the `start` in a 24-hour notation. Use the following format: YYYY-MM-DDTHH:mm:ssZ, where T and Z are literal characters.

For example, to specify 11:30pm on March 5, 2020, enter **2020-03-05T23:30:00Z**.

**Type:** string

**Required:** True

### **reservationName**

The name that you want to use for the reservation.

**Type:** string

**Required:** True

## **PurchaseOfferingResponse**

The result of a successful PurchaseOffering request.

## reservation

The details of the reservation that you just created when you purchased the offering.

**Type:** [Reservation](#)

**Required:** True

## Reservation

A pricing agreement for a discounted rate for a specific outbound bandwidth that your MediaConnect account will use each month over a specific time period. The discounted rate in the reservation applies to outbound bandwidth for all flows from your account until your account reaches the amount of bandwidth in your reservation. If you use more outbound bandwidth than the agreed upon amount in a single month, the overage is charged at the on-demand rate.

## reservationState

The status of your reservation.

**Type:** string

**Required:** True

**Values:** ACTIVE | EXPIRED | PROCESSING | CANCELED

## resourceSpecification

A definition of the amount of outbound bandwidth that you would be reserving if you purchase the offering. MediaConnect defines the values that make up the resourceSpecification in the offering.

**Type:** [ResourceSpecification](#)

**Required:** True

## start

The day and time that the reservation becomes active. You set this value when you purchase the offering.

**Type:** string

**Required:** True

## **durationUnits**

The unit of measurement for the duration of the reservation. MediaConnect defines this value in the offering.

**Type:** string

**Required:** True

**Values:** MONTHS

## **reservationArn**

The Amazon Resource Name (ARN) that MediaConnect assigns to the reservation when you purchase an offering.

**Type:** string

**Required:** True

## **reservationName**

The name that you assigned to the reservation when you purchased the offering.

**Type:** string

**Required:** True

## **offeringArn**

The Amazon Resource Name (ARN) that MediaConnect assigns to the offering.

**Type:** string

**Required:** True

## **pricePerUnit**

The cost of a single unit. This value, in combination with priceUnits, makes up the rate. MediaConnect defines this value in the offering.

**Type:** string

**Required:** True

**duration**

The length of time that this reservation is active. MediaConnect defines this value in the offering.

**Type:** integer

**Required:** True

**end**

The day and time that this reservation expires. This value is calculated based on the start date and time that you set and the offering's duration.

**Type:** string

**Required:** True

**offeringDescription**

A description of the offering. MediaConnect defines this value in the offering.

**Type:** string

**Required:** True

**priceUnits**

The unit of measurement that is used for billing. This value, in combination with pricePerUnit, makes up the rate. MediaConnect defines this value in the offering.

**Type:** string

**Required:** True

**Values:** HOURLY

**currencyCode**

The type of currency that is used for billing. The currencyCode used for your reservation is US dollars.

**Type:** string

**Required:** True

## ResourceSpecification

A definition of what is being billed for, including the type and amount.

### reservedBitrate

The amount of outbound bandwidth that is discounted in the offering.

**Type:** integer

**Required:** False

### resourceType

The type of resource and the unit that is being billed for.

**Type:** string

**Required:** True

**Values:** Mbps\_Outbound\_Bandwidth

## ResponseError

An exception raised by 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 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:

## DescribeOffering

- [AWS Command Line Interface](#)

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

## PurchaseOffering

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

## Reservation offerings: list

### URI

/v1/offerings

### HTTP methods

### GET

**Operation ID:** ListOfferings

Displays a list of all offerings that are available to this account in the current AWS Region. If you have an active reservation (which means you've purchased an offering that has already started and hasn't expired yet), your account isn't eligible for other offerings.

### Query parameters

Name	Type	Required	Description
nextToken	String	False	The token that identifies which batch of results that you want to see. For example, you submit a <code>ListEntitlements</code> request with <code>MaxResults</code> set at 5. The service returns the first batch of results (up to 5) and a <code>NextToken</code> value. To see the next batch of results, you can submit the <code>ListEntitlements</code> request a second time and specify the <code>NextToken</code> value.
maxResults	String	False	The maximum number of results to return per API request. For example, you submit a <code>ListEntitlements</code> request with <code>MaxResults</code> set at 5. Although 20 items match your request, the service returns



Name	Type	Required	Description
			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.

## Responses

Status code	Response model	Description
200	<a href="#">ListOfferingsResponse</a>	MediaConnect returned the list of offerings successfully.
400	<a href="#">ResponseError</a>	The request that you submitted is not valid.
429	<a href="#">ResponseError</a>	You have exceeded the service request rate limit for your MediaConnect account.
500	<a href="#">ResponseError</a>	MediaConnect can't fulfill your request because it encountered an unexpected condition.

Status code	Response model	Description
503	<a href="#">ResponseError</a>	MediaConnect is currently unavailable. Try again later.

## Schemas

### Response bodies

#### ListOfferingsResponse schema

```
{
  "nextToken": "string",
  "offerings": [
    {
      "duration": integer,
      "resourceSpecification": {
        "reservedBitrate": integer,
        "resourceType": enum
      },
      "durationUnits": enum,
      "offeringDescription": "string",
      "priceUnits": enum,
      "currencyCode": "string",
      "offeringArn": "string",
      "pricePerUnit": "string"
    }
  ]
}
```

#### ResponseError schema

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

# Properties

## ListOfferingsResponse

The result of a successful `ListOfferings` request. The response includes the details of each offering that your account is eligible for. The response includes the following information for each offering: description, duration, outbound bandwidth, price, Amazon Resource Name (ARN), and the `NextToken` to use in a subsequent `ListOfferings` request.

### nextToken

The token that identifies which batch of results that you want to see. For example, you submit a `ListOfferings` 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 `ListOfferings` request a second time and specify the `NextToken` value.

**Type:** string

**Required:** False

### offerings

A list of offerings that are available to this account in the current AWS Region.

**Type:** Array of type [Offering](#)

**Required:** True

## Offering

A savings plan that reserves a certain amount of outbound bandwidth usage at a discounted rate each month over a period of time.

### duration

The length of time that your reservation would be active.

**Type:** integer

**Required:** True

## resourceSpecification

A definition of the amount of outbound bandwidth that you would be reserving if you purchase the offering.

**Type:** [ResourceSpecification](#)

**Required:** True

## durationUnits

The unit of measurement for the duration of the offering.

**Type:** string

**Required:** True

**Values:** MONTHS

## offeringDescription

A description of the offering.

**Type:** string

**Required:** True

## priceUnits

The unit of measurement that is used for billing. This value, in combination with pricePerUnit, makes up the rate.

**Type:** string

**Required:** True

**Values:** HOURLY

## currencyCode

The type of currency that is used for billing. The currencyCode used for all reservations is US dollars.

**Type:** string

**Required:** True

### **offeringArn**

The Amazon Resource Name (ARN) that MediaConnect assigns to the offering.

**Type:** string

**Required:** True

### **pricePerUnit**

The cost of a single unit. This value, in combination with priceUnits, makes up the rate.

**Type:** string

**Required:** True

## **ResourceSpecification**

A definition of what is being billed for, including the type and amount.

### **reservedBitrate**

The amount of outbound bandwidth that is discounted in the offering.

**Type:** integer

**Required:** False

### **resourceType**

The type of resource and the unit that is being billed for.

**Type:** string

**Required:** True

**Values:** Mbps\_Outbound\_Bandwidth

## **ResponseError**

An exception raised by 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 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:

### ListOfferings

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

## Reservations: describe

### URI

/v1/reservations/*reservationArn*

### HTTP methods

#### GET

**Operation ID:** DescribeReservation

Displays the details of a reservation. The response includes the reservation name, state, start date and time, and the details of the offering that make up the rest of the reservation (such as price, duration, and outbound bandwidth).

### Path parameters

Name	Type	Required	Description
<i>reservationArn</i>	String	True	The Amazon Resource Name (ARN) of the reservation.

### Responses

Status code	Response model	Description
200	<a href="#">DescribeReservationResponse</a>	MediaConnect returned the reservation details successfully.
400	<a href="#">ResponseError</a>	The request that you submitted is not valid.
404	<a href="#">ResponseError</a>	MediaConnect did not find the resource that you specified in the request.
429	<a href="#">ResponseError</a>	You have exceeded the service request rate limit for your MediaConnect account.
500	<a href="#">ResponseError</a>	MediaConnect can't fulfill your request because it encountered an unexpected condition.
503	<a href="#">ResponseError</a>	MediaConnect is currently unavailable. Try again later.

# Schemas

## Response bodies

### DescribeReservationResponse schema

```
{
  "reservation": {
    "reservationState": enum,
    "resourceSpecification": {
      "reservedBitrate": integer,
      "resourceType": enum
    },
    "start": "string",
    "durationUnits": enum,
    "reservationArn": "string",
    "reservationName": "string",
    "offeringArn": "string",
    "pricePerUnit": "string",
    "duration": integer,
    "end": "string",
    "offeringDescription": "string",
    "priceUnits": enum,
    "currencyCode": "string"
  }
}
```

### ResponseError schema

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

## Properties

### DescribeReservationResponse

The result of a successful DescribeReservation request.

#### reservation

The reservation that you requested a description of.



**Type:** [Reservation](#)

**Required:** True

## Reservation

A pricing agreement for a discounted rate for a specific outbound bandwidth that your MediaConnect account will use each month over a specific time period. The discounted rate in the reservation applies to outbound bandwidth for all flows from your account until your account reaches the amount of bandwidth in your reservation. If you use more outbound bandwidth than the agreed upon amount in a single month, the overage is charged at the on-demand rate.

### reservationState

The status of your reservation.

**Type:** string

**Required:** True

**Values:** ACTIVE | EXPIRED | PROCESSING | CANCELED

### resourceSpecification

A definition of the amount of outbound bandwidth that you would be reserving if you purchase the offering. MediaConnect defines the values that make up the resourceSpecification in the offering.

**Type:** [ResourceSpecification](#)

**Required:** True

### start

The day and time that the reservation becomes active. You set this value when you purchase the offering.

**Type:** string

**Required:** True

## **durationUnits**

The unit of measurement for the duration of the reservation. MediaConnect defines this value in the offering.

**Type:** string

**Required:** True

**Values:** MONTHS

## **reservationArn**

The Amazon Resource Name (ARN) that MediaConnect assigns to the reservation when you purchase an offering.

**Type:** string

**Required:** True

## **reservationName**

The name that you assigned to the reservation when you purchased the offering.

**Type:** string

**Required:** True

## **offeringArn**

The Amazon Resource Name (ARN) that MediaConnect assigns to the offering.

**Type:** string

**Required:** True

## **pricePerUnit**

The cost of a single unit. This value, in combination with priceUnits, makes up the rate. MediaConnect defines this value in the offering.

**Type:** string

**Required:** True

## duration

The length of time that this reservation is active. MediaConnect defines this value in the offering.

**Type:** integer

**Required:** True

## end

The day and time that this reservation expires. This value is calculated based on the start date and time that you set and the offering's duration.

**Type:** string

**Required:** True

## offeringDescription

A description of the offering. MediaConnect defines this value in the offering.

**Type:** string

**Required:** True

## priceUnits

The unit of measurement that is used for billing. This value, in combination with pricePerUnit, makes up the rate. MediaConnect defines this value in the offering.

**Type:** string

**Required:** True

**Values:** HOURLY

## currencyCode

The type of currency that is used for billing. The currencyCode used for your reservation is US dollars.

**Type:** string

**Required:** True

## ResourceSpecification

A definition of what is being billed for, including the type and amount.

### reservedBitrate

The amount of outbound bandwidth that is discounted in the offering.

**Type:** integer

**Required:** False

### resourceType

The type of resource and the unit that is being billed for.

**Type:** string

**Required:** True

**Values:** Mbps\_Outbound\_Bandwidth

## ResponseError

An exception raised by 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 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:

## DescribeReservation

- [AWS Command Line Interface](#)

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

## Reservations: list

### URI

/v1/reservations

### HTTP methods

### GET

**Operation ID:** ListReservations

Displays a list of all reservations that have been purchased by this account in the current AWS Region. This list includes all reservations in all stages (such as active and expired).

### Query parameters

Name	Type	Required	Description
nextToken	String	False	The token that identifies which batch of results that you want to see. For example, you submit a ListElements request with MaxResults set at 5. The service

Name	Type	Required	Description
			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.

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

## Responses

Status code	Response model	Description
200	<a href="#">ListReservationsResponse</a>	MediaConnect returned the list of reservations successfully.

Status code	Response model	Description
400	<a href="#">ResponseError</a>	The request that you submitted is not valid.
429	<a href="#">ResponseError</a>	You have exceeded the service request rate limit for your MediaConnect account.
500	<a href="#">ResponseError</a>	MediaConnect can't fulfill your request because it encountered an unexpected condition.
503	<a href="#">ResponseError</a>	MediaConnect is currently unavailable. Try again later.

## Schemas

### Response bodies

#### ListReservationsResponse schema

```
{
  "reservations": [
    {
      "reservationState": enum,
      "resourceSpecification": {
        "reservedBitrate": integer,
        "resourceType": enum
      },
      "start": "string",
      "durationUnits": enum,
      "reservationArn": "string",
      "reservationName": "string",
      "offeringArn": "string",
      "pricePerUnit": "string",
      "duration": integer,
      "end": "string",
      "offeringDescription": "string",
    }
  ]
}
```



```
    "priceUnits": enum,
    "currencyCode": "string"
  },
  "nextToken": "string"
}
```

## ResponseError schema

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

# Properties

## ListReservationsResponse

The result of a successful `ListReservations` request. The response includes the details of each offering that your account is eligible for. The response includes the following information for each offering: description, duration, outbound bandwidth, price, Amazon Resource Name (ARN), and the `NextToken` to use in a subsequent `ListOfferings` request.

### reservations

A list of all reservations that have been purchased by this account in the current AWS Region.

**Type:** Array of type [Reservation](#)

**Required:** True

### nextToken

The token that identifies which batch of results that you want to see. For example, you submit a `ListReservations` 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 `ListReservations` request a second time and specify the `NextToken` value.

**Type:** string

**Required:** False

## Reservation

A pricing agreement for a discounted rate for a specific outbound bandwidth that your MediaConnect account will use each month over a specific time period. The discounted rate in the reservation applies to outbound bandwidth for all flows from your account until your account reaches the amount of bandwidth in your reservation. If you use more outbound bandwidth than the agreed upon amount in a single month, the overage is charged at the on-demand rate.

### reservationState

The status of your reservation.

**Type:** string

**Required:** True

**Values:** ACTIVE | EXPIRED | PROCESSING | CANCELED

### resourceSpecification

A definition of the amount of outbound bandwidth that you would be reserving if you purchase the offering. MediaConnect defines the values that make up the resourceSpecification in the offering.

**Type:** [ResourceSpecification](#)

**Required:** True

### start

The day and time that the reservation becomes active. You set this value when you purchase the offering.

**Type:** string

**Required:** True

### durationUnits

The unit of measurement for the duration of the reservation. MediaConnect defines this value in the offering.

**Type:** string

**Required:** True

**Values:** MONTHS

### reservationArn

The Amazon Resource Name (ARN) that MediaConnect assigns to the reservation when you purchase an offering.

**Type:** string

**Required:** True

### reservationName

The name that you assigned to the reservation when you purchased the offering.

**Type:** string

**Required:** True

### offeringArn

The Amazon Resource Name (ARN) that MediaConnect assigns to the offering.

**Type:** string

**Required:** True

### pricePerUnit

The cost of a single unit. This value, in combination with priceUnits, makes up the rate. MediaConnect defines this value in the offering.

**Type:** string

**Required:** True

### duration

The length of time that this reservation is active. MediaConnect defines this value in the offering.

**Type:** integer

**Required:** True

**end**

The day and time that this reservation expires. This value is calculated based on the start date and time that you set and the offering's duration.

**Type:** string

**Required:** True

**offeringDescription**

A description of the offering. MediaConnect defines this value in the offering.

**Type:** string

**Required:** True

**priceUnits**

The unit of measurement that is used for billing. This value, in combination with pricePerUnit, makes up the rate. MediaConnect defines this value in the offering.

**Type:** string

**Required:** True

**Values:** HOURLY

**currencyCode**

The type of currency that is used for billing. The currencyCode used for your reservation is US dollars.

**Type:** string

**Required:** True

**ResourceSpecification**

A definition of what is being billed for, including the type and amount.

**reservedBitrate**

The amount of outbound bandwidth that is discounted in the offering.

**Type:** integer

**Required:** False

## resourceType

The type of resource and the unit that is being billed for.

**Type:** string

**Required:** True

**Values:** Mbps\_Outbound\_Bandwidth

## ResponseError

An exception raised by 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 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:

### ListReservations

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

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

## Source: update, remove

### URI

/v1/flows/*flowArn*/source/*sourceArn*

### HTTP methods

#### PUT

**Operation ID:** UpdateFlowSource

Updates the source of a flow.

#### Path parameters

Name	Type	Required	Description
<i>flowArn</i>	String	True	The Amazon Resource Name (ARN) of the flow.
<i>sourceArn</i>	String	True	The ARN of the source that you want to update.

#### Responses

Status code	Response model	Description
202	<a href="#">UpdateFlowSourceResponse</a>	MediaConnect is updating the source.

Status code	Response model	Description
400	<a href="#">ResponseError</a>	The request that you submitted is not valid.
403	<a href="#">ResponseError</a>	You don't have the required permissions to perform this operation.
404	<a href="#">ResponseError</a>	MediaConnect did not find the resource that you specified in the request.
429	<a href="#">ResponseError</a>	You have exceeded the service request rate limit for your MediaConnect account.
500	<a href="#">ResponseError</a>	MediaConnect can't fulfill your request because it encountered an unexpected condition.
503	<a href="#">ResponseError</a>	MediaConnect is currently unavailable. Try again later.

## DELETE

### Operation ID: RemoveFlowSource

Removes a source from a flow. Because a flow must have at least one source at all times, you can remove a source only from a flow that has two sources.

### Path parameters

Name	Type	Required	Description
<i>flowArn</i>	String	True	The Amazon Resource Name (ARN) of the flow.

Name	Type	Required	Description
<i>sourceArn</i>	String	True	The ARN of the source that you want to update.

Responses			
Status code	Response model		Description
202	<a href="#">RemoveFlowSourceResponse</a>		MediaConnect is deleting the flow.
400	<a href="#">ResponseError</a>		The request that you submitted is not valid.
403	<a href="#">ResponseError</a>		You don't have the required permissions to perform this operation.
404	<a href="#">ResponseError</a>		MediaConnect did not find the resource that you specified in the request.
429	<a href="#">ResponseError</a>		You have exceeded the service request rate limit for your MediaConnect account.
500	<a href="#">ResponseError</a>		MediaConnect can't fulfill your request because it encountered an unexpected condition.
503	<a href="#">ResponseError</a>		MediaConnect is currently unavailable. Try again later.



# Schemas

## Request bodies

### PUT schema

```
{
  "streamId": "string",
  "minLatency": integer,
  "vpcInterfaceName": "string",
  "maxLatency": integer,
  "description": "string",
  "maxBitrate": integer,
  "entitlementArn": "string",
  "sourceListenerPort": integer,
  "mediaStreamSourceConfigurations": [
    {
      "mediaStreamName": "string",
      "encodingName": enum,
      "inputConfigurations": [
        {
          "inputPort": integer,
          "interface": {
            "name": "string"
          }
        }
      ]
    }
  ],
  "sourceListenerAddress": "string",
  "whitelistCidr": "string",
  "senderIpAddress": "string",
  "protocol": enum,
  "senderControlPort": integer,
  "gatewayBridgeSource": {
    "bridgeArn": "string",
    "vpcInterfaceAttachment": {
      "vpcInterfaceName": "string"
    }
  },
  "decryption": {
    "resourceId": "string",
    "roleArn": "string",

```

```
"secretArn": "string",
"constantInitializationVector": "string",
"keyType": enum,
"region": "string",
"deviceId": "string",
"url": "string",
"algorithm": enum
},
"ingestPort": integer,
"maxSyncBuffer": integer
}
```

## Response bodies

### UpdateFlowSourceResponse schema

```
{
  "flowArn": "string",
  "source": {
    "sourceArn": "string",
    "vpcInterfaceName": "string",
    "description": "string",
    "entitlementArn": "string",
    "transport": {
      "streamId": "string",
      "minLatency": integer,
      "maxLatency": integer,
      "maxBitrate": integer,
      "sourceListenerPort": integer,
      "smoothingLatency": integer,
      "remoteId": "string",
      "sourceListenerAddress": "string",
      "senderIpAddress": "string",
      "protocol": enum,
      "senderControlPort": integer,
      "cidrAllowList": [
        "string"
      ],
      "maxSyncBuffer": integer
    },
  },
  "mediaStreamSourceConfigurations": [
    {
      "mediaStreamName": "string",
```

```

    "encodingName": enum,
    "inputConfigurations": [
      {
        "inputIp": "string",
        "inputPort": integer,
        "interface": {
          "name": "string"
        }
      }
    ],
    "whitelistCidr": "string",
    "senderIpAddress": "string",
    "senderControlPort": integer,
    "name": "string",
    "gatewayBridgeSource": {
      "bridgeArn": "string",
      "vpcInterfaceAttachment": {
        "vpcInterfaceName": "string"
      }
    },
    "dataTransferSubscriberFeePercent": integer,
    "ingestIp": "string",
    "decryption": {
      "resourceId": "string",
      "roleArn": "string",
      "secretArn": "string",
      "constantInitializationVector": "string",
      "keyType": enum,
      "region": "string",
      "deviceId": "string",
      "url": "string",
      "algorithm": enum
    },
    "ingestPort": integer
  }
}

```

## RemoveFlowSourceResponse schema

```

{
  "sourceArn": "string",

```

```
"flowArn": "string"
}
```

## ResponseError schema

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

## Properties

### Encryption

Information about the encryption of the flow.

#### resourceId

An identifier for the content. The service sends this value to the key server to identify the current endpoint. The resource ID is also known as the content ID. This parameter is required for SPEKE encryption and is not valid for static key encryption.

**Type:** string

**Required:** False

#### roleArn

The Amazon Resource Name (ARN) of the role that you created during setup (when you set up 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:** False

## **constantInitializationVector**

A 128-bit, 16-byte hex value represented by a 32-character string, to be used with the key for encrypting content. This parameter is not valid for static key encryption.

**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:** speke | static-key | srt-password

## **region**

The AWS Region that the API Gateway proxy endpoint was created in. This parameter is required for SPEKE encryption and is not valid for static key encryption.

**Type:** string

**Required:** False

## **deviceId**

The value of one of the devices that you configured with your digital rights management (DRM) platform key provider. This parameter is required for SPEKE encryption and is not valid for static key encryption.

**Type:** string

**Required:** False

## **url**

The URL from the API Gateway proxy that you set up to talk to your key server. This parameter is required for SPEKE encryption and is not valid for static key encryption.

**Type:** string

**Required:** False

## 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

## GatewayBridgeSource

The source configuration for cloud flows receiving a stream from a bridge.

### bridgeArn

The ARN of the bridge feeding this flow.

**Type:** string

**Required:** True

### vpcInterfaceAttachment

The name of the VPC interface attachment to use for this bridge source.

**Type:** [VpcInterfaceAttachment](#)

**Required:** False

## InputConfiguration

The transport parameters associated with an incoming media stream.

### inputIp

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

**Type:** string

**Required:** True

### inputPort

The port that the flow listens on for an incoming media stream.

**Type:** integer

**Required:** True

**Format:** int32

### interface

The VPC interface where the media stream comes in from.

**Type:** [Interface](#)

**Required:** True

## InputConfigurationRequest

The transport parameters that you want to associate with an incoming media stream.

### inputPort

The port that you want the flow to listen on for an incoming media stream.

**Type:** integer

**Required:** True

**Format:** int32

### interface

The VPC interface that you want to use for the incoming media stream.

**Type:** [InterfaceRequest](#)

**Required:** True

## Interface

The VPC interface that you want to use for the media stream associated with the output.

**name**

The name of the VPC interface that you want to use for the media stream associated with the output.

**Type:** string

**Required:** True

**InterfaceRequest**

The VPC interface that you want to designate where the media stream is coming from or going to.

**name**

The name of the VPC interface.

**Type:** string

**Required:** True

**MediaStreamSourceConfiguration**

The media stream that is associated with the source, and the parameters for that association.

**mediaStreamName**

A name that helps you distinguish one media stream from another.

**Type:** string

**Required:** True

**encodingName**

The format that was used to encode the data.

For ancillary data streams, set the encoding name to `smpte291`.

For audio streams, set the encoding name to `pcm`.

For video, 2110 streams, set the encoding name to `raw`.



For video, JPEG XS streams, set the encoding name to `jxsv`.

**Type:** string

**Required:** True

**Values:** `jxsv` | `raw` | `smpte291` | `pcm`

## inputConfigurations

The media streams that you want to associate with the source.

**Type:** Array of type [InputConfiguration](#)

**Required:** False

## MediaStreamSourceConfigurationRequest

The media stream that you want to associate with the source, and the parameters for that association.

### mediaStreamName

The name of the media stream.

**Type:** string

**Required:** True

### encodingName

The format that was used to encode the data.

For ancillary data streams, set the encoding name to `smpte291`.

For audio streams, set the encoding name to `pcm`.

For video, 2110 streams, set the encoding name to `raw`.

For video, JPEG XS streams, set the encoding name to `jxsv`.

**Type:** string

**Required:** True

**Values:** `jpeg` | `raw` | `smpte291` | `pcm`

## inputConfigurations

The media streams that you want to associate with the source.

**Type:** Array of type [InputConfigurationRequest](#)

**Required:** False

## RemoveFlowSourceResponse

The result of a successful `RemoveFlowSource` request including the ARN of the flow, as well as the ARN of the source that was removed.

### sourceArn

The ARN of the source that you removed.

**Type:** string

**Required:** True

### flowArn

The ARN of the flow that you removed the source from.

**Type:** string

**Required:** True

## ResponseError

An exception raised by 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 MediaConnect returns to help you understand the reason that the request did not succeed.

**Type:** string

**Required:** True

## Source

The details of the sources of the flow.

### sourceArn

The ARN of the source.

**Type:** string

**Required:** True

### vpcInterfaceName

The name of the VPC interface that the source content comes from.

**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

### 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

### transport

Attributes that are related to the transport stream.

**Type:** [Transport](#)

**Required:** False

## mediaStreamSourceConfigurations

The media stream that is associated with the source, and the parameters for that association.

**Type:** Array of type [MediaStreamSourceConfiguration](#)

**Required:** False

## whitelistCidr

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

**Type:** string

**Required:** False

## senderIpAddress

The IP address that the flow communicates with to initiate connection with the sender.

**Type:** string

**Required:** False

## senderControlPort

The port that the flow uses to send outbound requests to initiate connection with the sender.

**Type:** integer

**Required:** False

**Format:** int32

## name

The name of the source.

**Type:** string

**Required:** True

## gatewayBridgeSource

The source configuration for cloud flows receiving a stream from a bridge.

**Type:** [GatewayBridgeSource](#)

**Required:** False

## dataTransferSubscriberFeePercent

The percentage of the entitlement data transfer fee that you want the subscriber to be responsible for.

**Type:** integer

**Required:** False

## ingestIp

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

**Type:** string

**Required:** False

## decryption

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

**Type:** [Encryption](#)

**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

## Transport

Attributes that are related to the transport stream.

### **streamId**

The stream ID that you want to use for this transport. This parameter applies only to Zixi and SRT caller-based streams.

**Type:** string

**Required:** False

### **minLatency**

The minimum latency in milliseconds for SRT-based streams. In streams that use the SRT protocol, this value that you set on your MediaConnect source or output represents the minimal potential latency of that connection. The latency of the stream is set to the highest number between the sender's minimum latency and the receiver's minimum latency.

**Type:** integer

**Required:** False

**Format:** int64

### **maxLatency**

The maximum latency in milliseconds for a RIST source, a Zixi-based source, a Fujitsu-based source, or a Zixi-based output.

**Type:** integer

**Required:** False

**Format:** int64

### **maxBitrate**

The maximum bitrate for RIST, RTP, and RTP-FEC streams.

**Type:** integer

**Required:** False

**Format:** int64

### **sourceListenerPort**

Source port for SRT-caller protocol.

**Type:** integer

**Required:** False

### **smoothingLatency**

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

**Type:** integer

**Required:** False

**Format:** int64

### **remoteld**

The identifier that is assigned to the Zixi receiver. This parameter applies only to outputs that use Zixi pull.

**Type:** string

**Required:** False

### **sourceListenerAddress**

Source IP or domain name for SRT-caller protocol.

**Type:** string

**Required:** False

### **senderIpAddress**

The IP address that the flow communicates with to initiate connection with the sender.

**Type:** string

**Required:** False

## protocol

The protocol that is used by the source or output.

**Type:** string

**Required:** True

**Values:** zixi-push | rtp-fec | rtp | zixi-pull | rist | st2110-jpegxs | cdi  
| srt-listener | srt-caller | fujitsu-qos | udp

## senderControlPort

The port that the flow uses to send outbound requests to initiate connection with the sender.

**Type:** integer

**Required:** False

**Format:** int32

## cidrAllowList

The range of IP addresses that are allowed to initiate output requests to this flow. Format the IP addresses as a Classless Inter-Domain Routing (CIDR) block; for example, 10.0.0.0/16.

**Type:** Array of type string

**Required:** False

## maxSyncBuffer

The size of the buffer (in milliseconds) to use to sync incoming source data.

**Type:** integer

**Required:** False

**Format:** int32

## UpdateEncryption

Information about the encryption of the flow.



**resourceId**

An identifier for the content. The service sends this value to the key server to identify the current endpoint. The resource ID is also known as the content ID. This parameter is required for SPEKE encryption and is not valid for static key encryption.

**Type:** string

**Required:** False

**roleArn**

The ARN of the role that you created during setup (when you set up 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

**constantInitializationVector**

A 128-bit, 16-byte hex value represented by a 32-character string, to be used with the key for encrypting content. This parameter is not valid for static key encryption.

**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:** speke | static-key | srt-password

## region

The AWS Region that the API Gateway proxy endpoint was created in. This parameter is required for SPEKE encryption and is not valid for static key encryption.

**Type:** string

**Required:** False

## deviceId

The value of one of the devices that you configured with your digital rights management (DRM) platform key provider. This parameter is required for SPEKE encryption and is not valid for static key encryption.

**Type:** string

**Required:** False

## url

The URL from the API Gateway proxy that you set up to talk to your key server. This parameter is required for SPEKE encryption and is not valid for static key encryption.

**Type:** string

**Required:** False

## 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.

## streamId

The stream ID that you want to use for this transport. This parameter applies only to Zixi and SRT caller-based streams.

**Type:** string

**Required:** False

## minLatency

The minimum latency in milliseconds for SRT-based streams. In streams that use the SRT protocol, this value that you set on your MediaConnect source or output represents the minimal potential latency of that connection. The latency of the stream is set to the highest number between the sender's minimum latency and the receiver's minimum latency.

**Type:** integer

**Required:** False

**Format:** int64

## vpcInterfaceName

The name of the VPC interface that you want to send your output to.

**Type:** string

**Required:** False

## maxLatency

The maximum latency in milliseconds. This parameter applies only to RIST-based, Zixi-based, and Fujitsu-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 maximum bitrate for RIST, 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

### **sourceListenerPort**

Source port for SRT-caller protocol.

**Type:** integer

**Required:** False

### **mediaStreamSourceConfigurations**

The media stream that is associated with the source, and the parameters for that association.

**Type:** Array of type [MediaStreamSourceConfigurationRequest](#)

**Required:** False

### **sourceListenerAddress**

Source IP or domain name for SRT-caller protocol.

**Type:** string

**Required:** False

### **whitelistCidr**

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

**Type:** string

**Required:** False

### **senderIpAddress**

The IP address that the flow communicates with to initiate connection with the sender.

**Type:** string

**Required:** False

### **protocol**

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

**Type:** string

**Required:** False

**Values:** zixi-push | rtp-fec | rtp | zixi-pull | rist | st2110-jpegxs | cdi  
| srt-listener | srt-caller | fujitsu-qos | udp

### **senderControlPort**

The port that the flow uses to send outbound requests to initiate connection with the sender.

**Type:** integer

**Required:** False

### **gatewayBridgeSource**

The source configuration for cloud flows receiving a stream from a bridge.

**Type:** [UpdateGatewayBridgeSourceRequest](#)

**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

## maxSyncBuffer

The size of the buffer (in milliseconds) to use to sync incoming source data.

**Type:** integer

**Required:** False

**Format:** int32

## 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 details of the sources that are assigned to the flow.

**Type:** [Source](#)

**Required:** True

## UpdateGatewayBridgeSourceRequest

The source configuration for cloud flows receiving a stream from a bridge.

### bridgeArn

The ARN of the bridge feeding this flow.

**Type:** string

**Required:** False

### vpcInterfaceAttachment

The name of the VPC interface attachment to use for this bridge source.

**Type:** [VpcInterfaceAttachment](#)

**Required:** False

## VpcInterfaceAttachment

The VPC interface that you want to send your output to.

### vpcInterfaceName

The name of the VPC interface that you want to send your output to.

**Type:** string

**Required:** False

## 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 v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

## RemoveFlowSource

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

## Sources: add

### URI

/v1/flows/*flowArn*/source

### HTTP methods

#### POST

**Operation ID:** AddFlowSources

Adds sources to an existing flow. You can add up to one additional source, for a total of two, to each flow. You must enable source failover on the flow before you can add a second source.



Both sources on the flow must use the same protocol. (However, you can have one source that uses RTP and the other that uses RTP-FEC.)

### Path parameters

Name	Type	Required	Description
<i>flowArn</i>	String	True	The Amazon Resource Name (ARN) of the flow.

### Responses

Status code	Response model	Description
201	<a href="#">AddFlowSourcesResponse</a>	MediaConnect created the new resource successfully.
400	<a href="#">ResponseError</a>	The request that you submitted is not valid.
403	<a href="#">ResponseError</a>	You don't have the required permissions to perform this operation.
404	<a href="#">ResponseError</a>	MediaConnect did not find the resource that you specified in the request.
429	<a href="#">ResponseError</a>	You have exceeded the service request rate limit for your MediaConnect account.
500	<a href="#">ResponseError</a>	MediaConnect can't fulfill your request because it encountered an unexpected condition.

Status code	Response model	Description
503	<a href="#">ResponseError</a>	MediaConnect is currently unavailable. Try again later.

## Schemas

### Request bodies

#### POST schema

```
{
  "sources": [
    {
      "streamId": "string",
      "minLatency": integer,
      "vpcInterfaceName": "string",
      "maxLatency": integer,
      "description": "string",
      "maxBitrate": integer,
      "entitlementArn": "string",
      "sourceListenerPort": integer,
      "mediaStreamSourceConfigurations": [
        {
          "mediaStreamName": "string",
          "encodingName": enum,
          "inputConfigurations": [
            {
              "inputPort": integer,
              "interface": {
                "name": "string"
              }
            }
          ]
        }
      ]
    },
    "sourceListenerAddress": "string",
    "whitelistCidr": "string",
    "senderIpAddress": "string",
    "protocol": enum,
    "senderControlPort": integer,
```

```
    "name": "string",
    "gatewayBridgeSource": {
      "bridgeArn": "string",
      "vpcInterfaceAttachment": {
        "vpcInterfaceName": "string"
      }
    },
    "decryption": {
      "resourceId": "string",
      "roleArn": "string",
      "secretArn": "string",
      "constantInitializationVector": "string",
      "keyType": enum,
      "region": "string",
      "deviceId": "string",
      "url": "string",
      "algorithm": enum
    },
    "ingestPort": integer,
    "maxSyncBuffer": integer
  }
]
```

## Response bodies

### AddFlowSourcesResponse schema

```
{
  "sources": [
    {
      "sourceArn": "string",
      "vpcInterfaceName": "string",
      "description": "string",
      "entitlementArn": "string",
      "transport": {
        "streamId": "string",
        "minLatency": integer,
        "maxLatency": integer,
        "maxBitrate": integer,
        "sourceListenerPort": integer,
        "smoothingLatency": integer,
        "remoteId": "string",

```

```

    "sourceListenerAddress": "string",
    "senderIpAddress": "string",
    "protocol": enum,
    "senderControlPort": integer,
    "cidrAllowList": [
        "string"
    ],
    "maxSyncBuffer": integer
},
"mediaStreamSourceConfigurations": [
    {
        "mediaStreamName": "string",
        "encodingName": enum,
        "inputConfigurations": [
            {
                "inputIp": "string",
                "inputPort": integer,
                "interface": {
                    "name": "string"
                }
            }
        ]
    }
],
"whitelistCidr": "string",
"senderIpAddress": "string",
"senderControlPort": integer,
"name": "string",
"gatewayBridgeSource": {
    "bridgeArn": "string",
    "vpcInterfaceAttachment": {
        "vpcInterfaceName": "string"
    }
},
"dataTransferSubscriberFeePercent": integer,
"ingestIp": "string",
"decryption": {
    "resourceId": "string",
    "roleArn": "string",
    "secretArn": "string",
    "constantInitializationVector": "string",
    "keyType": enum,
    "region": "string",
    "deviceId": "string",

```

```
    "url": "string",
    "algorithm": enum
  },
  "ingestPort": integer
},
"flowArn": "string"
}
```

## ResponseError schema

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

## Properties

### AddFlowSourcesRequest

Adds sources to an existing flow. You can add up to one additional source, for a total of two, to each flow.

#### sources

The list of sources that you want to add.

**Type:** Array of type [SetSourceRequest](#)

**Required:** True

### AddFlowSourcesResponse

The result of a successful AddFlowSources request. The response includes the details of the sources that you just added.

#### sources

The details of the sources that you just added.

**Type:** Array of type [Source](#)

**Required:** True

## **flowArn**

The ARN of the flow that you just added sources to.

**Type:** string

**Required:** True

## **Encryption**

Information about the encryption of the flow.

### **resourceId**

An identifier for the content. The service sends this value to the key server to identify the current endpoint. The resource ID is also known as the content ID. This parameter is required for SPEKE encryption and is not valid for static key encryption.

**Type:** string

**Required:** False

### **roleArn**

The Amazon Resource Name (ARN) of the role that you created during setup (when you set up 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:** False

### **constantInitializationVector**

A 128-bit, 16-byte hex value represented by a 32-character string, to be used with the key for encrypting content. This parameter is not valid for static key encryption.

**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:** `speke` | `static-key` | `srt-password`

## region

The AWS Region that the API Gateway proxy endpoint was created in. This parameter is required for SPEKE encryption and is not valid for static key encryption.

**Type:** string

**Required:** False

## deviceId

The value of one of the devices that you configured with your digital rights management (DRM) platform key provider. This parameter is required for SPEKE encryption and is not valid for static key encryption.

**Type:** string

**Required:** False

## url

The URL from the API Gateway proxy that you set up to talk to your key server. This parameter is required for SPEKE encryption and is not valid for static key encryption.

**Type:** string

**Required:** False

## 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

## GatewayBridgeSource

The source configuration for cloud flows receiving a stream from a bridge.

### bridgeArn

The ARN of the bridge feeding this flow.

**Type:** string

**Required:** True

### vpcInterfaceAttachment

The name of the VPC interface attachment to use for this bridge source.

**Type:** [VpcInterfaceAttachment](#)

**Required:** False

## InputConfiguration

The transport parameters associated with an incoming media stream.

### inputIp

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

**Type:** string

**Required:** True

### inputPort

The port that the flow listens on for an incoming media stream.



**Type:** integer  
**Required:** True  
**Format:** int32

## interface

The VPC interface where the media stream comes in from.

**Type:** [Interface](#)  
**Required:** True

## InputConfigurationRequest

The transport parameters that you want to associate with an incoming media stream.

### inputPort

The port that you want the flow to listen on for an incoming media stream.

**Type:** integer  
**Required:** True  
**Format:** int32

## interface

The VPC interface that you want to use for the incoming media stream.

**Type:** [InterfaceRequest](#)  
**Required:** True

## Interface

The VPC interface that you want to use for the media stream associated with the output.

### name

The name of the VPC interface that you want to use for the media stream associated with the output.

**Type:** string

**Required:** True

## InterfaceRequest

The VPC interface that you want to designate where the media stream is coming from or going to.

### name

The name of the VPC interface.

**Type:** string

**Required:** True

## MediaStreamSourceConfiguration

The media stream that is associated with the source, and the parameters for that association.

### mediaStreamName

A name that helps you distinguish one media stream from another.

**Type:** string

**Required:** True

### encodingName

The format that was used to encode the data.

For ancillary data streams, set the encoding name to `smpte291`.

For audio streams, set the encoding name to `pcm`.

For video, 2110 streams, set the encoding name to `raw`.

For video, JPEG XS streams, set the encoding name to `jxsv`.

**Type:** string

**Required:** True

**Values:** `jxsv` | `raw` | `smpte291` | `pcm`

## inputConfigurations

The media streams that you want to associate with the source.

**Type:** Array of type [InputConfiguration](#)

**Required:** False

## MediaStreamSourceConfigurationRequest

The media stream that you want to associate with the source, and the parameters for that association.

### mediaStreamName

The name of the media stream.

**Type:** string

**Required:** True

### encodingName

The format that was used to encode the data.

For ancillary data streams, set the encoding name to `smpte291`.

For audio streams, set the encoding name to `pcm`.

For video, 2110 streams, set the encoding name to `raw`.

For video, JPEG XS streams, set the encoding name to `jxsv`.

**Type:** string

**Required:** True

**Values:** `jxsv` | `raw` | `smpte291` | `pcm`

## inputConfigurations

The media streams that you want to associate with the source.

**Type:** Array of type [InputConfigurationRequest](#)

**Required:** False

## ResponseError

An exception raised by 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 MediaConnect returns to help you understand the reason that the request did not succeed.

**Type:** string

**Required:** True

## SetGatewayBridgeSourceRequest

The source configuration for cloud flows receiving a stream from a bridge.

### bridgeArn

The ARN of the bridge feeding this flow.

**Type:** string

**Required:** True

### vpcInterfaceAttachment

The name of the VPC interface attachment to use for this bridge source.

**Type:** [VpcInterfaceAttachment](#)

**Required:** False

## SetSourceRequest

The settings for the source that you want to use for the new flow.

### streamId

The stream ID that you want to use for this transport. This parameter applies only to Zixi and SRT caller-based streams.

**Type:** string

**Required:** False

### **minLatency**

The minimum latency in milliseconds for SRT-based streams. In streams that use the SRT protocol, this value that you set on your MediaConnect source or output represents the minimal potential latency of that connection. The latency of the stream is set to the highest number between the sender's minimum latency and the receiver's minimum latency.

**Type:** integer

**Required:** False

**Format:** int64

### **vpcInterfaceName**

The name of the VPC interface that you want to use for the source.

**Type:** string

**Required:** False

### **maxLatency**

The maximum latency in milliseconds. This parameter applies only to RIST-based, Zixi-based, and Fujitsu-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 maximum bitrate for RIST, 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

**sourceListenerPort**

Source port for SRT-caller protocol.

**Type:** integer

**Required:** False

**mediaStreamSourceConfigurations**

The media stream that is associated with the source, and the parameters for that association.

**Type:** Array of type [MediaStreamSourceConfigurationRequest](#)

**Required:** False

**sourceListenerAddress**

Source IP or domain name for SRT-caller protocol.

**Type:** string

**Required:** False

## **whitelistCidr**

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

**Type:** string

**Required:** False

## **senderIpAddress**

The IP address that the flow communicates with to initiate connection with the sender.

**Type:** string

**Required:** False

## **protocol**

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

**Type:** string

**Required:** False

**Values:** zixi-push | rtp-fec | rtp | zixi-pull | rist | st2110-jpegxs | cdi  
| srt-listener | srt-caller | fujitsu-qos | udp

## **senderControlPort**

The port that the flow uses to send outbound requests to initiate connection with the sender.

**Type:** integer

**Required:** False

## **name**

The name of the source.

**Type:** string

**Required:** False

## gatewayBridgeSource

The source configuration for cloud flows receiving a stream from a bridge.

**Type:** [SetGatewayBridgeSourceRequest](#)

**Required:** False

## decryption

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

**Type:** [Encryption](#)

**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

## maxSyncBuffer

The size of the buffer (in milliseconds) to use to sync incoming source data.

**Type:** integer

**Required:** False

## Source

The details of the sources of the flow.

### sourceArn

The ARN of the source.

**Type:** string



**Required:** True

### **vpcInterfaceName**

The name of the VPC interface that the source content comes from.

**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

### **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

### **transport**

Attributes that are related to the transport stream.

**Type:** [Transport](#)

**Required:** False

### **mediaStreamSourceConfigurations**

The media stream that is associated with the source, and the parameters for that association.

**Type:** Array of type [MediaStreamSourceConfiguration](#)

**Required:** False

## **whitelistCidr**

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

**Type:** string

**Required:** False

## **senderIpAddress**

The IP address that the flow communicates with to initiate connection with the sender.

**Type:** string

**Required:** False

## **senderControlPort**

The port that the flow uses to send outbound requests to initiate connection with the sender.

**Type:** integer

**Required:** False

**Format:** int32

## **name**

The name of the source.

**Type:** string

**Required:** True

## **gatewayBridgeSource**

The source configuration for cloud flows receiving a stream from a bridge.

**Type:** [GatewayBridgeSource](#)

**Required:** False

**dataTransferSubscriberFeePercent**

The percentage of the entitlement data transfer fee that you want the subscriber to be responsible for.

**Type:** integer

**Required:** False

**ingestIp**

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

**Type:** string

**Required:** False

**decryption**

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

**Type:** [Encryption](#)

**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

**Transport**

Attributes that are related to the transport stream.

**streamId**

The stream ID that you want to use for this transport. This parameter applies only to Zixi and SRT caller-based streams.

**Type:** string

**Required:** False

### **minLatency**

The minimum latency in milliseconds for SRT-based streams. In streams that use the SRT protocol, this value that you set on your MediaConnect source or output represents the minimal potential latency of that connection. The latency of the stream is set to the highest number between the sender's minimum latency and the receiver's minimum latency.

**Type:** integer

**Required:** False

**Format:** int64

### **maxLatency**

The maximum latency in milliseconds for a RIST source, a Zixi-based source, a Fujitsu-based source, or a Zixi-based output.

**Type:** integer

**Required:** False

**Format:** int64

### **maxBitrate**

The maximum bitrate for RIST, RTP, and RTP-FEC streams.

**Type:** integer

**Required:** False

**Format:** int64

### **sourceListenerPort**

Source port for SRT-caller protocol.

**Type:** integer

**Required:** False

## smoothingLatency

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

**Type:** integer

**Required:** False

**Format:** int64

## remoteld

The identifier that is assigned to the Zixi receiver. This parameter applies only to outputs that use Zixi pull.

**Type:** string

**Required:** False

## sourceListenerAddress

Source IP or domain name for SRT-caller protocol.

**Type:** string

**Required:** False

## senderIpAddress

The IP address that the flow communicates with to initiate connection with the sender.

**Type:** string

**Required:** False

## protocol

The protocol that is used by the source or output.

**Type:** string

**Required:** True

**Values:** zixi-push | rtp-fec | rtp | zixi-pull | rist | st2110-jpegxs | cdi  
| srt-listener | srt-caller | fujitsu-qos | udp

## **senderControlPort**

The port that the flow uses to send outbound requests to initiate connection with the sender.

**Type:** integer  
**Required:** False  
**Format:** int32

## **cidrAllowList**

The range of IP addresses that are allowed to initiate output requests to this flow. Format the IP addresses as a Classless Inter-Domain Routing (CIDR) block; for example, 10.0.0.0/16.

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

## **maxSyncBuffer**

The size of the buffer (in milliseconds) to use to sync incoming source data.

**Type:** integer  
**Required:** False  
**Format:** int32

## **VpcInterfaceAttachment**

The VPC interface that you want to send your output to.

### **vpcInterfaceName**

The name of the VPC interface that you want to send your output to.

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

## **See also**

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

## AddFlowSources

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

## Tags: list, tag, untag

### URI

/tags/*resourceArn*

### HTTP methods

#### GET

**Operation ID:** ListTagsForResource

Lists all tags associated with the resource.

#### Path parameters

Name	Type	Required	Description
<i>resourceArn</i>	String	True	The Amazon Resource Name (ARN) of the resource that you want to view tags for.

## Responses

Status code	Response model	Description
200	<a href="#">ListTagsForResourceResponse</a>	MediaConnect listed the tags associated with the resource.
400	<a href="#">ResponseError</a>	The request that you submitted is not valid.
404	<a href="#">ResponseError</a>	MediaConnect did not find the resource that you specified in the request.
500	<a href="#">ResponseError</a>	MediaConnect can't fulfill your request because it encountered an unexpected condition.

## 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

Name	Type	Required	Description
<i>resourceArn</i>	String	True	The Amazon Resource Name (ARN) of the resource that you want to view tags for.



## Responses

Status code	Response model	Description
204	None	If the action is successful, the service sends back an HTTP 204 response with an empty HTTP body.
400	<a href="#">ResponseError</a>	The request that you submitted is not valid.
404	<a href="#">ResponseError</a>	MediaConnect did not find the resource that you specified in the request.
500	<a href="#">ResponseError</a>	MediaConnect can't fulfill your request because it encountered an unexpected condition.

## DELETE

**Operation ID:** UntagResource

Deletes the specified tags from a resource.

### Path parameters

Name	Type	Required	Description
<i>resourceArn</i>	String	True	The Amazon Resource Name (ARN) of the resource that you want to view tags for.

### Query parameters

Name	Type	Required	Description
tagKeys	String	True	The keys of the tags to be removed.

### Responses

Status code	Response model	Description
204	None	If the action is successful, the service sends back an HTTP 204 response with an empty HTTP body.
400	<a href="#">ResponseError</a>	The request that you submitted is not valid.
404	<a href="#">ResponseError</a>	MediaConnect did not find the resource that you specified in the request.
500	<a href="#">ResponseError</a>	MediaConnect can't fulfill your request because it encountered an unexpected condition.

### Schemas

#### Request bodies

##### POST schema

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

## Response bodies

### ListTagsForResourceResponse schema

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

### ResponseError schema

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

## Properties

### ListTagsForResourceResponse

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 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 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 v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

## TagResource

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)

- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

## UntagResource

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

## VPC interfaces: add

### URI

/v1/flows/*flowArn*/vpcInterfaces

### HTTP methods

#### POST

**Operation ID:** AddFlowVpcInterfaces

Adds VPC interfaces to a flow.

A virtual private cloud (VPC) based on the Amazon Virtual Private Cloud service is your private, logically isolated network in the AWS Cloud. To avoid streaming your content over the public internet, you can add up to two VPC interfaces to your flow and use those connections to transfer content between your VPC and MediaConnect.

### Path parameters

Name	Type	Required	Description
<i>flowArn</i>	String	True	The Amazon Resource Name (ARN) of the flow.

### Responses

Status code	Response model	Description
201	<a href="#">AddFlowVpcInterfacesResponse</a>	MediaConnect created the new resource successfully.
400	<a href="#">ResponseError</a>	The request that you submitted is not valid.
403	<a href="#">ResponseError</a>	You don't have the required permissions to perform this operation.
404	<a href="#">ResponseError</a>	MediaConnect did not find the resource that you specified in the request.
429	<a href="#">ResponseError</a>	You have exceeded the service request rate limit for your MediaConnect account.
500	<a href="#">ResponseError</a>	MediaConnect can't fulfill your request because it encountered an unexpected condition.

Status code	Response model	Description
503	<a href="#">ResponseError</a>	MediaConnect is currently unavailable. Try again later.

## Schemas

### Request bodies

#### POST schema

```
{
  "vpcInterfaces": [
    {
      "subnetId": "string",
      "roleArn": "string",
      "securityGroupIds": [
        "string"
      ],
      "name": "string",
      "networkInterfaceType": enum
    }
  ]
}
```

### Response bodies

#### AddFlowVpcInterfacesResponse schema

```
{
  "flowArn": "string",
  "vpcInterfaces": [
    {
      "subnetId": "string",
      "roleArn": "string",
      "securityGroupIds": [
        "string"
      ],
      "name": "string",
      "networkInterfaceType": enum,
      "networkInterfaceIds": [
```

```
        "string"
      ]
    }
  ]
}
```

## ResponseError schema

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

## Properties

### AddFlowVpcInterfacesRequest

Adds VPC interfaces to an existing flow.

#### vpcInterfaces

A list of VPC interfaces that you want to add.

**Type:** Array of type [VpcInterfaceRequest](#)

**Required:** True

### AddFlowVpcInterfacesResponse

The result of a successful AddFlowVpcInterfaces request. The response includes the details of the newly added VPC interfaces.

#### flowArn

The ARN of the flow that these VPC interfaces were added to.

**Type:** string

**Required:** True

#### vpcInterfaces

The details of the newly added VPC interfaces.



**Type:** Array of type [VpcInterface](#)

**Required:** True

## ResponseError

An exception raised by 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 MediaConnect returns to help you understand the reason that the request did not succeed.

**Type:** string

**Required:** True

## VpcInterface

The details of a VPC interface.

### subnetId

The subnet IDs that you specified for your VPC interface.

A subnet ID is a range of IP addresses in your VPC. When you create your VPC, you specify a range of IPv4 addresses for the VPC in the form of a Classless Inter-Domain Routing (CIDR) block; for example, 10.0.0.0/16. This is the primary CIDR block for your VPC. When you create a subnet for your VPC, you specify the CIDR block for the subnet, which is a subset of the VPC CIDR block.

The subnets that you use across all VPC interfaces on the flow must be in the same Availability Zone as the flow.

**Type:** string

**Required:** True

### roleArn

The ARN of the IAM role that you created when you set up MediaConnect as a trusted service.

**Type:** string

**Required:** True

### **securityGroupIds**

A virtual firewall to control inbound and outbound traffic.

**Type:** Array of type string

**Required:** True

### **name**

The name for the VPC interface. This name must be unique within the flow.

**Type:** string

**Required:** True

### **networkInterfaceType**

The type of network interface.

**Type:** string

**Required:** True

**Values:** ena | efa

### **networkInterfaceIds**

The IDs of the network interfaces that MediaConnect created in your account.

**Type:** Array of type string

**Required:** True

## **VpcInterfaceRequest**

The details of the VPC interfaces that you want to add to the flow.

### **subnetId**

The subnet IDs that you want to use for your VPC interface.

A range of IP addresses in your VPC. When you create your VPC, you specify a range of IPv4 addresses for the VPC in the form of a Classless Inter-Domain Routing (CIDR) block; for example, 10.0.0.0/16. This is the primary CIDR block for your VPC. When you create a subnet for your VPC, you specify the CIDR block for the subnet, which is a subset of the VPC CIDR block.

The subnets that you use across all VPC interfaces on the flow must be in the same Availability Zone as the flow.

**Type:** string

**Required:** True

### **roleArn**

The Amazon Resource Name (ARN) of the role that you created when you set up MediaConnect as a trusted service.

**Type:** string

**Required:** True

### **securityGroupIds**

The VPC security groups that you want MediaConnect to use for your VPC configuration. You must include at least one security group in the request.

**Type:** Array of type string

**Required:** True

### **name**

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

**Type:** string

**Required:** True

### **networkInterfaceType**

The type of network adapter that you want MediaConnect to use on this interface. If you don't set this value, it defaults to ENA.

**Type:** string

**Required:** False

**Values:** ena | efa

## See also

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

### AddFlowVpcInterfaces

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

## VPC interfaces: remove

### URI

/v1/flows/*flowArn*/vpcInterfaces/*vpcInterfaceName*

### HTTP methods

#### DELETE

**Operation ID:** RemoveFlowVpcInterface

Removes a VPC interface from a flow. You can only remove a VPC interface if it isn't doesn't have a source or output associated with it.

## Path parameters

Name	Type	Required	Description
<i>flowArn</i>	String	True	The Amazon Resource Name (ARN) of the flow.
<i>vpcInterfaceName</i>	String	True	The name of the VPC interface that you want to remove.

## Responses

Status code	Response model	Description
200	<a href="#">RemoveFlowVpcInterfaceResponse</a>	The VPC interface was successfully removed from the flow.
400	<a href="#">ResponseError</a>	The request that you submitted is not valid.
403	<a href="#">ResponseError</a>	You don't have the required permissions to perform this operation.
404	<a href="#">ResponseError</a>	MediaConnect did not find the resource that you specified in the request.
429	<a href="#">ResponseError</a>	You have exceeded the service request rate limit for your MediaConnect account.
500	<a href="#">ResponseError</a>	MediaConnect can't fulfill your request because it encountered an unexpected condition.

Status code	Response model	Description
503	<a href="#">ResponseError</a>	MediaConnect is currently unavailable. Try again later.

## Schemas

### Response bodies

#### RemoveFlowVpcInterfaceResponse schema

```
{
  "flowArn": "string",
  "vpcInterfaceName": "string",
  "nonDeletedNetworkInterfaceIds": [
    "string"
  ]
}
```

#### ResponseError schema

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

## Properties

### RemoveFlowVpcInterfaceResponse

The result of a successful RemoveFlowVpcInterface request including the flow ARN and the name of the VPC interface that was removed.

#### flowArn

The ARN of the flow that is associated with the VPC interface that you removed.

**Type:** string

**Required:** True

## **vpcInterfaceName**

The name of the VPC interface that you removed.

**Type:** string

**Required:** True

## **nonDeletedNetworkInterfaceIds**

The IDs of network interfaces that MediaConnect was unable to remove when you removed your VPC interface. The result is that your VPC interface is removed from MediaConnect, but the network interfaces are still associated with your VPC. You should delete the network interfaces in your VPC.

**Type:** Array of type string

**Required:** False

## **ResponseError**

An exception raised by 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 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:

## **RemoveFlowVpcInterface**

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)

- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)



# Document history for API reference

The following table describes the documentation for this release of AWS Elemental MediaConnect.

Change	Description	Date
Source stream monitoring	Detailed information about MediaConnect flow source streams can now be viewed using the <code>DescribeFlowSourceMetadata</code> API. Source stream monitoring displays media information about the transport stream and its programs.	December 22, 2023
MediaConnect Gateway	A new feature has been released called MediaConnect Gateway. MediaConnect Gateway in an on-premises implementation of MediaConnect.	April 13, 2023
SRT caller	You can now use the SRT-caller protocol on sources and outputs.	September 19, 2022
Maintenance windows	You can now view and configure when flows will be restarted for routine maintenance using maintenance windows.	March 22, 2022
Fujitsu-QoS sources and outputs	You can now use the Fujitsu-QoS protocol for sources and outputs to transport content to and from Fujitsu devices.	December 20, 2021

Change	Description	Date
Source failover	When you enable source failover, you can now specify one of two sources as the primary source. You can choose between two failover modes to prevent any disruption to the video stream.	June 11, 2021
CDI workflows	MediaConnect now supports JPEG-XS for AWS Cloud Digital Interface (CDI) uncompressed workflows.	May 17, 2021
Listener address	For flows that use Listener protocols, you can now easily locate an output's outbound IP address for a private internet.	April 14, 2021
SRT	You can now use the SRT-listener protocol on sources and outputs.	March 16, 2021
Reservations	You can now purchase reservations, which provide a discounted hourly rate in exchange for a commitment to use a specific amount of outbound bandwidth each month over the course of a specified duration.	September 30, 2020

Change	Description	Date
Disabling entitlements	You can now disable an entitlement to temporarily stop streaming content to the subscriber's flow. When you're ready to reinstate access, you can enable the entitlement.	July 24, 2020
VPC outputs	You can now add an output to send content from your MediaConnect flow to your VPC without going over the public internet.	April 7, 2020
VPC sources	You can now connect your VPC to your MediaConnect flow and send content to your flow without going over the public internet.	March 31, 2020
Source failover	You can now enable source failover and add a second (redundant) source to your flow.	March 13, 2020
Service quotas (outputs)	You can now add up to 50 outputs to each flow.	February 7, 2020
Sharing the entitlement data transfer fee with the subscriber	When you create an entitlement, you can now specify the percentage of the entitlement data transfer fee that you want the subscriber to be responsible for.	September 16, 2019

Change	Description	Date
RIST	You can now use the RIST protocol on sources and outputs.	September 11, 2019
Zixi pull	You can now use the Zixi pull protocol on outputs.	July 26, 2019
SPEKE support	You can now use SPEKE for encryption of entitlements.	June 25, 2019
Tagging	You can now tag, untag, and view tags for existing MediaConnect resources.	February 4, 2019
New service and guide	This is the initial release of the media ingest and transport service, AWS Elemental MediaConnect, and the MediaConnect API Reference.	November 27, 2018

# AWS Glossary

For the latest AWS terminology, see the [AWS glossary](#) in the *AWS Glossary Reference*.