AWS Elemental MediaConnect

AWS Elemental MediaConnect: API Reference

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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

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

Responses

Status code	Response model	Description
200	[GrantFlowEntitleme ntsResponse](#)	MediaConnect granted the entitlements successfully.

Status code	Response model	Description
400	ResponseError	The request that you submitted is not valid.
403	ResponseError	You don't have the required permissions to perform this operation.
404	ResponseError	MediaConnect did not find the resource that you specified in the request.
420	ResponseError	Your account already contains the maximum number of 20 flows per account, per Region. For more information, contact AWS Support.
429	ResponseError	You have exceeded the service request rate limit for your MediaConnect account.
500	ResponseError	MediaConnect can't fulfill your request because it encountered an unexpected condition.
503	ResponseError	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 ListEntit lements 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	The maximum number of results to return per API request. For example, you submit a ListEntit lements request with MaxResults set at 5. Although 20 items match your request, the service returns no more than the first 5 items. (The service also returns a NextToken value that you can use to fetch the next batch of results.) The service might return fewer results than the MaxResults value. If MaxResults is not included in the request, the service defaults to paginatio n with a maximum of 20 results per page.

Responses

Status code	Response model	Description
200	[ListEntitlementsRe sponse](#)	MediaConnect returned the list of entitlements successfu lly.

Status code	Response model	Description
400	[ResponseError](#)	The request that you submitted is not valid.
429	[ResponseError](#)	You have exceeded the service request rate limit for your MediaConnect account.
500	[ResponseError](#)	MediaConnect can't fulfill your request because it encountered an unexpected condition.
503	[ResponseError](#)	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 .NET)
- [AWS SDK for C++](AWS SDK for C++)
- [AWS SDK for Go v2](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
flowArn	String	True	The Amazon Resource Name (ARN) of the flow.
entitlementArn	String	True	The ARN of the entitlement that you want to update.

Responses

Status code	Response model	Description
202	[UpdateFlowEntitlementResponse](#)	MediaConnect is updating the entitlement.

Status code	Response model	Description
400	ResponseError	The request that you submitted is not valid.
403	ResponseError	You don't have the required permissions to perform this operation.
404	ResponseError	MediaConnect did not find the resource that you specified in the request.
429	ResponseError	You have exceeded the service request rate limit for your MediaConnect account.
500	ResponseError	MediaConnect can't fulfill your request because it encountered an unexpected condition.
503	ResponseError	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
flowArn	String	True	The Amazon Resource Name (ARN) of the flow.

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

Responses

Status code	Response model	Description
202	RevokeFlowEntitlem entResponse	MediaConnect is revoking the entitlement.
400	ResponseError	The request that you submitted is not valid.
403	ResponseError	You don't have the required permissions to perform this operation.
404	ResponseError	MediaConnect did not find the resource that you specified in the request.
429	ResponseError	You have exceeded the service request rate limit for your MediaConnect account.
500	ResponseError	MediaConnect can't fulfill your request because it encountered an unexpected condition.
503	ResponseError	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
flowArn	String	True	The Amazon Resource Name (ARN) of the flow.

Responses

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

Status code	Response model	Description
		encountered an unexpected condition.
503	ResponseError	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 ListEntit lements 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	The maximum number of results to return per API request. For example, you submit a ListEntit lements request with MaxResults set at 5. Although 20 items match your request, the service returns no more than the first 5 items. (The service also returns a NextToken value that you can use to fetch the next batch of results.) The service might return fewer results than the MaxResults value. If MaxResults is not included in the request, the service defaults to paginatio n with a maximum of 20 results per page.

Responses

Status code	Response model	Description
200	[ListFlowsResponse](#)	MediaConnect returned the list of flows successfully.

Status code	Response model	Description
400	ResponseError	The request that you submitted is not valid.
429	ResponseError	You have exceeded the service request rate limit for your MediaConnect account.
500	ResponseError	MediaConnect can't fulfill your request because it encountered an unexpected condition.
503	ResponseError	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	CreateFlowResponse	MediaConnect created the new resource successfully.
400	ResponseError	The request that you submitted is not valid.
403	ResponseError	You don't have the required permissions to perform this operation.
420	ResponseError	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	ResponseError	You have exceeded the service request rate limit for your MediaConnect account.
500	ResponseError	MediaConnect can't fulfill your request because it encountered an unexpected condition.
503	ResponseError	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": {
          "fmtp": {
            "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": {
          "fmtp": {
            "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

vpcInterfaceAttachment

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

Type: VpcInterfaceAttachment
Required: False

remoteId

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 / 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

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 in 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

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

remoteId

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

Responses

Status code	Response model	Description
200	DescribeFlowResponse	MediaConnect returned the flow details successfully.
400	ResponseError	The request that you submitted is not valid.
403	ResponseError	You don't have the required permissions to perform this operation.
404	ResponseError	MediaConnect did not find the resource that you specified in the request.
429	ResponseError	You have exceeded the service request rate limit for your MediaConnect account.
500	ResponseError	MediaConnect can't fulfill your request because it encountered an unexpected condition.
503	ResponseError	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
flowArn	String	True	The Amazon Resource Name (ARN) of the flow.

Responses

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

Status code	Response model	Description
503	[ResponseError](#)	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
flowArn	String	True	The Amazon Resource Name (ARN) of the flow.

Responses

Status code	Response model	Description
202	[DeleteFlowResponse](#)	MediaConnect is deleting the flow.
400	[ResponseError](#)	The request that you submitted is not valid.
403	[ResponseError](#)	You don't have the required permissions to perform this operation.
404	[ResponseError](#)	MediaConnect did not find the resource that you specified in the request.

Status code	Response model	Description
429	ResponseError	You have exceeded the service request rate limit for your MediaConnect account.
500	ResponseError	MediaConnect can't fulfill your request because it encountered an unexpected condition.
503	ResponseError	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": {
          "fmtp": {
            "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": {
          "fmtp": {
            "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 in 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

remoteId

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

Responses

Status code	Response model	Description
202	[StartFlowResponse](#)	MediaConnect is starting the flow.
400	[ResponseError](#)	The request that you submitted is not valid.
403	[ResponseError](#)	You don't have the required permissions to perform this operation.

Status code	Response model	Description
404	ResponseError	MediaConnect did not find the resource that you specified in the request.
429	ResponseError	You have exceeded the service request rate limit for your MediaConnect account.
500	ResponseError	MediaConnect can't fulfill your request because it encountered an unexpected condition.
503	ResponseError	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
flowArn	String	True	The Amazon Resource Name (ARN) of the flow.

Responses

Status code	Response model	Description
202	StopFlowResponse	MediaConnect is stopping the flow.
400	ResponseError	The request that you submitted is not valid.
403	ResponseError	You don't have the required permissions to perform this operation.
404	ResponseError	MediaConnect did not find the resource that you specified in the request.
429	ResponseError	You have exceeded the service request rate limit for your MediaConnect account.
500	ResponseError	MediaConnect can't fulfill your request because it encountered an unexpected condition.
503	ResponseError	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
bridgeArn	String	True	The ARN of the bridge that you want to describe.

Responses

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

Status code	Response model	Description
503	[ResponseError](#)	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
outputName	String	True	The name of the bridge output that you want to update.
bridgeArn	String	True	The ARN of the bridge that you want to describe.

Responses

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

Status code	Response model	Description
500	ResponseError	MediaConnect can't fulfill your request because it encountered an unexpected condition.
503	ResponseError	MediaConnect is currently unavailable. Try again later.

DELETE

Operation ID: RemoveBridgeOutput

Removes an output from a bridge.

Path parameters

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

Responses

Status code	Response model	Description
202	RemoveBridgeOutput Response	MediaConnect is starting the flow.
400	ResponseError	The request that you submitted is not valid.

Status code	Response model	Description
403	ResponseError	You don't have the required permissions to perform this operation.
404	ResponseError	MediaConnect did not find the resource that you specified in the request.
409	ResponseError	There was a conflict when trying to add the requested output
429	ResponseError	You have exceeded the service request rate limit for your MediaConnect account.
500	ResponseError	MediaConnect can't fulfill your request because it encountered an unexpected condition.
503	ResponseError	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
bridgeArn	String	True	The ARN of the bridge that you want to describe.

Responses

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

Status code	Response model	Description
503	ResponseError	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
bridgeArn	String	True	The ARN of the bridge that you want to describe.
sourceName	String	True	The name of the source that you want to update.

Responses

Status code	Response model	Description
202	UpdateBridgeSource Response	MediaConnect is starting the flow.
400	ResponseError	The request that you submitted is not valid.
403	ResponseError	You don't have the required permissions to perform this operation.
404	ResponseError	MediaConnect did not find the resource that you specified in the request.

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

DELETE

Operation ID: RemoveBridgeSource

Removes a source from a bridge.

Path parameters

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

Responses

Status code	Response model	Description
202	RemoveBridgeSource Response	MediaConnect is starting the flow.
400	ResponseError	The request that you submitted is not valid.
403	ResponseError	You don't have the required permissions to perform this operation.
404	ResponseError	MediaConnect did not find the resource that you specified in the request.
409	ResponseError	There was a conflict when trying to add the requested output
429	ResponseError	You have exceeded the service request rate limit for your MediaConnect account.
500	ResponseError	MediaConnect can't fulfill your request because it encountered an unexpected condition.
503	ResponseError	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
bridgeArn	String	True	The ARN of the bridge that you want to describe.

Responses

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

Status code	Response model	Description
503	ResponseError	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 associate d 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 ListEntit lements 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	The maximum number of results to return per API request. For example, you submit a ListEntit lements request with MaxResults set at 5. Although 20 items match your request, the service returns no more than the first 5 items. (The service also returns a NextToken value that you can use to fetch the next batch of results.) The service might return fewer results than the MaxResults value. If MaxResults is not included in the request, the service defaults to paginatio n with a maximum of 20 results per page.

Responses

Status code	Response model	Description
200	[ListBridgesResponse](#)	AWS Elemental MediaConnect returned the list of bridges successfully.

Status code	Response model	Description
400	ResponseError	The request that you submitted is not valid.
409	ResponseError	There was a conflict when trying to add the requested output
429	ResponseError	You have exceeded the service request rate limit for your MediaConnect account.
500	ResponseError	MediaConnect can't fulfill your request because it encountered an unexpected condition.
503	ResponseError	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	CreateBridgeResponse	MediaConnect created the new resource successfully.
400	ResponseError	The request that you submitted is not valid.

Status code	Response model	Description
403	ResponseError	You don't have the required permissions to perform this operation.
409	ResponseError	There was a conflict when trying to add the requested output
420	ResponseError	Your account already contains the maximum number of 20 flows per account, per Region. For more information, contact AWS Support.
429	ResponseError	You have exceeded the service request rate limit for your MediaConnect account.
500	ResponseError	MediaConnect can't fulfill your request because it encountered an unexpected condition.
503	ResponseError	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
bridgeArn	String	True	The ARN of the bridge that you want to describe.

Responses

Status code	Response model	Description
200	DescribeBridgeResp onse	AWS Elemental MediaConnect returned the bridge details successfully.
400	ResponseError	The request that you submitted is not valid.
403	ResponseError	You don't have the required permissions to perform this operation.
404	ResponseError	MediaConnect did not find the resource that you specified in the request.
409	ResponseError	There was a conflict when trying to add the requested output
429	ResponseError	You have exceeded the service request rate limit for your MediaConnect account.
500	ResponseError	MediaConnect can't fulfill your request because it encountered an unexpected condition.

Status code	Response model	Description
503	ResponseError	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
bridgeArn	String	True	The ARN of the bridge that you want to describe.

Responses

Status code	Response model	Description
202	UpdateBridgeResponse	MediaConnect is starting the flow.
400	ResponseError	The request that you submitted is not valid.
403	ResponseError	You don't have the required permissions to perform this operation.
404	ResponseError	MediaConnect did not find the resource that you specified in the request.

Status code	Response model	Description
409	ResponseError	There was a conflict when trying to add the requested output
429	ResponseError	You have exceeded the service request rate limit for your MediaConnect account.
500	ResponseError	MediaConnect can't fulfill your request because it encountered an unexpected condition.
503	ResponseError	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
bridgeArn	String	True	The ARN of the bridge that you want to describe.

Responses

Status code	Response model	Description
200	DeleteBridgeResponse	AWS Elemental MediaConnect deleted the bridge.

Status code	Response model	Description
202	DeleteBridgeResponse	MediaConnect is starting the flow.
400	ResponseError	The request that you submitted is not valid.
403	ResponseError	You don't have the required permissions to perform this operation.
404	ResponseError	MediaConnect did not find the resource that you specified in the request.
409	ResponseError	There was a conflict when trying to add the requested output
429	ResponseError	You have exceeded the service request rate limit for your MediaConnect account.
500	ResponseError	MediaConnect can't fulfill your request because it encountered an unexpected condition.
503	ResponseError	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
gatewayArn	String	True	The Amazon Resource Name (ARN) that

Name	Type	Required	Description
			identifies the AWS Elemental MediaConn ect Gateway.

Responses

Status code	Response model	Description
200	DiscoverGatewayPol lEndpointResponse	The endpoints for the specified gateway
400	ResponseError	The request that you submitted is not valid.
403	ResponseError	You don't have the required permissions to perform this operation.
404	ResponseError	MediaConnect did not find the resource that you specified in the request.
409	ResponseError	There was a conflict when trying to add the requested output
429	ResponseError	You have exceeded the service request rate limit for your MediaConnect account.
500	ResponseError	MediaConnect can't fulfill your request because it encountered an unexpected condition.
503	ResponseError	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
gatewayIn stanceArn	String	True	The ARN of the gateway instance that you want to describe.

Responses

Status code	Response model	Description
200	[DescribeGatewayIns tanceResponse](#)	AWS Elemental MediaConnect returned the instance details successfully.
400	[ResponseError](#)	The request that you submitted is not valid.
403	[ResponseError](#)	You don't have the required permissions to perform this operation.
404	[ResponseError](#)	MediaConnect did not find the resource that you specified in the request.
409	[ResponseError](#)	There was a conflict when trying to add the requested output

Status code	Response model	Description
429	[ResponseError](#)	You have exceeded the service request rate limit for your MediaConnect account.
500	[ResponseError](#)	MediaConnect can't fulfill your request because it encountered an unexpected condition.
503	[ResponseError](#)	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
gatewayInstanceArn	String	True	The ARN of the gateway instance that you want to describe.

Responses

Status code	Response model	Description
200	[UpdateGatewayInstanceResponse](#)	AWS Elemental MediaConnect is applying the instance state.
400	[ResponseError](#)	The request that you submitted is not valid.

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

Status code	Response model	Description
409	ResponseError	There was a conflict when trying to add the requested output
429	ResponseError	You have exceeded the service request rate limit for your MediaConnect account.
500	ResponseError	MediaConnect can't fulfill your request because it encountered an unexpected condition.
503	ResponseError	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
filterArn	String	False	Filter the list results to display only the bridges associated with the selected ARN.
nextToken	String	False	The token that identifies which batch of results that

Name	Type	Required	Description
			you want to see. For example, you submit a ListEntit lements 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	The maximum number of results to return per API request. For example, you submit a ListEntit lements request with MaxResults set at 5. Although 20 items match your request, the service returns no more than the first 5 items. (The service also returns a NextToken value that you can use to fetch the next batch of results.) The service might return fewer results than the MaxResults value. If MaxResults is not included in the request, the service defaults to paginatio n with a maximum of 20 results per page.

Responses

Status code	Response model	Description
200	[ListGatewayInstanc esResponse](#)	AWS Elemental MediaConnect returned the list of instances in the gateway successfully.

Status code	Response model	Description
400	ResponseError	The request that you submitted is not valid.
409	ResponseError	There was a conflict when trying to add the requested output
429	ResponseError	You have exceeded the service request rate limit for your MediaConnect account.
500	ResponseError	MediaConnect can't fulfill your request because it encountered an unexpected condition.
503	ResponseError	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
gatewayArn	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	DescribeGatewayResponse	AWS Elemental MediaConnect returned the gateway details successfully.
400	ResponseError	The request that you submitted is not valid.
403	ResponseError	You don't have the required permissions to perform this operation.
404	ResponseError	MediaConnect did not find the resource that you specified in the request.
409	ResponseError	There was a conflict when trying to add the requested output
429	ResponseError	You have exceeded the service request rate limit for your MediaConnect account.
500	ResponseError	MediaConnect can't fulfill your request because it encountered an unexpected condition.

Status code	Response model	Description
503	[ResponseError](#)	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
gatewayArn	String	True	The Amazon Resource Name (ARN) that identifies the AWS Elemental MediaConnect Gateway.

Responses

Status code	Response model	Description
200	[DeleteGatewayResponse](#)	AWS Elemental MediaConnect deleted the gateway.
202	[DeleteGatewayResponse](#)	MediaConnect is starting the flow.
400	[ResponseError](#)	The request that you submitted is not valid.
403	[ResponseError](#)	You don't have the required permissions to perform this operation.

Status code	Response model	Description
404	ResponseError	MediaConnect did not find the resource that you specified in the request.
409	ResponseError	There was a conflict when trying to add the requested output
429	ResponseError	You have exceeded the service request rate limit for your MediaConnect account.
500	ResponseError	MediaConnect can't fulfill your request because it encountered an unexpected condition.
503	ResponseError	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 ListEntit lements 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.
maxResults	String	False	The maximum number of results to return per API request. For example, you submit a ListEntit lements request with MaxResults 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 paginatio n with a maximum of 20 results per page.

Responses

Status code	Response model	Description
200	ListGatewaysResponse	AWS Elemental MediaConnect returned the list of gateways successfully.
400	ResponseError	The request that you submitted is not valid.
409	ResponseError	There was a conflict when trying to add the requested output
429	ResponseError	You have exceeded the service request rate limit for your MediaConnect account.

Status code	Response model	Description
500	ResponseError	MediaConnect can't fulfill your request because it encountered an unexpected condition.
503	ResponseError	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	DescribeGatewayResponse	MediaConnect created the new resource successfully.
400	ResponseError	The request that you submitted is not valid.
403	ResponseError	You don't have the required permissions to perform this operation.
409	ResponseError	There was a conflict when trying to add the requested output
420	ResponseError	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	[ResponseError](#)	You have exceeded the service request rate limit for your MediaConnect account.
500	[ResponseError](#)	MediaConnect can't fulfill your request because it encountered an unexpected condition.
503	[ResponseError](#)	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
flowArn	String	True	The Amazon Resource Name (ARN) of the flow.

Responses

Status code	Response model	Description
201	[AddFlowMediaStreamsResponse](#)	MediaConnect created the new resource successfully.
400	[ResponseError](#)	The request that you submitted is not valid.
403	[ResponseError](#)	You don't have the required permissions to perform this operation.
404	[ResponseError](#)	MediaConnect did not find the resource that you specified in the request.
429	[ResponseError](#)	You have exceeded the service request rate limit for your MediaConnect account.

Status code	Response model	Description
500	ResponseError	MediaConnect can't fulfill your request because it encountered an unexpected condition.
503	ResponseError	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 in 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
flowArn	String	True	The Amazon Resource Name (ARN) of the flow.
mediaStreamName	String	True	The name of the media stream that you want to update.

Responses

Status code	Response model	Description
202	[UpdateFlowMediaStreamResponse](#)	MediaConnect is starting the flow.
400	[ResponseError](#)	The request that you submitted is not valid.
403	[ResponseError](#)	You don't have the required permissions to perform this operation.
404	[ResponseError](#)	MediaConnect did not find the resource that you specified in the request.

Status code	Response model	Description
429	ResponseError	You have exceeded the service request rate limit for your MediaConnect account.
500	ResponseError	MediaConnect can't fulfill your request because it encountered an unexpected condition.
503	ResponseError	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
flowArn	String	True	The Amazon Resource Name (ARN) of the flow.
mediaStreamName	String	True	The name of the media stream that you want to update.

Responses

Status code	Response model	Description
200	RemoveFlowMediaStr eamResponse	The media stream was successfully removed from the flow.
400	ResponseError	The request that you submitted is not valid.
403	ResponseError	You don't have the required permissions to perform this operation.
404	ResponseError	MediaConnect did not find the resource that you specified in the request.
429	ResponseError	You have exceeded the service request rate limit for your MediaConnect account.
500	ResponseError	MediaConnect can't fulfill your request because it encountered an unexpected condition.
503	ResponseError	MediaConnect is currently unavailable. Try again later.

Schemas

Request bodies

PUT schema

```
{
  "mediaStreamType": enum,
  "videoFormat": "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

RemoveFlowMediaStreamResponse schema

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

UpdateFlowMediaStreamResponse schema

```
{
  "mediaStream": {
    "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

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

Responses

Status code	Response model	Description
201	[AddFlowOutputsResponse](#)	MediaConnect created the new resource successfully.
400	[ResponseError](#)	The request that you submitted is not valid.
403	[ResponseError](#)	You don't have the required permissions to perform this operation.

Status code	Response model	Description
404	ResponseError	MediaConnect did not find the resource that you specified in the request.
420	ResponseError	Your account already contains the maximum number of 20 flows per account, per Region. For more information, contact AWS Support.
429	ResponseError	You have exceeded the service request rate limit for your MediaConnect account.
500	ResponseError	MediaConnect can't fulfill your request because it encountered an unexpected condition.
503	ResponseError	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

remoteId

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:

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 / 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`

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

remoteId

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
flowArn	String	True	The Amazon Resource Name (ARN) of the flow.
outputArn	String	True	The ARN of the output that you want to update.

Responses

Status code	Response model	Description
202	UpdateFlowOutputResponse	MediaConnect is updating the output.
400	ResponseError	The request that you submitted is not valid.
403	ResponseError	You don't have the required permissions to perform this operation.
404	ResponseError	MediaConnect did not find the resource that you specified in the request.
429	ResponseError	You have exceeded the service request rate limit for your MediaConnect account.
500	ResponseError	MediaConnect can't fulfill your request because it encountered an unexpected condition.

Status code	Response model	Description
503	[ResponseError](#)	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
flowArn	String	True	The Amazon Resource Name (ARN) of the flow.
outputArn	String	True	The ARN of the output that you want to update.

Responses

Status code	Response model	Description
202	[RemoveFlowOutputResponse](#)	MediaConnect is removing the output.
400	[ResponseError](#)	The request that you submitted is not valid.

Status code	Response model	Description
403	ResponseError	You don't have the required permissions to perform this operation.
404	ResponseError	MediaConnect did not find the resource that you specified in the request.
429	ResponseError	You have exceeded the service request rate limit for your MediaConnect account.
500	ResponseError	MediaConnect can't fulfill your request because it encountered an unexpected condition.
503	ResponseError	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:

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 / 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`

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

remoteId

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

remoteId

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
offeringArn	String	True	The Amazon Resource Name (ARN) of the offering.

Responses

Status code	Response model	Description
200	[DescribeOfferingRe sponse](#)	MediaConnect returned the offering details successfully.

Status code	Response model	Description
400	ResponseError	The request that you submitted is not valid.
404	ResponseError	MediaConnect did not find the resource that you specified in the request.
429	ResponseError	You have exceeded the service request rate limit for your MediaConnect account.
500	ResponseError	MediaConnect can't fulfill your request because it encountered an unexpected condition.
503	ResponseError	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
offeringArn	String	True	The Amazon Resource Name (ARN) of the offering.

Responses

Status code	Response model	Description
201	PurchaseOfferingRe sponse	MediaConnect created the new resource successfully.
400	ResponseError	The request that you submitted is not valid.
403	ResponseError	You don't have the required permissions to perform this operation.
404	ResponseError	MediaConnect did not find the resource that you specified in the request.
429	ResponseError	You have exceeded the service request rate limit for your MediaConnect account.
500	ResponseError	MediaConnect can't fulfill your request because it encountered an unexpected condition.
503	ResponseError	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 ListEntit lements 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.
maxResults	String	False	The maximum number of results to return per API request. For example, you submit a ListEntit lements request with MaxResults 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	[ListOfferingsResponse](#)	MediaConnect returned the list of offerings successfully.
400	[ResponseError](#)	The request that you submitted is not valid.
429	[ResponseError](#)	You have exceeded the service request rate limit for your MediaConnect account.
500	[ResponseError](#)	MediaConnect can't fulfill your request because it encountered an unexpected condition.

Status code	Response model	Description
503	ResponseError	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
reservationArn	String	True	The Amazon Resource Name (ARN) of the reservation.

Responses

Status code	Response model	Description
200	DescribeReservatio nResponse	MediaConnect returned the reservation details successfu lly.
400	ResponseError	The request that you submitted is not valid.
404	ResponseError	MediaConnect did not find the resource that you specified in the request.
429	ResponseError	You have exceeded the service request rate limit for your MediaConnect account.
500	ResponseError	MediaConnect can't fulfill your request because it encountered an unexpected condition.
503	ResponseError	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 ListEntit lements 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	The maximum number of results to return per API request. For example, you submit a ListEntit lements request with MaxResults set at 5. Although 20 items match your request, the service returns no more than the first 5 items. (The service also returns a NextToken value that you can use to fetch the next batch of results.) The service might return fewer results than the MaxResults value. If MaxResults is not included in the request, the service defaults to paginatio n with a maximum of 20 results per page.

Responses

Status code	Response model	Description
200	[ListReservationsRe sponse](#)	MediaConnect returned the list of reservations successfu lly.

Status code	Response model	Description
400	ResponseError	The request that you submitted is not valid.
429	ResponseError	You have exceeded the service request rate limit for your MediaConnect account.
500	ResponseError	MediaConnect can't fulfill your request because it encountered an unexpected condition.
503	ResponseError	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
flowArn	String	True	The Amazon Resource Name (ARN) of the flow.
sourceArn	String	True	The ARN of the source that you want to update.

Responses

Status code	Response model	Description
202	[UpdateFlowSourceResponse](#)	MediaConnect is updating the source.

Status code	Response model	Description
400	ResponseError	The request that you submitted is not valid.
403	ResponseError	You don't have the required permissions to perform this operation.
404	ResponseError	MediaConnect did not find the resource that you specified in the request.
429	ResponseError	You have exceeded the service request rate limit for your MediaConnect account.
500	ResponseError	MediaConnect can't fulfill your request because it encountered an unexpected condition.
503	ResponseError	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
flowArn	String	True	The Amazon Resource Name (ARN) of the flow.

Name	Type	Required	Description
sourceArn	String	True	The ARN of the source that you want to update.

Responses

Status code	Response model	Description
202	RemoveFlowSourceResponse	MediaConnect is deleting the flow.
400	ResponseError	The request that you submitted is not valid.
403	ResponseError	You don't have the required permissions to perform this operation.
404	ResponseError	MediaConnect did not find the resource that you specified in the request.
429	ResponseError	You have exceeded the service request rate limit for your MediaConnect account.
500	ResponseError	MediaConnect can't fulfill your request because it encountered an unexpected condition.
503	ResponseError	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: `jxsv | 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

remoteId

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

Responses

Status code	Response model	Description
201	AddFlowSourcesResponse	MediaConnect created the new resource successfully.
400	ResponseError	The request that you submitted is not valid.
403	ResponseError	You don't have the required permissions to perform this operation.
404	ResponseError	MediaConnect did not find the resource that you specified in the request.
429	ResponseError	You have exceeded the service request rate limit for your MediaConnect account.
500	ResponseError	MediaConnect can't fulfill your request because it encountered an unexpected condition.

Status code	Response model	Description
503	ResponseError	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

remoteId

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
resourceArn	String	True	The Amazon Resource Name (ARN) of the resource that you want to view tags for.

Responses

Status code	Response model	Description
200	ListTagsForResourc eResponse	MediaConnect listed the tags associated with the resource.
400	ResponseError	The request that you submitted is not valid.
404	ResponseError	MediaConnect did not find the resource that you specified in the request.
500	ResponseError	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
resourceArn	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	[ResponseError](#)	The request that you submitted is not valid.
404	[ResponseError](#)	MediaConnect did not find the resource that you specified in the request.
500	[ResponseError](#)	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
resourceArn	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	ResponseError	The request that you submitted is not valid.
404	ResponseError	MediaConnect did not find the resource that you specified in the request.
500	ResponseError	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
flowArn	String	True	The Amazon Resource Name (ARN) of the flow.

Responses

Status code	Response model	Description
201	AddFlowVpcInterfacesResponse	MediaConnect created the new resource successfully.
400	ResponseError	The request that you submitted is not valid.
403	ResponseError	You don't have the required permissions to perform this operation.
404	ResponseError	MediaConnect did not find the resource that you specified in the request.
429	ResponseError	You have exceeded the service request rate limit for your MediaConnect account.
500	ResponseError	MediaConnect can't fulfill your request because it encountered an unexpected condition.

Status code	Response model	Description
503	ResponseError	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
flowArn	String	True	The Amazon Resource Name (ARN) of the flow.
vpcInterf aceName	String	True	The name of the VPC interface that you want to remove.

Responses

Status code	Response model	Description
200	RemoveFlowVpcInter faceResponse	The VPC interface was successfully removed from the flow.
400	ResponseError	The request that you submitted is not valid.
403	ResponseError	You don't have the required permissions to perform this operation.
404	ResponseError	MediaConnect did not find the resource that you specified in the request.
429	ResponseError	You have exceeded the service request rate limit for your MediaConnect account.
500	ResponseError	MediaConnect can't fulfill your request because it encountered an unexpected condition.

Status code	Response model	Description
503	ResponseError	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 `DescribeF lowSourceMetadata` 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 MediaConn ect Gateway. MediaConn ect 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 maintenan ce 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 disconted 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*.