aws

API Reference

# AWS Elemental MediaConnect

**API Version 2018-11-14**

# AWS Elemental MediaConnect: API Reference

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# Welcome

Welcome to the AWS Elemental MediaConnect API reference.

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 API reference provides descriptions, syntax, and usage examples for each of the actions and data types that are supported by MediaConnect.

Use the following links to get started with the MediaConnect API:

- Actions: An alphabetical list of all MediaConnect API operations.
- Data types: An alphabetical list of all MediaConnect data types.
- Common parameters: Parameters that all operations can use.
- Common errors: Client and server errors that all operations can return.

This document was last published on March 5, 2026.

# Actions

The following actions are supported:

- AddBridgeOutputs
- AddBridgeSources
- AddFlowMediaStreams
- AddFlowOutputs
- AddFlowSources
- AddFlowVpcInterfaces
- BatchGetRouterInput
- BatchGetRouterNetworkInterface
- BatchGetRouterOutput
- CreateBridge
- CreateFlow
- CreateGateway
- CreateRouterInput
- CreateRouterNetworkInterface
- CreateRouterOutput
- DeleteBridge
- DeleteFlow
- DeleteGateway
- DeleteRouterInput
- DeleteRouterNetworkInterface
- DeleteRouterOutput
- DeregisterGatewayInstance
- DescribeBridge
- DescribeFlow
- DescribeFlowSourceMetadata
- DescribeFlowSourceThumbnail
- DescribeGateway

- DescribeGatewayInstance
- DescribeOffering
- DescribeReservation
- GetRouterInput
- GetRouterInputSourceMetadata
- GetRouterInputThumbnail
- GetRouterNetworkInterface
- GetRouterOutput
- GrantFlowEntitlements
- ListBridges
- ListEntitlements
- ListFlows
- ListGatewayInstances
- ListGateways
- ListOfferings
- ListReservations
- ListRouterInputs
- ListRouterNetworkInterfaces
- ListRouterOutputs
- ListTagsForGlobalResource
- ListTagsForResource
- PurchaseOffering
- RemoveBridgeOutput
- RemoveBridgeSource
- RemoveFlowMediaStream
- RemoveFlowOutput
- RemoveFlowSource
- RemoveFlowVpcInterface
- RestartRouterInput
- RestartRouterOutput

- RevokeFlowEntitlement
- StartFlow
- StartRouterInput
- StartRouterOutput
- StopFlow
- StopRouterInput
- StopRouterOutput
- TagGlobalResource
- TagResource
- TakeRouterInput
- UntagGlobalResource
- UntagResource
- UpdateBridge
- UpdateBridgeOutput
- UpdateBridgeSource
- UpdateBridgeState
- UpdateFlow
- UpdateFlowEntitlement
- UpdateFlowMediaStream
- UpdateFlowOutput
- UpdateFlowSource
- UpdateGatewayInstance
- UpdateRouterInput
- UpdateRouterNetworkInterface
- UpdateRouterOutput

# AddBridgeOutputs

Adds outputs to an existing bridge.

## Request Syntax

```
POST /v1/bridges/bridgeArn/outputs HTTP/1.1
Content-type: application/json

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

## URI Request Parameters

The request uses the following URI parameters.

### bridgeArn

The Amazon Resource Name (ARN) of the bridge that you want to update.

Pattern: `arn:.+:mediaconnect.+:bridge:.+`

Required: Yes

## Request Body

The request accepts the following data in JSON format.

### outputs

The outputs that you want to add to this bridge.

Type: Array of AddBridgeOutputRequest objects

Required: Yes

## Response Syntax

```
HTTP/1.1 202
Content-type: application/json

{
   "bridgeArn": "string",
   "outputs": [
      {
         "flowOutput": {
            "flowArn": "string",
            "flowSourceArn": "string",
            "name": "string"
         },
         "networkOutput": {
            "ipAddress": "string",
            "name": "string",
            "networkName": "string",
            "port": number,
            "protocol": "string",
            "ttl": number
         }
      }
   ]
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 202 response.

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

### bridgeArn

The ARN of the bridge that you added outputs to.

Type: String

**outputs**

The outputs that you added to this bridge.

Type: Array of BridgeOutput objects

## Errors

For information about the errors that are common to all actions, see Common Errors.

**BadRequestException**

This exception is thrown if the request contains a semantic error. The precise meaning depends on the API, and is documented in the error message.

HTTP Status Code: 400

**ConflictException**

The requested operation would cause a conflict with the current state of a service resource associated with the request. Resolve the conflict before retrying this request.

HTTP Status Code: 409

**ForbiddenException**

You do not have sufficient access to perform this action.

HTTP Status Code: 403

**InternalServerErrorException**

The server encountered an internal error and is unable to complete the request.

HTTP Status Code: 500

**NotFoundException**

One or more of the resources in the request does not exist in the system.

HTTP Status Code: 404

**ServiceUnavailableException**

The service is currently unavailable or busy.

HTTP Status Code: 503

**TooManyRequestsException**

The request was denied due to request throttling.

HTTP Status Code: 429

## See Also

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

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

# AddBridgeSources

Adds sources to an existing bridge.

## Request Syntax

```
POST /v1/bridges/bridgeArn/sources HTTP/1.1
Content-type: application/json

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

## URI Request Parameters

The request uses the following URI parameters.

### bridgeArn

The Amazon Resource Name (ARN) of the bridge that you want to update.

Required: Yes

## Request Body

The request accepts the following data in JSON format.

**sources**

The sources that you want to add to this bridge.

Type: Array of AddBridgeSourceRequest objects

Required: Yes

## Response Syntax

```
HTTP/1.1 202
Content-type: application/json

{
   "bridgeArn": "string",
   "sources": [
      {
         "flowSource": {
            "flowArn": "string",
            "flowVpcInterfaceAttachment": {
               "vpcInterfaceName": "string"
            },
            "name": "string",
            "outputArn": "string"
         },
         "networkSource": {
            "multicastIp": "string",
            "multicastSourceSettings": {
               "multicastSourceIp": "string"
            },
            "name": "string",
            "networkName": "string",
            "port": number,
            "protocol": "string"
         }
      }
   ]
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 202 response.

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

**bridgeArn**

The ARN of the bridge that you added sources to.

Type: String

**sources**

The sources that you added to this bridge.

Type: Array of BridgeSource objects

## Errors

For information about the errors that are common to all actions, see Common Errors.

**BadRequestException**

This exception is thrown if the request contains a semantic error. The precise meaning depends on the API, and is documented in the error message.

HTTP Status Code: 400

**ConflictException**

The requested operation would cause a conflict with the current state of a service resource associated with the request. Resolve the conflict before retrying this request.

HTTP Status Code: 409

**ForbiddenException**

You do not have sufficient access to perform this action.

HTTP Status Code: 403

**InternalServerErrorException**

The server encountered an internal error and is unable to complete the request.

HTTP Status Code: 500

**NotFoundException**

One or more of the resources in the request does not exist in the system.

HTTP Status Code: 404

**ServiceUnavailableException**

The service is currently unavailable or busy.

HTTP Status Code: 503

**TooManyRequestsException**

The request was denied due to request throttling.

HTTP Status Code: 429

## See Also

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

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

# 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.

## Request Syntax

```
POST /v1/flows/flowArn/mediaStreams HTTP/1.1
Content-type: application/json

{
   "mediaStreams": [
      {
         "attributes": {
            "fmtp": {
               "channelOrder": "string",
               "colorimetry": "string",
               "exactFramerate": "string",
               "par": "string",
               "range": "string",
               "scanMode": "string",
               "tcs": "string"
            },
            "lang": "string"
         },
         "clockRate": number,
         "description": "string",
         "mediaStreamId": number,
         "mediaStreamName": "string",
         "mediaStreamTags": {
            "string" : "string"
         },
         "mediaStreamType": "string",
         "videoFormat": "string"
      }
   ]
}
```

## URI Request Parameters

The request uses the following URI parameters.

### flowArn

The Amazon Resource Name (ARN) of the flow.

Pattern: `arn:.+:mediaconnect.+:flow:.+`

Required: Yes

## Request Body

The request accepts the following data in JSON format.

### mediaStreams

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

Type: Array of AddMediaStreamRequest objects

Required: Yes

## Response Syntax

```
HTTP/1.1 201
Content-type: application/json

{
   "flowArn": "string",
   "mediaStreams": [
      {
         "attributes": {
            "fmtp": {
               "channelOrder": "string",
               "colorimetry": "string",
               "exactFramerate": "string",
               "par": "string",
               "range": "string",
               "scanMode": "string",
               "tcs": "string"
            },
            "lang": "string"
         },
```

```
            "clockRate": number,
            "description": "string",
            "fmt": number,
            "mediaStreamId": number,
            "mediaStreamName": "string",
            "mediaStreamType": "string",
            "videoFormat": "string"
        }
    ]
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 201 response.

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

**flowArn**

The ARN of the flow that you added media streams to.

Type: String

**mediaStreams**

The media streams that you added to the flow.

Type: Array of MediaStream objects

## Errors

For information about the errors that are common to all actions, see Common Errors.

**BadRequestException**

This exception is thrown if the request contains a semantic error. The precise meaning depends on the API, and is documented in the error message.

HTTP Status Code: 400

**ForbiddenException**

You do not have sufficient access to perform this action.

HTTP Status Code: 403

**InternalServerErrorException**

The server encountered an internal error and is unable to complete the request.

HTTP Status Code: 500

**NotFoundException**

One or more of the resources in the request does not exist in the system.

HTTP Status Code: 404

**ServiceUnavailableException**

The service is currently unavailable or busy.

HTTP Status Code: 503

**TooManyRequestsException**

The request was denied due to request throttling.

HTTP Status Code: 429

## See Also

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

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

# AddFlowOutputs

Adds outputs to an existing flow. You can create up to 50 outputs per flow.

## Request Syntax

```
POST /v1/flows/flowArn/outputs HTTP/1.1
Content-type: application/json

{
   "outputs": [
      {
         "cidrAllowList": [ "string" ],
         "description": "string",
         "destination": "string",
         "encryption": {
            "algorithm": "string",
            "constantInitializationVector": "string",
            "deviceId": "string",
            "keyType": "string",
            "region": "string",
            "resourceId": "string",
            "roleArn": "string",
            "secretArn": "string",
            "url": "string"
         },
         "maxLatency": number,
         "mediaStreamOutputConfigurations": [
            {
               "destinationConfigurations": [
                  {
                     "destinationIp": "string",
                     "destinationPort": number,
                     "interface": {
                        "name": "string"
                     }
                  }
               ],
               "encodingName": "string",
               "encodingParameters": {
                  "compressionFactor": number,
                  "encoderProfile": "string"
               },
```

```
                "mediaStreamName": "string"
            }
         ],
         "minLatency": number,
         "name": "string",
         "ndiProgramName": "string",
         "ndiSpeedHqQuality": number,
         "outputStatus": "string",
         "outputTags": {
            "string" : "string"
         },
         "port": number,
         "protocol": "string",
         "remoteId": "string",
         "routerIntegrationState": "string",
         "routerIntegrationTransitEncryption": {
            "encryptionKeyConfiguration": { ... },
            "encryptionKeyType": "string"
         },
         "senderControlPort": number,
         "smoothingLatency": number,
         "streamId": "string",
         "vpcInterfaceAttachment": {
            "vpcInterfaceName": "string"
         }
      }
   ]
}
```

## URI Request Parameters

The request uses the following URI parameters.

### flowArn

The Amazon Resource Name (ARN) of the flow that you want to add outputs to.

Pattern: `arn:.+:mediaconnect.+:flow:.+`

Required: Yes

## Request Body

The request accepts the following data in JSON format.

**outputs**

A list of outputs that you want to add to the flow.

Type: Array of AddOutputRequest objects

Required: Yes

## Response Syntax

```
HTTP/1.1 201
Content-type: application/json

{
   "flowArn": "string",
   "outputs": [
      {
         "bridgeArn": "string",
         "bridgePorts": [ number ],
         "connectedRouterInputArn": "string",
         "dataTransferSubscriberFeePercent": number,
         "description": "string",
         "destination": "string",
         "encryption": {
            "algorithm": "string",
            "constantInitializationVector": "string",
            "deviceId": "string",
            "keyType": "string",
            "region": "string",
            "resourceId": "string",
            "roleArn": "string",
            "secretArn": "string",
            "url": "string"
         },
         "entitlementArn": "string",
         "listenerAddress": "string",
         "mediaLiveInputArn": "string",
         "mediaStreamOutputConfigurations": [
            {
```

```
            "destinationConfigurations": [
               {
                  "destinationIp": "string",
                  "destinationPort": number,
                  "interface": {
                     "name": "string"
                  },
                  "outboundIp": "string"
               }
            ],
            "encodingName": "string",
            "encodingParameters": {
               "compressionFactor": number,
               "encoderProfile": "string"
            },
            "mediaStreamName": "string"
         }
      ],
      "name": "string",
      "outputArn": "string",
      "outputStatus": "string",
      "peerIpAddress": "string",
      "port": number,
      "routerIntegrationState": "string",
      "routerIntegrationTransitEncryption": {
         "encryptionKeyConfiguration": { ... },
         "encryptionKeyType": "string"
      },
      "transport": {
         "cidrAllowList": [ "string" ],
         "maxBitrate": number,
         "maxLatency": number,
         "maxSyncBuffer": number,
         "minLatency": number,
         "ndiProgramName": "string",
         "ndiSourceSettings": {
            "sourceName": "string"
         },
         "ndiSpeedHqQuality": number,
         "protocol": "string",
         "remoteId": "string",
         "senderControlPort": number,
         "senderIpAddress": "string",
         "smoothingLatency": number,
```

```
            "sourceListenerAddress": "string",
            "sourceListenerPort": number,
            "streamId": "string"
         },
         "vpcInterfaceAttachment": {
            "vpcInterfaceName": "string"
         }
      }
   ]
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 201 response.

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

**flowArn**

The ARN of the flow that these outputs were added to.

Type: String

**outputs**

The details of the newly added outputs.

Type: Array of Output objects

## Errors

For information about the errors that are common to all actions, see Common Errors.

**AddFlowOutputs420Exception**

Exception raised by AWS Elemental MediaConnect when adding the flow output. See the error message for the operation for more information on the cause of this exception.

HTTP Status Code: 420

**BadRequestException**

This exception is thrown if the request contains a semantic error. The precise meaning depends on the API, and is documented in the error message.

HTTP Status Code: 400

**ForbiddenException**

You do not have sufficient access to perform this action.

HTTP Status Code: 403

**InternalServerErrorException**

The server encountered an internal error and is unable to complete the request.

HTTP Status Code: 500

**NotFoundException**

One or more of the resources in the request does not exist in the system.

HTTP Status Code: 404

**ServiceUnavailableException**

The service is currently unavailable or busy.

HTTP Status Code: 503

**TooManyRequestsException**

The request was denied due to request throttling.

HTTP Status Code: 429

## See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3

- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

# AddFlowSources

Adds sources to a flow.

## Request Syntax

```
POST /v1/flows/flowArn/source HTTP/1.1
Content-type: application/json

{
   "sources": [
      {
         "decryption": {
            "algorithm": "string",
            "constantInitializationVector": "string",
            "deviceId": "string",
            "keyType": "string",
            "region": "string",
            "resourceId": "string",
            "roleArn": "string",
            "secretArn": "string",
            "url": "string"
         },
         "description": "string",
         "entitlementArn": "string",
         "gatewayBridgeSource": {
            "bridgeArn": "string",
            "vpcInterfaceAttachment": {
               "vpcInterfaceName": "string"
            }
         },
         "ingestPort": number,
         "maxBitrate": number,
         "maxLatency": number,
         "maxSyncBuffer": number,
         "mediaStreamSourceConfigurations": [
            {
               "encodingName": "string",
               "inputConfigurations": [
                  {
                     "inputPort": number,
                     "interface": {
                        "name": "string"
```

```
                    }
                 }
              ],
              "mediaStreamName": "string"
           }
        ],
        "minLatency": number,
        "name": "string",
        "ndiSourceSettings": {
           "sourceName": "string"
        },
        "protocol": "string",
        "routerIntegrationState": "string",
        "routerIntegrationTransitDecryption": {
           "encryptionKeyConfiguration": { ... },
           "encryptionKeyType": "string"
        },
        "senderControlPort": number,
        "senderIpAddress": "string",
        "sourceListenerAddress": "string",
        "sourceListenerPort": number,
        "sourceTags": {
           "string" : "string"
        },
        "streamId": "string",
        "vpcInterfaceName": "string",
        "whitelistCidr": "string"
     }
  ]
}
```

## URI Request Parameters

The request uses the following URI parameters.

### flowArn

The Amazon Resource Name (ARN) of the flow that you want to update.

Pattern: `arn:.+:mediaconnect.+:flow:.+`

Required: Yes

## Request Body

The request accepts the following data in JSON format.

**sources**

A list of sources that you want to add to the flow.

Type: Array of SetSourceRequest objects

Required: Yes

## Response Syntax

```
HTTP/1.1 201
Content-type: application/json

{
   "flowArn": "string",
   "sources": [
      {
         "connectedRouterOutputArn": "string",
         "dataTransferSubscriberFeePercent": number,
         "decryption": {
            "algorithm": "string",
            "constantInitializationVector": "string",
            "deviceId": "string",
            "keyType": "string",
            "region": "string",
            "resourceId": "string",
            "roleArn": "string",
            "secretArn": "string",
            "url": "string"
         },
         "description": "string",
         "entitlementArn": "string",
         "gatewayBridgeSource": {
            "bridgeArn": "string",
            "vpcInterfaceAttachment": {
               "vpcInterfaceName": "string"
            }
         },
         "ingestIp": "string",
```

```
      "ingestPort": number,
      "mediaStreamSourceConfigurations": [
         {
            "encodingName": "string",
            "inputConfigurations": [
               {
                  "inputIp": "string",
                  "inputPort": number,
                  "interface": {
                     "name": "string"
                  }
               }
            ],
            "mediaStreamName": "string"
         }
      ],
      "name": "string",
      "peerIpAddress": "string",
      "routerIntegrationState": "string",
      "routerIntegrationTransitDecryption": {
         "encryptionKeyConfiguration": { ... },
         "encryptionKeyType": "string"
      },
      "senderControlPort": number,
      "senderIpAddress": "string",
      "sourceArn": "string",
      "transport": {
         "cidrAllowList": [ "string" ],
         "maxBitrate": number,
         "maxLatency": number,
         "maxSyncBuffer": number,
         "minLatency": number,
         "ndiProgramName": "string",
         "ndiSourceSettings": {
            "sourceName": "string"
         },
         "ndiSpeedHqQuality": number,
         "protocol": "string",
         "remoteId": "string",
         "senderControlPort": number,
         "senderIpAddress": "string",
         "smoothingLatency": number,
         "sourceListenerAddress": "string",
         "sourceListenerPort": number,
```

```
            "streamId": "string"
         },
         "vpcInterfaceName": "string",
         "whitelistCidr": "string"
      }
   ]
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 201 response.

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

**flowArn**

The ARN of the flow that these sources were added to.

Type: String

**sources**

The details of the newly added sources.

Type: Array of Source objects

## Errors

For information about the errors that are common to all actions, see Common Errors.

**BadRequestException**

This exception is thrown if the request contains a semantic error. The precise meaning depends on the API, and is documented in the error message.

HTTP Status Code: 400

**ForbiddenException**

You do not have sufficient access to perform this action.

HTTP Status Code: 403

**InternalServerErrorException**

The server encountered an internal error and is unable to complete the request.

HTTP Status Code: 500

**NotFoundException**

One or more of the resources in the request does not exist in the system.

HTTP Status Code: 404

**ServiceUnavailableException**

The service is currently unavailable or busy.

HTTP Status Code: 503

**TooManyRequestsException**

The request was denied due to request throttling.

HTTP Status Code: 429

## See Also

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

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

# AddFlowVpcInterfaces

Adds VPC interfaces to a flow.

## Request Syntax

```
POST /v1/flows/flowArn/vpcInterfaces HTTP/1.1
Content-type: application/json

{
   "vpcInterfaces": [
      {
         "name": "string",
         "networkInterfaceType": "string",
         "roleArn": "string",
         "securityGroupIds": [ "string" ],
         "subnetId": "string",
         "vpcInterfaceTags": {
            "string" : "string"
         }
      }
   ]
}
```

## URI Request Parameters

The request uses the following URI parameters.

### flowArn

The Amazon Resource Name (ARN) of the flow that you want to update.

Pattern: `arn:.+:mediaconnect.+:flow:.+`

Required: Yes

## Request Body

The request accepts the following data in JSON format.

**vpcInterfaces**

A list of VPC interfaces that you want to add to the flow.

Type: Array of VpcInterfaceRequest objects

Required: Yes

## Response Syntax

```
HTTP/1.1 201
Content-type: application/json

{
   "flowArn": "string",
   "vpcInterfaces": [
      {
         "name": "string",
         "networkInterfaceIds": [ "string" ],
         "networkInterfaceType": "string",
         "roleArn": "string",
         "securityGroupIds": [ "string" ],
         "subnetId": "string"
      }
   ]
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 201 response.

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

**flowArn**

The ARN of the flow that these VPC interfaces were added to.

Type: String

**vpcInterfaces**

The details of the newly added VPC interfaces.

Type: Array of VpcInterface objects

## Errors

For information about the errors that are common to all actions, see Common Errors.

**BadRequestException**

This exception is thrown if the request contains a semantic error. The precise meaning depends on the API, and is documented in the error message.

HTTP Status Code: 400

**ForbiddenException**

You do not have sufficient access to perform this action.

HTTP Status Code: 403

**InternalServerErrorException**

The server encountered an internal error and is unable to complete the request.

HTTP Status Code: 500

**NotFoundException**

One or more of the resources in the request does not exist in the system.

HTTP Status Code: 404

**ServiceUnavailableException**

The service is currently unavailable or busy.

HTTP Status Code: 503

**TooManyRequestsException**

The request was denied due to request throttling.

HTTP Status Code: 429

## See Also

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

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

# BatchGetRouterInput

Retrieves information about multiple router inputs in AWS Elemental MediaConnect.

## Request Syntax

```
GET /v1/routerInputs?arns=arns HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

**arns**

The Amazon Resource Names (ARNs) of the router inputs you want to retrieve information about.

Array Members: Minimum number of 1 item. Maximum number of 20 items.

Pattern: `arn:(aws[a-zA-Z-]*):mediaconnect:[a-z0-9-]+:[0-9]{12}:routerInput:[a-z0-9]{12}`

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

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

{
   "errors": [
      {
         "arn": "string",
         "code": "string",
         "message": "string"
      }
   ],
```

```
   "routerInputs": [
      {
         "arn": "string",
         "availabilityZone": "string",
         "configuration": { ... },
         "createdAt": "string",
         "id": "string",
         "inputType": "string",
         "ipAddress": "string",
         "maintenanceConfiguration": { ... },
         "maintenanceSchedule": { ... },
         "maintenanceScheduleType": "string",
         "maintenanceType": "string",
         "maximumBitrate": number,
         "maximumRoutedOutputs": number,
         "messages": [
            {
               "code": "string",
               "message": "string"
            }
         ],
         "name": "string",
         "regionName": "string",
         "routedOutputs": number,
         "routingScope": "string",
         "state": "string",
         "streamDetails": { ... },
         "tags": {
            "string" : "string"
         },
         "tier": "string",
         "transitEncryption": {
            "encryptionKeyConfiguration": { ... },
            "encryptionKeyType": "string"
         },
         "updatedAt": "string"
      }
   ]
}
```

## Response Elements

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

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

**errors**

An array of errors that occurred when retrieving the requested router inputs.

Type: Array of BatchGetRouterInputError objects

**routerInputs**

An array of router inputs that were successfully retrieved.

Type: Array of RouterInput objects

## Errors

For information about the errors that are common to all actions, see Common Errors.

**BadRequestException**

This exception is thrown if the request contains a semantic error. The precise meaning depends on the API, and is documented in the error message.

HTTP Status Code: 400

**ConflictException**

The requested operation would cause a conflict with the current state of a service resource associated with the request. Resolve the conflict before retrying this request.

HTTP Status Code: 409

**InternalServerErrorException**

The server encountered an internal error and is unable to complete the request.

HTTP Status Code: 500

**ServiceUnavailableException**

The service is currently unavailable or busy.

HTTP Status Code: 503

**TooManyRequestsException**

The request was denied due to request throttling.

HTTP Status Code: 429

## See Also

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

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

# BatchGetRouterNetworkInterface

Retrieves information about multiple router network interfaces in AWS Elemental MediaConnect.

## Request Syntax

```
GET /v1/routerNetworkInterfaces?arns=arns HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

**arns**

The Amazon Resource Names (ARNs) of the router network interfaces you want to retrieve information about.

Array Members: Minimum number of 1 item. Maximum number of 20 items.

Pattern: `arn:(aws[a-zA-Z-]*):mediaconnect:[a-z0-9-]+:[0-9]{12}:routerNetworkInterface:[a-z0-9]{12}`

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

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

{
   "errors": [
      {
         "arn": "string",
         "code": "string",
         "message": "string"
```

```
      }
   ],
   "routerNetworkInterfaces": [
      {
         "arn": "string",
         "associatedInputCount": number,
         "associatedOutputCount": number,
         "configuration": { ... },
         "createdAt": "string",
         "id": "string",
         "name": "string",
         "networkInterfaceType": "string",
         "regionName": "string",
         "state": "string",
         "tags": {
            "string" : "string"
         },
         "updatedAt": "string"
      }
   ]
}
```

## Response Elements

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

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

**errors**

An array of errors that occurred when retrieving the requested router network interfaces.

Type: Array of BatchGetRouterNetworkInterfaceError objects

**routerNetworkInterfaces**

An array of router network interfaces that were successfully retrieved.

Type: Array of RouterNetworkInterface objects

## Errors

For information about the errors that are common to all actions, see Common Errors.

**BadRequestException**

This exception is thrown if the request contains a semantic error. The precise meaning depends on the API, and is documented in the error message.

HTTP Status Code: 400

**ConflictException**

The requested operation would cause a conflict with the current state of a service resource associated with the request. Resolve the conflict before retrying this request.

HTTP Status Code: 409

**InternalServerErrorException**

The server encountered an internal error and is unable to complete the request.

HTTP Status Code: 500

**ServiceUnavailableException**

The service is currently unavailable or busy.

HTTP Status Code: 503

**TooManyRequestsException**

The request was denied due to request throttling.

HTTP Status Code: 429

## See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2

- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

# BatchGetRouterOutput

Retrieves information about multiple router outputs in AWS Elemental MediaConnect.

## Request Syntax

```
GET /v1/routerOutputs?arns=arns HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

**arns**

The Amazon Resource Names (ARNs) of the router outputs you want to retrieve information about.

Array Members: Minimum number of 1 item. Maximum number of 20 items.

Pattern: `arn:(aws[a-zA-Z-]*):mediaconnect:[a-z0-9-]+:[0-9]{12}:routerOutput:[a-z0-9]{12}`

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

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

{
   "errors": [
      {
         "arn": "string",
         "code": "string",
         "message": "string"
```

```
      }
   ],
   "routerOutputs": [
      {
         "arn": "string",
         "availabilityZone": "string",
         "configuration": { ... },
         "createdAt": "string",
         "id": "string",
         "ipAddress": "string",
         "maintenanceConfiguration": { ... },
         "maintenanceSchedule": { ... },
         "maintenanceScheduleType": "string",
         "maintenanceType": "string",
         "maximumBitrate": number,
         "messages": [
            {
               "code": "string",
               "message": "string"
            }
         ],
         "name": "string",
         "outputType": "string",
         "regionName": "string",
         "routedInputArn": "string",
         "routedState": "string",
         "routingScope": "string",
         "state": "string",
         "streamDetails": { ... },
         "tags": {
            "string" : "string"
         },
         "tier": "string",
         "updatedAt": "string"
      }
   ]
}
```

## Response Elements

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

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

**errors**

An array of errors that occurred when retrieving the requested router outputs.

Type: Array of BatchGetRouterOutputError objects

**routerOutputs**

An array of router outputs that were successfully retrieved.

Type: Array of RouterOutput objects

## Errors

For information about the errors that are common to all actions, see Common Errors.

**BadRequestException**

This exception is thrown if the request contains a semantic error. The precise meaning depends on the API, and is documented in the error message.

HTTP Status Code: 400

**ConflictException**

The requested operation would cause a conflict with the current state of a service resource associated with the request. Resolve the conflict before retrying this request.

HTTP Status Code: 409

**InternalServerErrorException**

The server encountered an internal error and is unable to complete the request.

HTTP Status Code: 500

**ServiceUnavailableException**

The service is currently unavailable or busy.

HTTP Status Code: 503

**TooManyRequestsException**

The request was denied due to request throttling.

HTTP Status Code: 429

## See Also

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

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

# CreateBridge

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

## Request Syntax

```
POST /v1/bridges HTTP/1.1
Content-type: application/json

{
   "egressGatewayBridge": {
      "maxBitrate": number
   },
   "ingressGatewayBridge": {
      "maxBitrate": number,
      "maxOutputs": number
   },
   "name": "string",
   "outputs": [
      {
         "networkOutput": {
            "ipAddress": "string",
            "name": "string",
            "networkName": "string",
            "port": number,
            "protocol": "string",
            "ttl": number
         }
      }
   ],
   "placementArn": "string",
   "sourceFailoverConfig": {
      "failoverMode": "string",
      "recoveryWindow": number,
      "sourcePriority": {
         "primarySource": "string"
      },
      "state": "string"
   },
   "sources": [
      {
         "flowSource": {
            "flowArn": "string",
```

```
            "flowVpcInterfaceAttachment": {
               "vpcInterfaceName": "string"
            },
            "name": "string"
         },
         "networkSource": {
            "multicastIp": "string",
            "multicastSourceSettings": {
               "multicastSourceIp": "string"
            },
            "name": "string",
            "networkName": "string",
            "port": number,
            "protocol": "string"
         }
      }
   ]
}
```

## URI Request Parameters

The request does not use any URI parameters.

## Request Body

The request accepts the following data in JSON format.

**egressGatewayBridge**

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 object

Required: No

**ingressGatewayBridge**

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

Type: AddIngressGatewayBridgeRequest object

Required: No

**name**

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

Type: String

Required: Yes

**outputs**

The outputs that you want to add to this bridge.

Type: Array of AddBridgeOutputRequest objects

Required: No

**placementArn**

The bridge placement Amazon Resource Number (ARN).

Type: String

Required: Yes

**sourceFailoverConfig**

The settings for source failover.

Type: FailoverConfig object

Required: No

**sources**

The sources that you want to add to this bridge.

Type: Array of AddBridgeSourceRequest objects

Required: Yes

## Response Syntax

```
HTTP/1.1 201
Content-type: application/json

{
   "bridge": {
```

```
   "bridgeArn": "string",
   "bridgeMessages": [
      {
         "code": "string",
         "message": "string",
         "resourceName": "string"
      }
   ],
   "bridgeState": "string",
   "egressGatewayBridge": {
      "instanceId": "string",
      "maxBitrate": number
   },
   "ingressGatewayBridge": {
      "instanceId": "string",
      "maxBitrate": number,
      "maxOutputs": number
   },
   "name": "string",
   "outputs": [
      {
         "flowOutput": {
            "flowArn": "string",
            "flowSourceArn": "string",
            "name": "string"
         },
         "networkOutput": {
            "ipAddress": "string",
            "name": "string",
            "networkName": "string",
            "port": number,
            "protocol": "string",
            "ttl": number
         }
      }
   ],
   "placementArn": "string",
   "sourceFailoverConfig": {
      "failoverMode": "string",
      "recoveryWindow": number,
      "sourcePriority": {
         "primarySource": "string"
      },
      "state": "string"
```

```
      },
      "sources": [
         {
            "flowSource": {
               "flowArn": "string",
               "flowVpcInterfaceAttachment": {
                  "vpcInterfaceName": "string"
               },
               "name": "string",
               "outputArn": "string"
            },
            "networkSource": {
               "multicastIp": "string",
               "multicastSourceSettings": {
                  "multicastSourceIp": "string"
               },
               "name": "string",
               "networkName": "string",
               "port": number,
               "protocol": "string"
            }
         }
      ]
   }
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 201 response.

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

**bridge**

The name of the bridge that was created.

Type: Bridge object

## Errors

For information about the errors that are common to all actions, see Common Errors.

**BadRequestException**

This exception is thrown if the request contains a semantic error. The precise meaning depends on the API, and is documented in the error message.

HTTP Status Code: 400

**ConflictException**

The requested operation would cause a conflict with the current state of a service resource associated with the request. Resolve the conflict before retrying this request.

HTTP Status Code: 409

**CreateBridge420Exception**

Exception raised by AWS Elemental MediaConnect when creating the bridge. See the error message for the operation for more information on the cause of this exception.

HTTP Status Code: 420

**ForbiddenException**

You do not have sufficient access to perform this action.

HTTP Status Code: 403

**InternalServerErrorException**

The server encountered an internal error and is unable to complete the request.

HTTP Status Code: 500

**ServiceUnavailableException**

The service is currently unavailable or busy.

HTTP Status Code: 503

**TooManyRequestsException**

The request was denied due to request throttling.

HTTP Status Code: 429

## See Also

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

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

# 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).

## Request Syntax

```
POST /v1/flows HTTP/1.1
Content-type: application/json

{
   "availabilityZone": "string",
   "encodingConfig": {
      "encodingProfile": "string",
      "videoMaxBitrate": number
   },
   "entitlements": [
      {
         "dataTransferSubscriberFeePercent": number,
         "description": "string",
         "encryption": {
            "algorithm": "string",
            "constantInitializationVector": "string",
            "deviceId": "string",
            "keyType": "string",
            "region": "string",
            "resourceId": "string",
            "roleArn": "string",
            "secretArn": "string",
            "url": "string"
         },
         "entitlementStatus": "string",
         "entitlementTags": {
            "string" : "string"
         },
         "name": "string",
         "subscribers": [ "string" ]
      }
   ],
   "flowSize": "string",
   "flowTags": {
      "string" : "string"
   },
```

```
   "maintenance": {
      "maintenanceDay": "string",
      "maintenanceStartHour": "string"
   },
   "mediaStreams": [
      {
         "attributes": {
            "fmtp": {
               "channelOrder": "string",
               "colorimetry": "string",
               "exactFramerate": "string",
               "par": "string",
               "range": "string",
               "scanMode": "string",
               "tcs": "string"
            },
            "lang": "string"
         },
         "clockRate": number,
         "description": "string",
         "mediaStreamId": number,
         "mediaStreamName": "string",
         "mediaStreamTags": {
            "string" : "string"
         },
         "mediaStreamType": "string",
         "videoFormat": "string"
      }
   ],
   "name": "string",
   "ndiConfig": {
      "machineName": "string",
      "ndiDiscoveryServers": [
         {
            "discoveryServerAddress": "string",
            "discoveryServerPort": number,
            "vpcInterfaceAdapter": "string"
         }
      ],
      "ndiState": "string"
   },
   "outputs": [
      {
         "cidrAllowList": [ "string" ],
```

```
      "description": "string",
      "destination": "string",
      "encryption": {
         "algorithm": "string",
         "constantInitializationVector": "string",
         "deviceId": "string",
         "keyType": "string",
         "region": "string",
         "resourceId": "string",
         "roleArn": "string",
         "secretArn": "string",
         "url": "string"
      },
      "maxLatency": number,
      "mediaStreamOutputConfigurations": [
         {
            "destinationConfigurations": [
               {
                  "destinationIp": "string",
                  "destinationPort": number,
                  "interface": {
                     "name": "string"
                  }
               }
            ],
            "encodingName": "string",
            "encodingParameters": {
               "compressionFactor": number,
               "encoderProfile": "string"
            },
            "mediaStreamName": "string"
         }
      ],
      "minLatency": number,
      "name": "string",
      "ndiProgramName": "string",
      "ndiSpeedHqQuality": number,
      "outputStatus": "string",
      "outputTags": {
         "string" : "string"
      },
      "port": number,
      "protocol": "string",
      "remoteId": "string",
```

```
            "routerIntegrationState": "string",
            "routerIntegrationTransitEncryption": {
               "encryptionKeyConfiguration": { ... },
               "encryptionKeyType": "string"
            },
            "senderControlPort": number,
            "smoothingLatency": number,
            "streamId": "string",
            "vpcInterfaceAttachment": {
               "vpcInterfaceName": "string"
            }
         }
      ],
      "source": {
         "decryption": {
            "algorithm": "string",
            "constantInitializationVector": "string",
            "deviceId": "string",
            "keyType": "string",
            "region": "string",
            "resourceId": "string",
            "roleArn": "string",
            "secretArn": "string",
            "url": "string"
         },
         "description": "string",
         "entitlementArn": "string",
         "gatewayBridgeSource": {
            "bridgeArn": "string",
            "vpcInterfaceAttachment": {
               "vpcInterfaceName": "string"
            }
         },
         "ingestPort": number,
         "maxBitrate": number,
         "maxLatency": number,
         "maxSyncBuffer": number,
         "mediaStreamSourceConfigurations": [
            {
               "encodingName": "string",
               "inputConfigurations": [
                  {
                     "inputPort": number,
                     "interface": {
```

```
                    "name": "string"
                }
            }
        ],
        "mediaStreamName": "string"
    }
  ],
  "minLatency": number,
  "name": "string",
  "ndiSourceSettings": {
    "sourceName": "string"
  },
  "protocol": "string",
  "routerIntegrationState": "string",
  "routerIntegrationTransitDecryption": {
    "encryptionKeyConfiguration": { ... },
    "encryptionKeyType": "string"
  },
  "senderControlPort": number,
  "senderIpAddress": "string",
  "sourceListenerAddress": "string",
  "sourceListenerPort": number,
  "sourceTags": {
    "string" : "string"
  },
  "streamId": "string",
  "vpcInterfaceName": "string",
  "whitelistCidr": "string"
},
"sourceFailoverConfig": {
  "failoverMode": "string",
  "recoveryWindow": number,
  "sourcePriority": {
    "primarySource": "string"
  },
  "state": "string"
},
"sourceMonitoringConfig": {
  "audioMonitoringSettings": [
    {
      "silentAudio": {
        "state": "string",
        "thresholdSeconds": number
      }
```

```
            }
         ],
         "contentQualityAnalysisState": "string",
         "thumbnailState": "string",
         "videoMonitoringSettings": [
            {
               "blackFrames": {
                  "state": "string",
                  "thresholdSeconds": number
               },
               "frozenFrames": {
                  "state": "string",
                  "thresholdSeconds": number
               }
            }
         ]
      },
      "sources": [
         {
            "decryption": {
               "algorithm": "string",
               "constantInitializationVector": "string",
               "deviceId": "string",
               "keyType": "string",
               "region": "string",
               "resourceId": "string",
               "roleArn": "string",
               "secretArn": "string",
               "url": "string"
            },
            "description": "string",
            "entitlementArn": "string",
            "gatewayBridgeSource": {
               "bridgeArn": "string",
               "vpcInterfaceAttachment": {
                  "vpcInterfaceName": "string"
               }
            },
            "ingestPort": number,
            "maxBitrate": number,
            "maxLatency": number,
            "maxSyncBuffer": number,
            "mediaStreamSourceConfigurations": [
               {
```

```
            "encodingName": "string",
            "inputConfigurations": [
               {
                  "inputPort": number,
                  "interface": {
                     "name": "string"
                  }
               }
            ],
            "mediaStreamName": "string"
         }
      ],
      "minLatency": number,
      "name": "string",
      "ndiSourceSettings": {
         "sourceName": "string"
      },
      "protocol": "string",
      "routerIntegrationState": "string",
      "routerIntegrationTransitDecryption": {
         "encryptionKeyConfiguration": { ... },
         "encryptionKeyType": "string"
      },
      "senderControlPort": number,
      "senderIpAddress": "string",
      "sourceListenerAddress": "string",
      "sourceListenerPort": number,
      "sourceTags": {
         "string" : "string"
      },
      "streamId": "string",
      "vpcInterfaceName": "string",
      "whitelistCidr": "string"
   }
],
"vpcInterfaces": [
   {
      "name": "string",
      "networkInterfaceType": "string",
      "roleArn": "string",
      "securityGroupIds": [ "string" ],
      "subnetId": "string",
      "vpcInterfaceTags": {
         "string" : "string"
```

```
            }
        }
    ]
}
```

## URI Request Parameters

The request does not use any URI parameters.

## Request Body

The request accepts the following data in JSON format.

**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: No

**encodingConfig**

The encoding configuration to apply to the NDI® source when transcoding it to a transport stream for downstream distribution. You can choose between several predefined encoding profiles based on common use cases.

Type: EncodingConfig object

Required: No

**entitlements**

The entitlements that you want to grant on a flow.

Type: Array of GrantEntitlementRequest objects

Required: No

**flowSize**

Determines the processing capacity and feature set of the flow. Set this optional parameter to LARGE if you want to enable NDI sources or outputs on the flow.

Type: String

Valid Values: `MEDIUM | LARGE | LARGE_4X`

Required: No

**flowTags**

The key-value pairs that can be used to tag and organize the flow.

Type: String to string map

Required: No

**maintenance**

The maintenance settings you want to use for the flow.

Type: AddMaintenance object

Required: No

**mediaStreams**

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

Type: Array of AddMediaStreamRequest objects

Required: No

**name**

The name of the flow.

Type: String

Required: Yes

**ndiConfig**

Specifies the configuration settings for a flow's NDI source or output. Required when the flow includes an NDI source or output.

Type: NdiConfig object

Required: No

**outputs**

The outputs that you want to add to this flow.

Type: Array of AddOutputRequest objects

Required: No

**source**

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

Type: SetSourceRequest object

Required: No

**sourceFailoverConfig**

The settings for source failover.

Type: FailoverConfig object

Required: No

**sourceMonitoringConfig**

The settings for source monitoring.

Type: MonitoringConfig object

Required: No

**sources**

The sources that are assigned to the flow.

Type: Array of SetSourceRequest objects

Required: No

**vpcInterfaces**

The VPC interfaces you want on the flow.

Type: Array of VpcInterfaceRequest objects

Required: No

## Response Syntax

```
HTTP/1.1 201
Content-type: application/json

{
   "flow": {
      "availabilityZone": "string",
      "description": "string",
      "egressIp": "string",
      "encodingConfig": {
         "encodingProfile": "string",
         "videoMaxBitrate": number
      },
      "entitlements": [
         {
            "dataTransferSubscriberFeePercent": number,
            "description": "string",
            "encryption": {
               "algorithm": "string",
               "constantInitializationVector": "string",
               "deviceId": "string",
               "keyType": "string",
               "region": "string",
               "resourceId": "string",
               "roleArn": "string",
               "secretArn": "string",
               "url": "string"
            },
            "entitlementArn": "string",
            "entitlementStatus": "string",
            "name": "string",
            "subscribers": [ "string" ]
         }
      ],
      "flowArn": "string",
      "flowSize": "string",
      "maintenance": {
         "maintenanceDay": "string",
         "maintenanceDeadline": "string",
         "maintenanceScheduledDate": "string",
         "maintenanceStartHour": "string"
      },
```

```
      "mediaStreams": [
         {
            "attributes": {
               "fmtp": {
                  "channelOrder": "string",
                  "colorimetry": "string",
                  "exactFramerate": "string",
                  "par": "string",
                  "range": "string",
                  "scanMode": "string",
                  "tcs": "string"
               },
               "lang": "string"
            },
            "clockRate": number,
            "description": "string",
            "fmt": number,
            "mediaStreamId": number,
            "mediaStreamName": "string",
            "mediaStreamType": "string",
            "videoFormat": "string"
         }
      ],
      "name": "string",
      "ndiConfig": {
         "machineName": "string",
         "ndiDiscoveryServers": [
            {
               "discoveryServerAddress": "string",
               "discoveryServerPort": number,
               "vpcInterfaceAdapter": "string"
            }
         ],
         "ndiState": "string"
      },
      "outputs": [
         {
            "bridgeArn": "string",
            "bridgePorts": [ number ],
            "connectedRouterInputArn": "string",
            "dataTransferSubscriberFeePercent": number,
            "description": "string",
            "destination": "string",
            "encryption": {
```

```
            "algorithm": "string",
            "constantInitializationVector": "string",
            "deviceId": "string",
            "keyType": "string",
            "region": "string",
            "resourceId": "string",
            "roleArn": "string",
            "secretArn": "string",
            "url": "string"
         },
         "entitlementArn": "string",
         "listenerAddress": "string",
         "mediaLiveInputArn": "string",
         "mediaStreamOutputConfigurations": [
            {
               "destinationConfigurations": [
                  {
                     "destinationIp": "string",
                     "destinationPort": number,
                     "interface": {
                        "name": "string"
                     },
                     "outboundIp": "string"
                  }
               ],
               "encodingName": "string",
               "encodingParameters": {
                  "compressionFactor": number,
                  "encoderProfile": "string"
               },
               "mediaStreamName": "string"
            }
         ],
         "name": "string",
         "outputArn": "string",
         "outputStatus": "string",
         "peerIpAddress": "string",
         "port": number,
         "routerIntegrationState": "string",
         "routerIntegrationTransitEncryption": {
            "encryptionKeyConfiguration": { ... },
            "encryptionKeyType": "string"
         },
         "transport": {
```

```
            "cidrAllowList": [ "string" ],
            "maxBitrate": number,
            "maxLatency": number,
            "maxSyncBuffer": number,
            "minLatency": number,
            "ndiProgramName": "string",
            "ndiSourceSettings": {
               "sourceName": "string"
            },
            "ndiSpeedHqQuality": number,
            "protocol": "string",
            "remoteId": "string",
            "senderControlPort": number,
            "senderIpAddress": "string",
            "smoothingLatency": number,
            "sourceListenerAddress": "string",
            "sourceListenerPort": number,
            "streamId": "string"
         },
         "vpcInterfaceAttachment": {
            "vpcInterfaceName": "string"
         }
      }
   ],
   "source": {
      "connectedRouterOutputArn": "string",
      "dataTransferSubscriberFeePercent": number,
      "decryption": {
         "algorithm": "string",
         "constantInitializationVector": "string",
         "deviceId": "string",
         "keyType": "string",
         "region": "string",
         "resourceId": "string",
         "roleArn": "string",
         "secretArn": "string",
         "url": "string"
      },
      "description": "string",
      "entitlementArn": "string",
      "gatewayBridgeSource": {
         "bridgeArn": "string",
         "vpcInterfaceAttachment": {
            "vpcInterfaceName": "string"
```

```
            }
         },
         "ingestIp": "string",
         "ingestPort": number,
         "mediaStreamSourceConfigurations": [
            {
               "encodingName": "string",
               "inputConfigurations": [
                  {
                     "inputIp": "string",
                     "inputPort": number,
                     "interface": {
                        "name": "string"
                     }
                  }
               ],
               "mediaStreamName": "string"
            }
         ],
         "name": "string",
         "peerIpAddress": "string",
         "routerIntegrationState": "string",
         "routerIntegrationTransitDecryption": {
            "encryptionKeyConfiguration": { ... },
            "encryptionKeyType": "string"
         },
         "senderControlPort": number,
         "senderIpAddress": "string",
         "sourceArn": "string",
         "transport": {
            "cidrAllowList": [ "string" ],
            "maxBitrate": number,
            "maxLatency": number,
            "maxSyncBuffer": number,
            "minLatency": number,
            "ndiProgramName": "string",
            "ndiSourceSettings": {
               "sourceName": "string"
            },
            "ndiSpeedHqQuality": number,
            "protocol": "string",
            "remoteId": "string",
            "senderControlPort": number,
            "senderIpAddress": "string",
```

```
            "smoothingLatency": number,
            "sourceListenerAddress": "string",
            "sourceListenerPort": number,
            "streamId": "string"
         },
         "vpcInterfaceName": "string",
         "whitelistCidr": "string"
      },
      "sourceFailoverConfig": {
         "failoverMode": "string",
         "recoveryWindow": number,
         "sourcePriority": {
            "primarySource": "string"
         },
         "state": "string"
      },
      "sourceMonitoringConfig": {
         "audioMonitoringSettings": [
            {
               "silentAudio": {
                  "state": "string",
                  "thresholdSeconds": number
               }
            }
         ],
         "contentQualityAnalysisState": "string",
         "thumbnailState": "string",
         "videoMonitoringSettings": [
            {
               "blackFrames": {
                  "state": "string",
                  "thresholdSeconds": number
               },
               "frozenFrames": {
                  "state": "string",
                  "thresholdSeconds": number
               }
            }
         ]
      },
      "sources": [
         {
            "connectedRouterOutputArn": "string",
            "dataTransferSubscriberFeePercent": number,
```

```
            "decryption": {
               "algorithm": "string",
               "constantInitializationVector": "string",
               "deviceId": "string",
               "keyType": "string",
               "region": "string",
               "resourceId": "string",
               "roleArn": "string",
               "secretArn": "string",
               "url": "string"
            },
            "description": "string",
            "entitlementArn": "string",
            "gatewayBridgeSource": {
               "bridgeArn": "string",
               "vpcInterfaceAttachment": {
                  "vpcInterfaceName": "string"
               }
            },
            "ingestIp": "string",
            "ingestPort": number,
            "mediaStreamSourceConfigurations": [
               {
                  "encodingName": "string",
                  "inputConfigurations": [
                     {
                        "inputIp": "string",
                        "inputPort": number,
                        "interface": {
                           "name": "string"
                        }
                     }
                  ],
                  "mediaStreamName": "string"
               }
            ],
            "name": "string",
            "peerIpAddress": "string",
            "routerIntegrationState": "string",
            "routerIntegrationTransitDecryption": {
               "encryptionKeyConfiguration": { ... },
               "encryptionKeyType": "string"
            },
            "senderControlPort": number,
```

```
            "senderIpAddress": "string",
            "sourceArn": "string",
            "transport": {
               "cidrAllowList": [ "string" ],
               "maxBitrate": number,
               "maxLatency": number,
               "maxSyncBuffer": number,
               "minLatency": number,
               "ndiProgramName": "string",
               "ndiSourceSettings": {
                  "sourceName": "string"
               },
               "ndiSpeedHqQuality": number,
               "protocol": "string",
               "remoteId": "string",
               "senderControlPort": number,
               "senderIpAddress": "string",
               "smoothingLatency": number,
               "sourceListenerAddress": "string",
               "sourceListenerPort": number,
               "streamId": "string"
            },
            "vpcInterfaceName": "string",
            "whitelistCidr": "string"
         }
      ],
      "status": "string",
      "vpcInterfaces": [
         {
            "name": "string",
            "networkInterfaceIds": [ "string" ],
            "networkInterfaceType": "string",
            "roleArn": "string",
            "securityGroupIds": [ "string" ],
            "subnetId": "string"
         }
      ]
   }
}
```


## Response Elements

If the action is successful, the service sends back an HTTP 201 response.

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

**flow**

The flow that you created.

Type: Flow object

## Errors

For information about the errors that are common to all actions, see Common Errors.

**BadRequestException**

This exception is thrown if the request contains a semantic error. The precise meaning depends on the API, and is documented in the error message.

HTTP Status Code: 400

**CreateFlow420Exception**

Exception raised by AWS Elemental MediaConnect when creating the flow. See the error message for the operation for more information on the cause of this exception.

HTTP Status Code: 420

**ForbiddenException**

You do not have sufficient access to perform this action.

HTTP Status Code: 403

**InternalServerErrorException**

The server encountered an internal error and is unable to complete the request.

HTTP Status Code: 500

**ServiceUnavailableException**

The service is currently unavailable or busy.

HTTP Status Code: 503

**TooManyRequestsException**

The request was denied due to request throttling.

HTTP Status Code: 429

## See Also

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

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

# CreateGateway

Creates a new gateway. The request must include at least one network (up to four).

## Request Syntax

```
POST /v1/gateways HTTP/1.1
Content-type: application/json

{
   "egressCidrBlocks": [ "string" ],
   "name": "string",
   "networks": [
      {
         "cidrBlock": "string",
         "name": "string"
      }
   ]
}
```

## URI Request Parameters

The request does not use any URI parameters.

## Request Body

The request accepts the following data in JSON format.

**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 strings

Required: Yes

**name**

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

Type: String

Required: Yes

**networks**

The list of networks that you want to add to the gateway.

Type: Array of GatewayNetwork objects

Required: Yes

## Response Syntax

```
HTTP/1.1 201
Content-type: application/json

{
   "gateway": {
      "egressCidrBlocks": [ "string" ],
      "gatewayArn": "string",
      "gatewayMessages": [
         {
            "code": "string",
            "message": "string",
            "resourceName": "string"
         }
      ],
      "gatewayState": "string",
      "name": "string",
      "networks": [
         {
            "cidrBlock": "string",
            "name": "string"
         }
      ]
   }
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 201 response.

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

**gateway**

The gateway that you created.

Type: Gateway object

## Errors

For information about the errors that are common to all actions, see Common Errors.

**BadRequestException**

This exception is thrown if the request contains a semantic error. The precise meaning depends on the API, and is documented in the error message.

HTTP Status Code: 400

**ConflictException**

The requested operation would cause a conflict with the current state of a service resource associated with the request. Resolve the conflict before retrying this request.

HTTP Status Code: 409

**CreateGateway420Exception**

Exception raised by AWS Elemental MediaConnect when creating the gateway. See the error message for the operation for more information on the cause of this exception.

HTTP Status Code: 420

**ForbiddenException**

You do not have sufficient access to perform this action.

HTTP Status Code: 403

**InternalServerErrorException**

The server encountered an internal error and is unable to complete the request.

HTTP Status Code: 500

**ServiceUnavailableException**

The service is currently unavailable or busy.

HTTP Status Code: 503

**TooManyRequestsException**

The request was denied due to request throttling.

HTTP Status Code: 429

## See Also

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

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

# CreateRouterInput

Creates a new router input in AWS Elemental MediaConnect.

## Request Syntax

```
POST /v1/routerInput HTTP/1.1
Content-type: application/json

{
   "availabilityZone": "string",
   "clientToken": "string",
   "configuration": { ... },
   "maintenanceConfiguration": { ... },
   "maximumBitrate": number,
   "name": "string",
   "regionName": "string",
   "routingScope": "string",
   "tags": {
      "string" : "string"
   },
   "tier": "string",
   "transitEncryption": {
      "encryptionKeyConfiguration": { ... },
      "encryptionKeyType": "string"
   }
}
```

## URI Request Parameters

The request does not use any URI parameters.

## Request Body

The request accepts the following data in JSON format.

### availabilityZone

The Availability Zone where you want to create the router input. This must be a valid Availability Zone for the region specified by `regionName`, or the current region if no `regionName` is provided.

Type: String

Required: No

**clientToken**

A unique identifier for the request to ensure idempotency.

Type: String

Required: No

**configuration**

The configuration settings for the router input, which can include the protocol, network interface, and other details.

Type: RouterInputConfiguration object

**Note:** This object is a Union. Only one member of this object can be specified or returned.

Required: Yes

**maintenanceConfiguration**

The maintenance configuration settings for the router input, including preferred maintenance windows and schedules.

Type: MaintenanceConfiguration object

**Note:** This object is a Union. Only one member of this object can be specified or returned.

Required: No

**maximumBitrate**

The maximum bitrate for the router input.

Type: Long

Required: Yes

**name**

The name of the router input.

Type: String

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

Required: Yes

**regionName**

The AWS Region for the router input. Defaults to the current region if not specified.

Type: String

Required: No

**routingScope**

Specifies whether the router input can be assigned to outputs in different Regions. REGIONAL (default) - connects only to outputs in same Region. GLOBAL - connects to outputs in any Region.

Type: String

Valid Values: `REGIONAL | GLOBAL`

Required: Yes

**tags**

Key-value pairs that can be used to tag and organize this router input.

Type: String to string map

Required: No

**tier**

The tier level for the router input.

Type: String

Valid Values: `INPUT_100 | INPUT_50 | INPUT_20`

Required: Yes

**transitEncryption**

The transit encryption settings for the router input.

Type: RouterInputTransitEncryption object

Required: No

## Response Syntax

```
HTTP/1.1 201
Content-type: application/json

{
   "routerInput": {
      "arn": "string",
      "availabilityZone": "string",
      "configuration": { ... },
      "createdAt": "string",
      "id": "string",
      "inputType": "string",
      "ipAddress": "string",
      "maintenanceConfiguration": { ... },
      "maintenanceSchedule": { ... },
      "maintenanceScheduleType": "string",
      "maintenanceType": "string",
      "maximumBitrate": number,
      "maximumRoutedOutputs": number,
      "messages": [
         {
            "code": "string",
            "message": "string"
         }
      ],
      "name": "string",
      "regionName": "string",
      "routedOutputs": number,
      "routingScope": "string",
      "state": "string",
      "streamDetails": { ... },
      "tags": {
         "string" : "string"
      },
      "tier": "string",
      "transitEncryption": {
         "encryptionKeyConfiguration": { ... },
         "encryptionKeyType": "string"
      },
      "updatedAt": "string"
   }
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 201 response.

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

**routerInput**

The newly-created router input.

Type: RouterInput object

## Errors

For information about the errors that are common to all actions, see Common Errors.

**BadRequestException**

This exception is thrown if the request contains a semantic error. The precise meaning depends on the API, and is documented in the error message.

HTTP Status Code: 400

**ConflictException**

The requested operation would cause a conflict with the current state of a service resource associated with the request. Resolve the conflict before retrying this request.

HTTP Status Code: 409

**ForbiddenException**

You do not have sufficient access to perform this action.

HTTP Status Code: 403

**InternalServerErrorException**

The server encountered an internal error and is unable to complete the request.

HTTP Status Code: 500

**RouterInputServiceQuotaExceededException**

The request to create a new router input would exceed the service quotas for the account.

HTTP Status Code: 420

**ServiceUnavailableException**

The service is currently unavailable or busy.

HTTP Status Code: 503

**TooManyRequestsException**

The request was denied due to request throttling.

HTTP Status Code: 429

## See Also

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

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

# CreateRouterNetworkInterface

Creates a new router network interface in AWS Elemental MediaConnect.

## Request Syntax

```
POST /v1/routerNetworkInterface HTTP/1.1
Content-type: application/json

{
   "clientToken": "string",
   "configuration": { ... },
   "name": "string",
   "regionName": "string",
   "tags": {
      "string" : "string"
   }
}
```

## URI Request Parameters

The request does not use any URI parameters.

## Request Body

The request accepts the following data in JSON format.

**clientToken**

A unique identifier for the request to ensure idempotency.

Type: String

Required: No

**configuration**

The configuration settings for the router network interface.

Type: RouterNetworkInterfaceConfiguration object

**Note:** This object is a Union. Only one member of this object can be specified or returned.

Required: Yes

**name**

The name of the router network interface.

Type: String

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

Required: Yes

**regionName**

The AWS Region for the router network interface. Defaults to the current region if not specified.

Type: String

Required: No

**tags**

Key-value pairs that can be used to tag and organize this router network interface.

Type: String to string map

Required: No

## Response Syntax

```
HTTP/1.1 201
Content-type: application/json

{
   "routerNetworkInterface": {
      "arn": "string",
      "associatedInputCount": number,
      "associatedOutputCount": number,
      "configuration": { ... },
      "createdAt": "string",
      "id": "string",
      "name": "string",
      "networkInterfaceType": "string",
      "regionName": "string",
```

```
      "state": "string",
      "tags": {
         "string" : "string"
      },
      "updatedAt": "string"
   }
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 201 response.

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

**routerNetworkInterface**

The newly-created router network interface.

Type: RouterNetworkInterface object

## Errors

For information about the errors that are common to all actions, see Common Errors.

**BadRequestException**

This exception is thrown if the request contains a semantic error. The precise meaning depends on the API, and is documented in the error message.

HTTP Status Code: 400

**ConflictException**

The requested operation would cause a conflict with the current state of a service resource associated with the request. Resolve the conflict before retrying this request.

HTTP Status Code: 409

**ForbiddenException**

You do not have sufficient access to perform this action.

HTTP Status Code: 403

**InternalServerErrorException**

The server encountered an internal error and is unable to complete the request.

HTTP Status Code: 500

**RouterNetworkInterfaceServiceQuotaExceededException**

The request to create a new router network interface would exceed the service quotas (limits) set for the account.

HTTP Status Code: 420

**ServiceUnavailableException**

The service is currently unavailable or busy.

HTTP Status Code: 503

**TooManyRequestsException**

The request was denied due to request throttling.

HTTP Status Code: 429

## See Also

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

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

# CreateRouterOutput

Creates a new router output in AWS Elemental MediaConnect.

## Request Syntax

```
POST /v1/routerOutput HTTP/1.1
Content-type: application/json

{
   "availabilityZone": "string",
   "clientToken": "string",
   "configuration": { ... },
   "maintenanceConfiguration": { ... },
   "maximumBitrate": number,
   "name": "string",
   "regionName": "string",
   "routingScope": "string",
   "tags": {
      "string" : "string"
   },
   "tier": "string"
}
```

## URI Request Parameters

The request does not use any URI parameters.

## Request Body

The request accepts the following data in JSON format.

### availabilityZone

The Availability Zone where you want to create the router output. This must be a valid Availability Zone for the region specified by `regionName`, or the current region if no `regionName` is provided.

Type: String

Required: No

### clientToken

A unique identifier for the request to ensure idempotency.

Type: String

Required: No

### configuration

The configuration settings for the router output.

Type: RouterOutputConfiguration object

**Note:** This object is a Union. Only one member of this object can be specified or returned.

Required: Yes

### maintenanceConfiguration

The maintenance configuration settings for the router output, including preferred maintenance windows and schedules.

Type: MaintenanceConfiguration object

**Note:** This object is a Union. Only one member of this object can be specified or returned.

Required: No

### maximumBitrate

The maximum bitrate for the router output.

Type: Long

Required: Yes

### name

The name of the router output.

Type: String

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

Required: Yes

**regionName**

The AWS Region for the router output. Defaults to the current region if not specified.

Type: String

Required: No

**routingScope**

Specifies whether the router output can take inputs that are in different Regions. REGIONAL (default) - can only take inputs from same Region. GLOBAL - can take inputs from any Region.

Type: String

Valid Values: `REGIONAL | GLOBAL`

Required: Yes

**tags**

Key-value pairs that can be used to tag this router output.

Type: String to string map

Required: No

**tier**

The tier level for the router output.

Type: String

Valid Values: `OUTPUT_100 | OUTPUT_50 | OUTPUT_20`

Required: Yes

## Response Syntax

```
HTTP/1.1 201
Content-type: application/json

{
   "routerOutput": {
      "arn": "string",
```

```
      "availabilityZone": "string",
      "configuration": { ... },
      "createdAt": "string",
      "id": "string",
      "ipAddress": "string",
      "maintenanceConfiguration": { ... },
      "maintenanceSchedule": { ... },
      "maintenanceScheduleType": "string",
      "maintenanceType": "string",
      "maximumBitrate": number,
      "messages": [
         {
            "code": "string",
            "message": "string"
         }
      ],
      "name": "string",
      "outputType": "string",
      "regionName": "string",
      "routedInputArn": "string",
      "routedState": "string",
      "routingScope": "string",
      "state": "string",
      "streamDetails": { ... },
      "tags": {
         "string" : "string"
      },
      "tier": "string",
      "updatedAt": "string"
   }
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 201 response.

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

**routerOutput**

The newly-created router output.

Type: RouterOutput object

# Errors

For information about the errors that are common to all actions, see Common Errors.

**BadRequestException**

This exception is thrown if the request contains a semantic error. The precise meaning depends on the API, and is documented in the error message.

HTTP Status Code: 400

**ConflictException**

The requested operation would cause a conflict with the current state of a service resource associated with the request. Resolve the conflict before retrying this request.

HTTP Status Code: 409

**ForbiddenException**

You do not have sufficient access to perform this action.

HTTP Status Code: 403

**InternalServerErrorException**

The server encountered an internal error and is unable to complete the request.

HTTP Status Code: 500

**RouterOutputServiceQuotaExceededException**

The request to create a new router output would exceed the service quotas (limits) set for the account.

HTTP Status Code: 420

**ServiceUnavailableException**

The service is currently unavailable or busy.

HTTP Status Code: 503

**TooManyRequestsException**

The request was denied due to request throttling.

HTTP Status Code: 429

## See Also

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

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

# DeleteBridge

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

## Request Syntax

```
DELETE /v1/bridges/bridgeArn HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

**bridgeArn**

The Amazon Resource Name (ARN) of the bridge that you want to delete.

Pattern: `arn:.+:mediaconnect.+:bridge:.+`

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

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

{
   "bridgeArn": "string"
}
```

## Response Elements

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

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

**bridgeArn**

The ARN of the deleted bridge.

Type: String

## Errors

For information about the errors that are common to all actions, see Common Errors.

**BadRequestException**

This exception is thrown if the request contains a semantic error. The precise meaning depends on the API, and is documented in the error message.

HTTP Status Code: 400

**ConflictException**

The requested operation would cause a conflict with the current state of a service resource associated with the request. Resolve the conflict before retrying this request.

HTTP Status Code: 409

**ForbiddenException**

You do not have sufficient access to perform this action.

HTTP Status Code: 403

**InternalServerErrorException**

The server encountered an internal error and is unable to complete the request.

HTTP Status Code: 500

**NotFoundException**

One or more of the resources in the request does not exist in the system.

HTTP Status Code: 404

**ServiceUnavailableException**

The service is currently unavailable or busy.

HTTP Status Code: 503

**TooManyRequestsException**

The request was denied due to request throttling.

HTTP Status Code: 429

## See Also

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

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

# DeleteFlow

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

## Request Syntax

```
DELETE /v1/flows/flowArn HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

**flowArn**

The Amazon Resource Name (ARN) of the flow that you want to delete.

Pattern: `arn:.+:mediaconnect.+:flow:.+`

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 202
Content-type: application/json

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

## Response Elements

If the action is successful, the service sends back an HTTP 202 response.

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

**flowArn**

The ARN of the flow that was deleted.

Type: String

**status**

The status of the flow when the `DeleteFlow` process begins.

Type: String

Valid Values: `STANDBY | ACTIVE | UPDATING | DELETING | STARTING | STOPPING | ERROR`

## Errors

For information about the errors that are common to all actions, see Common Errors.

**BadRequestException**

This exception is thrown if the request contains a semantic error. The precise meaning depends on the API, and is documented in the error message.

HTTP Status Code: 400

**ForbiddenException**

You do not have sufficient access to perform this action.

HTTP Status Code: 403

**InternalServerErrorException**

The server encountered an internal error and is unable to complete the request.

HTTP Status Code: 500

**NotFoundException**

One or more of the resources in the request does not exist in the system.

HTTP Status Code: 404

**ServiceUnavailableException**

The service is currently unavailable or busy.

HTTP Status Code: 503

**TooManyRequestsException**

The request was denied due to request throttling.

HTTP Status Code: 429

## See Also

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

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

# DeleteGateway

Deletes a gateway. Before you can delete a gateway, you must deregister its instances and delete its bridges.

## Request Syntax

```
DELETE /v1/gateways/gatewayArn HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

**gatewayArn**

The Amazon Resource Name (ARN) of the gateway that you want to delete.

Pattern: `arn:.+:mediaconnect.+:gateway:.+`

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

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

{
   "gatewayArn": "string"
}
```

## Response Elements

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

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

**gatewayArn**

The ARN of the gateway that was deleted.

Type: String

## Errors

For information about the errors that are common to all actions, see Common Errors.

**BadRequestException**

This exception is thrown if the request contains a semantic error. The precise meaning depends on the API, and is documented in the error message.

HTTP Status Code: 400

**ConflictException**

The requested operation would cause a conflict with the current state of a service resource associated with the request. Resolve the conflict before retrying this request.

HTTP Status Code: 409

**ForbiddenException**

You do not have sufficient access to perform this action.

HTTP Status Code: 403

**InternalServerErrorException**

The server encountered an internal error and is unable to complete the request.

HTTP Status Code: 500

**NotFoundException**

One or more of the resources in the request does not exist in the system.

HTTP Status Code: 404

**ServiceUnavailableException**

The service is currently unavailable or busy.

HTTP Status Code: 503

**TooManyRequestsException**

The request was denied due to request throttling.

HTTP Status Code: 429

## See Also

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

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

# DeleteRouterInput

Deletes a router input from AWS Elemental MediaConnect.

## Request Syntax

```
DELETE /v1/routerInput/arn HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

**arn**

The Amazon Resource Name (ARN) of the router input that you want to delete.

Pattern: `arn:(aws[a-zA-Z-]*):mediaconnect:[a-z0-9-]+:[0-9]{12}:routerInput:[a-z0-9]{12}`

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

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

{
   "arn": "string",
   "name": "string",
   "state": "string"
}
```

## Response Elements

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

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

**arn**

The ARN of the deleted router input.

Type: String

Pattern: `arn:(aws[a-zA-Z-]*):mediaconnect:[a-z0-9-]+:[0-9]{12}:routerInput:[a-z0-9]{12}`

**name**

The name of the deleted router input.

Type: String

**state**

The current state of the deleted router input, indicating where it is in the deletion process.

Type: String

Valid Values: `CREATING | STANDBY | STARTING | ACTIVE | STOPPING | DELETING | UPDATING | ERROR | RECOVERING | MIGRATING`

## Errors

For information about the errors that are common to all actions, see Common Errors.

**BadRequestException**

This exception is thrown if the request contains a semantic error. The precise meaning depends on the API, and is documented in the error message.

HTTP Status Code: 400

**ConflictException**

The requested operation would cause a conflict with the current state of a service resource associated with the request. Resolve the conflict before retrying this request.

HTTP Status Code: 409

**ForbiddenException**

You do not have sufficient access to perform this action.

HTTP Status Code: 403

**InternalServerErrorException**

The server encountered an internal error and is unable to complete the request.

HTTP Status Code: 500

**NotFoundException**

One or more of the resources in the request does not exist in the system.

HTTP Status Code: 404

**ServiceUnavailableException**

The service is currently unavailable or busy.

HTTP Status Code: 503

**TooManyRequestsException**

The request was denied due to request throttling.

HTTP Status Code: 429

## See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin

- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

# DeleteRouterNetworkInterface

Deletes a router network interface from AWS Elemental MediaConnect.

## Request Syntax

```
DELETE /v1/routerNetworkInterface/arn HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

**arn**

The Amazon Resource Name (ARN) of the router network interface that you want to delete.

Pattern: `arn:(aws[a-zA-Z-]*):mediaconnect:[a-z0-9-]+:[0-9]{12}:routerNetworkInterface:[a-z0-9]{12}`

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

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

{
   "arn": "string",
   "name": "string",
   "state": "string"
}
```

## Response Elements

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

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

**arn**

The ARN of the deleted router network interface.

Type: String

Pattern: `arn:(aws[a-zA-Z-]*):mediaconnect:[a-z0-9-]+:[0-9]{12}:routerNetworkInterface:[a-z0-9]{12}`

**name**

The name of the deleted router network interface.

Type: String

**state**

The current state of the deleted router network interface, indicating where it is in the deletion process.

Type: String

Valid Values: `CREATING | ACTIVE | UPDATING | DELETING | ERROR | RECOVERING`

## Errors

For information about the errors that are common to all actions, see Common Errors.

**BadRequestException**

This exception is thrown if the request contains a semantic error. The precise meaning depends on the API, and is documented in the error message.

HTTP Status Code: 400

**ConflictException**

The requested operation would cause a conflict with the current state of a service resource associated with the request. Resolve the conflict before retrying this request.

HTTP Status Code: 409

**ForbiddenException**

You do not have sufficient access to perform this action.

HTTP Status Code: 403

**InternalServerErrorException**

The server encountered an internal error and is unable to complete the request.

HTTP Status Code: 500

**NotFoundException**

One or more of the resources in the request does not exist in the system.

HTTP Status Code: 404

**ServiceUnavailableException**

The service is currently unavailable or busy.

HTTP Status Code: 503

**TooManyRequestsException**

The request was denied due to request throttling.

HTTP Status Code: 429

## See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin

- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

# DeleteRouterOutput

Deletes a router output from AWS Elemental MediaConnect.

## Request Syntax

```
DELETE /v1/routerOutput/arn HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

**arn**

The Amazon Resource Name (ARN) of the router output that you want to delete.

Pattern: `arn:(aws[a-zA-Z-]*):mediaconnect:[a-z0-9-]+:[0-9]{12}:routerOutput:[a-z0-9]{12}`

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

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

{
   "arn": "string",
   "name": "string",
   "state": "string"
}
```

## Response Elements

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

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

**arn**

The ARN of the deleted router output.

Type: String

Pattern: `arn:(aws[a-zA-Z-]*):mediaconnect:[a-z0-9-]+:[0-9]{12}:routerOutput:[a-z0-9]{12}`

**name**

The name of the deleted router output.

Type: String

**state**

The current state of the deleted router output, indicating where it is in the deletion process.

Type: String

Valid Values: `CREATING | STANDBY | STARTING | ACTIVE | STOPPING | DELETING | UPDATING | ERROR | RECOVERING | MIGRATING`

## Errors

For information about the errors that are common to all actions, see Common Errors.

**BadRequestException**

This exception is thrown if the request contains a semantic error. The precise meaning depends on the API, and is documented in the error message.

HTTP Status Code: 400

**ConflictException**

The requested operation would cause a conflict with the current state of a service resource associated with the request. Resolve the conflict before retrying this request.

HTTP Status Code: 409

**ForbiddenException**

You do not have sufficient access to perform this action.

HTTP Status Code: 403

**InternalServerErrorException**

The server encountered an internal error and is unable to complete the request.

HTTP Status Code: 500

**NotFoundException**

One or more of the resources in the request does not exist in the system.

HTTP Status Code: 404

**ServiceUnavailableException**

The service is currently unavailable or busy.

HTTP Status Code: 503

**TooManyRequestsException**

The request was denied due to request throttling.

HTTP Status Code: 429

## See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin

- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

# 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.

## Request Syntax

```
DELETE /v1/gateway-instances/gatewayInstanceArn?force=force HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

**force**

Force the deregistration of an instance. Force will deregister an instance, even if there are bridges running on it.

**gatewayInstanceArn**

The Amazon Resource Name (ARN) of the gateway that contains the instance that you want to deregister.

Pattern: `arn:.+:mediaconnect.+:gateway:.+:instance:.+`

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 202
Content-type: application/json

{
   "gatewayInstanceArn": "string",
   "instanceState": "string"
```

```
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 202 response.

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

**gatewayInstanceArn**

The ARN of the instance.

Type: String

**instanceState**

The status of the instance.

Type: String

Valid Values: `REGISTERING | ACTIVE | DEREGISTERING | DEREGISTERED | REGISTRATION_ERROR | DEREGISTRATION_ERROR`

## Errors

For information about the errors that are common to all actions, see Common Errors.

**BadRequestException**

This exception is thrown if the request contains a semantic error. The precise meaning depends on the API, and is documented in the error message.

HTTP Status Code: 400

**ConflictException**

The requested operation would cause a conflict with the current state of a service resource associated with the request. Resolve the conflict before retrying this request.

HTTP Status Code: 409

**ForbiddenException**

You do not have sufficient access to perform this action.

HTTP Status Code: 403

**InternalServerErrorException**

The server encountered an internal error and is unable to complete the request.

HTTP Status Code: 500

**NotFoundException**

One or more of the resources in the request does not exist in the system.

HTTP Status Code: 404

**ServiceUnavailableException**

The service is currently unavailable or busy.

HTTP Status Code: 503

**TooManyRequestsException**

The request was denied due to request throttling.

HTTP Status Code: 429

## See Also

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

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

# DescribeBridge

Displays the details of a bridge.

## Request Syntax

```
GET /v1/bridges/bridgeArn HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### bridgeArn

The Amazon Resource Name (ARN) of the bridge that you want to describe.

Pattern: `arn:.+:mediaconnect.+:bridge:.+`

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

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

{
   "bridge": {
      "bridgeArn": "string",
      "bridgeMessages": [
         {
            "code": "string",
            "message": "string",
            "resourceName": "string"
         }
      ],
      "bridgeState": "string",
      "egressGatewayBridge": {
```

```
            "instanceId": "string",
            "maxBitrate": number
         },
         "ingressGatewayBridge": {
            "instanceId": "string",
            "maxBitrate": number,
            "maxOutputs": number
         },
         "name": "string",
         "outputs": [
            {
               "flowOutput": {
                  "flowArn": "string",
                  "flowSourceArn": "string",
                  "name": "string"
               },
               "networkOutput": {
                  "ipAddress": "string",
                  "name": "string",
                  "networkName": "string",
                  "port": number,
                  "protocol": "string",
                  "ttl": number
               }
            }
         ],
         "placementArn": "string",
         "sourceFailoverConfig": {
            "failoverMode": "string",
            "recoveryWindow": number,
            "sourcePriority": {
               "primarySource": "string"
            },
            "state": "string"
         },
         "sources": [
            {
               "flowSource": {
                  "flowArn": "string",
                  "flowVpcInterfaceAttachment": {
                     "vpcInterfaceName": "string"
                  },
                  "name": "string",
                  "outputArn": "string"
```

```
            },
            "networkSource": {
               "multicastIp": "string",
               "multicastSourceSettings": {
                  "multicastSourceIp": "string"
               },
               "name": "string",
               "networkName": "string",
               "port": number,
               "protocol": "string"
            }
         }
      ]
   }
}
```

## Response Elements

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

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

**bridge**

The bridge that you requested a description of.

Type: Bridge object

## Errors

For information about the errors that are common to all actions, see Common Errors.

**BadRequestException**

This exception is thrown if the request contains a semantic error. The precise meaning depends on the API, and is documented in the error message.

HTTP Status Code: 400

**ConflictException**

The requested operation would cause a conflict with the current state of a service resource associated with the request. Resolve the conflict before retrying this request.

HTTP Status Code: 409

**ForbiddenException**

You do not have sufficient access to perform this action.

HTTP Status Code: 403

**InternalServerErrorException**

The server encountered an internal error and is unable to complete the request.

HTTP Status Code: 500

**NotFoundException**

One or more of the resources in the request does not exist in the system.

HTTP Status Code: 404

**ServiceUnavailableException**

The service is currently unavailable or busy.

HTTP Status Code: 503

**TooManyRequestsException**

The request was denied due to request throttling.

HTTP Status Code: 429

## See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3

- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

# DescribeFlow

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

## Request Syntax

```
GET /v1/flows/flowArn HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### flowArn

The ARN of the flow that you want to describe.

Pattern: `arn:.+:mediaconnect.+:flow:.+`

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

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

{
   "flow": {
      "availabilityZone": "string",
      "description": "string",
      "egressIp": "string",
      "encodingConfig": {
         "encodingProfile": "string",
         "videoMaxBitrate": number
      },
      "entitlements": [
         {
```

```
            "dataTransferSubscriberFeePercent": number,
            "description": "string",
            "encryption": {
               "algorithm": "string",
               "constantInitializationVector": "string",
               "deviceId": "string",
               "keyType": "string",
               "region": "string",
               "resourceId": "string",
               "roleArn": "string",
               "secretArn": "string",
               "url": "string"
            },
            "entitlementArn": "string",
            "entitlementStatus": "string",
            "name": "string",
            "subscribers": [ "string" ]
         }
      ],
      "flowArn": "string",
      "flowSize": "string",
      "maintenance": {
         "maintenanceDay": "string",
         "maintenanceDeadline": "string",
         "maintenanceScheduledDate": "string",
         "maintenanceStartHour": "string"
      },
      "mediaStreams": [
         {
            "attributes": {
               "fmtp": {
                  "channelOrder": "string",
                  "colorimetry": "string",
                  "exactFramerate": "string",
                  "par": "string",
                  "range": "string",
                  "scanMode": "string",
                  "tcs": "string"
               },
               "lang": "string"
            },
            "clockRate": number,
            "description": "string",
            "fmt": number,
```

```
            "mediaStreamId": number,
            "mediaStreamName": "string",
            "mediaStreamType": "string",
            "videoFormat": "string"
         }
      ],
      "name": "string",
      "ndiConfig": {
         "machineName": "string",
         "ndiDiscoveryServers": [
            {
               "discoveryServerAddress": "string",
               "discoveryServerPort": number,
               "vpcInterfaceAdapter": "string"
            }
         ],
         "ndiState": "string"
      },
      "outputs": [
         {
            "bridgeArn": "string",
            "bridgePorts": [ number ],
            "connectedRouterInputArn": "string",
            "dataTransferSubscriberFeePercent": number,
            "description": "string",
            "destination": "string",
            "encryption": {
               "algorithm": "string",
               "constantInitializationVector": "string",
               "deviceId": "string",
               "keyType": "string",
               "region": "string",
               "resourceId": "string",
               "roleArn": "string",
               "secretArn": "string",
               "url": "string"
            },
            "entitlementArn": "string",
            "listenerAddress": "string",
            "mediaLiveInputArn": "string",
            "mediaStreamOutputConfigurations": [
               {
                  "destinationConfigurations": [
                     {
```

```
                    "destinationIp": "string",
                    "destinationPort": number,
                    "interface": {
                       "name": "string"
                    },
                    "outboundIp": "string"
                 }
              ],
              "encodingName": "string",
              "encodingParameters": {
                 "compressionFactor": number,
                 "encoderProfile": "string"
              },
              "mediaStreamName": "string"
           }
        ],
        "name": "string",
        "outputArn": "string",
        "outputStatus": "string",
        "peerIpAddress": "string",
        "port": number,
        "routerIntegrationState": "string",
        "routerIntegrationTransitEncryption": {
           "encryptionKeyConfiguration": { ... },
           "encryptionKeyType": "string"
        },
        "transport": {
           "cidrAllowList": [ "string" ],
           "maxBitrate": number,
           "maxLatency": number,
           "maxSyncBuffer": number,
           "minLatency": number,
           "ndiProgramName": "string",
           "ndiSourceSettings": {
              "sourceName": "string"
           },
           "ndiSpeedHqQuality": number,
           "protocol": "string",
           "remoteId": "string",
           "senderControlPort": number,
           "senderIpAddress": "string",
           "smoothingLatency": number,
           "sourceListenerAddress": "string",
           "sourceListenerPort": number,
```

```
            "streamId": "string"
         },
         "vpcInterfaceAttachment": {
            "vpcInterfaceName": "string"
         }
      }
   ],
   "source": {
      "connectedRouterOutputArn": "string",
      "dataTransferSubscriberFeePercent": number,
      "decryption": {
         "algorithm": "string",
         "constantInitializationVector": "string",
         "deviceId": "string",
         "keyType": "string",
         "region": "string",
         "resourceId": "string",
         "roleArn": "string",
         "secretArn": "string",
         "url": "string"
      },
      "description": "string",
      "entitlementArn": "string",
      "gatewayBridgeSource": {
         "bridgeArn": "string",
         "vpcInterfaceAttachment": {
            "vpcInterfaceName": "string"
         }
      },
      "ingestIp": "string",
      "ingestPort": number,
      "mediaStreamSourceConfigurations": [
         {
            "encodingName": "string",
            "inputConfigurations": [
               {
                  "inputIp": "string",
                  "inputPort": number,
                  "interface": {
                     "name": "string"
                  }
               }
            ],
            "mediaStreamName": "string"
```

```
            }
         ],
         "name": "string",
         "peerIpAddress": "string",
         "routerIntegrationState": "string",
         "routerIntegrationTransitDecryption": {
            "encryptionKeyConfiguration": { ... },
            "encryptionKeyType": "string"
         },
         "senderControlPort": number,
         "senderIpAddress": "string",
         "sourceArn": "string",
         "transport": {
            "cidrAllowList": [ "string" ],
            "maxBitrate": number,
            "maxLatency": number,
            "maxSyncBuffer": number,
            "minLatency": number,
            "ndiProgramName": "string",
            "ndiSourceSettings": {
               "sourceName": "string"
            },
            "ndiSpeedHqQuality": number,
            "protocol": "string",
            "remoteId": "string",
            "senderControlPort": number,
            "senderIpAddress": "string",
            "smoothingLatency": number,
            "sourceListenerAddress": "string",
            "sourceListenerPort": number,
            "streamId": "string"
         },
         "vpcInterfaceName": "string",
         "whitelistCidr": "string"
      },
      "sourceFailoverConfig": {
         "failoverMode": "string",
         "recoveryWindow": number,
         "sourcePriority": {
            "primarySource": "string"
         },
         "state": "string"
      },
      "sourceMonitoringConfig": {
```

```
      "audioMonitoringSettings": [
         {
            "silentAudio": {
               "state": "string",
               "thresholdSeconds": number
            }
         }
      ],
      "contentQualityAnalysisState": "string",
      "thumbnailState": "string",
      "videoMonitoringSettings": [
         {
            "blackFrames": {
               "state": "string",
               "thresholdSeconds": number
            },
            "frozenFrames": {
               "state": "string",
               "thresholdSeconds": number
            }
         }
      ]
   },
   "sources": [
      {
         "connectedRouterOutputArn": "string",
         "dataTransferSubscriberFeePercent": number,
         "decryption": {
            "algorithm": "string",
            "constantInitializationVector": "string",
            "deviceId": "string",
            "keyType": "string",
            "region": "string",
            "resourceId": "string",
            "roleArn": "string",
            "secretArn": "string",
            "url": "string"
         },
         "description": "string",
         "entitlementArn": "string",
         "gatewayBridgeSource": {
            "bridgeArn": "string",
            "vpcInterfaceAttachment": {
               "vpcInterfaceName": "string"
```

```
            }
         },
         "ingestIp": "string",
         "ingestPort": number,
         "mediaStreamSourceConfigurations": [
            {
               "encodingName": "string",
               "inputConfigurations": [
                  {
                     "inputIp": "string",
                     "inputPort": number,
                     "interface": {
                        "name": "string"
                     }
                  }
               ],
               "mediaStreamName": "string"
            }
         ],
         "name": "string",
         "peerIpAddress": "string",
         "routerIntegrationState": "string",
         "routerIntegrationTransitDecryption": {
            "encryptionKeyConfiguration": { ... },
            "encryptionKeyType": "string"
         },
         "senderControlPort": number,
         "senderIpAddress": "string",
         "sourceArn": "string",
         "transport": {
            "cidrAllowList": [ "string" ],
            "maxBitrate": number,
            "maxLatency": number,
            "maxSyncBuffer": number,
            "minLatency": number,
            "ndiProgramName": "string",
            "ndiSourceSettings": {
               "sourceName": "string"
            },
            "ndiSpeedHqQuality": number,
            "protocol": "string",
            "remoteId": "string",
            "senderControlPort": number,
            "senderIpAddress": "string",
```

```
                "smoothingLatency": number,
                "sourceListenerAddress": "string",
                "sourceListenerPort": number,
                "streamId": "string"
             },
             "vpcInterfaceName": "string",
             "whitelistCidr": "string"
          }
       ],
       "status": "string",
       "vpcInterfaces": [
          {
             "name": "string",
             "networkInterfaceIds": [ "string" ],
             "networkInterfaceType": "string",
             "roleArn": "string",
             "securityGroupIds": [ "string" ],
             "subnetId": "string"
          }
       ]
    },
    "messages": {
       "errors": [ "string" ]
    }
}
```

## Response Elements

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

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

**flow**

The flow that you requested a description of.

Type: Flow object

**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 object

## Errors

For information about the errors that are common to all actions, see Common Errors.

**BadRequestException**

This exception is thrown if the request contains a semantic error. The precise meaning depends on the API, and is documented in the error message.

HTTP Status Code: 400

**ForbiddenException**

You do not have sufficient access to perform this action.

HTTP Status Code: 403

**InternalServerErrorException**

The server encountered an internal error and is unable to complete the request.

HTTP Status Code: 500

**NotFoundException**

One or more of the resources in the request does not exist in the system.

HTTP Status Code: 404

**ServiceUnavailableException**

The service is currently unavailable or busy.

HTTP Status Code: 503

**TooManyRequestsException**

The request was denied due to request throttling.

HTTP Status Code: 429

## See Also

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

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

# DescribeFlowSourceMetadata

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.

## Request Syntax

```
GET /v1/flows/flowArn/source-metadata HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### flowArn

The Amazon Resource Name (ARN) of the flow.

Pattern: `arn:(aws[a-zA-Z-]*):mediaconnect:[a-z0-9-]+:[0-9]{12}:flow:[a-zA-Z0-9-]+:[a-zA-Z0-9_-]+`

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

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

{
   "flowArn": "string",
   "messages": [
      {
         "code": "string",
         "message": "string",
         "resourceName": "string"
      }
   ],
```

```
   "ndiInfo": {
      "activeSource": {
         "sourceName": "string"
      },
      "discoveredSources": [
         {
            "sourceName": "string"
         }
      ],
      "mediaInfo": {
         "streams": [
            {
               "channels": number,
               "codec": "string",
               "frameRate": "string",
               "frameResolution": {
                  "frameHeight": number,
                  "frameWidth": number
               },
               "sampleRate": number,
               "scanMode": "string",
               "streamId": number,
               "streamType": "string"
            }
         ]
      },
      "messages": [
         {
            "code": "string",
            "message": "string",
            "resourceName": "string"
         }
      ]
   },
   "timestamp": "string",
   "transportMediaInfo": {
      "programs": [
         {
            "pcrPid": number,
            "programName": "string",
            "programNumber": number,
            "programPid": number,
            "streams": [
               {
```

```
                    "channels": number,
                    "codec": "string",
                    "frameRate": "string",
                    "frameResolution": {
                       "frameHeight": number,
                       "frameWidth": number
                    },
                    "pid": number,
                    "sampleRate": number,
                    "sampleSize": number,
                    "streamType": "string"
                 }
              ]
           }
        ]
     }
}
```

## Response Elements

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

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

**flowArn**

The ARN of the flow that DescribeFlowSourceMetadata was performed on.

Type: String

**messages**

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

Type: Array of MessageDetail objects

**ndiInfo**

The NDI® specific information about the flow's source. This includes the current active NDI sender, a list of all discovered NDI senders, the associated media streams for the active NDI sender, and any relevant status messages.

Type: NdiSourceMetadataInfo object

**timestamp**

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

Type: Timestamp

**transportMediaInfo**

Information about the flow's transport media.

Type: TransportMediaInfo object

## Errors

For information about the errors that are common to all actions, see Common Errors.

**BadRequestException**

This exception is thrown if the request contains a semantic error. The precise meaning depends on the API, and is documented in the error message.

HTTP Status Code: 400

**ForbiddenException**

You do not have sufficient access to perform this action.

HTTP Status Code: 403

**InternalServerErrorException**

The server encountered an internal error and is unable to complete the request.

HTTP Status Code: 500

**NotFoundException**

One or more of the resources in the request does not exist in the system.

HTTP Status Code: 404

**ServiceUnavailableException**

The service is currently unavailable or busy.

HTTP Status Code: 503

**TooManyRequestsException**

The request was denied due to request throttling.

HTTP Status Code: 429

## See Also

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

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

# DescribeFlowSourceThumbnail

Describes the thumbnail for the flow source.

## Request Syntax

```
GET /v1/flows/flowArn/source-thumbnail HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### flowArn

The Amazon Resource Name (ARN) of the flow.

Pattern: `arn:(aws[a-zA-Z-]*):mediaconnect:[a-z0-9-]+:[0-9]{12}:flow:[a-zA-Z0-9-]+:[a-zA-Z0-9_-]+`

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

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

{
   "thumbnailDetails": {
      "flowArn": "string",
      "thumbnail": "string",
      "thumbnailMessages": [
         {
            "code": "string",
            "message": "string",
            "resourceName": "string"
```

```
            }
        ],
        "timecode": "string",
        "timestamp": "string"
    }
}
```

## Response Elements

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

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

**thumbnailDetails**

The details of the thumbnail, including thumbnail base64 string, timecode and the time when thumbnail was generated.

Type: ThumbnailDetails object

## Errors

For information about the errors that are common to all actions, see Common Errors.

**BadRequestException**

This exception is thrown if the request contains a semantic error. The precise meaning depends on the API, and is documented in the error message.

HTTP Status Code: 400

**ForbiddenException**

You do not have sufficient access to perform this action.

HTTP Status Code: 403

**InternalServerErrorException**

The server encountered an internal error and is unable to complete the request.

HTTP Status Code: 500

**NotFoundException**

One or more of the resources in the request does not exist in the system.

HTTP Status Code: 404

**ServiceUnavailableException**

The service is currently unavailable or busy.

HTTP Status Code: 503

**TooManyRequestsException**

The request was denied due to request throttling.

HTTP Status Code: 429

## See Also

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

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

# DescribeGateway

Displays the details of a gateway. The response includes the gateway Amazon Resource Name (ARN), name, and CIDR blocks, as well as details about the networks.

## Request Syntax

```
GET /v1/gateways/gatewayArn HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

**gatewayArn**

The ARN of the gateway that you want to describe.

Pattern: `arn:.+:mediaconnect.+:gateway:.+`

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

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

{
   "gateway": {
      "egressCidrBlocks": [ "string" ],
      "gatewayArn": "string",
      "gatewayMessages": [
         {
            "code": "string",
            "message": "string",
            "resourceName": "string"
```

```
            }
         ],
         "gatewayState": "string",
         "name": "string",
         "networks": [
            {
               "cidrBlock": "string",
               "name": "string"
            }
         ]
      }
}
```

## Response Elements

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

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

**gateway**

The gateway that you wanted to describe.

Type: Gateway object

## Errors

For information about the errors that are common to all actions, see Common Errors.

**BadRequestException**

This exception is thrown if the request contains a semantic error. The precise meaning depends on the API, and is documented in the error message.

HTTP Status Code: 400

**ConflictException**

The requested operation would cause a conflict with the current state of a service resource associated with the request. Resolve the conflict before retrying this request.

HTTP Status Code: 409

**ForbiddenException**

You do not have sufficient access to perform this action.

HTTP Status Code: 403

**InternalServerErrorException**

The server encountered an internal error and is unable to complete the request.

HTTP Status Code: 500

**NotFoundException**

One or more of the resources in the request does not exist in the system.

HTTP Status Code: 404

**ServiceUnavailableException**

The service is currently unavailable or busy.

HTTP Status Code: 503

**TooManyRequestsException**

The request was denied due to request throttling.

HTTP Status Code: 429

## See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin

- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

# DescribeGatewayInstance

Displays the details of an instance.

## Request Syntax

```
GET /v1/gateway-instances/gatewayInstanceArn HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

**gatewayInstanceArn**

The Amazon Resource Name (ARN) of the gateway instance that you want to describe.

Pattern: `arn:.+:mediaconnect.+:gateway:.+:instance:.+`

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

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

{
   "gatewayInstance": {
      "bridgePlacement": "string",
      "connectionStatus": "string",
      "gatewayArn": "string",
      "gatewayInstanceArn": "string",
      "instanceId": "string",
      "instanceMessages": [
         {
            "code": "string",
            "message": "string",
```

```
            "resourceName": "string"
         }
      ],
      "instanceState": "string",
      "runningBridgeCount": number
   }
}
```

## Response Elements

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

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

**gatewayInstance**

The gateway instance that you requested a description of.

Type: GatewayInstance object

## Errors

For information about the errors that are common to all actions, see Common Errors.

**BadRequestException**

This exception is thrown if the request contains a semantic error. The precise meaning depends on the API, and is documented in the error message.

HTTP Status Code: 400

**ConflictException**

The requested operation would cause a conflict with the current state of a service resource associated with the request. Resolve the conflict before retrying this request.

HTTP Status Code: 409

**ForbiddenException**

You do not have sufficient access to perform this action.

HTTP Status Code: 403

**InternalServerErrorException**

The server encountered an internal error and is unable to complete the request.

HTTP Status Code: 500

**NotFoundException**

One or more of the resources in the request does not exist in the system.

HTTP Status Code: 404

**ServiceUnavailableException**

The service is currently unavailable or busy.

HTTP Status Code: 503

**TooManyRequestsException**

The request was denied due to request throttling.

HTTP Status Code: 429

## See Also

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

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

# DescribeOffering

Displays the details of an offering. The response includes the offering description, duration, outbound bandwidth, price, and Amazon Resource Name (ARN).

## Request Syntax

```
GET /v1/offerings/offeringArn HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### offeringArn

The ARN of the offering.

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

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

{
   "offering": {
      "currencyCode": "string",
      "duration": number,
      "durationUnits": "string",
      "offeringArn": "string",
      "offeringDescription": "string",
      "pricePerUnit": "string",
      "priceUnits": "string",
      "resourceSpecification": {
         "reservedBitrate": number,
         "resourceType": "string"
```

```
        }
    }
}
```

## Response Elements

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

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

**offering**

The offering that you requested a description of.

Type: Offering object

## Errors

For information about the errors that are common to all actions, see Common Errors.

**BadRequestException**

This exception is thrown if the request contains a semantic error. The precise meaning depends on the API, and is documented in the error message.

HTTP Status Code: 400

**InternalServerErrorException**

The server encountered an internal error and is unable to complete the request.

HTTP Status Code: 500

**NotFoundException**

One or more of the resources in the request does not exist in the system.

HTTP Status Code: 404

**ServiceUnavailableException**

The service is currently unavailable or busy.

HTTP Status Code: 503

**TooManyRequestsException**

The request was denied due to request throttling.

HTTP Status Code: 429

## See Also

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

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

# 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).

## Request Syntax

```
GET /v1/reservations/reservationArn HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

**reservationArn**

The Amazon Resource Name (ARN) of the offering.

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

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

{
   "reservation": {
      "currencyCode": "string",
      "duration": number,
      "durationUnits": "string",
      "end": "string",
      "offeringArn": "string",
      "offeringDescription": "string",
      "pricePerUnit": "string",
      "priceUnits": "string",
      "reservationArn": "string",
```

```
      "reservationName": "string",
      "reservationState": "string",
      "resourceSpecification": {
         "reservedBitrate": number,
         "resourceType": "string"
      },
      "start": "string"
   }
}
```

## Response Elements

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

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

**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.

Type: Reservation object

## Errors

For information about the errors that are common to all actions, see Common Errors.

**BadRequestException**

This exception is thrown if the request contains a semantic error. The precise meaning depends on the API, and is documented in the error message.

HTTP Status Code: 400

**InternalServerErrorException**

The server encountered an internal error and is unable to complete the request.

HTTP Status Code: 500

**NotFoundException**

One or more of the resources in the request does not exist in the system.

HTTP Status Code: 404

**ServiceUnavailableException**

The service is currently unavailable or busy.

HTTP Status Code: 503

**TooManyRequestsException**

The request was denied due to request throttling.

HTTP Status Code: 429

## See Also

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

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

# GetRouterInput

Retrieves information about a specific router input in AWS Elemental MediaConnect.

## Request Syntax

```
GET /v1/routerInput/arn HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### arn

The Amazon Resource Name (ARN) of the router input to retrieve information about.

Pattern: `arn:(aws[a-zA-Z-]*):mediaconnect:[a-z0-9-]+:[0-9]{12}:routerInput:[a-z0-9]{12}`

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

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

{
   "routerInput": {
      "arn": "string",
      "availabilityZone": "string",
      "configuration": { ... },
      "createdAt": "string",
      "id": "string",
      "inputType": "string",
      "ipAddress": "string",
      "maintenanceConfiguration": { ... },
      "maintenanceSchedule": { ... },
```

```
      "maintenanceScheduleType": "string",
      "maintenanceType": "string",
      "maximumBitrate": number,
      "maximumRoutedOutputs": number,
      "messages": [
         {
            "code": "string",
            "message": "string"
         }
      ],
      "name": "string",
      "regionName": "string",
      "routedOutputs": number,
      "routingScope": "string",
      "state": "string",
      "streamDetails": { ... },
      "tags": {
         "string" : "string"
      },
      "tier": "string",
      "transitEncryption": {
         "encryptionKeyConfiguration": { ... },
         "encryptionKeyType": "string"
      },
      "updatedAt": "string"
   }
}
```

## Response Elements

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

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

**routerInput**

The details of the requested router input, including its configuration, state, and other attributes.

Type: RouterInput object

## Errors

For information about the errors that are common to all actions, see Common Errors.

**BadRequestException**

This exception is thrown if the request contains a semantic error. The precise meaning depends on the API, and is documented in the error message.

HTTP Status Code: 400

**ConflictException**

The requested operation would cause a conflict with the current state of a service resource associated with the request. Resolve the conflict before retrying this request.

HTTP Status Code: 409

**ForbiddenException**

You do not have sufficient access to perform this action.

HTTP Status Code: 403

**InternalServerErrorException**

The server encountered an internal error and is unable to complete the request.

HTTP Status Code: 500

**NotFoundException**

One or more of the resources in the request does not exist in the system.

HTTP Status Code: 404

**ServiceUnavailableException**

The service is currently unavailable or busy.

HTTP Status Code: 503

**TooManyRequestsException**

The request was denied due to request throttling.

HTTP Status Code: 429

## See Also

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

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

# GetRouterInputSourceMetadata

Retrieves detailed metadata information about a specific router input source, including stream details and connection state.

## Request Syntax

```
GET /v1/routerInput/arn/source-metadata HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### arn

The Amazon Resource Name (ARN) of the router input to retrieve metadata for.

Pattern: `arn:(aws[a-zA-Z-]*):mediaconnect:[a-z0-9-]+:[0-9]{12}:routerInput:[a-z0-9]{12}`

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

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

{
   "arn": "string",
   "name": "string",
   "sourceMetadataDetails": {
      "routerInputMetadata": { ... },
      "sourceMetadataMessages": [
         {
            "code": "string",
            "message": "string"
```

```
            }
        ],
        "timestamp": "string"
    }
}
```

## Response Elements

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

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

**arn**

The Amazon Resource Name (ARN) of the router input.

Type: String

Pattern: `arn:(aws[a-zA-Z-]*):mediaconnect:[a-z0-9-]+:[0-9]{12}:routerInput:[a-z0-9]{12}`

**name**

The name of the router input.

Type: String

**sourceMetadataDetails**

Detailed metadata information about the router input source, including connection state, timestamps, and stream configuration.

Type: RouterInputSourceMetadataDetails object

## Errors

For information about the errors that are common to all actions, see Common Errors.

**BadRequestException**

This exception is thrown if the request contains a semantic error. The precise meaning depends on the API, and is documented in the error message.

HTTP Status Code: 400

**ForbiddenException**

You do not have sufficient access to perform this action.

HTTP Status Code: 403

**InternalServerErrorException**

The server encountered an internal error and is unable to complete the request.

HTTP Status Code: 500

**NotFoundException**

One or more of the resources in the request does not exist in the system.

HTTP Status Code: 404

**ServiceUnavailableException**

The service is currently unavailable or busy.

HTTP Status Code: 503

**TooManyRequestsException**

The request was denied due to request throttling.

HTTP Status Code: 429

## See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3

- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

# GetRouterInputThumbnail

Retrieves the thumbnail for a router input in AWS Elemental MediaConnect.

## Request Syntax

```
GET /v1/routerInput/arn/thumbnail HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

**arn**

The Amazon Resource Name (ARN) of the router input that you want to see a thumbnail of.

Pattern: `arn:(aws[a-zA-Z-]*):mediaconnect:[a-z0-9-]+:[0-9]{12}:routerInput:[a-z0-9]{12}`

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

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

{
   "arn": "string",
   "name": "string",
   "thumbnailDetails": {
      "thumbnail": blob,
      "thumbnailMessages": [
         {
            "code": "string",
            "message": "string"
         }
```

```
        ],
        "timecode": "string",
        "timestamp": "string"
    }
}
```

## Response Elements

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

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

**arn**

The ARN of the router input.

Type: String

Pattern: `arn:(aws[a-zA-Z-]*):mediaconnect:[a-z0-9-]+:[0-9]{12}:routerInput:[a-z0-9]{12}`

**name**

The name of the router input.

Type: String

**thumbnailDetails**

The details of the thumbnail associated with the router input, including the thumbnail image, timecode, timestamp, and any associated error messages.

Type: RouterInputThumbnailDetails object

## Errors

For information about the errors that are common to all actions, see Common Errors.

**BadRequestException**

This exception is thrown if the request contains a semantic error. The precise meaning depends on the API, and is documented in the error message.

HTTP Status Code: 400

**ForbiddenException**

You do not have sufficient access to perform this action.

HTTP Status Code: 403

**InternalServerErrorException**

The server encountered an internal error and is unable to complete the request.

HTTP Status Code: 500

**NotFoundException**

One or more of the resources in the request does not exist in the system.

HTTP Status Code: 404

**ServiceUnavailableException**

The service is currently unavailable or busy.

HTTP Status Code: 503

**TooManyRequestsException**

The request was denied due to request throttling.

HTTP Status Code: 429

## See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3

- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

# GetRouterNetworkInterface

Retrieves information about a specific router network interface in AWS Elemental MediaConnect.

## Request Syntax

```
GET /v1/routerNetworkInterface/arn HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### arn

The Amazon Resource Name (ARN) of the router network interface that you want to retrieve information about.

Pattern: `arn:(aws[a-zA-Z-]*):mediaconnect:[a-z0-9-]+:[0-9]{12}:routerNetworkInterface:[a-z0-9]{12}`

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

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

{
   "routerNetworkInterface": {
      "arn": "string",
      "associatedInputCount": number,
      "associatedOutputCount": number,
      "configuration": { ... },
      "createdAt": "string",
      "id": "string",
```

```
      "name": "string",
      "networkInterfaceType": "string",
      "regionName": "string",
      "state": "string",
      "tags": {
         "string" : "string"
      },
      "updatedAt": "string"
   }
}
```

## Response Elements

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

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

**routerNetworkInterface**

The details of the requested router network interface, including its configuration and other attributes.

Type: RouterNetworkInterface object

## Errors

For information about the errors that are common to all actions, see Common Errors.

**BadRequestException**

This exception is thrown if the request contains a semantic error. The precise meaning depends on the API, and is documented in the error message.

HTTP Status Code: 400

**ConflictException**

The requested operation would cause a conflict with the current state of a service resource associated with the request. Resolve the conflict before retrying this request.

HTTP Status Code: 409

**ForbiddenException**

You do not have sufficient access to perform this action.

HTTP Status Code: 403

**InternalServerErrorException**

The server encountered an internal error and is unable to complete the request.

HTTP Status Code: 500

**NotFoundException**

One or more of the resources in the request does not exist in the system.

HTTP Status Code: 404

**ServiceUnavailableException**

The service is currently unavailable or busy.

HTTP Status Code: 503

**TooManyRequestsException**

The request was denied due to request throttling.

HTTP Status Code: 429

## See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin

- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

# GetRouterOutput

Retrieves information about a specific router output in AWS Elemental MediaConnect.

## Request Syntax

```
GET /v1/routerOutput/arn HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### arn

The Amazon Resource Name (ARN) of the router output that you want to retrieve information about.

Pattern: `arn:(aws[a-zA-Z-]*):mediaconnect:[a-z0-9-]+:[0-9]{12}:routerOutput:[a-z0-9]{12}`

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

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

{
   "routerOutput": {
      "arn": "string",
      "availabilityZone": "string",
      "configuration": { ... },
      "createdAt": "string",
      "id": "string",
      "ipAddress": "string",
      "maintenanceConfiguration": { ... },
```

```
      "maintenanceSchedule": { ... },
      "maintenanceScheduleType": "string",
      "maintenanceType": "string",
      "maximumBitrate": number,
      "messages": [
         {
            "code": "string",
            "message": "string"
         }
      ],
      "name": "string",
      "outputType": "string",
      "regionName": "string",
      "routedInputArn": "string",
      "routedState": "string",
      "routingScope": "string",
      "state": "string",
      "streamDetails": { ... },
      "tags": {
         "string" : "string"
      },
      "tier": "string",
      "updatedAt": "string"
   }
}
```


## Response Elements

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

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

**routerOutput**

The details of the requested router output, including its configuration, state, and other attributes.

Type: RouterOutput object

## Errors

For information about the errors that are common to all actions, see Common Errors.

**BadRequestException**

This exception is thrown if the request contains a semantic error. The precise meaning depends on the API, and is documented in the error message.

HTTP Status Code: 400

**ConflictException**

The requested operation would cause a conflict with the current state of a service resource associated with the request. Resolve the conflict before retrying this request.

HTTP Status Code: 409

**ForbiddenException**

You do not have sufficient access to perform this action.

HTTP Status Code: 403

**InternalServerErrorException**

The server encountered an internal error and is unable to complete the request.

HTTP Status Code: 500

**NotFoundException**

One or more of the resources in the request does not exist in the system.

HTTP Status Code: 404

**ServiceUnavailableException**

The service is currently unavailable or busy.

HTTP Status Code: 503

**TooManyRequestsException**

The request was denied due to request throttling.

HTTP Status Code: 429

## See Also

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

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

# GrantFlowEntitlements

Grants entitlements to an existing flow.

## Request Syntax

```
POST /v1/flows/flowArn/entitlements HTTP/1.1
Content-type: application/json

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

## URI Request Parameters

The request uses the following URI parameters.

### flowArn

The Amazon Resource Name (ARN) of the flow that you want to grant entitlements on.

Pattern: `arn:.+:mediaconnect.+:flow:.+`

Required: Yes

## Request Body

The request accepts the following data in JSON format.

**entitlements**

The list of entitlements that you want to grant.

Type: Array of GrantEntitlementRequest objects

Required: Yes

## Response Syntax

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

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

```
    ],
    "flowArn": "string"
}
```

## Response Elements

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

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

**entitlements**

The entitlements that were just granted.

Type: Array of Entitlement objects

**flowArn**

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

Type: String

## Errors

For information about the errors that are common to all actions, see Common Errors.

**BadRequestException**

This exception is thrown if the request contains a semantic error. The precise meaning depends on the API, and is documented in the error message.

HTTP Status Code: 400

**ForbiddenException**

You do not have sufficient access to perform this action.

HTTP Status Code: 403

**GrantFlowEntitlements420Exception**

Exception raised by AWS Elemental MediaConnect when granting the entitlement. See the error message for the operation for more information on the cause of this exception.

HTTP Status Code: 420

**InternalServerErrorException**

The server encountered an internal error and is unable to complete the request.

HTTP Status Code: 500

**NotFoundException**

One or more of the resources in the request does not exist in the system.

HTTP Status Code: 404

**ServiceUnavailableException**

The service is currently unavailable or busy.

HTTP Status Code: 503

**TooManyRequestsException**

The request was denied due to request throttling.

HTTP Status Code: 429

## See Also

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

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

# ListBridges

Displays a list of bridges that are associated with this account and an optionally specified Amazon Resource Name (ARN). This request returns a paginated result.

## Request Syntax

```
GET /v1/bridges?filterArn=filterArn&maxResults=maxResults&nextToken=nextToken HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

**filterArn**

Filter the list results to display only the bridges associated with the selected ARN.

**maxResults**

The maximum number of results to return per API request.

For example, you submit a `ListBridges` request with `MaxResults` set at 5. Although 20 items match your request, the service returns no more than the first 5 items. (The service also returns a `NextToken` value that you can use to fetch the next batch of results.)

The service might return fewer results than the `MaxResults` value. If `MaxResults` is not included in the request, the service defaults to pagination with a maximum of 10 results per page.

Valid Range: Minimum value of 1. Maximum value of 1000.

**nextToken**

The token that identifies the 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.

## Request Body

The request does not have a request body.

## Response Syntax

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

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

## Response Elements

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

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

**bridges**

A list of bridge summaries.

Type: Array of ListedBridge objects

**nextToken**

The token that identifies the 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

## Errors

For information about the errors that are common to all actions, see Common Errors.

**BadRequestException**

This exception is thrown if the request contains a semantic error. The precise meaning depends on the API, and is documented in the error message.

HTTP Status Code: 400

**ConflictException**

The requested operation would cause a conflict with the current state of a service resource associated with the request. Resolve the conflict before retrying this request.

HTTP Status Code: 409

**InternalServerErrorException**

The server encountered an internal error and is unable to complete the request.

HTTP Status Code: 500

**ServiceUnavailableException**

The service is currently unavailable or busy.

HTTP Status Code: 503

**TooManyRequestsException**

The request was denied due to request throttling.

HTTP Status Code: 429

## See Also

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

- AWS Command Line Interface V2

- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

# ListEntitlements

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

## Request Syntax

```
GET /v1/entitlements?maxResults=maxResults&nextToken=nextToken HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

**maxResults**

The maximum number of results to return per API request.

For example, you submit a `ListEntitlements` request with set at 5. Although 20 items match your request, the service returns no more than the first 5 items. (The service also returns a NextToken value that you can use to fetch the next batch of results.)

The service might return fewer results than the `MaxResults` value. If `MaxResults` is not included in the request, the service defaults to pagination with a maximum of 20 results per page.

Valid Range: Minimum value of 1. Maximum value of 1000.

**nextToken**

The token that identifies the 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.

## Request Body

The request does not have a request body.

## Response Syntax

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

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

## Response Elements

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

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

**entitlements**

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

Type: Array of ListedEntitlement objects

**nextToken**

The token that identifies the 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

## Errors

For information about the errors that are common to all actions, see Common Errors.

**BadRequestException**

This exception is thrown if the request contains a semantic error. The precise meaning depends on the API, and is documented in the error message.

HTTP Status Code: 400

**InternalServerErrorException**

The server encountered an internal error and is unable to complete the request.

HTTP Status Code: 500

**ServiceUnavailableException**

The service is currently unavailable or busy.

HTTP Status Code: 503

**TooManyRequestsException**

The request was denied due to request throttling.

HTTP Status Code: 429

## See Also

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

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

# ListFlows

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

## Request Syntax

```
GET /v1/flows?maxResults=maxResults&nextToken=nextToken HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

**maxResults**

The maximum number of results to return per API request.

For example, you submit a `ListFlows` request with MaxResults set at 5. Although 20 items match your request, the service returns no more than the first 5 items. (The service also returns a `NextToken` value that you can use to fetch the next batch of results.)

The service might return fewer results than the `MaxResults` value. If `MaxResults` is not included in the request, the service defaults to pagination with a maximum of 10 results per page.

Valid Range: Minimum value of 1. Maximum value of 1000.

**nextToken**

The token that identifies the 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.

## Request Body

The request does not have a request body.

## Response Syntax

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

{
   "flows": [
      {
         "availabilityZone": "string",
         "description": "string",
         "flowArn": "string",
         "maintenance": {
            "maintenanceDay": "string",
            "maintenanceDeadline": "string",
            "maintenanceScheduledDate": "string",
            "maintenanceStartHour": "string"
         },
         "name": "string",
         "sourceType": "string",
         "status": "string"
      }
   ],
   "nextToken": "string"
}
```

## Response Elements

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

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

**flows**

A list of flow summaries.

Type: Array of ListedFlow objects

**nextToken**

The token that identifies the 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

## Errors

For information about the errors that are common to all actions, see Common Errors.

**BadRequestException**

This exception is thrown if the request contains a semantic error. The precise meaning depends on the API, and is documented in the error message.

HTTP Status Code: 400

**InternalServerErrorException**

The server encountered an internal error and is unable to complete the request.

HTTP Status Code: 500

**ServiceUnavailableException**

The service is currently unavailable or busy.

HTTP Status Code: 503

**TooManyRequestsException**

The request was denied due to request throttling.

HTTP Status Code: 429

## See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4

- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

# 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).

## Request Syntax

```
GET /v1/gateway-instances?filterArn=filterArn&maxResults=maxResults&nextToken=nextToken
 HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

**filterArn**

Filter the list results to display only the instances associated with the selected Gateway ARN.

**maxResults**

The maximum number of results to return per API request.

For example, you submit a ListInstances request with `MaxResults` set at 5. Although 20 items match your request, the service returns no more than the first 5 items. (The service also returns a `NextToken` value that you can use to fetch the next batch of results.)

The service might return fewer results than the `MaxResults` value. If `MaxResults` is not included in the request, the service defaults to pagination with a maximum of 10 results per page.

Valid Range: Minimum value of 1. Maximum value of 1000.

**nextToken**

The token that identifies the 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.

## Request Body

The request does not have a request body.

## Response Syntax

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

{
   "instances": [
      {
         "gatewayArn": "string",
         "gatewayInstanceArn": "string",
         "instanceId": "string",
         "instanceState": "string"
      }
   ],
   "nextToken": "string"
}
```

## Response Elements

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

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

**instances**

A list of instance summaries.

Type: Array of ListedGatewayInstance objects

**nextToken**

The token that identifies the 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

## Errors

For information about the errors that are common to all actions, see Common Errors.

**BadRequestException**

This exception is thrown if the request contains a semantic error. The precise meaning depends on the API, and is documented in the error message.

HTTP Status Code: 400

**ConflictException**

The requested operation would cause a conflict with the current state of a service resource associated with the request. Resolve the conflict before retrying this request.

HTTP Status Code: 409

**InternalServerErrorException**

The server encountered an internal error and is unable to complete the request.

HTTP Status Code: 500

**ServiceUnavailableException**

The service is currently unavailable or busy.

HTTP Status Code: 503

**TooManyRequestsException**

The request was denied due to request throttling.

HTTP Status Code: 429

## See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4

- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

# ListGateways

Displays a list of gateways that are associated with this account. This request returns a paginated result.

## Request Syntax

```
GET /v1/gateways?maxResults=maxResults&nextToken=nextToken HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

**maxResults**

The maximum number of results to return per API request.

For example, you submit a `ListGateways` request with `MaxResults` set at 5. Although 20 items match your request, the service returns no more than the first 5 items. (The service also returns a `NextToken` value that you can use to fetch the next batch of results.)

The service might return fewer results than the `MaxResults` value. If `MaxResults` is not included in the request, the service defaults to pagination with a maximum of 10 results per page.

Valid Range: Minimum value of 1. Maximum value of 1000.

**nextToken**

The token that identifies the 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.

## Request Body

The request does not have a request body.

## Response Syntax

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

{
   "gateways": [
      {
         "gatewayArn": "string",
         "gatewayState": "string",
         "name": "string"
      }
   ],
   "nextToken": "string"
}
```

## Response Elements

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

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

**gateways**

A list of gateway summaries.

Type: Array of ListedGateway objects

**nextToken**

The token that identifies the 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

## Errors

For information about the errors that are common to all actions, see Common Errors.

**BadRequestException**

This exception is thrown if the request contains a semantic error. The precise meaning depends on the API, and is documented in the error message.

HTTP Status Code: 400

**ConflictException**

The requested operation would cause a conflict with the current state of a service resource associated with the request. Resolve the conflict before retrying this request.

HTTP Status Code: 409

**InternalServerErrorException**

The server encountered an internal error and is unable to complete the request.

HTTP Status Code: 500

**ServiceUnavailableException**

The service is currently unavailable or busy.

HTTP Status Code: 503

**TooManyRequestsException**

The request was denied due to request throttling.

HTTP Status Code: 429

## See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2

- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

# 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.

## Request Syntax

```
GET /v1/offerings?maxResults=maxResults&nextToken=nextToken HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

**maxResults**

The maximum number of results to return per API request.

For example, you submit a `ListOfferings` request with `MaxResults` set at 5. Although 20 items match your request, the service returns no more than the first 5 items. (The service also returns a `NextToken` value that you can use to fetch the next batch of results.)

The service might return fewer results than the `MaxResults` value. If `MaxResults` is not included in the request, the service defaults to pagination with a maximum of 10 results per page.

Valid Range: Minimum value of 1. Maximum value of 1000.

**nextToken**

The token that identifies the 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.

## Request Body

The request does not have a request body.

## Response Syntax

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

{
   "nextToken": "string",
   "offerings": [
      {
         "currencyCode": "string",
         "duration": number,
         "durationUnits": "string",
         "offeringArn": "string",
         "offeringDescription": "string",
         "pricePerUnit": "string",
         "priceUnits": "string",
         "resourceSpecification": {
            "reservedBitrate": number,
            "resourceType": "string"
         }
      }
   ]
}
```

## Response Elements

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

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

**nextToken**

The token that identifies the 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

**offerings**

A list of offerings that are available to this account in the current AWS Region.

Type: Array of Offering objects

## Errors

For information about the errors that are common to all actions, see Common Errors.

**BadRequestException**

This exception is thrown if the request contains a semantic error. The precise meaning depends on the API, and is documented in the error message.

HTTP Status Code: 400

**InternalServerErrorException**

The server encountered an internal error and is unable to complete the request.

HTTP Status Code: 500

**ServiceUnavailableException**

The service is currently unavailable or busy.

HTTP Status Code: 503

**TooManyRequestsException**

The request was denied due to request throttling.

HTTP Status Code: 429

## See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4

- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

# 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 states (such as active and expired).

## Request Syntax

```
GET /v1/reservations?maxResults=maxResults&nextToken=nextToken HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

**maxResults**

The maximum number of results to return per API request.

For example, you submit a `ListReservations` request with `MaxResults` set at 5. Although 20 items match your request, the service returns no more than the first 5 items. (The service also returns a NextToken value that you can use to fetch the next batch of results.)

The service might return fewer results than the `MaxResults` value. If `MaxResults` is not included in the request, the service defaults to pagination with a maximum of 10 results per page.

Valid Range: Minimum value of 1. Maximum value of 1000.

**nextToken**

The token that identifies the 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 `ListOfferings` request a second time and specify the `NextToken` value.

## Request Body

The request does not have a request body.

## Response Syntax

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

{
   "nextToken": "string",
   "reservations": [
      {
         "currencyCode": "string",
         "duration": number,
         "durationUnits": "string",
         "end": "string",
         "offeringArn": "string",
         "offeringDescription": "string",
         "pricePerUnit": "string",
         "priceUnits": "string",
         "reservationArn": "string",
         "reservationName": "string",
         "reservationState": "string",
         "resourceSpecification": {
            "reservedBitrate": number,
            "resourceType": "string"
         },
         "start": "string"
      }
   ]
}
```

## Response Elements

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

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

**nextToken**

The token that identifies the 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

**reservations**

A list of all reservations that have been purchased by this account in the current AWS Region.

Type: Array of Reservation objects

## Errors

For information about the errors that are common to all actions, see Common Errors.

**BadRequestException**

This exception is thrown if the request contains a semantic error. The precise meaning depends on the API, and is documented in the error message.

HTTP Status Code: 400

**InternalServerErrorException**

The server encountered an internal error and is unable to complete the request.

HTTP Status Code: 500

**ServiceUnavailableException**

The service is currently unavailable or busy.

HTTP Status Code: 503

**TooManyRequestsException**

The request was denied due to request throttling.

HTTP Status Code: 429

## See Also

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

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

# ListRouterInputs

Retrieves a list of router inputs in AWS Elemental MediaConnect.

## Request Syntax

```
POST /v1/routerInputs?maxResults=maxResults&nextToken=nextToken HTTP/1.1
Content-type: application/json

{
   "filters": [
      { ... }
   ]
}
```

## URI Request Parameters

The request uses the following URI parameters.

**maxResults**

The maximum number of router inputs to return in the response.

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

**nextToken**

A token used to retrieve the next page of results.

## Request Body

The request accepts the following data in JSON format.

**filters**

The filters to apply when retrieving the list of router inputs.

Type: Array of RouterInputFilter objects

Required: No

## Response Syntax

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

{
   "nextToken": "string",
   "routerInputs": [
      {
         "arn": "string",
         "availabilityZone": "string",
         "createdAt": "string",
         "id": "string",
         "inputType": "string",
         "maintenanceSchedule": { ... },
         "maintenanceScheduleType": "string",
         "maximumBitrate": number,
         "messageCount": number,
         "name": "string",
         "networkInterfaceArn": "string",
         "regionName": "string",
         "routedOutputs": number,
         "routingScope": "string",
         "state": "string",
         "updatedAt": "string"
      }
   ]
}
```

## Response Elements

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

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

**nextToken**

The token to use to retrieve the next page of results.

Type: String

**routerInputs**

The summary information for the retrieved router inputs.

Type: Array of ListedRouterInput objects

## Errors

For information about the errors that are common to all actions, see Common Errors.

**BadRequestException**

This exception is thrown if the request contains a semantic error. The precise meaning depends on the API, and is documented in the error message.

HTTP Status Code: 400

**ConflictException**

The requested operation would cause a conflict with the current state of a service resource associated with the request. Resolve the conflict before retrying this request.

HTTP Status Code: 409

**InternalServerErrorException**

The server encountered an internal error and is unable to complete the request.

HTTP Status Code: 500

**ServiceUnavailableException**

The service is currently unavailable or busy.

HTTP Status Code: 503

**TooManyRequestsException**

The request was denied due to request throttling.

HTTP Status Code: 429

## See Also

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

- AWS Command Line Interface V2

- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

# ListRouterNetworkInterfaces

Retrieves a list of router network interfaces in AWS Elemental MediaConnect.

## Request Syntax

```
POST /v1/routerNetworkInterfaces?maxResults=maxResults&nextToken=nextToken HTTP/1.1
Content-type: application/json

{
   "filters": [
      { ... }
   ]
}
```

## URI Request Parameters

The request uses the following URI parameters.

**maxResults**

The maximum number of router network interfaces to return in the response.

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

**nextToken**

A token used to retrieve the next page of results.

## Request Body

The request accepts the following data in JSON format.

**filters**

The filters to apply when retrieving the list of router network interfaces.

Type: Array of RouterNetworkInterfaceFilter objects

Required: No

## Response Syntax

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

{
   "nextToken": "string",
   "routerNetworkInterfaces": [
      {
         "arn": "string",
         "associatedInputCount": number,
         "associatedOutputCount": number,
         "createdAt": "string",
         "id": "string",
         "name": "string",
         "networkInterfaceType": "string",
         "regionName": "string",
         "state": "string",
         "updatedAt": "string"
      }
   ]
}
```

## Response Elements

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

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

**nextToken**

The token to use to retrieve the next page of results.

Type: String

**routerNetworkInterfaces**

The summary information for the retrieved router network interfaces.

Type: Array of ListedRouterNetworkInterface objects

## Errors

For information about the errors that are common to all actions, see Common Errors.

**BadRequestException**

This exception is thrown if the request contains a semantic error. The precise meaning depends on the API, and is documented in the error message.

HTTP Status Code: 400

**ConflictException**

The requested operation would cause a conflict with the current state of a service resource associated with the request. Resolve the conflict before retrying this request.

HTTP Status Code: 409

**InternalServerErrorException**

The server encountered an internal error and is unable to complete the request.

HTTP Status Code: 500

**ServiceUnavailableException**

The service is currently unavailable or busy.

HTTP Status Code: 503

**TooManyRequestsException**

The request was denied due to request throttling.

HTTP Status Code: 429

## See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4

- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

# ListRouterOutputs

Retrieves a list of router outputs in AWS Elemental MediaConnect.

## Request Syntax

```
POST /v1/routerOutputs?maxResults=maxResults&nextToken=nextToken HTTP/1.1
Content-type: application/json

{
   "filters": [
      { ... }
   ]
}
```

## URI Request Parameters

The request uses the following URI parameters.

**maxResults**

The maximum number of router outputs to return in the response.

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

**nextToken**

A token used to retrieve the next page of results.

## Request Body

The request accepts the following data in JSON format.

**filters**

The filters to apply when retrieving the list of router outputs.

Type: Array of RouterOutputFilter objects

Required: No

## Response Syntax

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

{
   "nextToken": "string",
   "routerOutputs": [
      {
         "arn": "string",
         "availabilityZone": "string",
         "createdAt": "string",
         "id": "string",
         "maintenanceSchedule": { ... },
         "maintenanceScheduleType": "string",
         "maximumBitrate": number,
         "messageCount": number,
         "name": "string",
         "networkInterfaceArn": "string",
         "outputType": "string",
         "regionName": "string",
         "routedInputArn": "string",
         "routedState": "string",
         "routingScope": "string",
         "state": "string",
         "updatedAt": "string"
      }
   ]
}
```

## Response Elements

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

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

**nextToken**

The token to use to retrieve the next page of results.

Type: String

**routerOutputs**

The summary information for the retrieved router outputs.

Type: Array of ListedRouterOutput objects

## Errors

For information about the errors that are common to all actions, see Common Errors.

**BadRequestException**

This exception is thrown if the request contains a semantic error. The precise meaning depends on the API, and is documented in the error message.

HTTP Status Code: 400

**ConflictException**

The requested operation would cause a conflict with the current state of a service resource associated with the request. Resolve the conflict before retrying this request.

HTTP Status Code: 409

**InternalServerErrorException**

The server encountered an internal error and is unable to complete the request.

HTTP Status Code: 500

**ServiceUnavailableException**

The service is currently unavailable or busy.

HTTP Status Code: 503

**TooManyRequestsException**

The request was denied due to request throttling.

HTTP Status Code: 429

## See Also

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

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

# ListTagsForGlobalResource

Lists the tags associated with a global resource in AWS Elemental MediaConnect. The API supports the following global resources: router inputs, router outputs and router network interfaces.

## Request Syntax

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

## URI Request Parameters

The request uses the following URI parameters.

**resourceArn**

The Amazon Resource Name (ARN) of the global resource whose tags you want to list.

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

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

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

## Response Elements

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

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

**tags**

A map of tag keys and values associated with the global resource.

Type: String to string map

## Errors

For information about the errors that are common to all actions, see Common Errors.

**BadRequestException**

This exception is thrown if the request contains a semantic error. The precise meaning depends on the API, and is documented in the error message.

HTTP Status Code: 400

**InternalServerErrorException**

The server encountered an internal error and is unable to complete the request.

HTTP Status Code: 500

**NotFoundException**

One or more of the resources in the request does not exist in the system.

HTTP Status Code: 404

## See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3

- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

# ListTagsForResource

List all tags on a MediaConnect resource in the current region.

## Request Syntax

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

## URI Request Parameters

The request uses the following URI parameters.

**resourceArn**

The Amazon Resource Name (ARN) that identifies the MediaConnect resource for which to list the tags.

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

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

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

## Response Elements

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

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

**tags**

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: String to string map

## Errors

For information about the errors that are common to all actions, see Common Errors.

**BadRequestException**

This exception is thrown if the request contains a semantic error. The precise meaning depends on the API, and is documented in the error message.

HTTP Status Code: 400

**InternalServerErrorException**

The server encountered an internal error and is unable to complete the request.

HTTP Status Code: 500

**NotFoundException**

One or more of the resources in the request does not exist in the system.

HTTP Status Code: 404

## See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2

- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

# PurchaseOffering

Submits a request to purchase an offering. If you already have an active reservation, you can't purchase another offering.

## Request Syntax

```
POST /v1/offerings/offeringArn HTTP/1.1
Content-type: application/json

{
   "reservationName": "string",
   "start": "string"
}
```

## URI Request Parameters

The request uses the following URI parameters.

### offeringArn

The Amazon Resource Name (ARN) of the offering.

Required: Yes

## Request Body

The request accepts the following data in JSON format.

### reservationName

The name that you want to use for the reservation.

Type: String

Required: Yes

### 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: Yes

## Response Syntax

```
HTTP/1.1 201
Content-type: application/json

{
   "reservation": {
      "currencyCode": "string",
      "duration": number,
      "durationUnits": "string",
      "end": "string",
      "offeringArn": "string",
      "offeringDescription": "string",
      "pricePerUnit": "string",
      "priceUnits": "string",
      "reservationArn": "string",
      "reservationName": "string",
      "reservationState": "string",
      "resourceSpecification": {
         "reservedBitrate": number,
         "resourceType": "string"
      },
      "start": "string"
   }
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 201 response.

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

### reservation

The details of the reservation that you just created when you purchased the offering.

Type: Reservation object

## Errors

For information about the errors that are common to all actions, see Common Errors.

**BadRequestException**

This exception is thrown if the request contains a semantic error. The precise meaning depends on the API, and is documented in the error message.

HTTP Status Code: 400

**ForbiddenException**

You do not have sufficient access to perform this action.

HTTP Status Code: 403

**InternalServerErrorException**

The server encountered an internal error and is unable to complete the request.

HTTP Status Code: 500

**NotFoundException**

One or more of the resources in the request does not exist in the system.

HTTP Status Code: 404

**ServiceUnavailableException**

The service is currently unavailable or busy.

HTTP Status Code: 503

**TooManyRequestsException**

The request was denied due to request throttling.

HTTP Status Code: 429

## See Also

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

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

# RemoveBridgeOutput

Removes an output from a bridge.

## Request Syntax

```
DELETE /v1/bridges/bridgeArn/outputs/outputName HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

**bridgeArn**

The Amazon Resource Name (ARN) of the bridge that you want to update.

Pattern: `arn:.+:mediaconnect.+:bridge:.+`

Required: Yes

**outputName**

The name of the bridge output that you want to remove.

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 202
Content-type: application/json

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

## Response Elements

If the action is successful, the service sends back an HTTP 202 response.

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

**bridgeArn**

The ARN of the bridge from which the output was removed.

Type: String

**outputName**

The name of the bridge output that was removed.

Type: String

## Errors

For information about the errors that are common to all actions, see Common Errors.

**BadRequestException**

This exception is thrown if the request contains a semantic error. The precise meaning depends on the API, and is documented in the error message.

HTTP Status Code: 400

**ConflictException**

The requested operation would cause a conflict with the current state of a service resource associated with the request. Resolve the conflict before retrying this request.

HTTP Status Code: 409

**ForbiddenException**

You do not have sufficient access to perform this action.

HTTP Status Code: 403

**InternalServerErrorException**

The server encountered an internal error and is unable to complete the request.

HTTP Status Code: 500

**NotFoundException**

One or more of the resources in the request does not exist in the system.

HTTP Status Code: 404

**ServiceUnavailableException**

The service is currently unavailable or busy.

HTTP Status Code: 503

**TooManyRequestsException**

The request was denied due to request throttling.

HTTP Status Code: 429

## See Also

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

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

# RemoveBridgeSource

Removes a source from a bridge.

## Request Syntax

```
DELETE /v1/bridges/bridgeArn/sources/sourceName HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

**bridgeArn**

The Amazon Resource Name (ARN) of the bridge that you want to update.

Pattern: `arn:.+:mediaconnect.+:bridge:.+`

Required: Yes

**sourceName**

The name of the bridge source that you want to remove.

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 202
Content-type: application/json

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

## Response Elements

If the action is successful, the service sends back an HTTP 202 response.

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

**bridgeArn**

The ARN of the bridge from which the source was removed.

Type: String

**sourceName**

The name of the bridge source that was removed.

Type: String

## Errors

For information about the errors that are common to all actions, see Common Errors.

**BadRequestException**

This exception is thrown if the request contains a semantic error. The precise meaning depends on the API, and is documented in the error message.

HTTP Status Code: 400

**ConflictException**

The requested operation would cause a conflict with the current state of a service resource associated with the request. Resolve the conflict before retrying this request.

HTTP Status Code: 409

**ForbiddenException**

You do not have sufficient access to perform this action.

HTTP Status Code: 403

**InternalServerErrorException**

The server encountered an internal error and is unable to complete the request.

HTTP Status Code: 500

**NotFoundException**

One or more of the resources in the request does not exist in the system.

HTTP Status Code: 404

**ServiceUnavailableException**

The service is currently unavailable or busy.

HTTP Status Code: 503

**TooManyRequestsException**

The request was denied due to request throttling.

HTTP Status Code: 429

## See Also

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

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

# RemoveFlowMediaStream

Removes a media stream from a flow. This action is only available if the media stream is not associated with a source or output.

## Request Syntax

```
DELETE /v1/flows/flowArn/mediaStreams/mediaStreamName HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

**flowArn**

The Amazon Resource Name (ARN) of the flow that you want to update.

Pattern: `arn:.+:mediaconnect.+:flow:.+`

Required: Yes

**mediaStreamName**

The name of the media stream that you want to remove.

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

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

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

## Response Elements

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

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

**flowArn**

The ARN of the flow that was updated.

Type: String

**mediaStreamName**

The name of the media stream that was removed.

Type: String

## Errors

For information about the errors that are common to all actions, see Common Errors.

**BadRequestException**

This exception is thrown if the request contains a semantic error. The precise meaning depends on the API, and is documented in the error message.

HTTP Status Code: 400

**ForbiddenException**

You do not have sufficient access to perform this action.

HTTP Status Code: 403

**InternalServerErrorException**

The server encountered an internal error and is unable to complete the request.

HTTP Status Code: 500

**NotFoundException**

One or more of the resources in the request does not exist in the system.

HTTP Status Code: 404

**ServiceUnavailableException**

The service is currently unavailable or busy.

HTTP Status Code: 503

**TooManyRequestsException**

The request was denied due to request throttling.

HTTP Status Code: 429

## See Also

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

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

# 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.

## Request Syntax

```
DELETE /v1/flows/flowArn/outputs/outputArn HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

**flowArn**

The Amazon Resource Name (ARN) of the flow that you want to remove an output from.

Pattern: `arn:.+:mediaconnect.+:flow:.+`

Required: Yes

**outputArn**

The ARN of the output that you want to remove.

Pattern: `arn:.+:mediaconnect.+:output:.+`

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 202
Content-type: application/json
```

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

## Response Elements

If the action is successful, the service sends back an HTTP 202 response.

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

**flowArn**

The ARN of the flow that the output was removed from.

Type: String

**outputArn**

The ARN of the output that was removed.

Type: String

## Errors

For information about the errors that are common to all actions, see Common Errors.

**BadRequestException**

This exception is thrown if the request contains a semantic error. The precise meaning depends on the API, and is documented in the error message.

HTTP Status Code: 400

**ForbiddenException**

You do not have sufficient access to perform this action.

HTTP Status Code: 403

**InternalServerErrorException**

The server encountered an internal error and is unable to complete the request.

HTTP Status Code: 500

**NotFoundException**

One or more of the resources in the request does not exist in the system.

HTTP Status Code: 404

**ServiceUnavailableException**

The service is currently unavailable or busy.

HTTP Status Code: 503

**TooManyRequestsException**

The request was denied due to request throttling.

HTTP Status Code: 429

## See Also

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

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

# RemoveFlowSource

Removes a source from an existing flow. This request can be made only if there is more than one source on the flow.

## Request Syntax

```
DELETE /v1/flows/flowArn/source/sourceArn HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

**flowArn**

The Amazon Resource Name (ARN) of the flow that you want to remove a source from.

Pattern: `arn:.+:mediaconnect.+:flow:.+`

Required: Yes

**sourceArn**

The ARN of the source that you want to remove.

Pattern: `arn:.+:mediaconnect.+:source:.+`

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 202
Content-type: application/json

{
   "flowArn": "string",
```

```
    "sourceArn": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 202 response.

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

**flowArn**

The ARN of the flow that the source was removed from.

Type: String

**sourceArn**

The ARN of the source that was removed.

Type: String

## Errors

For information about the errors that are common to all actions, see Common Errors.

**BadRequestException**

This exception is thrown if the request contains a semantic error. The precise meaning depends on the API, and is documented in the error message.

HTTP Status Code: 400

**ForbiddenException**

You do not have sufficient access to perform this action.

HTTP Status Code: 403

**InternalServerErrorException**

The server encountered an internal error and is unable to complete the request.

HTTP Status Code: 500

**NotFoundException**

One or more of the resources in the request does not exist in the system.

HTTP Status Code: 404

**ServiceUnavailableException**

The service is currently unavailable or busy.

HTTP Status Code: 503

**TooManyRequestsException**

The request was denied due to request throttling.

HTTP Status Code: 429

## See Also

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

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

# RemoveFlowVpcInterface

Removes a VPC Interface from an existing flow. This request can be made only on a VPC interface that does not have a Source or Output associated with it. If the VPC interface is referenced by a Source or Output, you must first delete or update the Source or Output to no longer reference the VPC interface.

## Request Syntax

```
DELETE /v1/flows/flowArn/vpcInterfaces/vpcInterfaceName HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

**flowArn**

The Amazon Resource Name (ARN) of the flow that you want to remove a VPC interface from.

Pattern: `arn:.+:mediaconnect.+:flow:.+`

Required: Yes

**vpcInterfaceName**

The name of the VPC interface that you want to remove.

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

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

{
   "flowArn": "string",
```

```
   "nonDeletedNetworkInterfaceIds": [ "string" ],
   "vpcInterfaceName": "string"
}
```

## Response Elements

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

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

**flowArn**

The ARN of the flow that is associated with the VPC interface you removed.

Type: String

**nonDeletedNetworkInterfaceIds**

IDs of network interfaces associated with the removed VPC interface that MediaConnect was unable to remove.

Type: Array of strings

**vpcInterfaceName**

The name of the VPC interface that was removed.

Type: String

## Errors

For information about the errors that are common to all actions, see Common Errors.

**BadRequestException**

This exception is thrown if the request contains a semantic error. The precise meaning depends on the API, and is documented in the error message.

HTTP Status Code: 400

**ForbiddenException**

You do not have sufficient access to perform this action.

HTTP Status Code: 403

**InternalServerErrorException**

The server encountered an internal error and is unable to complete the request.

HTTP Status Code: 500

**NotFoundException**

One or more of the resources in the request does not exist in the system.

HTTP Status Code: 404

**ServiceUnavailableException**

The service is currently unavailable or busy.

HTTP Status Code: 503

**TooManyRequestsException**

The request was denied due to request throttling.

HTTP Status Code: 429

## See Also

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

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

# RestartRouterInput

Restarts a router input. This operation can be used to recover from errors or refresh the input state.

## Request Syntax

```
POST /v1/routerInput/restart/arn HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

**arn**

The Amazon Resource Name (ARN) of the router input that you want to restart.

Pattern: `arn:(aws[a-zA-Z-]*):mediaconnect:[a-z0-9-]+:[0-9]{12}:routerInput:[a-z0-9]{12}`

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 202
Content-type: application/json

{
   "arn": "string",
   "name": "string",
   "state": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 202 response.

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

**arn**

The ARN of the router input that was restarted.

Type: String

Pattern: `arn:(aws[a-zA-Z-]*):mediaconnect:[a-z0-9-]+:[0-9]{12}:routerInput:[a-z0-9]{12}`

**name**

The name of the router input that was restarted.

Type: String

**state**

The current state of the router input after the restart operation.

Type: String

Valid Values: `CREATING | STANDBY | STARTING | ACTIVE | STOPPING | DELETING | UPDATING | ERROR | RECOVERING | MIGRATING`

## Errors

For information about the errors that are common to all actions, see Common Errors.

**BadRequestException**

This exception is thrown if the request contains a semantic error. The precise meaning depends on the API, and is documented in the error message.

HTTP Status Code: 400

**ConflictException**

The requested operation would cause a conflict with the current state of a service resource associated with the request. Resolve the conflict before retrying this request.

HTTP Status Code: 409

**ForbiddenException**

You do not have sufficient access to perform this action.

HTTP Status Code: 403

**InternalServerErrorException**

The server encountered an internal error and is unable to complete the request.

HTTP Status Code: 500

**NotFoundException**

One or more of the resources in the request does not exist in the system.

HTTP Status Code: 404

**ServiceUnavailableException**

The service is currently unavailable or busy.

HTTP Status Code: 503

**TooManyRequestsException**

The request was denied due to request throttling.

HTTP Status Code: 429

## See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin

- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

# RestartRouterOutput

Restarts a router output. This operation can be used to recover from errors or refresh the output state.

## Request Syntax

```
POST /v1/routerOutput/restart/arn HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### arn

The Amazon Resource Name (ARN) of the router output that you want to restart.

Pattern: `arn:(aws[a-zA-Z-]*):mediaconnect:[a-z0-9-]+:[0-9]{12}:routerOutput:[a-z0-9]{12}`

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 202
Content-type: application/json

{
   "arn": "string",
   "name": "string",
   "state": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 202 response.

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

**arn**

The ARN of the router output that was restarted.

Type: String

Pattern: `arn:(aws[a-zA-Z-]*):mediaconnect:[a-z0-9-]+:[0-9]{12}:routerOutput:[a-z0-9]{12}`

**name**

The name of the router output that was restarted.

Type: String

**state**

The current state of the router output after the restart operation.

Type: String

Valid Values: `CREATING | STANDBY | STARTING | ACTIVE | STOPPING | DELETING | UPDATING | ERROR | RECOVERING | MIGRATING`

## Errors

For information about the errors that are common to all actions, see Common Errors.

**BadRequestException**

This exception is thrown if the request contains a semantic error. The precise meaning depends on the API, and is documented in the error message.

HTTP Status Code: 400

**ConflictException**

The requested operation would cause a conflict with the current state of a service resource associated with the request. Resolve the conflict before retrying this request.

HTTP Status Code: 409

**ForbiddenException**

You do not have sufficient access to perform this action.

HTTP Status Code: 403

**InternalServerErrorException**

The server encountered an internal error and is unable to complete the request.

HTTP Status Code: 500

**NotFoundException**

One or more of the resources in the request does not exist in the system.

HTTP Status Code: 404

**ServiceUnavailableException**

The service is currently unavailable or busy.

HTTP Status Code: 503

**TooManyRequestsException**

The request was denied due to request throttling.

HTTP Status Code: 429

## See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin

- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

# RevokeFlowEntitlement

Revokes an entitlement from a flow. Once an entitlement is revoked, the content becomes unavailable to the subscriber and the associated output is removed.

## Request Syntax

```
DELETE /v1/flows/flowArn/entitlements/entitlementArn HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

**entitlementArn**

The Amazon Resource Name (ARN) of the entitlement that you want to revoke.

Pattern: `arn:.+:mediaconnect.+:entitlement:.+`

Required: Yes

**flowArn**

The flow that you want to revoke an entitlement from.

Pattern: `arn:.+:mediaconnect.+:flow:.+`

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 202
Content-type: application/json

{
   "entitlementArn": "string",
```

```
    "flowArn": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 202 response.

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

**entitlementArn**

The ARN of the entitlement that was revoked.

Type: String

**flowArn**

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

Type: String

## Errors

For information about the errors that are common to all actions, see Common Errors.

**BadRequestException**

This exception is thrown if the request contains a semantic error. The precise meaning depends on the API, and is documented in the error message.

HTTP Status Code: 400

**ForbiddenException**

You do not have sufficient access to perform this action.

HTTP Status Code: 403

**InternalServerErrorException**

The server encountered an internal error and is unable to complete the request.

HTTP Status Code: 500

**NotFoundException**

One or more of the resources in the request does not exist in the system.

HTTP Status Code: 404

**ServiceUnavailableException**

The service is currently unavailable or busy.

HTTP Status Code: 503

**TooManyRequestsException**

The request was denied due to request throttling.

HTTP Status Code: 429

## See Also

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

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

# StartFlow

Starts a flow.

## Request Syntax

```
POST /v1/flows/start/flowArn HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

**flowArn**

The Amazon Resource Name (ARN) of the flow that you want to start.

Pattern: `arn:.+:mediaconnect.+:flow:.+`

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 202
Content-type: application/json

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

## Response Elements

If the action is successful, the service sends back an HTTP 202 response.

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

**flowArn**

The ARN of the flow that you started.

Type: String

**status**

The status of the flow when the `StartFlow` process begins.

Type: String

Valid Values: `STANDBY | ACTIVE | UPDATING | DELETING | STARTING | STOPPING | ERROR`

## Errors

For information about the errors that are common to all actions, see Common Errors.

**BadRequestException**

This exception is thrown if the request contains a semantic error. The precise meaning depends on the API, and is documented in the error message.

HTTP Status Code: 400

**ForbiddenException**

You do not have sufficient access to perform this action.

HTTP Status Code: 403

**InternalServerErrorException**

The server encountered an internal error and is unable to complete the request.

HTTP Status Code: 500

**NotFoundException**

One or more of the resources in the request does not exist in the system.

HTTP Status Code: 404

**ServiceUnavailableException**

The service is currently unavailable or busy.

HTTP Status Code: 503

**TooManyRequestsException**

The request was denied due to request throttling.

HTTP Status Code: 429

## See Also

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

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

# StartRouterInput

Starts a router input in AWS Elemental MediaConnect.

## Request Syntax

```
POST /v1/routerInput/start/arn HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### arn

The Amazon Resource Name (ARN) of the router input that you want to start.

Pattern: `arn:(aws[a-zA-Z-]*):mediaconnect:[a-z0-9-]+:[0-9]{12}:routerInput:[a-z0-9]{12}`

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 202
Content-type: application/json

{
   "arn": "string",
   "maintenanceSchedule": { ... },
   "maintenanceScheduleType": "string",
   "name": "string",
   "state": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 202 response.

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

**arn**

The ARN of the router input that was started.

Type: String

Pattern: `arn:(aws[a-zA-Z-]*):mediaconnect:[a-z0-9-]+:[0-9]{12}:routerInput:[a-z0-9]{12}`

**maintenanceSchedule**

The details of the maintenance schedule for the router input.

Type: MaintenanceSchedule object

**Note:** This object is a Union. Only one member of this object can be specified or returned.

**maintenanceScheduleType**

The type of maintenance schedule associated with the router input.

Type: String

Valid Values: `WINDOW`

**name**

The name of the router input that was started.

Type: String

**state**

The current state of the router input after being started.

Type: String

Valid Values: `CREATING | STANDBY | STARTING | ACTIVE | STOPPING | DELETING | UPDATING | ERROR | RECOVERING | MIGRATING`

## Errors

For information about the errors that are common to all actions, see Common Errors.

**BadRequestException**

This exception is thrown if the request contains a semantic error. The precise meaning depends on the API, and is documented in the error message.

HTTP Status Code: 400

**ConflictException**

The requested operation would cause a conflict with the current state of a service resource associated with the request. Resolve the conflict before retrying this request.

HTTP Status Code: 409

**ForbiddenException**

You do not have sufficient access to perform this action.

HTTP Status Code: 403

**InternalServerErrorException**

The server encountered an internal error and is unable to complete the request.

HTTP Status Code: 500

**NotFoundException**

One or more of the resources in the request does not exist in the system.

HTTP Status Code: 404

**ServiceUnavailableException**

The service is currently unavailable or busy.

HTTP Status Code: 503

**TooManyRequestsException**

The request was denied due to request throttling.

HTTP Status Code: 429

## See Also

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

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

# StartRouterOutput

Starts a router output in AWS Elemental MediaConnect.

## Request Syntax

```
POST /v1/routerOutput/start/arn HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### arn

The Amazon Resource Name (ARN) of the router output that you want to start.

Pattern: `arn:(aws[a-zA-Z-]*):mediaconnect:[a-z0-9-]+:[0-9]{12}:routerOutput:[a-z0-9]{12}`

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 202
Content-type: application/json

{
   "arn": "string",
   "maintenanceSchedule": { ... },
   "maintenanceScheduleType": "string",
   "name": "string",
   "state": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 202 response.

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

**arn**

The Amazon Resource Name (ARN) of the router output that was started.

Type: String

Pattern: `arn:(aws[a-zA-Z-]*):mediaconnect:[a-z0-9-]+:[0-9]{12}:routerOutput:[a-z0-9]{12}`

**maintenanceSchedule**

The details of the maintenance schedule for the router output.

Type: MaintenanceSchedule object

**Note:** This object is a Union. Only one member of this object can be specified or returned.

**maintenanceScheduleType**

The type of maintenance schedule associated with the router output.

Type: String

Valid Values: `WINDOW`

**name**

The name of the router output that was started.

Type: String

**state**

The current state of the router output after being started.

Type: String

Valid Values: `CREATING | STANDBY | STARTING | ACTIVE | STOPPING | DELETING | UPDATING | ERROR | RECOVERING | MIGRATING`

## Errors

For information about the errors that are common to all actions, see Common Errors.

**BadRequestException**

This exception is thrown if the request contains a semantic error. The precise meaning depends on the API, and is documented in the error message.

HTTP Status Code: 400

**ConflictException**

The requested operation would cause a conflict with the current state of a service resource associated with the request. Resolve the conflict before retrying this request.

HTTP Status Code: 409

**ForbiddenException**

You do not have sufficient access to perform this action.

HTTP Status Code: 403

**InternalServerErrorException**

The server encountered an internal error and is unable to complete the request.

HTTP Status Code: 500

**NotFoundException**

One or more of the resources in the request does not exist in the system.

HTTP Status Code: 404

**ServiceUnavailableException**

The service is currently unavailable or busy.

HTTP Status Code: 503

**TooManyRequestsException**

The request was denied due to request throttling.

HTTP Status Code: 429

## See Also

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

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

# StopFlow

Stops a flow.

## Request Syntax

```
POST /v1/flows/stop/flowArn HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

**flowArn**

The Amazon Resource Name (ARN) of the flow that you want to stop.

Pattern: `arn:.+:mediaconnect.+:flow:.+`

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 202
Content-type: application/json

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

## Response Elements

If the action is successful, the service sends back an HTTP 202 response.

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

**flowArn**

The ARN of the flow that you stopped.

Type: String

**status**

The status of the flow when the `StopFlow` process begins.

Type: String

Valid Values: `STANDBY | ACTIVE | UPDATING | DELETING | STARTING | STOPPING | ERROR`

## Errors

For information about the errors that are common to all actions, see Common Errors.

**BadRequestException**

This exception is thrown if the request contains a semantic error. The precise meaning depends on the API, and is documented in the error message.

HTTP Status Code: 400

**ForbiddenException**

You do not have sufficient access to perform this action.

HTTP Status Code: 403

**InternalServerErrorException**

The server encountered an internal error and is unable to complete the request.

HTTP Status Code: 500

**NotFoundException**

One or more of the resources in the request does not exist in the system.

HTTP Status Code: 404

**ServiceUnavailableException**

The service is currently unavailable or busy.

HTTP Status Code: 503

**TooManyRequestsException**

The request was denied due to request throttling.

HTTP Status Code: 429

## See Also

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

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

# StopRouterInput

Stops a router input in AWS Elemental MediaConnect.

## Request Syntax

```
POST /v1/routerInput/stop/arn HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

**arn**

The Amazon Resource Name (ARN) of the router input that you want to stop.

Pattern: `arn:(aws[a-zA-Z-]*):mediaconnect:[a-z0-9-]+:[0-9]{12}:routerInput:[a-z0-9]{12}`

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 202
Content-type: application/json

{
   "arn": "string",
   "name": "string",
   "state": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 202 response.

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

**arn**

The ARN of the router input that was stopped.

Type: String

Pattern: `arn:(aws[a-zA-Z-]*):mediaconnect:[a-z0-9-]+:[0-9]{12}:routerInput:[a-z0-9]{12}`

**name**

The name of the router input that was stopped.

Type: String

**state**

The current state of the router input after being stopped.

Type: String

Valid Values: `CREATING | STANDBY | STARTING | ACTIVE | STOPPING | DELETING | UPDATING | ERROR | RECOVERING | MIGRATING`

## Errors

For information about the errors that are common to all actions, see Common Errors.

**BadRequestException**

This exception is thrown if the request contains a semantic error. The precise meaning depends on the API, and is documented in the error message.

HTTP Status Code: 400

**ConflictException**

The requested operation would cause a conflict with the current state of a service resource associated with the request. Resolve the conflict before retrying this request.

HTTP Status Code: 409

**ForbiddenException**

You do not have sufficient access to perform this action.

HTTP Status Code: 403

**InternalServerErrorException**

The server encountered an internal error and is unable to complete the request.

HTTP Status Code: 500

**NotFoundException**

One or more of the resources in the request does not exist in the system.

HTTP Status Code: 404

**ServiceUnavailableException**

The service is currently unavailable or busy.

HTTP Status Code: 503

**TooManyRequestsException**

The request was denied due to request throttling.

HTTP Status Code: 429

## See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin

- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

# StopRouterOutput

Stops a router output in AWS Elemental MediaConnect.

## Request Syntax

```
POST /v1/routerOutput/stop/arn HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

**arn**

The Amazon Resource Name (ARN) of the router output that you want to stop.

Pattern: `arn:(aws[a-zA-Z-]*):mediaconnect:[a-z0-9-]+:[0-9]{12}:routerOutput:[a-z0-9]{12}`

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 202
Content-type: application/json

{
   "arn": "string",
   "name": "string",
   "state": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 202 response.

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

**arn**

The ARN of the router output that was stopped.

Type: String

Pattern: `arn:(aws[a-zA-Z-]*):mediaconnect:[a-z0-9-]+:[0-9]{12}:routerOutput:[a-z0-9]{12}`

**name**

The name of the router output that was stopped.

Type: String

**state**

The current state of the router output after being stopped.

Type: String

Valid Values: `CREATING | STANDBY | STARTING | ACTIVE | STOPPING | DELETING | UPDATING | ERROR | RECOVERING | MIGRATING`

## Errors

For information about the errors that are common to all actions, see Common Errors.

**BadRequestException**

This exception is thrown if the request contains a semantic error. The precise meaning depends on the API, and is documented in the error message.

HTTP Status Code: 400

**ConflictException**

The requested operation would cause a conflict with the current state of a service resource associated with the request. Resolve the conflict before retrying this request.

HTTP Status Code: 409

**ForbiddenException**

You do not have sufficient access to perform this action.

HTTP Status Code: 403

**InternalServerErrorException**

The server encountered an internal error and is unable to complete the request.

HTTP Status Code: 500

**NotFoundException**

One or more of the resources in the request does not exist in the system.

HTTP Status Code: 404

**ServiceUnavailableException**

The service is currently unavailable or busy.

HTTP Status Code: 503

**TooManyRequestsException**

The request was denied due to request throttling.

HTTP Status Code: 429

## See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin

- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

# TagGlobalResource

Adds tags to a global resource in AWS Elemental MediaConnect. The API supports the following global resources: router inputs, router outputs and router network interfaces.

## Request Syntax

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

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

## URI Request Parameters

The request uses the following URI parameters.

**resourceArn**

The Amazon Resource Name (ARN) of the global resource to tag.

Required: Yes

## Request Body

The request accepts the following data in JSON format.

**tags**

A map of tag keys and values to add to the global resource.

Type: String to string map

Required: Yes

## Response Syntax

```
HTTP/1.1 204
```

## Response Elements

If the action is successful, the service sends back an HTTP 204 response with an empty HTTP body.

## Errors

For information about the errors that are common to all actions, see Common Errors.

**BadRequestException**

This exception is thrown if the request contains a semantic error. The precise meaning depends on the API, and is documented in the error message.

HTTP Status Code: 400

**InternalServerErrorException**

The server encountered an internal error and is unable to complete the request.

HTTP Status Code: 500

**NotFoundException**

One or more of the resources in the request does not exist in the system.

HTTP Status Code: 404

## See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2

- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

# TagResource

Associates the specified tags to a resource with the specified `resourceArn` in the current region. If existing tags on a resource are not specified in the request parameters, they are not changed. When a resource is deleted, the tags associated with that resource are deleted as well.

## Request Syntax

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

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

## URI Request Parameters

The request uses the following URI parameters.

**resourceArn**

The Amazon Resource Name (ARN) that identifies the MediaConnect resource to which to add tags.

Required: Yes

## Request Body

The request accepts the following data in JSON format.

**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: String to string map

Required: Yes

## Response Syntax

```
HTTP/1.1 204
```

## Response Elements

If the action is successful, the service sends back an HTTP 204 response with an empty HTTP body.

## Errors

For information about the errors that are common to all actions, see Common Errors.

**BadRequestException**

This exception is thrown if the request contains a semantic error. The precise meaning depends on the API, and is documented in the error message.

HTTP Status Code: 400

**InternalServerErrorException**

The server encountered an internal error and is unable to complete the request.

HTTP Status Code: 500

**NotFoundException**

One or more of the resources in the request does not exist in the system.

HTTP Status Code: 404

## See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2

- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

# TakeRouterInput

Associates a router input with a router output in AWS Elemental MediaConnect.

## Request Syntax

```
PUT /v1/routerOutput/takeRouterInput/routerOutputArn HTTP/1.1
Content-type: application/json

{
   "routerInputArn": "string"
}
```

## URI Request Parameters

The request uses the following URI parameters.

### routerOutputArn

The Amazon Resource Name (ARN) of the router output that you want to associate with a router input.

Pattern: `arn:(aws[a-zA-Z-]*):mediaconnect:[a-z0-9-]+:[0-9]{12}:routerOutput:[a-z0-9]{12}`

Required: Yes

## Request Body

The request accepts the following data in JSON format.

### routerInputArn

The Amazon Resource Name (ARN) of the router input that you want to associate with a router output.

Type: String

Pattern: `arn:(aws[a-zA-Z-]*):mediaconnect:[a-z0-9-]+:[0-9]{12}:routerInput:[a-z0-9]{12}`

Required: No

## Response Syntax

```
HTTP/1.1 202
Content-type: application/json

{
   "routedState": "string",
   "routerInputArn": "string",
   "routerInputName": "string",
   "routerOutputArn": "string",
   "routerOutputName": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 202 response.

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

**routedState**

The state of the association between the router input and output.

Type: String

Valid Values: `ROUTED | ROUTING | UNROUTED`

**routerInputArn**

The ARN of the associated router input.

Type: String

Pattern: `arn:(aws[a-zA-Z-]*):mediaconnect:[a-z0-9-]+:[0-9]{12}:routerInput:[a-z0-9]{12}`

**routerInputName**

The name of the associated router input.

Type: String

**routerOutputArn**

The ARN of the associated router output.

Type: String

Pattern: `arn:(aws[a-zA-Z-]*):mediaconnect:[a-z0-9-]+:[0-9]{12}:routerOutput:[a-z0-9]{12}`

**routerOutputName**

The name of the associated router output.

Type: String

## Errors

For information about the errors that are common to all actions, see Common Errors.

**BadRequestException**

This exception is thrown if the request contains a semantic error. The precise meaning depends on the API, and is documented in the error message.

HTTP Status Code: 400

**ConflictException**

The requested operation would cause a conflict with the current state of a service resource associated with the request. Resolve the conflict before retrying this request.

HTTP Status Code: 409

**ForbiddenException**

You do not have sufficient access to perform this action.

HTTP Status Code: 403

**InternalServerErrorException**

The server encountered an internal error and is unable to complete the request.

HTTP Status Code: 500

**NotFoundException**

One or more of the resources in the request does not exist in the system.

HTTP Status Code: 404

**ServiceUnavailableException**

The service is currently unavailable or busy.

HTTP Status Code: 503

**TooManyRequestsException**

The request was denied due to request throttling.

HTTP Status Code: 429

## See Also

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

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

# UntagGlobalResource

Removes tags from a global resource in AWS Elemental MediaConnect. The API supports the following global resources: router inputs, router outputs and router network interfaces.

## Request Syntax

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

## URI Request Parameters

The request uses the following URI parameters.

**resourceArn**

The Amazon Resource Name (ARN) of the global resource to remove tags from.

Required: Yes

**tagKeys**

The keys of the tags to remove from the global resource.

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 204
```

## Response Elements

If the action is successful, the service sends back an HTTP 204 response with an empty HTTP body.

## Errors

For information about the errors that are common to all actions, see Common Errors.

**BadRequestException**

This exception is thrown if the request contains a semantic error. The precise meaning depends on the API, and is documented in the error message.

HTTP Status Code: 400

**InternalServerErrorException**

The server encountered an internal error and is unable to complete the request.

HTTP Status Code: 500

**NotFoundException**

One or more of the resources in the request does not exist in the system.

HTTP Status Code: 404

## See Also

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

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

# UntagResource

Deletes specified tags from a resource in the current region.

## Request Syntax

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

## URI Request Parameters

The request uses the following URI parameters.

**resourceArn**

The Amazon Resource Name (ARN) of the resource that you want to untag.

Required: Yes

**tagKeys**

The keys of the tags to be removed.

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 204
```

## Response Elements

If the action is successful, the service sends back an HTTP 204 response with an empty HTTP body.

## Errors

For information about the errors that are common to all actions, see Common Errors.

**BadRequestException**

This exception is thrown if the request contains a semantic error. The precise meaning depends on the API, and is documented in the error message.

HTTP Status Code: 400

**InternalServerErrorException**

The server encountered an internal error and is unable to complete the request.

HTTP Status Code: 500

**NotFoundException**

One or more of the resources in the request does not exist in the system.

HTTP Status Code: 404

## See Also

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

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

# UpdateBridge

Updates the bridge.

## Request Syntax

```
PUT /v1/bridges/bridgeArn HTTP/1.1
Content-type: application/json

{
   "egressGatewayBridge": {
      "maxBitrate": number
   },
   "ingressGatewayBridge": {
      "maxBitrate": number,
      "maxOutputs": number
   },
   "sourceFailoverConfig": {
      "failoverMode": "string",
      "recoveryWindow": number,
      "sourcePriority": {
         "primarySource": "string"
      },
      "state": "string"
   }
}
```

## URI Request Parameters

The request uses the following URI parameters.

### bridgeArn

TheAmazon Resource Name (ARN) of the bridge that you want to update.

Pattern: `arn:.+:mediaconnect.+:bridge:.+`

Required: Yes

## Request Body

The request accepts the following data in JSON format.

**egressGatewayBridge**

A cloud-to-ground bridge. The content comes from an existing MediaConnect flow and is delivered to your premises.

Type: UpdateEgressGatewayBridgeRequest object

Required: No

**ingressGatewayBridge**

A ground-to-cloud bridge. The content originates at your premises and is delivered to the cloud.

Type: UpdateIngressGatewayBridgeRequest object

Required: No

**sourceFailoverConfig**

The settings for source failover.

Type: UpdateFailoverConfig object

Required: No

## Response Syntax

```
HTTP/1.1 202
Content-type: application/json

{
   "bridge": {
      "bridgeArn": "string",
      "bridgeMessages": [
         {
            "code": "string",
            "message": "string",
            "resourceName": "string"
         }
      ],
      "bridgeState": "string",
      "egressGatewayBridge": {
         "instanceId": "string",
         "maxBitrate": number
      },
```

```
      "ingressGatewayBridge": {
         "instanceId": "string",
         "maxBitrate": number,
         "maxOutputs": number
      },
      "name": "string",
      "outputs": [
         {
            "flowOutput": {
               "flowArn": "string",
               "flowSourceArn": "string",
               "name": "string"
            },
            "networkOutput": {
               "ipAddress": "string",
               "name": "string",
               "networkName": "string",
               "port": number,
               "protocol": "string",
               "ttl": number
            }
         }
      ],
      "placementArn": "string",
      "sourceFailoverConfig": {
         "failoverMode": "string",
         "recoveryWindow": number,
         "sourcePriority": {
            "primarySource": "string"
         },
         "state": "string"
      },
      "sources": [
         {
            "flowSource": {
               "flowArn": "string",
               "flowVpcInterfaceAttachment": {
                  "vpcInterfaceName": "string"
               },
               "name": "string",
               "outputArn": "string"
            },
            "networkSource": {
               "multicastIp": "string",
```

```
                "multicastSourceSettings": {
                   "multicastSourceIp": "string"
                },
                "name": "string",
                "networkName": "string",
                "port": number,
                "protocol": "string"
             }
          }
       ]
    }
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 202 response.

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

**bridge**

The bridge that was updated.

Type: Bridge object

## Errors

For information about the errors that are common to all actions, see Common Errors.

**BadRequestException**

This exception is thrown if the request contains a semantic error. The precise meaning depends on the API, and is documented in the error message.

HTTP Status Code: 400

**ConflictException**

The requested operation would cause a conflict with the current state of a service resource associated with the request. Resolve the conflict before retrying this request.

HTTP Status Code: 409

**ForbiddenException**

You do not have sufficient access to perform this action.

HTTP Status Code: 403

**InternalServerErrorException**

The server encountered an internal error and is unable to complete the request.

HTTP Status Code: 500

**NotFoundException**

One or more of the resources in the request does not exist in the system.

HTTP Status Code: 404

**ServiceUnavailableException**

The service is currently unavailable or busy.

HTTP Status Code: 503

**TooManyRequestsException**

The request was denied due to request throttling.

HTTP Status Code: 429

## See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin

- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

# UpdateBridgeOutput

Updates an existing bridge output.

## Request Syntax

```
PUT /v1/bridges/bridgeArn/outputs/outputName HTTP/1.1
Content-type: application/json

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

## URI Request Parameters

The request uses the following URI parameters.

**bridgeArn**

The Amazon Resource Name (ARN) of the bridge that you want to update.

Pattern: `arn:.+:mediaconnect.+:bridge:.+`

Required: Yes

**outputName**

Tname of the output that you want to update.

Required: Yes

## Request Body

The request accepts the following data in JSON format.

### networkOutput

The network of the bridge output.

Type: UpdateBridgeNetworkOutputRequest object

Required: No

## Response Syntax

```
HTTP/1.1 202
Content-type: application/json

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

## Response Elements

If the action is successful, the service sends back an HTTP 202 response.

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

### bridgeArn

The ARN of the bridge that was updated.

Type: String

**output**

The bridge output that was updated.

Type: BridgeOutput object

## Errors

For information about the errors that are common to all actions, see Common Errors.

**BadRequestException**

This exception is thrown if the request contains a semantic error. The precise meaning depends on the API, and is documented in the error message.

HTTP Status Code: 400

**ConflictException**

The requested operation would cause a conflict with the current state of a service resource associated with the request. Resolve the conflict before retrying this request.

HTTP Status Code: 409

**ForbiddenException**

You do not have sufficient access to perform this action.

HTTP Status Code: 403

**InternalServerErrorException**

The server encountered an internal error and is unable to complete the request.

HTTP Status Code: 500

**NotFoundException**

One or more of the resources in the request does not exist in the system.

HTTP Status Code: 404

**ServiceUnavailableException**

The service is currently unavailable or busy.

HTTP Status Code: 503

**TooManyRequestsException**

The request was denied due to request throttling.

HTTP Status Code: 429

## See Also

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

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

# UpdateBridgeSource

Updates an existing bridge source.

## Request Syntax

```
PUT /v1/bridges/bridgeArn/sources/sourceName HTTP/1.1
Content-type: application/json

{
   "flowSource": {
      "flowArn": "string",
      "flowVpcInterfaceAttachment": {
         "vpcInterfaceName": "string"
      }
   },
   "networkSource": {
      "multicastIp": "string",
      "multicastSourceSettings": {
         "multicastSourceIp": "string"
      },
      "networkName": "string",
      "port": number,
      "protocol": "string"
   }
}
```

## URI Request Parameters

The request uses the following URI parameters.

### bridgeArn

The Amazon Resource Name (ARN) of the bridge that you want to update.

Pattern: `arn:.+:mediaconnect.+:bridge:.+`

Required: Yes

### sourceName

The name of the source that you want to update.

Required: Yes

## Request Body

The request accepts the following data in JSON format.

**flowSource**

The name of the flow that you want to update.

Type: UpdateBridgeFlowSourceRequest object

Required: No

**networkSource**

The network for the bridge source.

Type: UpdateBridgeNetworkSourceRequest object

Required: No

## Response Syntax

```
HTTP/1.1 202
Content-type: application/json

{
   "bridgeArn": "string",
   "source": {
      "flowSource": {
         "flowArn": "string",
         "flowVpcInterfaceAttachment": {
            "vpcInterfaceName": "string"
         },
         "name": "string",
         "outputArn": "string"
      },
      "networkSource": {
         "multicastIp": "string",
         "multicastSourceSettings": {
            "multicastSourceIp": "string"
```

```
            },
            "name": "string",
            "networkName": "string",
            "port": number,
            "protocol": "string"
        }
    }
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 202 response.

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

**bridgeArn**

The ARN of the updated bridge source.

Type: String

**source**

The updated bridge source.

Type: BridgeSource object

## Errors

For information about the errors that are common to all actions, see Common Errors.

**BadRequestException**

This exception is thrown if the request contains a semantic error. The precise meaning depends on the API, and is documented in the error message.

HTTP Status Code: 400

**ConflictException**

The requested operation would cause a conflict with the current state of a service resource associated with the request. Resolve the conflict before retrying this request.

HTTP Status Code: 409

**ForbiddenException**

You do not have sufficient access to perform this action.

HTTP Status Code: 403

**InternalServerErrorException**

The server encountered an internal error and is unable to complete the request.

HTTP Status Code: 500

**NotFoundException**

One or more of the resources in the request does not exist in the system.

HTTP Status Code: 404

**ServiceUnavailableException**

The service is currently unavailable or busy.

HTTP Status Code: 503

**TooManyRequestsException**

The request was denied due to request throttling.

HTTP Status Code: 429

## See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3

- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

# UpdateBridgeState

Updates the bridge state.

## Request Syntax

```
PUT /v1/bridges/bridgeArn/state HTTP/1.1
Content-type: application/json

{
   "desiredState": "string"
}
```

## URI Request Parameters

The request uses the following URI parameters.

### bridgeArn

The Amazon Resource Name (ARN) of the bridge that you want to update the state of.

Pattern: `arn:.+:mediaconnect.+:bridge:.+`

Required: Yes

## Request Body

The request accepts the following data in JSON format.

### desiredState

The desired state for the bridge.

Type: String

Valid Values: `ACTIVE | STANDBY | DELETED`

Required: Yes

## Response Syntax

```
HTTP/1.1 202
Content-type: application/json

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

## Response Elements

If the action is successful, the service sends back an HTTP 202 response.

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

**bridgeArn**

The ARN of the updated bridge.

Type: String

**desiredState**

The new state of the bridge.

Type: String

Valid Values: `ACTIVE | STANDBY | DELETED`

## Errors

For information about the errors that are common to all actions, see Common Errors.

**BadRequestException**

This exception is thrown if the request contains a semantic error. The precise meaning depends on the API, and is documented in the error message.

HTTP Status Code: 400

**ConflictException**

The requested operation would cause a conflict with the current state of a service resource associated with the request. Resolve the conflict before retrying this request.

HTTP Status Code: 409

**ForbiddenException**

You do not have sufficient access to perform this action.

HTTP Status Code: 403

**InternalServerErrorException**

The server encountered an internal error and is unable to complete the request.

HTTP Status Code: 500

**NotFoundException**

One or more of the resources in the request does not exist in the system.

HTTP Status Code: 404

**ServiceUnavailableException**

The service is currently unavailable or busy.

HTTP Status Code: 503

**TooManyRequestsException**

The request was denied due to request throttling.

HTTP Status Code: 429

## See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++

- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

# UpdateFlow

Updates an existing flow.

> **Note**
>
> Because UpdateFlowSources and UpdateFlow are separate operations, you can't change both the source type AND the flow size in a single request.
>
> - If you have a MEDIUM flow and you want to change the flow source to NDI®:
>   - First, use the UpdateFlow operation to upgrade the flow size to LARGE.
>   - After that, you can then use the UpdateFlowSource operation to configure the NDI source.
> - If you're switching from an NDI source to a transport stream (TS) source and want to downgrade the flow size:
>   - First, use the UpdateFlowSource operation to change the flow source type.
>   - After that, you can then use the UpdateFlow operation to downgrade the flow size to MEDIUM.

## Request Syntax

```
PUT /v1/flows/flowArn HTTP/1.1
Content-type: application/json

{
   "encodingConfig": {
      "encodingProfile": "string",
      "videoMaxBitrate": number
   },
   "flowSize": "string",
   "maintenance": {
      "maintenanceDay": "string",
      "maintenanceScheduledDate": "string",
      "maintenanceStartHour": "string"
   },
   "ndiConfig": {
      "machineName": "string",
      "ndiDiscoveryServers": [
```

```
            {
               "discoveryServerAddress": "string",
               "discoveryServerPort": number,
               "vpcInterfaceAdapter": "string"
            }
         ],
         "ndiState": "string"
      },
      "sourceFailoverConfig": {
         "failoverMode": "string",
         "recoveryWindow": number,
         "sourcePriority": {
            "primarySource": "string"
         },
         "state": "string"
      },
      "sourceMonitoringConfig": {
         "audioMonitoringSettings": [
            {
               "silentAudio": {
                  "state": "string",
                  "thresholdSeconds": number
               }
            }
         ],
         "contentQualityAnalysisState": "string",
         "thumbnailState": "string",
         "videoMonitoringSettings": [
            {
               "blackFrames": {
                  "state": "string",
                  "thresholdSeconds": number
               },
               "frozenFrames": {
                  "state": "string",
                  "thresholdSeconds": number
               }
            }
         ]
      }
}
```

## URI Request Parameters

The request uses the following URI parameters.

**flowArn**

The Amazon Resource Name (ARN) of the flow that you want to update.

Pattern: `arn:.+:mediaconnect.+:flow:.+`

Required: Yes

## Request Body

The request accepts the following data in JSON format.

**encodingConfig**

The encoding configuration to apply to the NDI® source when transcoding it to a transport stream for downstream distribution. You can choose between several predefined encoding profiles based on common use cases.

Type: EncodingConfig object

Required: No

**flowSize**

Determines the processing capacity and feature set of the flow.

Type: String

Valid Values: `MEDIUM | LARGE | LARGE_4X`

Required: No

**maintenance**

The maintenance setting of the flow.

Type: UpdateMaintenance object

Required: No

**ndiConfig**

Specifies the configuration settings for a flow's NDI source or output. Required when the flow includes an NDI source or output.

Type: NdiConfig object

Required: No

**sourceFailoverConfig**

The settings for source failover.

Type: UpdateFailoverConfig object

Required: No

**sourceMonitoringConfig**

The settings for source monitoring.

Type: MonitoringConfig object

Required: No

## Response Syntax

```
HTTP/1.1 202
Content-type: application/json

{
   "flow": {
      "availabilityZone": "string",
      "description": "string",
      "egressIp": "string",
      "encodingConfig": {
         "encodingProfile": "string",
         "videoMaxBitrate": number
      },
      "entitlements": [
         {
            "dataTransferSubscriberFeePercent": number,
            "description": "string",
            "encryption": {
               "algorithm": "string",
```

```
            "constantInitializationVector": "string",
            "deviceId": "string",
            "keyType": "string",
            "region": "string",
            "resourceId": "string",
            "roleArn": "string",
            "secretArn": "string",
            "url": "string"
         },
         "entitlementArn": "string",
         "entitlementStatus": "string",
         "name": "string",
         "subscribers": [ "string" ]
      }
   ],
   "flowArn": "string",
   "flowSize": "string",
   "maintenance": {
      "maintenanceDay": "string",
      "maintenanceDeadline": "string",
      "maintenanceScheduledDate": "string",
      "maintenanceStartHour": "string"
   },
   "mediaStreams": [
      {
         "attributes": {
            "fmtp": {
               "channelOrder": "string",
               "colorimetry": "string",
               "exactFramerate": "string",
               "par": "string",
               "range": "string",
               "scanMode": "string",
               "tcs": "string"
            },
            "lang": "string"
         },
         "clockRate": number,
         "description": "string",
         "fmt": number,
         "mediaStreamId": number,
         "mediaStreamName": "string",
         "mediaStreamType": "string",
         "videoFormat": "string"
```

```
            }
         ],
         "name": "string",
         "ndiConfig": {
            "machineName": "string",
            "ndiDiscoveryServers": [
               {
                  "discoveryServerAddress": "string",
                  "discoveryServerPort": number,
                  "vpcInterfaceAdapter": "string"
               }
            ],
            "ndiState": "string"
         },
         "outputs": [
            {
               "bridgeArn": "string",
               "bridgePorts": [ number ],
               "connectedRouterInputArn": "string",
               "dataTransferSubscriberFeePercent": number,
               "description": "string",
               "destination": "string",
               "encryption": {
                  "algorithm": "string",
                  "constantInitializationVector": "string",
                  "deviceId": "string",
                  "keyType": "string",
                  "region": "string",
                  "resourceId": "string",
                  "roleArn": "string",
                  "secretArn": "string",
                  "url": "string"
               },
               "entitlementArn": "string",
               "listenerAddress": "string",
               "mediaLiveInputArn": "string",
               "mediaStreamOutputConfigurations": [
                  {
                     "destinationConfigurations": [
                        {
                           "destinationIp": "string",
                           "destinationPort": number,
                           "interface": {
                              "name": "string"
```

```
                    },
                    "outboundIp": "string"
                 }
              ],
              "encodingName": "string",
              "encodingParameters": {
                 "compressionFactor": number,
                 "encoderProfile": "string"
              },
              "mediaStreamName": "string"
           }
        ],
        "name": "string",
        "outputArn": "string",
        "outputStatus": "string",
        "peerIpAddress": "string",
        "port": number,
        "routerIntegrationState": "string",
        "routerIntegrationTransitEncryption": {
           "encryptionKeyConfiguration": { ... },
           "encryptionKeyType": "string"
        },
        "transport": {
           "cidrAllowList": [ "string" ],
           "maxBitrate": number,
           "maxLatency": number,
           "maxSyncBuffer": number,
           "minLatency": number,
           "ndiProgramName": "string",
           "ndiSourceSettings": {
              "sourceName": "string"
           },
           "ndiSpeedHqQuality": number,
           "protocol": "string",
           "remoteId": "string",
           "senderControlPort": number,
           "senderIpAddress": "string",
           "smoothingLatency": number,
           "sourceListenerAddress": "string",
           "sourceListenerPort": number,
           "streamId": "string"
        },
        "vpcInterfaceAttachment": {
           "vpcInterfaceName": "string"
```

```
            }
         }
      ],
      "source": {
         "connectedRouterOutputArn": "string",
         "dataTransferSubscriberFeePercent": number,
         "decryption": {
            "algorithm": "string",
            "constantInitializationVector": "string",
            "deviceId": "string",
            "keyType": "string",
            "region": "string",
            "resourceId": "string",
            "roleArn": "string",
            "secretArn": "string",
            "url": "string"
         },
         "description": "string",
         "entitlementArn": "string",
         "gatewayBridgeSource": {
            "bridgeArn": "string",
            "vpcInterfaceAttachment": {
               "vpcInterfaceName": "string"
            }
         },
         "ingestIp": "string",
         "ingestPort": number,
         "mediaStreamSourceConfigurations": [
            {
               "encodingName": "string",
               "inputConfigurations": [
                  {
                     "inputIp": "string",
                     "inputPort": number,
                     "interface": {
                        "name": "string"
                     }
                  }
               ],
               "mediaStreamName": "string"
            }
         ],
         "name": "string",
         "peerIpAddress": "string",
```

```
      "routerIntegrationState": "string",
      "routerIntegrationTransitDecryption": {
         "encryptionKeyConfiguration": { ... },
         "encryptionKeyType": "string"
      },
      "senderControlPort": number,
      "senderIpAddress": "string",
      "sourceArn": "string",
      "transport": {
         "cidrAllowList": [ "string" ],
         "maxBitrate": number,
         "maxLatency": number,
         "maxSyncBuffer": number,
         "minLatency": number,
         "ndiProgramName": "string",
         "ndiSourceSettings": {
            "sourceName": "string"
         },
         "ndiSpeedHqQuality": number,
         "protocol": "string",
         "remoteId": "string",
         "senderControlPort": number,
         "senderIpAddress": "string",
         "smoothingLatency": number,
         "sourceListenerAddress": "string",
         "sourceListenerPort": number,
         "streamId": "string"
      },
      "vpcInterfaceName": "string",
      "whitelistCidr": "string"
   },
   "sourceFailoverConfig": {
      "failoverMode": "string",
      "recoveryWindow": number,
      "sourcePriority": {
         "primarySource": "string"
      },
      "state": "string"
   },
   "sourceMonitoringConfig": {
      "audioMonitoringSettings": [
         {
            "silentAudio": {
               "state": "string",
```

```
                "thresholdSeconds": number
            }
         }
      ],
      "contentQualityAnalysisState": "string",
      "thumbnailState": "string",
      "videoMonitoringSettings": [
         {
            "blackFrames": {
               "state": "string",
               "thresholdSeconds": number
            },
            "frozenFrames": {
               "state": "string",
               "thresholdSeconds": number
            }
         }
      ]
   },
   "sources": [
      {
         "connectedRouterOutputArn": "string",
         "dataTransferSubscriberFeePercent": number,
         "decryption": {
            "algorithm": "string",
            "constantInitializationVector": "string",
            "deviceId": "string",
            "keyType": "string",
            "region": "string",
            "resourceId": "string",
            "roleArn": "string",
            "secretArn": "string",
            "url": "string"
         },
         "description": "string",
         "entitlementArn": "string",
         "gatewayBridgeSource": {
            "bridgeArn": "string",
            "vpcInterfaceAttachment": {
               "vpcInterfaceName": "string"
            }
         },
         "ingestIp": "string",
         "ingestPort": number,
```

```
            "mediaStreamSourceConfigurations": [
               {
                  "encodingName": "string",
                  "inputConfigurations": [
                     {
                        "inputIp": "string",
                        "inputPort": number,
                        "interface": {
                           "name": "string"
                        }
                     }
                  ],
                  "mediaStreamName": "string"
               }
            ],
            "name": "string",
            "peerIpAddress": "string",
            "routerIntegrationState": "string",
            "routerIntegrationTransitDecryption": {
               "encryptionKeyConfiguration": { ... },
               "encryptionKeyType": "string"
            },
            "senderControlPort": number,
            "senderIpAddress": "string",
            "sourceArn": "string",
            "transport": {
               "cidrAllowList": [ "string" ],
               "maxBitrate": number,
               "maxLatency": number,
               "maxSyncBuffer": number,
               "minLatency": number,
               "ndiProgramName": "string",
               "ndiSourceSettings": {
                  "sourceName": "string"
               },
               "ndiSpeedHqQuality": number,
               "protocol": "string",
               "remoteId": "string",
               "senderControlPort": number,
               "senderIpAddress": "string",
               "smoothingLatency": number,
               "sourceListenerAddress": "string",
               "sourceListenerPort": number,
               "streamId": "string"
```

```
            },
            "vpcInterfaceName": "string",
            "whitelistCidr": "string"
         }
      ],
      "status": "string",
      "vpcInterfaces": [
         {
            "name": "string",
            "networkInterfaceIds": [ "string" ],
            "networkInterfaceType": "string",
            "roleArn": "string",
            "securityGroupIds": [ "string" ],
            "subnetId": "string"
         }
      ]
   }
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 202 response.

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

**flow**

The updated flow.

Type: Flow object

## Errors

For information about the errors that are common to all actions, see Common Errors.

**BadRequestException**

This exception is thrown if the request contains a semantic error. The precise meaning depends on the API, and is documented in the error message.

HTTP Status Code: 400

**ForbiddenException**

You do not have sufficient access to perform this action.

HTTP Status Code: 403

**InternalServerErrorException**

The server encountered an internal error and is unable to complete the request.

HTTP Status Code: 500

**NotFoundException**

One or more of the resources in the request does not exist in the system.

HTTP Status Code: 404

**ServiceUnavailableException**

The service is currently unavailable or busy.

HTTP Status Code: 503

**TooManyRequestsException**

The request was denied due to request throttling.

HTTP Status Code: 429

## See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin

- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

# UpdateFlowEntitlement

Updates an entitlement. You can change an entitlement's description, subscribers, and encryption. If you change the subscribers, the service will remove the outputs that are are used by the subscribers that are removed.

## Request Syntax

```
PUT /v1/flows/flowArn/entitlements/entitlementArn HTTP/1.1
Content-type: application/json

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

## URI Request Parameters

The request uses the following URI parameters.

### entitlementArn

The Amazon Resource Name (ARN) of the entitlement that you want to update.

Pattern: `arn:.+:mediaconnect.+:entitlement:.+`

Required: Yes

### flowArn

The ARN of the flow that is associated with the entitlement that you want to update.

Pattern: `arn:.+:mediaconnect.+:flow:.+`

Required: Yes

## Request Body

The request accepts the following data in JSON format.

**description**

A description of the entitlement. This description appears only on the MediaConnect console and will not be seen by the subscriber or end user.

Type: String

Required: No

**encryption**

The type of encryption that will be used on the output associated with this entitlement. Allowable encryption types: static-key, speke.

Type: UpdateEncryption object

Required: No

**entitlementStatus**

An indication of whether you want to enable the entitlement to allow access, or disable 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

Valid Values: `ENABLED | DISABLED`

Required: No

**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 strings

Required: No

## Response Syntax

```
HTTP/1.1 202
Content-type: application/json

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

## Response Elements

If the action is successful, the service sends back an HTTP 202 response.

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

**entitlement**

The new configuration of the entitlement that you updated.

Type: Entitlement object

**flowArn**

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

Type: String

## Errors

For information about the errors that are common to all actions, see Common Errors.

**BadRequestException**

This exception is thrown if the request contains a semantic error. The precise meaning depends on the API, and is documented in the error message.

HTTP Status Code: 400

**ForbiddenException**

You do not have sufficient access to perform this action.

HTTP Status Code: 403

**InternalServerErrorException**

The server encountered an internal error and is unable to complete the request.

HTTP Status Code: 500

**NotFoundException**

One or more of the resources in the request does not exist in the system.

HTTP Status Code: 404

**ServiceUnavailableException**

The service is currently unavailable or busy.

HTTP Status Code: 503

**TooManyRequestsException**

The request was denied due to request throttling.

HTTP Status Code: 429

## See Also

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

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

# UpdateFlowMediaStream

Updates an existing media stream.

## Request Syntax

```
PUT /v1/flows/flowArn/mediaStreams/mediaStreamName HTTP/1.1
Content-type: application/json

{
   "attributes": {
      "fmtp": {
         "channelOrder": "string",
         "colorimetry": "string",
         "exactFramerate": "string",
         "par": "string",
         "range": "string",
         "scanMode": "string",
         "tcs": "string"
      },
      "lang": "string"
   },
   "clockRate": number,
   "description": "string",
   "mediaStreamType": "string",
   "videoFormat": "string"
}
```

## URI Request Parameters

The request uses the following URI parameters.

### flowArn

The Amazon Resource Name (ARN) of the flow that is associated with the media stream that you updated.

Pattern: `arn:.+:mediaconnect.+:flow:.+`

Required: Yes

**mediaStreamName**

The media stream that you updated.

Required: Yes

## Request Body

The request accepts the following data in JSON format.

**attributes**

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

Type: MediaStreamAttributesRequest object

Required: No

**clockRate**

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

Type: Integer

Required: No

**description**

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

Type: String

Required: No

**mediaStreamType**

The type of media stream.

Type: String

Valid Values: `video | audio | ancillary-data`

Required: No

**videoFormat**

The resolution of the video.

Type: String

Required: No

## Response Syntax

```
HTTP/1.1 202
Content-type: application/json

{
   "flowArn": "string",
   "mediaStream": {
      "attributes": {
         "fmtp": {
            "channelOrder": "string",
            "colorimetry": "string",
            "exactFramerate": "string",
            "par": "string",
            "range": "string",
            "scanMode": "string",
            "tcs": "string"
         },
         "lang": "string"
      },
      "clockRate": number,
      "description": "string",
      "fmt": number,
      "mediaStreamId": number,
      "mediaStreamName": "string",
      "mediaStreamType": "string",
      "videoFormat": "string"
   }
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 202 response.

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

**flowArn**

The ARN of the flow that is associated with the media stream that you updated.

Type: String

**mediaStream**

The media stream that you updated.

Type: MediaStream object

## Errors

For information about the errors that are common to all actions, see Common Errors.

**BadRequestException**

This exception is thrown if the request contains a semantic error. The precise meaning depends on the API, and is documented in the error message.

HTTP Status Code: 400

**ForbiddenException**

You do not have sufficient access to perform this action.

HTTP Status Code: 403

**InternalServerErrorException**

The server encountered an internal error and is unable to complete the request.

HTTP Status Code: 500

**NotFoundException**

One or more of the resources in the request does not exist in the system.

HTTP Status Code: 404

**ServiceUnavailableException**

The service is currently unavailable or busy.

HTTP Status Code: 503

**TooManyRequestsException**

The request was denied due to request throttling.

HTTP Status Code: 429

## See Also

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

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

# UpdateFlowOutput

Updates an existing flow output.

## Request Syntax

```
PUT /v1/flows/flowArn/outputs/outputArn HTTP/1.1
Content-type: application/json

{
   "cidrAllowList": [ "string" ],
   "description": "string",
   "destination": "string",
   "encryption": {
      "algorithm": "string",
      "constantInitializationVector": "string",
      "deviceId": "string",
      "keyType": "string",
      "region": "string",
      "resourceId": "string",
      "roleArn": "string",
      "secretArn": "string",
      "url": "string"
   },
   "maxLatency": number,
   "mediaStreamOutputConfigurations": [
      {
         "destinationConfigurations": [
            {
               "destinationIp": "string",
               "destinationPort": number,
               "interface": {
                  "name": "string"
               }
            }
         ],
         "encodingName": "string",
         "encodingParameters": {
            "compressionFactor": number,
            "encoderProfile": "string"
         },
         "mediaStreamName": "string"
      }
```

```
    ],
    "minLatency": number,
    "ndiProgramName": "string",
    "ndiSpeedHqQuality": number,
    "outputStatus": "string",
    "port": number,
    "protocol": "string",
    "remoteId": "string",
    "routerIntegrationState": "string",
    "routerIntegrationTransitEncryption": {
       "encryptionKeyConfiguration": { ... },
       "encryptionKeyType": "string"
    },
    "senderControlPort": number,
    "senderIpAddress": "string",
    "smoothingLatency": number,
    "streamId": "string",
    "vpcInterfaceAttachment": {
       "vpcInterfaceName": "string"
    }
}
```

## URI Request Parameters

The request uses the following URI parameters.

### flowArn

The Amazon Resource Name (ARN) of the flow that is associated with the output that you want to update.

Pattern: `arn:.+:mediaconnect.+:flow:.+`

Required: Yes

### outputArn

The ARN of the output that you want to update.

Pattern: `arn:.+:mediaconnect.+:output:.+`

Required: Yes

## Request Body

The request accepts the following data in JSON format.

**cidrAllowList**

The range of IP addresses that should be allowed to initiate output requests to this flow. 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 strings

Required: No

**description**

A description of the output. This description appears only on the MediaConnect console and will not be seen by the end user.

Type: String

Required: No

**destination**

The IP address where you want to send the output.

Type: String

Required: No

**encryption**

The type of key used for the encryption. If no keyType is provided, the service will use the default setting (static-key). Allowable encryption types: static-key.

Type: UpdateEncryption object

Required: No

**maxLatency**

The maximum latency in milliseconds. This parameter applies only to RIST-based and Zixi-based streams.

Type: Integer

Required: No

**mediaStreamOutputConfigurations**

The media streams that are associated with the output, and the parameters for those associations.

Type: Array of MediaStreamOutputConfigurationRequest objects

Required: No

**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: No

**ndiProgramName**

A suffix for the name of the NDI® sender that the flow creates. If a custom name isn't specified, MediaConnect uses the output name.

Type: String

Required: No

**ndiSpeedHqQuality**

A quality setting for the NDI Speed HQ encoder.

Type: Integer

Required: No

**outputStatus**

An indication of whether the output should transmit data or not. If you don't specify the `outputStatus` field in your request, MediaConnect leaves the value unchanged.

Type: String

Valid Values: `ENABLED | DISABLED`

Required: No

**port**

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

Type: Integer

Required: No

**protocol**

The protocol to use for the output.

> **Note**
>
> AWS Elemental MediaConnect no longer supports the Fujitsu QoS protocol. This reference is maintained for legacy purposes only.

Type: String

Valid Values: `zixi-push | rtp-fec | rtp | zixi-pull | rist | st2110-jpegxs | cdi | srt-listener | srt-caller | fujitsu-qos | udp | ndi-speed-hq`

Required: No

**remoteId**

The remote ID for the Zixi-pull stream.

Type: String

Required: No

**routerIntegrationState**

Indicates whether to enable or disable router integration for this flow output.

Type: String

Valid Values: `ENABLED | DISABLED`

Required: No

**routerIntegrationTransitEncryption**

The configuration that defines how content is encrypted during transit between the MediaConnect router and a MediaConnect flow.

Type: FlowTransitEncryption object

Required: No

**senderControlPort**

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

Type: Integer

Required: No

**senderIpAddress**

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

Type: String

Required: No

**smoothingLatency**

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

Type: Integer

Required: No

**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: No

**vpcInterfaceAttachment**

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

Type: VpcInterfaceAttachment object

Required: No

## Response Syntax

```
HTTP/1.1 202
Content-type: application/json

{
   "flowArn": "string",
   "output": {
      "bridgeArn": "string",
      "bridgePorts": [ number ],
      "connectedRouterInputArn": "string",
      "dataTransferSubscriberFeePercent": number,
      "description": "string",
      "destination": "string",
      "encryption": {
         "algorithm": "string",
         "constantInitializationVector": "string",
         "deviceId": "string",
         "keyType": "string",
         "region": "string",
         "resourceId": "string",
         "roleArn": "string",
         "secretArn": "string",
         "url": "string"
      },
      "entitlementArn": "string",
      "listenerAddress": "string",
      "mediaLiveInputArn": "string",
      "mediaStreamOutputConfigurations": [
         {
            "destinationConfigurations": [
               {
                  "destinationIp": "string",
                  "destinationPort": number,
                  "interface": {
                     "name": "string"
                  },
                  "outboundIp": "string"
               }
            ],
            "encodingName": "string",
            "encodingParameters": {
               "compressionFactor": number,
```

```
                "encoderProfile": "string"
            },
            "mediaStreamName": "string"
         }
      ],
      "name": "string",
      "outputArn": "string",
      "outputStatus": "string",
      "peerIpAddress": "string",
      "port": number,
      "routerIntegrationState": "string",
      "routerIntegrationTransitEncryption": {
         "encryptionKeyConfiguration": { ... },
         "encryptionKeyType": "string"
      },
      "transport": {
         "cidrAllowList": [ "string" ],
         "maxBitrate": number,
         "maxLatency": number,
         "maxSyncBuffer": number,
         "minLatency": number,
         "ndiProgramName": "string",
         "ndiSourceSettings": {
            "sourceName": "string"
         },
         "ndiSpeedHqQuality": number,
         "protocol": "string",
         "remoteId": "string",
         "senderControlPort": number,
         "senderIpAddress": "string",
         "smoothingLatency": number,
         "sourceListenerAddress": "string",
         "sourceListenerPort": number,
         "streamId": "string"
      },
      "vpcInterfaceAttachment": {
         "vpcInterfaceName": "string"
      }
   }
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 202 response.

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

**flowArn**

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

Type: String

**output**

The new settings of the output that you updated.

Type: Output object

## Errors

For information about the errors that are common to all actions, see Common Errors.

**BadRequestException**

This exception is thrown if the request contains a semantic error. The precise meaning depends on the API, and is documented in the error message.

HTTP Status Code: 400

**ForbiddenException**

You do not have sufficient access to perform this action.

HTTP Status Code: 403

**InternalServerErrorException**

The server encountered an internal error and is unable to complete the request.

HTTP Status Code: 500

**NotFoundException**

One or more of the resources in the request does not exist in the system.

HTTP Status Code: 404

**ServiceUnavailableException**

The service is currently unavailable or busy.

HTTP Status Code: 503

**TooManyRequestsException**

The request was denied due to request throttling.

HTTP Status Code: 429

## See Also

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

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

# UpdateFlowSource

Updates the source of a flow.

> **Note**
>
> Because UpdateFlowSources and UpdateFlow are separate operations, you can't change both the source type AND the flow size in a single request.
>
> - If you have a MEDIUM flow and you want to change the flow source to NDI®:
>   - First, use the UpdateFlow operation to upgrade the flow size to LARGE.
>   - After that, you can then use the UpdateFlowSource operation to configure the NDI source.
> - If you're switching from an NDI source to a transport stream (TS) source and want to downgrade the flow size:
>   - First, use the UpdateFlowSource operation to change the flow source type.
>   - After that, you can then use the UpdateFlow operation to downgrade the flow size to MEDIUM.

## Request Syntax

```
PUT /v1/flows/flowArn/source/sourceArn HTTP/1.1
Content-type: application/json

{
   "decryption": {
      "algorithm": "string",
      "constantInitializationVector": "string",
      "deviceId": "string",
      "keyType": "string",
      "region": "string",
      "resourceId": "string",
      "roleArn": "string",
      "secretArn": "string",
      "url": "string"
   },
   "description": "string",
   "entitlementArn": "string",
```

```
   "gatewayBridgeSource": {
      "bridgeArn": "string",
      "vpcInterfaceAttachment": {
         "vpcInterfaceName": "string"
      }
   },
   "ingestPort": number,
   "maxBitrate": number,
   "maxLatency": number,
   "maxSyncBuffer": number,
   "mediaStreamSourceConfigurations": [
      {
         "encodingName": "string",
         "inputConfigurations": [
            {
               "inputPort": number,
               "interface": {
                  "name": "string"
               }
            }
         ],
         "mediaStreamName": "string"
      }
   ],
   "minLatency": number,
   "ndiSourceSettings": {
      "sourceName": "string"
   },
   "protocol": "string",
   "routerIntegrationState": "string",
   "routerIntegrationTransitDecryption": {
      "encryptionKeyConfiguration": { ... },
      "encryptionKeyType": "string"
   },
   "senderControlPort": number,
   "senderIpAddress": "string",
   "sourceListenerAddress": "string",
   "sourceListenerPort": number,
   "streamId": "string",
   "vpcInterfaceName": "string",
   "whitelistCidr": "string"
}
```

## URI Request Parameters

The request uses the following URI parameters.

**flowArn**

The ARN of the flow that you want to update.

Pattern: `arn:.+:mediaconnect.+:flow:.+`

Required: Yes

**sourceArn**

The ARN of the source that you want to update.

Pattern: `arn:.+:mediaconnect.+:source:.+`

Required: Yes

## Request Body

The request accepts the following data in JSON format.

**decryption**

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

Type: UpdateEncryption object

Required: No

**description**

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

Type: String

Required: No

**entitlementArn**

The Amazon Resource Name (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

Pattern: `arn:.+:mediaconnect.+:entitlement:.+`

Required: No

**gatewayBridgeSource**

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

Type: UpdateGatewayBridgeSourceRequest object

Required: No

**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: No

**maxBitrate**

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

Type: Integer

Required: No

**maxLatency**

The maximum latency in milliseconds. This parameter applies only to RIST-based and Zixi-based streams.

Type: Integer

Required: No

**maxSyncBuffer**

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

Type: Integer

Required: No

**mediaStreamSourceConfigurations**

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

Type: Array of MediaStreamSourceConfigurationRequest objects

Required: No

**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: No

**ndiSourceSettings**

The settings for the NDI source. This includes the exact name of the upstream NDI sender that you want to connect to your source.

Type: NdiSourceSettings object

Required: No

**protocol**

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

> **Note**
>
> AWS Elemental MediaConnect no longer supports the Fujitsu QoS protocol. This reference is maintained for legacy purposes only.

Type: String

Valid Values: `zixi-push | rtp-fec | rtp | zixi-pull | rist | st2110-jpegxs | cdi | srt-listener | srt-caller | fujitsu-qos | udp | ndi-speed-hq`

Required: No

**routerIntegrationState**

Indicates whether to enable or disable router integration for this flow source.

Type: String

Valid Values: `ENABLED | DISABLED`

Required: No

**routerIntegrationTransitDecryption**

The encryption configuration for the flow source when router integration is enabled.

Type: FlowTransitEncryption object

Required: No

**senderControlPort**

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

Type: Integer

Required: No

**senderIpAddress**

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

Type: String

Required: No

**sourceListenerAddress**

The source IP or domain name for SRT-caller protocol.

Type: String

Required: No

**sourceListenerPort**

Source port for SRT-caller protocol.

Type: Integer

Required: No

**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: No

**vpcInterfaceName**

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

Type: String

Required: No

**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: No

## Response Syntax

```
HTTP/1.1 202
Content-type: application/json

{
   "flowArn": "string",
   "source": {
      "connectedRouterOutputArn": "string",
      "dataTransferSubscriberFeePercent": number,
      "decryption": {
         "algorithm": "string",
         "constantInitializationVector": "string",
         "deviceId": "string",
         "keyType": "string",
         "region": "string",
         "resourceId": "string",
         "roleArn": "string",
         "secretArn": "string",
```

```
      "url": "string"
   },
   "description": "string",
   "entitlementArn": "string",
   "gatewayBridgeSource": {
      "bridgeArn": "string",
      "vpcInterfaceAttachment": {
         "vpcInterfaceName": "string"
      }
   },
   "ingestIp": "string",
   "ingestPort": number,
   "mediaStreamSourceConfigurations": [
      {
         "encodingName": "string",
         "inputConfigurations": [
            {
               "inputIp": "string",
               "inputPort": number,
               "interface": {
                  "name": "string"
               }
            }
         ],
         "mediaStreamName": "string"
      }
   ],
   "name": "string",
   "peerIpAddress": "string",
   "routerIntegrationState": "string",
   "routerIntegrationTransitDecryption": {
      "encryptionKeyConfiguration": { ... },
      "encryptionKeyType": "string"
   },
   "senderControlPort": number,
   "senderIpAddress": "string",
   "sourceArn": "string",
   "transport": {
      "cidrAllowList": [ "string" ],
      "maxBitrate": number,
      "maxLatency": number,
      "maxSyncBuffer": number,
      "minLatency": number,
      "ndiProgramName": "string",
```

```
            "ndiSourceSettings": {
               "sourceName": "string"
            },
            "ndiSpeedHqQuality": number,
            "protocol": "string",
            "remoteId": "string",
            "senderControlPort": number,
            "senderIpAddress": "string",
            "smoothingLatency": number,
            "sourceListenerAddress": "string",
            "sourceListenerPort": number,
            "streamId": "string"
         },
         "vpcInterfaceName": "string",
         "whitelistCidr": "string"
      }
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 202 response.

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

**flowArn**

The ARN of the flow that you updated.

Type: String

**source**

The details of the sources that are assigned to the flow.

Type: Source object

## Errors

For information about the errors that are common to all actions, see Common Errors.

**BadRequestException**

This exception is thrown if the request contains a semantic error. The precise meaning depends on the API, and is documented in the error message.

HTTP Status Code: 400

**ForbiddenException**

You do not have sufficient access to perform this action.

HTTP Status Code: 403

**InternalServerErrorException**

The server encountered an internal error and is unable to complete the request.

HTTP Status Code: 500

**NotFoundException**

One or more of the resources in the request does not exist in the system.

HTTP Status Code: 404

**ServiceUnavailableException**

The service is currently unavailable or busy.

HTTP Status Code: 503

**TooManyRequestsException**

The request was denied due to request throttling.

HTTP Status Code: 429

## See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3

- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

# UpdateGatewayInstance

Updates an existing gateway instance.

## Request Syntax

```
PUT /v1/gateway-instances/gatewayInstanceArn HTTP/1.1
Content-type: application/json

{
   "bridgePlacement": "string"
}
```

## URI Request Parameters

The request uses the following URI parameters.

### gatewayInstanceArn

The Amazon Resource Name (ARN) of the gateway instance that you want to update.

Pattern: `arn:.+:mediaconnect.+:gateway:.+:instance:.+`

Required: Yes

## Request Body

The request accepts the following data in JSON format.

### bridgePlacement

The state of the instance. `ACTIVE` or `INACTIVE`.

Type: String

Valid Values: `AVAILABLE | LOCKED`

Required: No

## Response Syntax

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

{
   "bridgePlacement": "string",
   "gatewayInstanceArn": "string"
}
```

## Response Elements

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

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

**bridgePlacement**

The state of the instance. `ACTIVE` or `INACTIVE`.

Type: String

Valid Values: `AVAILABLE | LOCKED`

**gatewayInstanceArn**

The ARN of the instance that was updated.

Type: String

## Errors

For information about the errors that are common to all actions, see Common Errors.

**BadRequestException**

This exception is thrown if the request contains a semantic error. The precise meaning depends on the API, and is documented in the error message.

HTTP Status Code: 400

**ConflictException**

The requested operation would cause a conflict with the current state of a service resource associated with the request. Resolve the conflict before retrying this request.

HTTP Status Code: 409

**ForbiddenException**

You do not have sufficient access to perform this action.

HTTP Status Code: 403

**InternalServerErrorException**

The server encountered an internal error and is unable to complete the request.

HTTP Status Code: 500

**NotFoundException**

One or more of the resources in the request does not exist in the system.

HTTP Status Code: 404

**ServiceUnavailableException**

The service is currently unavailable or busy.

HTTP Status Code: 503

**TooManyRequestsException**

The request was denied due to request throttling.

HTTP Status Code: 429

## See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++

- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

# UpdateRouterInput

Updates the configuration of an existing router input in AWS Elemental MediaConnect.

## Request Syntax

```
PUT /v1/routerInput/arn HTTP/1.1
Content-type: application/json

{
   "configuration": { ... },
   "maintenanceConfiguration": { ... },
   "maximumBitrate": number,
   "name": "string",
   "routingScope": "string",
   "tier": "string",
   "transitEncryption": {
      "encryptionKeyConfiguration": { ... },
      "encryptionKeyType": "string"
   }
}
```

## URI Request Parameters

The request uses the following URI parameters.

### arn

The Amazon Resource Name (ARN) of the router input that you want to update.

Pattern: `arn:(aws[a-zA-Z-]*):mediaconnect:[a-z0-9-]+:[0-9]{12}:routerInput:[a-z0-9]{12}`

Required: Yes

## Request Body

The request accepts the following data in JSON format.

**configuration**

The updated configuration settings for the router input. Changing the type of the configuration is not supported.

Type: RouterInputConfiguration object

**Note:** This object is a Union. Only one member of this object can be specified or returned.

Required: No

**maintenanceConfiguration**

The updated maintenance configuration settings for the router input, including any changes to preferred maintenance windows and schedules.

Type: MaintenanceConfiguration object

**Note:** This object is a Union. Only one member of this object can be specified or returned.

Required: No

**maximumBitrate**

The updated maximum bitrate for the router input.

Type: Long

Required: No

**name**

The updated name for the router input.

Type: String

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

Required: No

**routingScope**

Specifies whether the router input can be assigned to outputs in different Regions. REGIONAL (default) - can be assigned only to outputs in the same Region. GLOBAL - can be assigned to outputs in any Region.

Type: String

Valid Values: `REGIONAL | GLOBAL`

Required: No

**tier**

The updated tier level for the router input.

Type: String

Valid Values: `INPUT_100 | INPUT_50 | INPUT_20`

Required: No

**transitEncryption**

The updated transit encryption settings for the router input.

Type: RouterInputTransitEncryption object

Required: No

## Response Syntax

```
HTTP/1.1 202
Content-type: application/json

{
   "routerInput": {
      "arn": "string",
      "availabilityZone": "string",
      "configuration": { ... },
      "createdAt": "string",
      "id": "string",
      "inputType": "string",
      "ipAddress": "string",
      "maintenanceConfiguration": { ... },
      "maintenanceSchedule": { ... },
      "maintenanceScheduleType": "string",
      "maintenanceType": "string",
      "maximumBitrate": number,
      "maximumRoutedOutputs": number,
      "messages": [
         {
```

```
            "code": "string",
            "message": "string"
         }
      ],
      "name": "string",
      "regionName": "string",
      "routedOutputs": number,
      "routingScope": "string",
      "state": "string",
      "streamDetails": { ... },
      "tags": {
         "string" : "string"
      },
      "tier": "string",
      "transitEncryption": {
         "encryptionKeyConfiguration": { ... },
         "encryptionKeyType": "string"
      },
      "updatedAt": "string"
   }
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 202 response.

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

**routerInput**

The updated router input.

Type: RouterInput object

## Errors

For information about the errors that are common to all actions, see Common Errors.

**BadRequestException**

This exception is thrown if the request contains a semantic error. The precise meaning depends on the API, and is documented in the error message.

HTTP Status Code: 400

**ConflictException**

The requested operation would cause a conflict with the current state of a service resource associated with the request. Resolve the conflict before retrying this request.

HTTP Status Code: 409

**ForbiddenException**

You do not have sufficient access to perform this action.

HTTP Status Code: 403

**InternalServerErrorException**

The server encountered an internal error and is unable to complete the request.

HTTP Status Code: 500

**NotFoundException**

One or more of the resources in the request does not exist in the system.

HTTP Status Code: 404

**ServiceUnavailableException**

The service is currently unavailable or busy.

HTTP Status Code: 503

**TooManyRequestsException**

The request was denied due to request throttling.

HTTP Status Code: 429

## See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4

- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

# UpdateRouterNetworkInterface

Updates the configuration of an existing router network interface in AWS Elemental MediaConnect.

## Request Syntax

```
PUT /v1/routerNetworkInterface/arn HTTP/1.1
Content-type: application/json

{
   "configuration": { ... },
   "name": "string"
}
```

## URI Request Parameters

The request uses the following URI parameters.

### arn

The Amazon Resource Name (ARN) of the router network interface that you want to update.

Pattern: `arn:(aws[a-zA-Z-]*):mediaconnect:[a-z0-9-]+:[0-9]{12}:routerNetworkInterface:[a-z0-9]{12}`

Required: Yes

## Request Body

The request accepts the following data in JSON format.

### configuration

The updated configuration settings for the router network interface. Changing the type of the configuration is not supported.

Type: RouterNetworkInterfaceConfiguration object

**Note:** This object is a Union. Only one member of this object can be specified or returned.

Required: No

### name

The updated name for the router network interface.

Type: String

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

Required: No

## Response Syntax

```
HTTP/1.1 202
Content-type: application/json

{
   "routerNetworkInterface": {
      "arn": "string",
      "associatedInputCount": number,
      "associatedOutputCount": number,
      "configuration": { ... },
      "createdAt": "string",
      "id": "string",
      "name": "string",
      "networkInterfaceType": "string",
      "regionName": "string",
      "state": "string",
      "tags": {
         "string" : "string"
      },
      "updatedAt": "string"
   }
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 202 response.

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

### routerNetworkInterface

The updated router network interface.

Type: RouterNetworkInterface object

## Errors

For information about the errors that are common to all actions, see Common Errors.

**BadRequestException**

This exception is thrown if the request contains a semantic error. The precise meaning depends on the API, and is documented in the error message.

HTTP Status Code: 400

**ConflictException**

The requested operation would cause a conflict with the current state of a service resource associated with the request. Resolve the conflict before retrying this request.

HTTP Status Code: 409

**ForbiddenException**

You do not have sufficient access to perform this action.

HTTP Status Code: 403

**InternalServerErrorException**

The server encountered an internal error and is unable to complete the request.

HTTP Status Code: 500

**ServiceUnavailableException**

The service is currently unavailable or busy.

HTTP Status Code: 503

**TooManyRequestsException**

The request was denied due to request throttling.

HTTP Status Code: 429

## See Also

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

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

# UpdateRouterOutput

Updates the configuration of an existing router output in AWS Elemental MediaConnect.

## Request Syntax

```
PUT /v1/routerOutput/arn HTTP/1.1
Content-type: application/json

{
   "configuration": { ... },
   "maintenanceConfiguration": { ... },
   "maximumBitrate": number,
   "name": "string",
   "routingScope": "string",
   "tier": "string"
}
```

## URI Request Parameters

The request uses the following URI parameters.

### arn

The Amazon Resource Name (ARN) of the router output that you want to update.

Pattern: `arn:(aws[a-zA-Z-]*):mediaconnect:[a-z0-9-]+:[0-9]{12}:routerOutput:[a-z0-9]{12}`

Required: Yes

## Request Body

The request accepts the following data in JSON format.

### configuration

The updated configuration settings for the router output. Changing the type of the configuration is not supported.

Type: RouterOutputConfiguration object

**Note:** This object is a Union. Only one member of this object can be specified or returned.

Required: No

**maintenanceConfiguration**

The updated maintenance configuration settings for the router output, including any changes to preferred maintenance windows and schedules.

Type: MaintenanceConfiguration object

**Note:** This object is a Union. Only one member of this object can be specified or returned.

Required: No

**maximumBitrate**

The updated maximum bitrate for the router output.

Type: Long

Required: No

**name**

The updated name for the router output.

Type: String

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

Required: No

**routingScope**

Specifies whether the router output can take inputs that are in different Regions. REGIONAL (default) - can only take inputs from same Region. GLOBAL - can take inputs from any Region.

Type: String

Valid Values: `REGIONAL | GLOBAL`

Required: No

**tier**

The updated tier level for the router output.

Type: String

Valid Values: OUTPUT_100 | OUTPUT_50 | OUTPUT_20

Required: No

## Response Syntax

```
HTTP/1.1 202
Content-type: application/json

{
   "routerOutput": {
      "arn": "string",
      "availabilityZone": "string",
      "configuration": { ... },
      "createdAt": "string",
      "id": "string",
      "ipAddress": "string",
      "maintenanceConfiguration": { ... },
      "maintenanceSchedule": { ... },
      "maintenanceScheduleType": "string",
      "maintenanceType": "string",
      "maximumBitrate": number,
      "messages": [
         {
            "code": "string",
            "message": "string"
         }
      ],
      "name": "string",
      "outputType": "string",
      "regionName": "string",
      "routedInputArn": "string",
      "routedState": "string",
      "routingScope": "string",
      "state": "string",
      "streamDetails": { ... },
      "tags": {
         "string" : "string"
      },
      "tier": "string",
      "updatedAt": "string"
```

```
    }
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 202 response.

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

**routerOutput**

The updated router output.

Type: RouterOutput object

## Errors

For information about the errors that are common to all actions, see Common Errors.

**BadRequestException**

This exception is thrown if the request contains a semantic error. The precise meaning depends on the API, and is documented in the error message.

HTTP Status Code: 400

**ConflictException**

The requested operation would cause a conflict with the current state of a service resource associated with the request. Resolve the conflict before retrying this request.

HTTP Status Code: 409

**ForbiddenException**

You do not have sufficient access to perform this action.

HTTP Status Code: 403

**InternalServerErrorException**

The server encountered an internal error and is unable to complete the request.

HTTP Status Code: 500

**NotFoundException**

One or more of the resources in the request does not exist in the system.

HTTP Status Code: 404

**ServiceUnavailableException**

The service is currently unavailable or busy.

HTTP Status Code: 503

**TooManyRequestsException**

The request was denied due to request throttling.

HTTP Status Code: 429

## See Also

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

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

# Data Types

The AWS Elemental MediaConnect API contains several data types that various actions use. This section describes each data type in detail.

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

The following data types are supported:

- AddBridgeFlowSourceRequest
- AddBridgeNetworkOutputRequest
- AddBridgeNetworkSourceRequest
- AddBridgeOutputRequest
- AddBridgeSourceRequest
- AddEgressGatewayBridgeRequest
- AddIngressGatewayBridgeRequest
- AddMaintenance
- AddMediaStreamRequest
- AddOutputRequest
- AudioMonitoringSetting
- AutomaticEncryptionKeyConfiguration
- BatchGetRouterInputError
- BatchGetRouterNetworkInterfaceError
- BatchGetRouterOutputError
- BlackFrames
- Bridge
- BridgeFlowOutput
- BridgeFlowSource
- BridgeNetworkOutput

- BridgeNetworkSource
- BridgeOutput
- BridgeSource
- DefaultMaintenanceConfiguration
- DestinationConfiguration
- DestinationConfigurationRequest
- EgressGatewayBridge
- EncodingConfig
- EncodingParameters
- EncodingParametersRequest
- Encryption
- Entitlement
- FailoverConfig
- FailoverRouterInputConfiguration
- FailoverRouterInputIndexedStreamDetails
- FailoverRouterInputProtocolConfiguration
- FailoverRouterInputStreamDetails
- Flow
- FlowTransitEncryption
- FlowTransitEncryptionKeyConfiguration
- Fmtp
- FmtpRequest
- FrameResolution
- FrozenFrames
- Gateway
- GatewayBridgeSource
- GatewayInstance
- GatewayNetwork
- GrantEntitlementRequest
- IngressGatewayBridge

- InputConfiguration
- InputConfigurationRequest
- Interface
- InterfaceRequest
- ListedBridge
- ListedEntitlement
- ListedFlow
- ListedGateway
- ListedGatewayInstance
- ListedRouterInput
- ListedRouterNetworkInterface
- ListedRouterOutput
- Maintenance
- MaintenanceConfiguration
- MaintenanceSchedule
- MediaConnectFlowRouterInputConfiguration
- MediaConnectFlowRouterInputStreamDetails
- MediaConnectFlowRouterOutputConfiguration
- MediaConnectFlowRouterOutputStreamDetails
- MediaLiveInputRouterOutputConfiguration
- MediaLiveInputRouterOutputStreamDetails
- MediaLiveTransitEncryption
- MediaLiveTransitEncryptionKeyConfiguration
- MediaStream
- MediaStreamAttributes
- MediaStreamAttributesRequest
- MediaStreamOutputConfiguration
- MediaStreamOutputConfigurationRequest
- MediaStreamSourceConfiguration
- MediaStreamSourceConfigurationRequest

- MergeRouterInputConfiguration
- MergeRouterInputIndexedStreamDetails
- MergeRouterInputProtocolConfiguration
- MergeRouterInputStreamDetails
- MessageDetail
- Messages
- MonitoringConfig
- MulticastSourceSettings
- NdiConfig
- NdiDiscoveryServerConfig
- NdiMediaInfo
- NdiMediaStreamInfo
- NdiSourceInfo
- NdiSourceMetadataInfo
- NdiSourceSettings
- Offering
- Output
- PreferredDayTimeMaintenanceConfiguration
- PublicRouterNetworkInterfaceConfiguration
- PublicRouterNetworkInterfaceRule
- Reservation
- ResourceSpecification
- RistRouterInputConfiguration
- RistRouterOutputConfiguration
- RouterInput
- RouterInputConfiguration
- RouterInputFilter
- RouterInputMessage
- RouterInputMetadata
- RouterInputProtocolConfiguration

- RouterInputSourceMetadataDetails
- RouterInputStreamDetails
- RouterInputThumbnailDetails
- RouterInputTransitEncryption
- RouterInputTransitEncryptionKeyConfiguration
- RouterNetworkInterface
- RouterNetworkInterfaceConfiguration
- RouterNetworkInterfaceFilter
- RouterOutput
- RouterOutputConfiguration
- RouterOutputFilter
- RouterOutputMessage
- RouterOutputProtocolConfiguration
- RouterOutputStreamDetails
- RtpRouterInputConfiguration
- RtpRouterOutputConfiguration
- SecretsManagerEncryptionKeyConfiguration
- SetGatewayBridgeSourceRequest
- SetSourceRequest
- SilentAudio
- Source
- SourcePriority
- SrtCallerRouterInputConfiguration
- SrtCallerRouterOutputConfiguration
- SrtDecryptionConfiguration
- SrtEncryptionConfiguration
- SrtListenerRouterInputConfiguration
- SrtListenerRouterOutputConfiguration
- StandardRouterInputConfiguration
- StandardRouterInputStreamDetails

- StandardRouterOutputConfiguration
- StandardRouterOutputStreamDetails
- ThumbnailDetails
- Transport
- TransportMediaInfo
- TransportStream
- TransportStreamProgram
- UpdateBridgeFlowSourceRequest
- UpdateBridgeNetworkOutputRequest
- UpdateBridgeNetworkSourceRequest
- UpdateEgressGatewayBridgeRequest
- UpdateEncryption
- UpdateFailoverConfig
- UpdateGatewayBridgeSourceRequest
- UpdateIngressGatewayBridgeRequest
- UpdateMaintenance
- VideoMonitoringSetting
- VpcInterface
- VpcInterfaceAttachment
- VpcInterfaceRequest
- VpcRouterNetworkInterfaceConfiguration
- WindowMaintenanceSchedule

# AddBridgeFlowSourceRequest

Add a flow source to an existing bridge.

## Contents

**flowArn**

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

Type: String

Pattern: `arn:.+:mediaconnect.+:flow:.+`

Required: Yes

**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: Yes

**flowVpcInterfaceAttachment**

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

Type: VpcInterfaceAttachment object

Required: No

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# AddBridgeNetworkOutputRequest

Add a network output to an existing bridge.

## Contents

**ipAddress**

The network output IP Address.

Type: String

Required: Yes

**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: Yes

**networkName**

The network output's gateway network name.

Type: String

Required: Yes

**port**

The network output port.

Type: Integer

Required: Yes

**protocol**

The network output protocol.

> **Note**
>
> AWS Elemental MediaConnect no longer supports the Fujitsu QoS protocol. This reference is maintained for legacy purposes only.

Type: String

Valid Values: `zixi-push | rtp-fec | rtp | zixi-pull | rist | st2110-jpegxs | cdi | srt-listener | srt-caller | fujitsu-qos | udp | ndi-speed-hq`

Required: Yes

**ttl**

The network output TTL.

Type: Integer

Required: Yes

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# AddBridgeNetworkSourceRequest

Add a network source to an existing bridge.

## Contents

**multicastIp**

The network source multicast IP.

Type: String

Required: Yes

**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: Yes

**networkName**

The network source's gateway network name.

Type: String

Required: Yes

**port**

The network source port.

Type: Integer

Required: Yes

**protocol**

The network source protocol.

> **Note**
>
> AWS Elemental MediaConnect no longer supports the Fujitsu QoS protocol. This reference is maintained for legacy purposes only.

Type: String

Valid Values: `zixi-push | rtp-fec | rtp | zixi-pull | rist | st2110-jpegxs | cdi | srt-listener | srt-caller | fujitsu-qos | udp | ndi-speed-hq`

Required: Yes

**multicastSourceSettings**

The settings related to the multicast source.

Type: MulticastSourceSettings object

Required: No

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# AddBridgeOutputRequest

Add outputs to the specified bridge.

## Contents

**networkOutput**

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

Type: AddBridgeNetworkOutputRequest object

Required: No

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# AddBridgeSourceRequest

Add an output to a bridge.

## Contents

**flowSource**

The source of the flow.

Type: AddBridgeFlowSourceRequest object

Required: No

**networkSource**

The source of the network.

Type: AddBridgeNetworkSourceRequest object

Required: No

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# AddEgressGatewayBridgeRequest

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.

## Contents

**maxBitrate**

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

Type: Integer

Required: Yes

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# AddIngressGatewayBridgeRequest

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.

## Contents

**maxBitrate**

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

Type: Integer

Required: Yes

**maxOutputs**

The maximum number of expected outputs on the ingress bridge.

Type: Integer

Required: Yes

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# AddMaintenance

Create a maintenance setting for a flow.

## Contents

**maintenanceDay**

A day of a week when the maintenance will happen.

Type: String

Valid Values: `Monday | Tuesday | Wednesday | Thursday | Friday | Saturday | Sunday`

Required: Yes

**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: Yes

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# AddMediaStreamRequest

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

## Contents

**mediaStreamId**

A unique identifier for the media stream.

Type: Integer

Required: Yes

**mediaStreamName**

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

Type: String

Required: Yes

**mediaStreamType**

The type of media stream.

Type: String

Valid Values: `video | audio | ancillary-data`

Required: Yes

**attributes**

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

Type: MediaStreamAttributesRequest object

Required: No

**clockRate**

The sample rate (in Hz) 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: No

**description**

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

Type: String

Required: No

**mediaStreamTags**

The key-value pairs that can be used to tag and organize the media stream.

Type: String to string map

Required: No

**videoFormat**

The resolution of the video.

Type: String

Required: No

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# AddOutputRequest

A request to add an output to a flow.

## Contents

**cidrAllowList**

The range of IP addresses that should be allowed to initiate output requests to this flow. 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 strings

Required: No

**description**

A description of the output. This description appears only on the Audit Manager console and will not be seen by the end user.

Type: String

Required: No

**destination**

The IP address from which video will be sent to output destinations.

Type: String

Required: No

**encryption**

The type of key used for the encryption. If no keyType is provided, the service will use the default setting (static-key). Allowable encryption types: static-key.

Type: Encryption object

Required: No

**maxLatency**

The maximum latency in milliseconds. This parameter applies only to RIST-based and Zixi-based streams.

Type: Integer

Required: No

**mediaStreamOutputConfigurations**

The media streams that are associated with the output, and the parameters for those associations.

Type: Array of MediaStreamOutputConfigurationRequest objects

Required: No

**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: No

**name**

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

Type: String

Required: No

**ndiProgramName**

A suffix for the name of the NDI® sender that the flow creates. If a custom name isn't specified, MediaConnect uses the output name.

Type: String

Required: No

**ndiSpeedHqQuality**

A quality setting for the NDI Speed HQ encoder.

Type: Integer

Required: No

**outputStatus**

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

Type: String

Valid Values: `ENABLED | DISABLED`

Required: No

**outputTags**

The key-value pairs that can be used to tag and organize the output.

Type: String to string map

Required: No

**port**

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

Type: Integer

Required: No

**protocol**

The protocol to use for the output.

> **Note**
>
> AWS Elemental MediaConnect no longer supports the Fujitsu QoS protocol. This reference is maintained for legacy purposes only.

Type: String

Valid Values: `zixi-push | rtp-fec | rtp | zixi-pull | rist | st2110-jpegxs | cdi | srt-listener | srt-caller | fujitsu-qos | udp | ndi-speed-hq`

Required: No

**remoteId**

The remote ID for the Zixi-pull output stream.

Type: String

Required: No

**routerIntegrationState**

Indicates whether to enable or disable router integration when creating a new flow output.

Type: String

Valid Values: `ENABLED | DISABLED`

Required: No

**routerIntegrationTransitEncryption**

The configuration that defines how content is encrypted during transit between the MediaConnect router and a MediaConnect flow.

Type: FlowTransitEncryption object

Required: No

**senderControlPort**

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

Type: Integer

Required: No

**smoothingLatency**

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

Type: Integer

Required: No

**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: No

**vpcInterfaceAttachment**

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

Type: VpcInterfaceAttachment object

Required: No

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# AudioMonitoringSetting

Specifies the configuration for audio stream metrics monitoring.

## Contents

**silentAudio**

Detects periods of silence.

Type: SilentAudio object

Required: No

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# AutomaticEncryptionKeyConfiguration

Configuration settings for automatic encryption key management, where MediaConnect handles key creation and rotation.

## Contents

The members of this exception structure are context-dependent.

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# BatchGetRouterInputError

An error that occurred when retrieving multiple router inputs in the BatchGetRouterInput operation, including the ARN, error code, and error message.

## Contents

**arn**

The Amazon Resource Name (ARN) of the router input for which the error occurred.

Type: String

Pattern: `arn:(aws[a-zA-Z-]*):mediaconnect:[a-z0-9-]+:[0-9]{12}:routerInput:[a-z0-9]{12}`

Required: Yes

**code**

The error code associated with the error.

Type: String

Required: Yes

**message**

A message describing the error.

Type: String

Required: Yes

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# BatchGetRouterNetworkInterfaceError

An error that occurred when retrieving multiple router network interfaces in the BatchGetRouterNetworkInterface operation, including the ARN, error code, and error message.

## Contents

**arn**

The Amazon Resource Name (ARN) of the router network interface for which the error occurred.

Type: String

Pattern: `arn:(aws[a-zA-Z-]*):mediaconnect:[a-z0-9-]+:[0-9]{12}:routerNetworkInterface:[a-z0-9]{12}`

Required: Yes

**code**

The error code associated with the error.

Type: String

Required: Yes

**message**

A message describing the error.

Type: String

Required: Yes

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# BatchGetRouterOutputError

An error that occurred when retrieving multiple router outputs in the BatchGetRouterOutput operation, including the ARN, error code, and error message.

## Contents

**arn**

The Amazon Resource Name (ARN) of the router output for which the error occurred.

Type: String

Pattern: `arn:(aws[a-zA-Z-]*):mediaconnect:[a-z0-9-]+:[0-9]{12}:routerOutput:[a-z0-9]{12}`

Required: Yes

**code**

The error code associated with the error.

Type: String

Required: Yes

**message**

A message describing the error.

Type: String

Required: Yes

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# BlackFrames

Configures settings for the `BlackFrames` metric.

## Contents

**state**

Indicates whether the `BlackFrames` metric is enabled or disabled..

Type: String

Valid Values: `ENABLED | DISABLED`

Required: No

**thresholdSeconds**

Specifies the number of consecutive seconds of black frames that triggers an event or alert.

Type: Integer

Required: No

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# 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.

## Contents

**bridgeArn**

The Amazon Resource Number (ARN) of the bridge.

Type: String

Required: Yes

**bridgeState**

The state of the bridge.

Type: String

Valid Values: `CREATING | STANDBY | STARTING | DEPLOYING | ACTIVE | STOPPING | DELETING | DELETED | START_FAILED | START_PENDING | STOP_FAILED | UPDATING`

Required: Yes

**name**

The name of the bridge.

Type: String

Required: Yes

**placementArn**

The placement Amazon Resource Number (ARN) of the bridge.

Type: String

Required: Yes

**bridgeMessages**

Messages with details about the bridge.

Type: Array of MessageDetail objects

Required: No

**egressGatewayBridge**

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

Type: EgressGatewayBridge object

Required: No

**ingressGatewayBridge**

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

Type: IngressGatewayBridge object

Required: No

**outputs**

The outputs on this bridge.

Type: Array of BridgeOutput objects

Required: No

**sourceFailoverConfig**

The settings for source failover.

Type: FailoverConfig object

Required: No

**sources**

The sources on this bridge.

Type: Array of BridgeSource objects

Required: No

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# BridgeFlowOutput

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

## Contents

**flowArn**

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

Type: String

Required: Yes

**flowSourceArn**

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

Type: String

Required: Yes

**name**

The name of the bridge's output.

Type: String

Required: Yes

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# BridgeFlowSource

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

## Contents

**flowArn**

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

Type: String

Required: Yes

**name**

The name of the flow source.

Type: String

Required: Yes

**flowVpcInterfaceAttachment**

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

Type: VpcInterfaceAttachment object

Required: No

**outputArn**

The Amazon Resource Number (ARN) of the output.

Type: String

Required: No

## See Also

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

- AWS SDK for C++

- AWS SDK for Java V2
- AWS SDK for Ruby V3

# BridgeNetworkOutput

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

## Contents

**ipAddress**

The network output IP address.

Type: String

Required: Yes

**name**

The network output name.

Type: String

Required: Yes

**networkName**

The network output's gateway network name.

Type: String

Required: Yes

**port**

The network output's port.

Type: Integer

Required: Yes

**protocol**

The network output protocol.

> **Note**
>
> AWS Elemental MediaConnect no longer supports the Fujitsu QoS protocol. This reference is maintained for legacy purposes only.

Type: String

Valid Values: `zixi-push | rtp-fec | rtp | zixi-pull | rist | st2110-jpegxs | cdi | srt-listener | srt-caller | fujitsu-qos | udp | ndi-speed-hq`

Required: Yes

**ttl**

The network output TTL.

Type: Integer

Required: Yes

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# BridgeNetworkSource

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

## Contents

**multicastIp**

The network source multicast IP.

Type: String

Required: Yes

**name**

The name of the network source.

Type: String

Required: Yes

**networkName**

The network source's gateway network name.

Type: String

Required: Yes

**port**

The network source port.

Type: Integer

Required: Yes

**protocol**

The network source protocol.

> **Note**
>
> AWS Elemental MediaConnect no longer supports the Fujitsu QoS protocol. This reference is maintained for legacy purposes only.

Type: String

Valid Values: `zixi-push | rtp-fec | rtp | zixi-pull | rist | st2110-jpegxs | cdi | srt-listener | srt-caller | fujitsu-qos | udp | ndi-speed-hq`

Required: Yes

**multicastSourceSettings**

The settings related to the multicast source.

Type: MulticastSourceSettings object

Required: No

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# BridgeOutput

The output of the bridge.

## Contents

**flowOutput**

The output of the associated flow.

Type: BridgeFlowOutput object

Required: No

**networkOutput**

The network output for the bridge.

Type: BridgeNetworkOutput object

Required: No

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# BridgeSource

The bridge's source.

## Contents

**flowSource**

The source of the associated flow.

Type: BridgeFlowSource object

Required: No

**networkSource**

The network source for the bridge.

Type: BridgeNetworkSource object

Required: No

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# DefaultMaintenanceConfiguration

Configuration settings for default maintenance scheduling.

## Contents

The members of this exception structure are context-dependent.

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# DestinationConfiguration

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

## Contents

**destinationIp**

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

Type: String

Required: Yes

**destinationPort**

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

Type: Integer

Required: Yes

**interface**

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

Type: Interface object

Required: Yes

**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: Yes

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# DestinationConfigurationRequest

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

## Contents

**destinationIp**

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

Type: String

Required: Yes

**destinationPort**

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

Type: Integer

Required: Yes

**interface**

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

Type: InterfaceRequest object

Required: Yes

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# 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.

## Contents

**maxBitrate**

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

Type: Integer

Required: Yes

**instanceId**

The ID of the instance running this bridge.

Type: String

Required: No

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# EncodingConfig

The encoding configuration to apply to the NDI® source when transcoding it to a transport stream for downstream distribution. You can choose between several predefined encoding profiles based on common use cases.

## Contents

**encodingProfile**

The encoding profile to use when transcoding the NDI source content to a transport stream. You can change this value while the flow is running.

Type: String

Valid Values: `DISTRIBUTION_H264_DEFAULT | CONTRIBUTION_H264_DEFAULT`

Required: No

**videoMaxBitrate**

The maximum video bitrate to use when transcoding the NDI source to a transport stream. This parameter enables you to override the default video bitrate within the encoding profile's supported range.

The supported range is 10,000,000 - 50,000,000 bits per second (bps). If you don't specify a value, MediaConnect uses the default value of 20,000,000 bps.

Type: Integer

Required: No

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# 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.

## Contents

**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 floating point numbers in the range of 3.0 to 10.0, inclusive.

Type: Double

Required: Yes

**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

Valid Values: `main | high`

Required: Yes

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# 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.

## Contents

**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 floating point numbers in the range of 3.0 to 10.0, inclusive.

Type: Double

Required: Yes

**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

Valid Values: `main | high`

Required: Yes

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# Encryption

Encryption information.

## Contents

**roleArn**

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

Type: String

Required: Yes

**algorithm**

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

Type: String

Valid Values: `aes128 | aes192 | aes256`

Required: No

**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: No

**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: No

**keyType**

The type of key that is used for the encryption. If no keyType is provided, the service will use the default setting (static-key).

Type: String

Valid Values: `speke | static-key | srt-password`

Required: No

**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: No

**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: No

**secretArn**

The ARN of the secret that you created in AWS Secrets Manager to store the encryption key. This parameter is required for static key encryption and is not valid for SPEKE encryption.

Type: String

Required: No

**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: No

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# Entitlement

The settings for a flow entitlement.

## Contents

**entitlementArn**

The ARN of the entitlement.

Type: String

Required: Yes

**name**

The name of the entitlement.

Type: String

Required: Yes

**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 strings

Required: Yes

**dataTransferSubscriberFeePercent**

Percentage from 0-100 of the data transfer cost to be billed to the subscriber.

Type: Integer

Required: No

**description**

A description of the entitlement.

Type: String

Required: No

**encryption**

The type of encryption that will be used on the output that is associated with this entitlement.

Type: Encryption object

Required: No

**entitlementStatus**

An indication of whether the entitlement is enabled.

Type: String

Valid Values: `ENABLED | DISABLED`

Required: No

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# FailoverConfig

The settings for source failover.

## Contents

**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

Valid Values: `MERGE | FAILOVER`

Required: No

**recoveryWindow**

Search window time to look for dash-7 packets.

Type: Integer

Required: No

**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.

Type: SourcePriority object

Required: No

**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

Valid Values: `ENABLED | DISABLED`

Required: No

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# FailoverRouterInputConfiguration

Configuration settings for a failover router input that allows switching between two input sources.

## Contents

**networkInterfaceArn**

The ARN of the network interface to use for this failover router input.

Type: String

Pattern: `arn:(aws[a-zA-Z-]*):mediaconnect:[a-z0-9-]+:[0-9]{12}:routerNetworkInterface:[a-z0-9]{12}`

Required: Yes

**protocolConfigurations**

A list of exactly two protocol configurations for the failover input sources. Both must use the same protocol type.

Type: Array of FailoverRouterInputProtocolConfiguration objects

Required: Yes

**sourcePriorityMode**

The mode for determining source priority in failover configurations.

Type: String

Valid Values: `NO_PRIORITY | PRIMARY_SECONDARY`

Required: Yes

**primarySourceIndex**

The index (0 or 1) that specifies which source in the protocol configurations list is currently active. Used to control which of the two failover sources is currently selected. This field is ignored when sourcePriorityMode is set to NO_PRIORITY

Type: Integer

Valid Range: Minimum value of 0. Maximum value of 1.

Required: No

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# FailoverRouterInputIndexedStreamDetails

Configuration details for an indexed stream in a failover router input setup.

## Contents

**sourceIndex**

The index number (0 or 1) assigned to this source in the failover configuration.

Type: Integer

Required: Yes

**sourceIpAddress**

The IP address of the source for this indexed stream.

Type: String

Required: No

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# FailoverRouterInputProtocolConfiguration

Protocol configuration settings for failover router inputs.

## Contents

> **Important**
>
> This data type is a UNION, so only one of the following members can be specified when used or returned.

**rist**

The configuration settings for a router input using the RIST (Reliable Internet Stream Transport) protocol, including the port and recovery latency.

Type: RistRouterInputConfiguration object

Required: No

**rtp**

The configuration settings for a Router Input using the RTP (Real-Time Transport Protocol) protocol, including the port and forward error correction state.

Type: RtpRouterInputConfiguration object

Required: No

**srtCaller**

The configuration settings for a router input using the SRT (Secure Reliable Transport) protocol in caller mode, including the source address and port, minimum latency, stream ID, and decryption key configuration.

Type: SrtCallerRouterInputConfiguration object

Required: No

**srtListener**

The configuration settings for a router input using the SRT (Secure Reliable Transport) protocol in listener mode, including the port, minimum latency, and decryption key configuration.

Type: SrtListenerRouterInputConfiguration object

Required: No

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# FailoverRouterInputStreamDetails

Configuration details for a failover router input that can automatically switch between two sources.

## Contents

**sourceIndexOneStreamDetails**

Configuration details for the secondary source (index 1) in the failover setup.

Type: FailoverRouterInputIndexedStreamDetails object

Required: Yes

**sourceIndexZeroStreamDetails**

Configuration details for the primary source (index 0) in the failover setup.

Type: FailoverRouterInputIndexedStreamDetails object

Required: Yes

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# Flow

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

## Contents

**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: Yes

**entitlements**

The entitlements in this flow.

Type: Array of Entitlement objects

Required: Yes

**flowArn**

The Amazon Resource Name (ARN) of the flow.

Type: String

Required: Yes

**name**

The name of the flow.

Type: String

Required: Yes

**outputs**

The outputs in this flow.

Type: Array of Output objects

Required: Yes

**source**

The source for the flow.

Type: Source object

Required: Yes

**status**

The current status of the flow.

Type: String

Valid Values: `STANDBY | ACTIVE | UPDATING | DELETING | STARTING | STOPPING | ERROR`

Required: Yes

**description**

A description of the flow. This value is not used or seen outside of the current MediaConnect account.

Type: String

Required: No

**egressIp**

The IP address from which video will be sent to output destinations.

Type: String

Required: No

**encodingConfig**

The encoding configuration to apply to the NDI® source when transcoding it to a transport stream for downstream distribution.

Type: EncodingConfig object

Required: No

**flowSize**

Determines the processing capacity and feature set of the flow.

Type: String

Valid Values: `MEDIUM | LARGE | LARGE_4X`

Required: No

**maintenance**

The maintenance settings for the flow.

Type: Maintenance object

Required: No

**mediaStreams**

The media streams that are associated with the flow. After you associate a media stream with a source, you can also associate it with outputs on the flow.

Type: Array of MediaStream objects

Required: No

**ndiConfig**

Specifies the configuration settings for a flow's NDI source or output. Required when the flow includes an NDI source or output.

Type: NdiConfig object

Required: No

**sourceFailoverConfig**

The settings for the source failover.

Type: FailoverConfig object

Required: No

**sourceMonitoringConfig**

The settings for source monitoring.

Type: MonitoringConfig object

Required: No

**sources**

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

Type: Array of Source objects

Required: No

**vpcInterfaces**

The VPC Interfaces for this flow.

Type: Array of VpcInterface objects

Required: No

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# FlowTransitEncryption

The configuration that defines how content is encrypted during transit between the MediaConnect router and a MediaConnect flow.

## Contents

**encryptionKeyConfiguration**

The configuration details for the encryption key.

Type: FlowTransitEncryptionKeyConfiguration object

**Note:** This object is a Union. Only one member of this object can be specified or returned.

Required: Yes

**encryptionKeyType**

The type of encryption key to use for flow transit encryption.

Type: String

Valid Values: `SECRETS_MANAGER | AUTOMATIC`

Required: No

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# FlowTransitEncryptionKeyConfiguration

Configuration settings for flow transit encryption keys.

## Contents

> **Important**
>
> This data type is a UNION, so only one of the following members can be specified when used or returned.

**automatic**

Configuration settings for automatic encryption key management, where MediaConnect handles key creation and rotation.

Type: AutomaticEncryptionKeyConfiguration object

Required: No

**secretsManager**

The configuration settings for transit encryption using AWS Secrets Manager, including the secret ARN and role ARN.

Type: SecretsManagerEncryptionKeyConfiguration object

Required: No

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# Fmtp

A set of parameters that define the media stream.

## Contents

**channelOrder**

The format of the audio channel.

Type: String

Required: No

**colorimetry**

The format used for the representation of color.

Type: String

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

Required: No

**exactFramerate**

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

Type: String

Required: No

**par**

The pixel aspect ratio (PAR) of the video.

Type: String

Required: No

**range**

The encoding range of the video.

Type: String

Valid Values: `NARROW | FULL | FULLPROTECT`

Required: No

**scanMode**

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

Type: String

Valid Values: `progressive | interlace | progressive-segmented-frame`

Required: No

**tcs**

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

Type: String

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

Required: No

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# FmtpRequest

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

## Contents

**channelOrder**

The format of the audio channel.

Type: String

Required: No

**colorimetry**

The format that is used for the representation of color.

Type: String

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

Required: No

**exactFramerate**

The frame rate for the video stream, in frames/second. For example: 60000/1001. If you specify a whole number, MediaConnect uses a ratio of N/1. For example, if you specify 60, MediaConnect uses 60/1 as the `exactFramerate`.

Type: String

Required: No

**par**

The pixel aspect ratio (PAR) of the video.

Type: String

Required: No

**range**

The encoding range of the video.

Type: String

Valid Values: `NARROW | FULL | FULLPROTECT`

Required: No

**scanMode**

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

Type: String

Valid Values: `progressive | interlace | progressive-segmented-frame`

Required: No

**tcs**

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

Type: String

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

Required: No

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# FrameResolution

The frame resolution used by the video stream.

## Contents

**frameHeight**

The number of pixels in the height of the video frame.

Type: Integer

Required: Yes

**frameWidth**

The number of pixels in the width of the video frame.

Type: Integer

Required: Yes

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# FrozenFrames

Configures settings for the `FrozenFrames` metric.

## Contents

**state**

Indicates whether the `FrozenFrames` metric is enabled or disabled.

Type: String

Valid Values: `ENABLED | DISABLED`

Required: No

**thresholdSeconds**

Specifies the number of consecutive seconds of a static image that triggers an event or alert.

Type: Integer

Required: No

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# Gateway

The settings for a gateway, including its networks.

## Contents

**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 strings

Required: Yes

**gatewayArn**

The Amazon Resource Name (ARN) of the gateway.

Type: String

Required: Yes

**name**

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

Type: String

Required: Yes

**networks**

The list of networks in the gateway.

Type: Array of GatewayNetwork objects

Required: Yes

**gatewayMessages**

Messages with information about the gateway.

Type: Array of MessageDetail objects

Required: No

**gatewayState**

The current status of the gateway.

Type: String

Valid Values: `CREATING | ACTIVE | UPDATING | ERROR | DELETING | DELETED`

Required: No

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# GatewayBridgeSource

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

## Contents

**bridgeArn**

The ARN of the bridge feeding this flow.

Type: String

Required: Yes

**vpcInterfaceAttachment**

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

Type: VpcInterfaceAttachment object

Required: No

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# GatewayInstance

The settings for an instance in a gateway.

## Contents

**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

Valid Values: `AVAILABLE | LOCKED`

Required: Yes

**connectionStatus**

The connection state of the instance.

Type: String

Valid Values: `CONNECTED | DISCONNECTED`

Required: Yes

**gatewayArn**

The Amazon Resource Name (ARN) of the instance.

Type: String

Required: Yes

**gatewayInstanceArn**

The ARN of the gateway.

Type: String

Required: Yes

**instanceId**

The instance ID generated by the SSM install. This will begin with "mi-".

Type: String

Required: Yes

**instanceState**

The status of the instance.

Type: String

Valid Values: `REGISTERING | ACTIVE | DEREGISTERING | DEREGISTERED | REGISTRATION_ERROR | DEREGISTRATION_ERROR`

Required: Yes

**runningBridgeCount**

The running bridge count.

Type: Integer

Required: Yes

**instanceMessages**

Messages with information about the gateway.

Type: Array of MessageDetail objects

Required: No

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# GatewayNetwork

The network settings for a gateway.

## Contents

**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: Yes

**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: Yes

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# GrantEntitlementRequest

The entitlements that you want to grant on a flow.

## Contents

**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 strings

Required: Yes

**dataTransferSubscriberFeePercent**

Percentage from 0-100 of the data transfer cost to be billed to the subscriber.

Type: Integer

Required: No

**description**

A description of the entitlement. This description appears only on the MediaConnect console and will not be seen by the subscriber or end user.

Type: String

Required: No

**encryption**

The type of encryption that will be used on the output that is associated with this entitlement. Allowable encryption types: static-key, speke.

Type: Encryption object

Required: No

**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

Valid Values: `ENABLED | DISABLED`

Required: No

**entitlementTags**

The key-value pairs that can be used to tag and organize the entitlement.

Type: String to string map

Required: No

**name**

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

Type: String

Required: No

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# 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.

## Contents

**maxBitrate**

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

Type: Integer

Required: Yes

**maxOutputs**

The maximum number of outputs on the ingress bridge.

Type: Integer

Required: Yes

**instanceId**

The ID of the instance running this bridge.

Type: String

Required: No

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# InputConfiguration

The transport parameters that are associated with an incoming media stream.

## Contents

**inputIp**

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

Type: String

Required: Yes

**inputPort**

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

Type: Integer

Required: Yes

**interface**

The VPC interface where the media stream comes in from.

Type: Interface object

Required: Yes

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# InputConfigurationRequest

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

## Contents

**inputPort**

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

Type: Integer

Required: Yes

**interface**

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

Type: InterfaceRequest object

Required: Yes

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# Interface

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

## Contents

**name**

The name of the VPC interface.

Type: String

Required: Yes

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# InterfaceRequest

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

## Contents

**name**

The name of the VPC interface.

Type: String

Required: Yes

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# ListedBridge

Displays details of the selected bridge.

## Contents

**bridgeArn**

The ARN of the bridge.

Type: String

Required: Yes

**bridgeState**

The state of the bridge.

Type: String

Valid Values: `CREATING | STANDBY | STARTING | DEPLOYING | ACTIVE | STOPPING | DELETING | DELETED | START_FAILED | START_PENDING | STOP_FAILED | UPDATING`

Required: Yes

**bridgeType**

The type of the bridge.

Type: String

Required: Yes

**name**

The name of the bridge.

Type: String

Required: Yes

**placementArn**

The ARN of the gateway associated with the bridge.

Type: String

Required: Yes

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# ListedEntitlement

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

## Contents

**entitlementArn**

The ARN of the entitlement.

Type: String

Required: Yes

**entitlementName**

The name of the entitlement.

Type: String

Required: Yes

**dataTransferSubscriberFeePercent**

Percentage from 0-100 of the data transfer cost to be billed to the subscriber.

Type: Integer

Required: No

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# ListedFlow

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

## Contents

**availabilityZone**

The Availability Zone that the flow was created in.

Type: String

Required: Yes

**description**

A description of the flow.

Type: String

Required: Yes

**flowArn**

The ARN of the flow.

Type: String

Required: Yes

**name**

The name of the flow.

Type: String

Required: Yes

**sourceType**

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

Type: String

Valid Values: `OWNED | ENTITLED`

Required: Yes

**status**

The current status of the flow.

Type: String

Valid Values: `STANDBY | ACTIVE | UPDATING | DELETING | STARTING | STOPPING | ERROR`

Required: Yes

**maintenance**

The maintenance settings for the flow.

Type: Maintenance object

Required: No

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# ListedGateway

A summary of a gateway, including its name, ARN, and status.

## Contents

**gatewayArn**

The Amazon Resource Name (ARN) of the gateway.

Type: String

Required: Yes

**gatewayState**

The status of the gateway.

Type: String

Valid Values: `CREATING | ACTIVE | UPDATING | ERROR | DELETING | DELETED`

Required: Yes

**name**

The name of the gateway.

Type: String

Required: Yes

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# ListedGatewayInstance

A summary of an instance.

## Contents

**gatewayArn**

The Amazon Resource Name (ARN) of the gateway.

Type: String

Required: Yes

**gatewayInstanceArn**

The Amazon Resource Name (ARN) of the instance.

Type: String

Required: Yes

**instanceId**

The managed instance ID generated by the SSM install. This will begin with "mi-".

Type: String

Required: Yes

**instanceState**

The status of the instance.

Type: String

Valid Values: `REGISTERING | ACTIVE | DEREGISTERING | DEREGISTERED | REGISTRATION_ERROR | DEREGISTRATION_ERROR`

Required: No

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# ListedRouterInput

A summary of a router input, including its name, type, ARN, ID, state, and other key details. This structure is used in the response of the ListRouterInputs operation.

## Contents

**arn**

The Amazon Resource Name (ARN) of the router input.

Type: String

Pattern: `arn:(aws[a-zA-Z-]*):mediaconnect:[a-z0-9-]+:[0-9]{12}:routerInput:[a-z0-9]{12}`

Required: Yes

**availabilityZone**

The Availability Zone of the router input.

Type: String

Required: Yes

**createdAt**

The timestamp when the router input was created.

Type: Timestamp

Required: Yes

**id**

The unique identifier of the router input.

Type: String

Required: Yes

**inputType**

The type of the router input.

Type: String

Valid Values: `STANDARD | FAILOVER | MERGE | MEDIACONNECT_FLOW`

Required: Yes

**maximumBitrate**

The maximum bitrate of the router input.

Type: Long

Required: Yes

**messageCount**

The number of messages associated with the router input.

Type: Integer

Required: Yes

**name**

The name of the router input.

Type: String

Required: Yes

**regionName**

The AWS Region where the router input is located.

Type: String

Required: Yes

**routedOutputs**

The number of router outputs that are associated with this router input.

Type: Integer

Required: Yes

**routingScope**

Indicates whether the router input is configured for Regional or global routing.

Type: String

Valid Values: `REGIONAL | GLOBAL`

Required: Yes

**state**

The overall state of the router input.

Type: String

Valid Values: `CREATING | STANDBY | STARTING | ACTIVE | STOPPING | DELETING | UPDATING | ERROR | RECOVERING | MIGRATING`

Required: Yes

**updatedAt**

The timestamp when the router input was last updated.

Type: Timestamp

Required: Yes

**maintenanceSchedule**

The details of the maintenance schedule for the listed router input.

Type: MaintenanceSchedule object

**Note:** This object is a Union. Only one member of this object can be specified or returned.

Required: No

**maintenanceScheduleType**

The type of maintenance schedule currently associated with the listed router input.

Type: String

Valid Values: `WINDOW`

Required: No

**networkInterfaceArn**

The ARN of the network interface associated with the router input.

Type: String

Pattern: `arn:(aws[a-zA-Z-]*):mediaconnect:[a-z0-9-]+:[0-9]{12}:routerNetworkInterface:[a-z0-9]{12}`

Required: No

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# ListedRouterNetworkInterface

A summary of a router network interface, including its name, type, ARN, ID, associated input/output counts, state, and other key details. This structure is used in the response of the ListRouterNetworkInterfaces operation.

## Contents

**arn**

The Amazon Resource Name (ARN) of the router network interface.

Type: String

Pattern: `arn:(aws[a-zA-Z-]*):mediaconnect:[a-z0-9-]+:[0-9]{12}:routerNetworkInterface:[a-z0-9]{12}`

Required: Yes

**associatedInputCount**

The number of router inputs associated with the network interface.

Type: Integer

Required: Yes

**associatedOutputCount**

The number of router outputs associated with the network interface.

Type: Integer

Required: Yes

**createdAt**

The timestamp when the network interface was created.

Type: Timestamp

Required: Yes

**id**

The unique identifier of the router network interface.

Type: String

Required: Yes

**name**

The name of the router network interface.

Type: String

Required: Yes

**networkInterfaceType**

The type of the router network interface.

Type: String

Valid Values: `PUBLIC | VPC`

Required: Yes

**regionName**

The AWS Region where the router network interface is located.

Type: String

Required: Yes

**state**

The current state of the router network interface.

Type: String

Valid Values: `CREATING | ACTIVE | UPDATING | DELETING | ERROR | RECOVERING`

Required: Yes

**updatedAt**

The timestamp when the router network interface was last updated.

Type: Timestamp

Required: Yes

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# ListedRouterOutput

A summary of a router output, including its name, type, ARN, ID, state, routed state, and other key details. This structure is used in the response of the ListRouterOutputs operation.

## Contents

**arn**

The Amazon Resource Name (ARN) of the router output.

Type: String

Pattern: `arn:(aws[a-zA-Z-]*):mediaconnect:[a-z0-9-]+:[0-9]{12}:routerOutput:[a-z0-9]{12}`

Required: Yes

**availabilityZone**

The Availability Zone of the router output.

Type: String

Required: Yes

**createdAt**

The timestamp when the router output was created.

Type: Timestamp

Required: Yes

**id**

The unique identifier of the router output.

Type: String

Required: Yes

**maximumBitrate**

The maximum bitrate of the router output.

Type: Long

Required: Yes

**messageCount**

The number of messages associated with the router output.

Type: Integer

Required: Yes

**name**

The name of the router output.

Type: String

Required: Yes

**outputType**

The type of the router output.

Type: String

Valid Values: `STANDARD | MEDIACONNECT_FLOW | MEDIALIVE_INPUT`

Required: Yes

**regionName**

The AAWS Region where the router output is located.

Type: String

Required: Yes

**routedState**

The current state of the association between the router output and its input.

Type: String

Valid Values: `ROUTED | ROUTING | UNROUTED`

Required: Yes

**routingScope**

Indicates whether the router output is configured for Regional or global routing.

Type: String

Valid Values: `REGIONAL | GLOBAL`

Required: Yes

**state**

The overall state of the router output.

Type: String

Valid Values: `CREATING | STANDBY | STARTING | ACTIVE | STOPPING | DELETING | UPDATING | ERROR | RECOVERING | MIGRATING`

Required: Yes

**updatedAt**

The timestamp when the router output was last updated.

Type: Timestamp

Required: Yes

**maintenanceSchedule**

The details of the maintenance schedule for the listed router output.

Type: MaintenanceSchedule object

**Note:** This object is a Union. Only one member of this object can be specified or returned.

Required: No

**maintenanceScheduleType**

The type of maintenance schedule currently associated with the listed router output.

Type: String

Valid Values: `WINDOW`

Required: No

**networkInterfaceArn**

The ARN of the network interface associated with the router output.

Type: String

Pattern: `arn:(aws[a-zA-Z-]*):mediaconnect:[a-z0-9-]+:[0-9]{12}:routerNetworkInterface:[a-z0-9]{12}`

Required: No

**routedInputArn**

The ARN of the router input associated with the output.

Type: String

Pattern: `arn:(aws[a-zA-Z-]*):mediaconnect:[a-z0-9-]+:[0-9]{12}:routerInput:[a-z0-9]{12}`

Required: No

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# Maintenance

The maintenance setting of a flow.

## Contents

**maintenanceDay**

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

Type: String

Valid Values: `Monday | Tuesday | Wednesday | Thursday | Friday | Saturday | Sunday`

Required: No

**maintenanceDeadline**

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

Type: String

Required: No

**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: No

**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: No

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# MaintenanceConfiguration

The configuration settings for maintenance operations, including preferred maintenance windows and schedules.

## Contents

> **Important**
>
> This data type is a UNION, so only one of the following members can be specified when used or returned.

**default**

Default maintenance configuration settings.

Type: DefaultMaintenanceConfiguration object

Required: No

**preferredDayTime**

Preferred day and time maintenance configuration settings.

Type: PreferredDayTimeMaintenanceConfiguration object

Required: No

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# MaintenanceSchedule

The details of the maintenance schedule.

## Contents

> **Important**
>
> This data type is a UNION, so only one of the following members can be specified when used or returned.

**window**

Defines a specific time window for maintenance operations.

Type: WindowMaintenanceSchedule object

Required: No

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# MediaConnectFlowRouterInputConfiguration

Configuration settings for connecting a router input to a flow output.

## Contents

**sourceTransitDecryption**

The decryption configuration for the flow source when connected to this router input.

Type: FlowTransitEncryption object

Required: Yes

**flowArn**

The ARN of the flow to connect to.

Type: String

Pattern: `arn:(aws[a-zA-Z-]*):mediaconnect:[a-z0-9-]+:[0-9]{12}:flow:[a-zA-Z0-9-]+:[a-zA-Z0-9_-]+`

Required: No

**flowOutputArn**

The ARN of the flow output to connect to this router input.

Type: String

Pattern: `arn:(aws[a-zA-Z-]*):mediaconnect:[a-z0-9-]+:[0-9]{12}:output:[a-zA-Z0-9-]+:[a-zA-Z0-9_-]+`

Required: No

## See Also

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

- AWS SDK for C++

- AWS SDK for Java V2
- AWS SDK for Ruby V3

# MediaConnectFlowRouterInputStreamDetails

Configuration details for a MediaConnect flow when used as a router input source.

## Contents

The members of this exception structure are context-dependent.

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# MediaConnectFlowRouterOutputConfiguration

Configuration settings for connecting a router output to a MediaConnect flow source.

## Contents

**destinationTransitEncryption**

The encryption configuration for the flow destination when connected to this router output.

Type: FlowTransitEncryption object

Required: Yes

**flowArn**

The ARN of the flow to connect to this router output.

Type: String

Pattern: `arn:(aws[a-zA-Z-]*):mediaconnect:[a-z0-9-]+:[0-9]{12}:flow:[a-zA-Z0-9-]+:[a-zA-Z0-9_-]+`

Required: No

**flowSourceArn**

The ARN of the flow source to connect to this router output.

Type: String

Pattern: `arn:(aws[a-zA-Z-]*):mediaconnect:[a-z0-9-]+:[0-9]{12}:source:[a-zA-Z0-9-]+:[a-zA-Z0-9_-]+`

Required: No

## See Also

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

- AWS SDK for C++

- AWS SDK for Java V2
- AWS SDK for Ruby V3

# MediaConnectFlowRouterOutputStreamDetails

Configuration details for a MediaConnect flow when used as a router output destination.

## Contents

The members of this exception structure are context-dependent.

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# MediaLiveInputRouterOutputConfiguration

Configuration settings for connecting a router output to a MediaLive input.

## Contents

**destinationTransitEncryption**

The encryption configuration for the MediaLive input when connected to this router output.

Type: MediaLiveTransitEncryption object

Required: Yes

**mediaLiveInputArn**

The ARN of the MediaLive input to connect to this router output.

Type: String

Pattern: `arn:(aws[a-zA-Z-]*):medialive:[a-z0-9-]+:[0-9]{12}:input:[a-zA-Z0-9]+`

Required: No

**mediaLivePipelineId**

The index of the MediaLive pipeline to connect to this router output.

Type: String

Valid Values: `PIPELINE_0 | PIPELINE_1`

Required: No

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2

- AWS SDK for Ruby V3

# MediaLiveInputRouterOutputStreamDetails

Configuration details for a MediaLive input when used as a router output destination.

## Contents

The members of this exception structure are context-dependent.

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# MediaLiveTransitEncryption

The encryption configuration that defines how content is encrypted during transit between MediaConnect Router and MediaLive. This configuration determines whether encryption keys are automatically managed by the service or manually managed through AWS Secrets Manager.

## Contents

**encryptionKeyConfiguration**

The configuration details for the MediaLive encryption key.

Type: MediaLiveTransitEncryptionKeyConfiguration object

**Note:** This object is a Union. Only one member of this object can be specified or returned.

Required: Yes

**encryptionKeyType**

The type of encryption key to use for MediaLive transit encryption.

Type: String

Valid Values: `SECRETS_MANAGER | AUTOMATIC`

Required: No

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# MediaLiveTransitEncryptionKeyConfiguration

Configuration settings for the MediaLive transit encryption key.

## Contents

> **Important**
>
> This data type is a UNION, so only one of the following members can be specified when used or returned.

**automatic**

Configuration settings for automatic encryption key management, where MediaConnect handles key creation and rotation.

Type: AutomaticEncryptionKeyConfiguration object

Required: No

**secretsManager**

The configuration settings for transit encryption using AWS Secrets Manager, including the secret ARN and role ARN.

Type: SecretsManagerEncryptionKeyConfiguration object

Required: No

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# MediaStream

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.

## Contents

**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: Yes

**mediaStreamId**

A unique identifier for the media stream.

Type: Integer

Required: Yes

**mediaStreamName**

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

Type: String

Required: Yes

**mediaStreamType**

The type of media stream.

Type: String

Valid Values: `video | audio | ancillary-data`

Required: Yes

**attributes**

Attributes that are related to the media stream.

Type: MediaStreamAttributes object

Required: No

**clockRate**

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

Type: Integer

Required: No

**description**

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

Type: String

Required: No

**videoFormat**

The resolution of the video.

Type: String

Required: No

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# MediaStreamAttributes

Attributes that are related to the media stream.

## Contents

**fmtp**

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

Type: Fmtp object

Required: Yes

**lang**

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

Type: String

Required: No

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# MediaStreamAttributesRequest

Attributes that are related to the media stream.

## Contents

**fmtp**

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

Type: FmtpRequest object

Required: No

**lang**

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

Type: String

Required: No

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# MediaStreamOutputConfiguration

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

## Contents

**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

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

Required: Yes

**mediaStreamName**

The name of the media stream.

Type: String

Required: Yes

**destinationConfigurations**

The transport parameters that are associated with each outbound media stream.

Type: Array of DestinationConfiguration objects

Required: No

**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 object

Required: No

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# MediaStreamOutputConfigurationRequest

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

## Contents

**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

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

Required: Yes

**mediaStreamName**

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

Type: String

Required: Yes

**destinationConfigurations**

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

Type: Array of DestinationConfigurationRequest objects

Required: No

**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 object

Required: No

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# MediaStreamSourceConfiguration

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

## Contents

**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

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

Required: Yes

**mediaStreamName**

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

Type: String

Required: Yes

**inputConfigurations**

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

Type: Array of InputConfiguration objects

Required: No

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# MediaStreamSourceConfigurationRequest

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

## Contents

**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

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

Required: Yes

**mediaStreamName**

The name of the media stream.

Type: String

Required: Yes

**inputConfigurations**

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

Type: Array of InputConfigurationRequest objects

Required: No

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2

- AWS SDK for Ruby V3

# MergeRouterInputConfiguration

Configuration settings for a merge router input that combines two input sources.

## Contents

**mergeRecoveryWindowMilliseconds**

The time window in milliseconds for merging the two input sources.

Type: Long

Required: Yes

**networkInterfaceArn**

The ARN of the network interface to use for this merge router input.

Type: String

Pattern: `arn:(aws[a-zA-Z-]*):mediaconnect:[a-z0-9-]+:[0-9]{12}:routerNetworkInterface:[a-z0-9]{12}`

Required: Yes

**protocolConfigurations**

A list of exactly two protocol configurations for the merge input sources. Both must use the same protocol type.

Type: Array of MergeRouterInputProtocolConfiguration objects

Required: Yes

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# MergeRouterInputIndexedStreamDetails

Configuration details for an indexed stream in a merge router input setup.

## Contents

**sourceIndex**

The index number (0 or 1) assigned to this source in the merge configuration.

Type: Integer

Required: Yes

**sourceIpAddress**

The IP address of the source for this indexed stream in the merge setup.

Type: String

Required: No

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# MergeRouterInputProtocolConfiguration

Protocol configuration settings for merge router inputs.

## Contents

> **Important**
>
> This data type is a UNION, so only one of the following members can be specified when used or returned.

**rist**

The configuration settings for a router input using the RIST (Reliable Internet Stream Transport) protocol, including the port and recovery latency.

Type: RistRouterInputConfiguration object

Required: No

**rtp**

The configuration settings for a Router Input using the RTP (Real-Time Transport Protocol) protocol, including the port and forward error correction state.

Type: RtpRouterInputConfiguration object

Required: No

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# MergeRouterInputStreamDetails

Configuration details for a merge router input that combines two input sources.

## Contents

**sourceIndexOneStreamDetails**

Configuration details for the second source (index 1) in the merge setup.

Type: MergeRouterInputIndexedStreamDetails object

Required: Yes

**sourceIndexZeroStreamDetails**

Configuration details for the first source (index 0) in the merge setup.

Type: MergeRouterInputIndexedStreamDetails object

Required: Yes

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# MessageDetail

The details of an error message.

## Contents

**code**

The error code.

Type: String

Required: Yes

**message**

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

Type: String

Required: Yes

**resourceName**

The name of the resource.

Type: String

Required: No

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# Messages

Messages that provide the state of the flow.

## Contents

**errors**

A list of errors that might have been generated from processes on this flow.

Type: Array of strings

Required: Yes

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# MonitoringConfig

The settings for source monitoring.

## Contents

**audioMonitoringSettings**

Contains the settings for audio stream metrics monitoring.

Type: Array of AudioMonitoringSetting objects

Required: No

**contentQualityAnalysisState**

Indicates whether content quality analysis is enabled or disabled.

Type: String

Valid Values: `ENABLED | DISABLED`

Required: No

**thumbnailState**

Indicates whether thumbnails are enabled or disabled.

Type: String

Valid Values: `ENABLED | DISABLED`

Required: No

**videoMonitoringSettings**

Contains the settings for video stream metrics monitoring.

Type: Array of VideoMonitoringSetting objects

Required: No

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# MulticastSourceSettings

The settings related to the multicast source.

## Contents

**multicastSourceIp**

The IP address of the source for source-specific multicast (SSM).

Type: String

Required: No

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# NdiConfig

Specifies the configuration settings for NDI sources and outputs.

## Contents

**machineName**

A prefix for the names of the NDI sources that the flow creates. If a custom name isn't specified, MediaConnect generates a unique 12-character ID as the prefix.

Type: String

Required: No

**ndiDiscoveryServers**

A list of up to three NDI discovery server configurations. While not required by the API, this configuration is necessary for NDI functionality to work properly.

Type: Array of NdiDiscoveryServerConfig objects

Required: No

**ndiState**

A setting that controls whether NDI® sources or outputs can be used in the flow.

The default value is `DISABLED`. This value must be set as `ENABLED` for your flow to support NDI sources or outputs.

Type: String

Valid Values: `ENABLED | DISABLED`

Required: No

## See Also

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

- AWS SDK for C++

- AWS SDK for Java V2
- AWS SDK for Ruby V3

# NdiDiscoveryServerConfig

Specifies the configuration settings for individual NDI® discovery servers. A maximum of 3 servers is allowed.

## Contents

**discoveryServerAddress**

The unique network address of the NDI discovery server.

Type: String

Required: Yes

**vpcInterfaceAdapter**

The identifier for the Virtual Private Cloud (VPC) network interface used by the flow.

Type: String

Required: Yes

**discoveryServerPort**

The port for the NDI discovery server. Defaults to 5959 if a custom port isn't specified.

Type: Integer

Required: No

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# NdiMediaInfo

Metadata about the audio and video media that is part of the NDI® source content. This includes details about the individual media streams.

## Contents

**streams**

A list of the individual media streams that make up the NDI source. This includes details about each stream's codec, resolution, frame rate, audio channels, and other parameters.

Type: Array of NdiMediaStreamInfo objects

Required: Yes

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# NdiMediaStreamInfo

Detailed information about a single media stream that is part of an NDI® source. This includes details about the stream type, codec, resolution, frame rate, audio channels, and sample rate.

## Contents

**codec**

The codec used for the media stream. For NDI sources, use `speed-hq`.

Type: String

Required: Yes

**streamId**

A unique identifier for the media stream.

Type: Integer

Required: Yes

**streamType**

The type of media stream (for example, `Video` or `Audio`).

Type: String

Required: Yes

**channels**

The number of audio channels in the stream. Used when the `streamType` is `Audio`.

Type: Integer

Required: No

**frameRate**

The number of video frames displayed per second. Used when the `streamType` is `Video`.

Type: String

Required: No

**frameResolution**

The width and height dimensions of the video frame in pixels. Used when the `streamType` is `Video`.

Type: FrameResolution object

Required: No

**sampleRate**

The number of audio samples captured per second, measured in kilohertz (kHz). Used when the `streamType` is `Audio`.

Type: Integer

Required: No

**scanMode**

The method used to display video frames. Used when the `streamType` is `Video`.

Type: String

Valid Values: `progressive | interlace | progressive-segmented-frame`

Required: No

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# NdiSourceInfo

Information about a single NDI® sender, including its name.

## Contents

**sourceName**

The name of the upstream NDI sender.

Type: String

Required: Yes

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# NdiSourceMetadataInfo

Comprehensive information about the NDI® source that's associated with a flow. This includes the currently active NDI source, a list of all discovered NDI senders, metadata about the media streams, and any relevant status messages.

## Contents

**discoveredSources**

A list of the available upstream NDI senders aggregated from all of your configured discovery servers.

Type: Array of NdiSourceInfo objects

Required: Yes

**mediaInfo**

Detailed information about the media streams (video, audio, and so on) that are part of the active NDI source.

Type: NdiMediaInfo object

Required: Yes

**messages**

Any status messages or error codes related to the NDI source and its metadata.

Type: Array of MessageDetail objects

Required: Yes

**activeSource**

The connected NDI sender that's currently sending source content to the flow's NDI source.

Type: NdiSourceInfo object

Required: No

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# NdiSourceSettings

The settings for the NDI® source. This includes the exact name of the upstream NDI sender that you want to connect to your source.

## Contents

**sourceName**

The exact name of an existing NDI sender that's registered with your discovery server. If included, the format of this name must be `MACHINENAME (ProgramName)`.

Type: String

Required: No

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# Offering

A savings plan that reserves a certain amount of outbound bandwidth usage at a discounted rate each month over a period of time.

## Contents

**currencyCode**

The type of currency that is used for billing. The currencyCode used for all reservations is US dollars.

Type: String

Required: Yes

**duration**

The length of time that your reservation would be active.

Type: Integer

Required: Yes

**durationUnits**

The unit of measurement for the duration of the offering.

Type: String

Valid Values: `MONTHS`

Required: Yes

**offeringArn**

The Amazon Resource Name (ARN) that MediaConnect assigns to the offering.

Type: String

Required: Yes

**offeringDescription**

A description of the offering.

Type: String

Required: Yes

**pricePerUnit**

The cost of a single unit. This value, in combination with priceUnits, makes up the rate.

Type: String

Required: Yes

**priceUnits**

The unit of measurement that is used for billing. This value, in combination with pricePerUnit, makes up the rate.

Type: String

Valid Values: HOURLY

Required: Yes

**resourceSpecification**

A definition of the amount of outbound bandwidth that you would be reserving if you purchase the offering.

Type: ResourceSpecification object

Required: Yes

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# Output

The settings for an output.

## Contents

**name**

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

Type: String

Required: Yes

**outputArn**

The ARN of the output.

Type: String

Required: Yes

**bridgeArn**

The ARN of the bridge added to this output.

Type: String

Required: No

**bridgePorts**

The bridge output ports currently in use.

Type: Array of integers

Required: No

**connectedRouterInputArn**

The ARN of the router input that's connected to this flow output.

Type: String

Required: No

**dataTransferSubscriberFeePercent**

Percentage from 0-100 of the data transfer cost to be billed to the subscriber.

Type: Integer

Required: No

**description**

A description of the output.

Type: String

Required: No

**destination**

The address where you want to send the output.

Type: String

Required: No

**encryption**

The type of key used for the encryption. If no keyType is provided, the service will use the default setting (static-key).

Type: Encryption object

Required: No

**entitlementArn**

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

Type: String

Required: No

**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 the Zixi pull or SRT listener protocol.

Type: String

Required: No

**mediaLiveInputArn**

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

Type: String

Required: No

**mediaStreamOutputConfigurations**

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

Type: Array of MediaStreamOutputConfiguration objects

Required: No

**outputStatus**

An indication of whether the output is transmitting data or not.

Type: String

Valid Values: `ENABLED | DISABLED`

Required: No

**peerIpAddress**

The IP address of the device that is currently receiving content from this output.

> **Note**
>
> - For outputs that use protocols where you specify the destination (such as SRT Caller or Zixi Push), this value matches the configured destination address.
> - For outputs that use listener protocols (such as SRT Listener), this value shows the address of the connected receiver.

- Peer IP addresses aren't available for entitlements, managed MediaLive outputs, NDI® sources and outputs, and CDI/ST2110 outputs.
- The peer IP address might not be visible for flows that haven't been started yet, or flows that were started before May 2025. In these cases, restart your flow to see the peer IP address.

Type: String

Required: No

**port**

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

Type: Integer

Required: No

**routerIntegrationState**

Indicates if router integration is enabled or disabled on the flow output.

Type: String

Valid Values: `ENABLED | DISABLED`

Required: No

**routerIntegrationTransitEncryption**

The encryption configuration for the output when router integration is enabled.

Type: FlowTransitEncryption object

Required: No

**transport**

Attributes related to the transport stream that are used in the output.

Type: Transport object

Required: No

**vpcInterfaceAttachment**

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

Type: VpcInterfaceAttachment object

Required: No

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# PreferredDayTimeMaintenanceConfiguration

Configuration for preferred day and time maintenance settings.

## Contents

**day**

The preferred day for maintenance operations.

Type: String

Valid Values: `MONDAY | TUESDAY | WEDNESDAY | THURSDAY | FRIDAY | SATURDAY | SUNDAY`

Required: Yes

**time**

The preferred time for maintenance operations.

Type: String

Required: Yes

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# PublicRouterNetworkInterfaceConfiguration

The configuration settings for a public router network interface, including the list of allowed CIDR blocks.

## Contents

**allowRules**

The list of allowed CIDR blocks for the public router network interface.

Type: Array of PublicRouterNetworkInterfaceRule objects

Array Members: Minimum number of 0 items. Maximum number of 10 items.

Required: Yes

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# PublicRouterNetworkInterfaceRule

A rule that allows a specific CIDR block to access the public router network interface.

## Contents

**cidr**

The CIDR block that is allowed to access the public router network interface.

Type: String

Required: Yes

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# 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.

## Contents

**currencyCode**

The type of currency that is used for billing. The currencyCode used for your reservation is US dollars.

Type: String

Required: Yes

**duration**

The length of time that this reservation is active. MediaConnect defines this value in the offering.

Type: Integer

Required: Yes

**durationUnits**

The unit of measurement for the duration of the reservation. MediaConnect defines this value in the offering.

Type: String

Valid Values: `MONTHS`

Required: Yes

**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: Yes

**offeringArn**

The Amazon Resource Name (ARN) that MediaConnect assigns to the offering.

Type: String

Required: Yes

**offeringDescription**

A description of the offering. MediaConnect defines this value in the offering.

Type: String

Required: Yes

**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: Yes

**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

Valid Values: HOURLY

Required: Yes

**reservationArn**

The Amazon Resource Name (ARN) that MediaConnect assigns to the reservation when you purchase an offering.

Type: String

Required: Yes

**reservationName**

The name that you assigned to the reservation when you purchased the offering.

Type: String

Required: Yes

**reservationState**

The status of your reservation.

Type: String

Valid Values: `ACTIVE | EXPIRED | PROCESSING | CANCELED`

Required: Yes

**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 object

Required: Yes

**start**

The day and time that the reservation becomes active. You set this value when you purchase the offering.

Type: String

Required: Yes

## See Also

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

- AWS SDK for C++

- AWS SDK for Java V2
- AWS SDK for Ruby V3

# ResourceSpecification

A definition of what is being billed for, including the type and amount.

## Contents

**resourceType**

The type of resource and the unit that is being billed for.

Type: String

Valid Values: `Mbps_Outbound_Bandwidth`

Required: Yes

**reservedBitrate**

The amount of outbound bandwidth that is discounted in the offering.

Type: Integer

Required: No

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# RistRouterInputConfiguration

The configuration settings for a router input using the RIST (Reliable Internet Stream Transport) protocol, including the port and recovery latency.

## Contents

**port**

The port number used for the RIST protocol in the router input configuration.

Type: Integer

Valid Range: Minimum value of 3000. Maximum value of 30000.

Required: Yes

**recoveryLatencyMilliseconds**

The recovery latency in milliseconds for the RIST protocol in the router input configuration.

Type: Long

Valid Range: Minimum value of 10. Maximum value of 10000.

Required: Yes

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# RistRouterOutputConfiguration

The configuration settings for a router output using the RIST (Reliable Internet Stream Transport) protocol, including the destination address and port.

## Contents

**destinationAddress**

The destination IP address for the RIST protocol in the router output configuration.

Type: String

Required: Yes

**destinationPort**

The destination port number for the RIST protocol in the router output configuration.

Type: Integer

Valid Range: Minimum value of 1024. Maximum value of 65535.

Required: Yes

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# RouterInput

A router input in AWS Elemental MediaConnect. A router input is a source of media content that can be routed to one or more router outputs.

## Contents

**arn**

The Amazon Resource Name (ARN) of the router input.

Type: String

Pattern: `arn:(aws[a-zA-Z-]*):mediaconnect:[a-z0-9-]+:[0-9]{12}:routerInput:[a-z0-9]{12}`

Required: Yes

**availabilityZone**

The Availability Zone of the router input.

Type: String

Required: Yes

**configuration**

The configuration settings for a router input.

Type: RouterInputConfiguration object

**Note:** This object is a Union. Only one member of this object can be specified or returned.

Required: Yes

**createdAt**

The timestamp when the router input was created.

Type: Timestamp

Required: Yes

**id**

The unique identifier of the router input.

Type: String

Required: Yes

**inputType**

The type of the router input.

Type: String

Valid Values: `STANDARD | FAILOVER | MERGE | MEDIACONNECT_FLOW`

Required: Yes

**maintenanceConfiguration**

The maintenance configuration settings applied to this router input.

Type: MaintenanceConfiguration object

**Note:** This object is a Union. Only one member of this object can be specified or returned.

Required: Yes

**maintenanceType**

The type of maintenance configuration applied to this router input.

Type: String

Valid Values: `PREFERRED_DAY_TIME | DEFAULT`

Required: Yes

**maximumBitrate**

The maximum bitrate for the router input.

Type: Long

Required: Yes

**messages**

The messages associated with the router input.

Type: Array of RouterInputMessage objects

Required: Yes

**name**

The name of the router input.

Type: String

Required: Yes

**regionName**

The AWS Region where the router input is located.

Type: String

Required: Yes

**routedOutputs**

The number of router outputs associated with the router input.

Type: Integer

Required: Yes

**routingScope**

Indicates whether the router input is configured for Regional or global routing.

Type: String

Valid Values: `REGIONAL | GLOBAL`

Required: Yes

**state**

The current state of the router input.

Type: String

Valid Values: `CREATING | STANDBY | STARTING | ACTIVE | STOPPING | DELETING | UPDATING | ERROR | RECOVERING | MIGRATING`

Required: Yes

**streamDetails**

Configuration details for the router input stream.

Type: RouterInputStreamDetails object

**Note:** This object is a Union. Only one member of this object can be specified or returned.

Required: Yes

**tags**

Key-value pairs that can be used to tag and organize this router input.

Type: String to string map

Required: Yes

**tier**

The tier level of the router input.

Type: String

Valid Values: `INPUT_100 | INPUT_50 | INPUT_20`

Required: Yes

**transitEncryption**

The transit encryption settings for a router input.

Type: RouterInputTransitEncryption object

Required: Yes

**updatedAt**

The timestamp when the router input was last updated.

Type: Timestamp

Required: Yes

**ipAddress**

The IP address of the router input.

Type: String

Required: No

**maintenanceSchedule**

The current maintenance schedule details for this router input.

Type: MaintenanceSchedule object

**Note:** This object is a Union. Only one member of this object can be specified or returned.

Required: No

**maintenanceScheduleType**

The type of maintenance schedule currently in effect for this router input.

Type: String

Valid Values: `WINDOW`

Required: No

**maximumRoutedOutputs**

The maximum number of outputs that can be simultaneously routed to this input.

Type: Integer

Required: No

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2

- AWS SDK for Ruby V3

# RouterInputConfiguration

The configuration settings for a router input.

## Contents

> **Important**
>
> This data type is a UNION, so only one of the following members can be specified when used or returned.

**failover**

Configuration settings for a failover router input that allows switching between two input sources.

Type: FailoverRouterInputConfiguration object

Required: No

**mediaConnectFlow**

Configuration settings for connecting a router input to a flow output.

Type: MediaConnectFlowRouterInputConfiguration object

Required: No

**merge**

Configuration settings for a merge router input that combines two input sources.

Type: MergeRouterInputConfiguration object

Required: No

**standard**

The configuration settings for a standard router input, including the protocol, protocol-specific configuration, network interface, and availability zone.

Type: StandardRouterInputConfiguration object

Required: No

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# RouterInputFilter

A filter that can be used to retrieve a list of router inputs.

## Contents

> **Important**
>
> This data type is a UNION, so only one of the following members can be specified when used or returned.

**inputTypes**

The types of router inputs to include in the filter.

Type: Array of strings

Valid Values: `STANDARD | FAILOVER | MERGE | MEDIACONNECT_FLOW`

Required: No

**nameContains**

The names of the router inputs to include in the filter.

Type: Array of strings

Required: No

**networkInterfaceArns**

The Amazon Resource Names (ARNs) of the network interfaces associated with the router inputs to include in the filter.

Type: Array of strings

Pattern: `arn:(aws[a-zA-Z-]*):mediaconnect:[a-z0-9-]+:[0-9]{12}:routerNetworkInterface:[a-z0-9]{12}`

Required: No

**regionNames**

The AWS Regions of the router inputs to include in the filter.

Type: Array of strings

Required: No

**routingScopes**

Filter criteria to list router inputs based on their routing scope (REGIONAL or GLOBAL).

Type: Array of strings

Valid Values: `REGIONAL | GLOBAL`

Required: No

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# RouterInputMessage

A message associated with a router input, including a code and a message.

## Contents

**code**

The code associated with the router input message.

Type: String

Required: Yes

**message**

The message text associated with the router input message.

Type: String

Required: Yes

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# RouterInputMetadata

Metadata information associated with the router input, including stream details and connection state.

## Contents

> **Important**
>
> This data type is a UNION, so only one of the following members can be specified when used or returned.

**transportStreamMediaInfo**

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

Type: TransportMediaInfo object

Required: No

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# RouterInputProtocolConfiguration

The protocol configuration settings for a router input.

## Contents

> **Important**
>
> This data type is a UNION, so only one of the following members can be specified when used or returned.

**rist**

The configuration settings for a router input using the RIST (Reliable Internet Stream Transport) protocol, including the port and recovery latency.

Type: RistRouterInputConfiguration object

Required: No

**rtp**

The configuration settings for a Router Input using the RTP (Real-Time Transport Protocol) protocol, including the port and forward error correction state.

Type: RtpRouterInputConfiguration object

Required: No

**srtCaller**

The configuration settings for a router input using the SRT (Secure Reliable Transport) protocol in caller mode, including the source address and port, minimum latency, stream ID, and decryption key configuration.

Type: SrtCallerRouterInputConfiguration object

Required: No

**srtListener**

The configuration settings for a router input using the SRT (Secure Reliable Transport) protocol in listener mode, including the port, minimum latency, and decryption key configuration.

Type: SrtListenerRouterInputConfiguration object

Required: No

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# RouterInputSourceMetadataDetails

Detailed metadata information about a router input source.

## Contents

**sourceMetadataMessages**

Collection of metadata messages associated with the router input source.

Type: Array of RouterInputMessage objects

Required: Yes

**timestamp**

The timestamp when the metadata was last updated.

Type: Timestamp

Required: Yes

**routerInputMetadata**

Metadata information specific to the router input configuration and state.

Type: RouterInputMetadata object

**Note:** This object is a Union. Only one member of this object can be specified or returned.

Required: No

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# RouterInputStreamDetails

Configuration details for the router input stream.

## Contents

> **Important**
>
> This data type is a UNION, so only one of the following members can be specified when used or returned.

**failover**

Configuration details for a failover router input that can automatically switch between two sources.

Type: FailoverRouterInputStreamDetails object

Required: No

**mediaConnectFlow**

Configuration details for a MediaConnect flow when used as a router input source.

Type: MediaConnectFlowRouterInputStreamDetails object

Required: No

**merge**

Configuration details for a merge router input that combines two input sources.

Type: MergeRouterInputStreamDetails object

Required: No

**standard**

Configuration details for a standard router input stream type.

Type: StandardRouterInputStreamDetails object

Required: No

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# RouterInputThumbnailDetails

The details of a thumbnail associated with a router input, including the thumbnail messages, the thumbnail image, the timecode, and the timestamp.

## Contents

**thumbnailMessages**

The messages associated with the router input thumbnail.

Type: Array of RouterInputMessage objects

Required: Yes

**thumbnail**

The thumbnail image, encoded as a Base64-encoded binary data object.

Type: Base64-encoded binary data object

Required: No

**timecode**

The timecode associated with the thumbnail.

Type: String

Required: No

**timestamp**

The timestamp associated with the thumbnail.

Type: Timestamp

Required: No

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# RouterInputTransitEncryption

The transit encryption settings for a router input.

## Contents

**encryptionKeyConfiguration**

Contains the configuration details for the encryption key used in transit encryption, including the key source and associated parameters.

Type: RouterInputTransitEncryptionKeyConfiguration object

**Note:** This object is a Union. Only one member of this object can be specified or returned.

Required: Yes

**encryptionKeyType**

Specifies the type of encryption key to use for transit encryption.

Type: String

Valid Values: `SECRETS_MANAGER | AUTOMATIC`

Required: No

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# RouterInputTransitEncryptionKeyConfiguration

Defines the configuration settings for transit encryption keys.

## Contents

> **Important**
>
> This data type is a UNION, so only one of the following members can be specified when used or returned.

**automatic**

Configuration settings for automatic encryption key management, where MediaConnect handles key creation and rotation.

Type: AutomaticEncryptionKeyConfiguration object

Required: No

**secretsManager**

The configuration settings for transit encryption using AWS Secrets Manager, including the secret ARN and role ARN.

Type: SecretsManagerEncryptionKeyConfiguration object

Required: No

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# RouterNetworkInterface

A router network interface in AWS Elemental MediaConnect. A router network interface is a network interface that can be associated with one or more router inputs and outputs.

## Contents

**arn**

The Amazon Resource Name (ARN) of the router network interface.

Type: String

Pattern: `arn:(aws[a-zA-Z-]*):mediaconnect:[a-z0-9-]+:[0-9]{12}:routerNetworkInterface:[a-z0-9]{12}`

Required: Yes

**associatedInputCount**

The number of router inputs associated with the network interface.

Type: Integer

Required: Yes

**associatedOutputCount**

The number of router outputs associated with the network interface.

Type: Integer

Required: Yes

**configuration**

The configuration settings for a router network interface.

Type: RouterNetworkInterfaceConfiguration object

**Note:** This object is a Union. Only one member of this object can be specified or returned.

Required: Yes

**createdAt**

The timestamp when the router network interface was created.

Type: Timestamp

Required: Yes

**id**

The unique identifier of the router network interface.

Type: String

Required: Yes

**name**

The name of the router network interface.

Type: String

Required: Yes

**networkInterfaceType**

The type of the router network interface.

Type: String

Valid Values: `PUBLIC | VPC`

Required: Yes

**regionName**

The AWS Region where the router network interface is located.

Type: String

Required: Yes

**state**

The current state of the router network interface.

Type: String

Valid Values: `CREATING | ACTIVE | UPDATING | DELETING | ERROR | RECOVERING`

Required: Yes

**tags**

Key-value pairs that can be used to tag and organize this router network interface.

Type: String to string map

Required: Yes

**updatedAt**

The timestamp when the router network interface was last updated.

Type: Timestamp

Required: Yes

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# RouterNetworkInterfaceConfiguration

The configuration settings for a router network interface.

## Contents

> **Important**
>
> This data type is a UNION, so only one of the following members can be specified when used or returned.

**public**

The configuration settings for a public router network interface, including the list of allowed CIDR blocks.

Type: PublicRouterNetworkInterfaceConfiguration object

Required: No

**vpc**

The configuration settings for a router network interface within a VPC, including the security group IDs and subnet ID.

Type: VpcRouterNetworkInterfaceConfiguration object

Required: No

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# RouterNetworkInterfaceFilter

A filter that can be used to retrieve a list of router network interfaces.

## Contents

> **Important**
>
> This data type is a UNION, so only one of the following members can be specified when used or returned.

**nameContains**

The names of the router network interfaces to include in the filter.

Type: Array of strings

Required: No

**networkInterfaceTypes**

The types of router network interfaces to include in the filter.

Type: Array of strings

Valid Values: `PUBLIC | VPC`

Required: No

**regionNames**

The AWS Regions of the router network interfaces to include in the filter.

Type: Array of strings

Required: No

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# RouterOutput

A router output in AWS Elemental MediaConnect. A router output is a destination for media content that can receive input from one or more router inputs.

## Contents

**arn**

The Amazon Resource Name (ARN) of the router output.

Type: String

Pattern: `arn:(aws[a-zA-Z-]*):mediaconnect:[a-z0-9-]+:[0-9]{12}:routerOutput:[a-z0-9]{12}`

Required: Yes

**availabilityZone**

The Availability Zone of the router output.

Type: String

Required: Yes

**configuration**

The configuration settings for a router output.

Type: RouterOutputConfiguration object

**Note:** This object is a Union. Only one member of this object can be specified or returned.

Required: Yes

**createdAt**

The timestamp when the router output was created.

Type: Timestamp

Required: Yes

**id**

The unique identifier of the router output.

Type: String

Required: Yes

**maintenanceConfiguration**

The maintenance configuration settings applied to this router output.

Type: MaintenanceConfiguration object

**Note:** This object is a Union. Only one member of this object can be specified or returned.

Required: Yes

**maintenanceType**

The type of maintenance configuration applied to this router output.

Type: String

Valid Values: `PREFERRED_DAY_TIME | DEFAULT`

Required: Yes

**maximumBitrate**

The maximum bitrate for the router output.

Type: Long

Required: Yes

**messages**

The messages associated with the router output.

Type: Array of RouterOutputMessage objects

Required: Yes

**name**

The name of the router output.

Type: String

Required: Yes

**outputType**

The type of the router output.

Type: String

Valid Values: `STANDARD | MEDIACONNECT_FLOW | MEDIALIVE_INPUT`

Required: Yes

**regionName**

The AWS Region where the router output is located.

Type: String

Required: Yes

**routedState**

The current state of the association between the router output and its input.

Type: String

Valid Values: `ROUTED | ROUTING | UNROUTED`

Required: Yes

**routingScope**

Indicates whether the router output is configured for Regional or global routing.

Type: String

Valid Values: `REGIONAL | GLOBAL`

Required: Yes

**state**

The overall state of the router output.

Type: String

Valid Values: `CREATING | STANDBY | STARTING | ACTIVE | STOPPING | DELETING | UPDATING | ERROR | RECOVERING | MIGRATING`

Required: Yes

**streamDetails**

Information about the router output's stream, including connection state and destination details. The specific details provided vary based on the router output type.

Type: RouterOutputStreamDetails object

**Note:** This object is a Union. Only one member of this object can be specified or returned.

Required: Yes

**tags**

Key-value pairs that can be used to tag and organize this router output.

Type: String to string map

Required: Yes

**tier**

The tier level of the router output.

Type: String

Valid Values: `OUTPUT_100 | OUTPUT_50 | OUTPUT_20`

Required: Yes

**updatedAt**

The timestamp when the router output was last updated.

Type: Timestamp

Required: Yes

**ipAddress**

The IP address of the router output.

Type: String

Required: No

**maintenanceSchedule**

The current maintenance schedule details for this router output.

Type: MaintenanceSchedule object

**Note:** This object is a Union. Only one member of this object can be specified or returned.

Required: No

**maintenanceScheduleType**

The type of maintenance schedule currently in effect for this router output.

Type: String

Valid Values: `WINDOW`

Required: No

**routedInputArn**

The Amazon Resource Name (ARN) of the router input associated with the output.

Type: String

Pattern: `arn:(aws[a-zA-Z-]*):mediaconnect:[a-z0-9-]+:[0-9]{12}:routerInput:[a-z0-9]{12}`

Required: No

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# RouterOutputConfiguration

The configuration settings for a router output.

## Contents

> **Important**
>
> This data type is a UNION, so only one of the following members can be specified when used or returned.

**mediaConnectFlow**

Configuration settings for connecting a router output to a MediaConnect flow source.

Type: MediaConnectFlowRouterOutputConfiguration object

Required: No

**mediaLiveInput**

Configuration settings for connecting a router output to a MediaLive input.

Type: MediaLiveInputRouterOutputConfiguration object

Required: No

**standard**

The configuration settings for a standard router output, including the protocol, protocol-specific configuration, network interface, and availability zone.

Type: StandardRouterOutputConfiguration object

Required: No

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# RouterOutputFilter

A filter that can be used to retrieve a list of router outputs.

## Contents

> **Important**
>
> This data type is a UNION, so only one of the following members can be specified when used or returned.

**nameContains**

The names of the router outputs to include in the filter.

Type: Array of strings

Required: No

**networkInterfaceArns**

The Amazon Resource Names (ARNs) of the network interfaces associated with the router outputs to include in the filter.

Type: Array of strings

Pattern: `arn:(aws[a-zA-Z-]*):mediaconnect:[a-z0-9-]+:[0-9]{12}:routerNetworkInterface:[a-z0-9]{12}`

Required: No

**outputTypes**

The types of router outputs to include in the filter.

Type: Array of strings

Valid Values: `STANDARD | MEDIACONNECT_FLOW | MEDIALIVE_INPUT`

Required: No

**regionNames**

The AWS Regions of the router outputs to include in the filter.

Type: Array of strings

Required: No

**routedInputArns**

The ARNs of the router inputs associated with the router outputs to include in the filter.

Type: Array of strings

Pattern: `arn:(aws[a-zA-Z-]*):mediaconnect:[a-z0-9-]+:[0-9]{12}:routerInput:[a-z0-9]{12}`

Required: No

**routingScopes**

Filter criteria to list router outputs based on their routing scope.

Type: Array of strings

Valid Values: `REGIONAL | GLOBAL`

Required: No

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# RouterOutputMessage

A message associated with a router output.

## Contents

**code**

The code associated with the router output message.

Type: String

Required: Yes

**message**

The message text associated with the router output message.

Type: String

Required: Yes

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# RouterOutputProtocolConfiguration

The protocol configuration settings for a router output.

## Contents

> **Important**
>
> This data type is a UNION, so only one of the following members can be specified when used or returned.

**rist**

The configuration settings for a router output using the RIST (Reliable Internet Stream Transport) protocol, including the destination address and port.

Type: RistRouterOutputConfiguration object

Required: No

**rtp**

The configuration settings for a router output using the RTP (Real-Time Transport Protocol) protocol, including the destination address and port, and forward error correction state.

Type: RtpRouterOutputConfiguration object

Required: No

**srtCaller**

The configuration settings for a router output using the SRT (Secure Reliable Transport) protocol in caller mode, including the destination address and port, minimum latency, stream ID, and encryption key configuration.

Type: SrtCallerRouterOutputConfiguration object

Required: No

**srtListener**

The configuration settings for a router output using the SRT (Secure Reliable Transport) protocol in listener mode, including the port, minimum latency, and encryption key configuration.

Type: SrtListenerRouterOutputConfiguration object

Required: No

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# RouterOutputStreamDetails

Information about the router output's stream, including connection state and destination details. The specific details provided vary based on the router output type.

## Contents

**Important**

This data type is a UNION, so only one of the following members can be specified when used or returned.

**mediaConnectFlow**

Configuration details for a MediaConnect flow when used as a router output destination.

Type: MediaConnectFlowRouterOutputStreamDetails object

Required: No

**mediaLiveInput**

Configuration details for a MediaLive input when used as a router output destination.

Type: MediaLiveInputRouterOutputStreamDetails object

Required: No

**standard**

Configuration details for a standard router output stream type. Contains information about the destination IP address and connection state for basic output routing.

Type: StandardRouterOutputStreamDetails object

Required: No

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# RtpRouterInputConfiguration

The configuration settings for a Router Input using the RTP (Real-Time Transport Protocol) protocol, including the port and forward error correction state.

## Contents

**port**

The port number used for the RTP protocol in the router input configuration.

Type: Integer

Valid Range: Minimum value of 3000. Maximum value of 30000.

Required: Yes

**forwardErrorCorrection**

The state of forward error correction for the RTP protocol in the router input configuration.

Type: String

Valid Values: `ENABLED | DISABLED`

Required: No

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# RtpRouterOutputConfiguration

The configuration settings for a router output using the RTP (Real-Time Transport Protocol) protocol, including the destination address and port, and forward error correction state.

## Contents

**destinationAddress**

The destination IP address for the RTP protocol in the router output configuration.

Type: String

Required: Yes

**destinationPort**

The destination port number for the RTP protocol in the router output configuration.

Type: Integer

Valid Range: Minimum value of 1024. Maximum value of 65531.

Required: Yes

**forwardErrorCorrection**

The state of forward error correction for the RTP protocol in the router output configuration.

Type: String

Valid Values: `ENABLED | DISABLED`

Required: No

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2

- AWS SDK for Ruby V3

# SecretsManagerEncryptionKeyConfiguration

The configuration settings for transit encryption using AWS Secrets Manager, including the secret ARN and role ARN.

## Contents

**roleArn**

The ARN of the IAM role assumed by MediaConnect to access the AWS Secrets Manager secret.

Type: String

Pattern: `arn:(aws[a-zA-Z-]*):iam::[0-9]{12}:role/[a-zA-Z0-9_+=,.@-]+`

Required: Yes

**secretArn**

The ARN of the AWS Secrets Manager secret used for transit encryption.

Type: String

Pattern: `arn:(aws[a-zA-Z-]*):secretsmanager:[a-z0-9-]+:[0-9]{12}:secret:[a-zA-Z0-9/_+=.@-]+`

Required: Yes

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# SetGatewayBridgeSourceRequest

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

## Contents

**bridgeArn**

The ARN of the bridge feeding this flow.

Type: String

Pattern: `arn:.+:mediaconnect.+:bridge:.+`

Required: Yes

**vpcInterfaceAttachment**

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

Type: VpcInterfaceAttachment object

Required: No

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# SetSourceRequest

The settings for the source of the flow.

## Contents

**decryption**

The type of encryption that is used on the content ingested from this source. Allowable encryption types: static-key.

Type: Encryption object

Required: No

**description**

A description for the source. This value is not used or seen outside of the current MediaConnect account.

Type: String

Required: No

**entitlementArn**

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

Type: String

Pattern: `arn:.+:mediaconnect.+:entitlement:.+`

Required: No

**gatewayBridgeSource**

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

Type: SetGatewayBridgeSourceRequest object

Required: No

**ingestPort**

The port that the flow will be listening on for incoming content.

Type: Integer

Required: No

**maxBitrate**

The smoothing max bitrate (in bps) for RIST, RTP, and RTP-FEC streams.

Type: Integer

Required: No

**maxLatency**

The maximum latency in milliseconds. This parameter applies only to RIST-based and Zixi-based streams.

Type: Integer

Required: No

**maxSyncBuffer**

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

Type: Integer

Required: No

**mediaStreamSourceConfigurations**

The media streams that are associated with the source, and the parameters for those associations.

Type: Array of MediaStreamSourceConfigurationRequest objects

Required: No

**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: No

**name**

The name of the source.

Type: String

Required: No

**ndiSourceSettings**

The settings for the NDI® source. This includes the exact name of the upstream NDI sender that you want to connect to your source.

Type: NdiSourceSettings object

Required: No

**protocol**

The protocol that is used by the source.

> **Note**
>
> AWS Elemental MediaConnect no longer supports the Fujitsu QoS protocol. This reference is maintained for legacy purposes only.

Type: String

Valid Values: `zixi-push | rtp-fec | rtp | zixi-pull | rist | st2110-jpegxs | cdi | srt-listener | srt-caller | fujitsu-qos | udp | ndi-speed-hq`

Required: No

**routerIntegrationState**

Indicates whether to enable or disable router integration when setting a flow source.

Type: String

Valid Values: `ENABLED | DISABLED`

Required: No

**routerIntegrationTransitDecryption**

The decryption configuration for the flow source when router integration is enabled. Specifies how the source content should be decrypted when router integration is used.

Type: FlowTransitEncryption object

Required: No

**senderControlPort**

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

Type: Integer

Required: No

**senderIpAddress**

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

Type: String

Required: No

**sourceListenerAddress**

Source IP or domain name for SRT-caller protocol.

Type: String

Required: No

**sourceListenerPort**

Source port for SRT-caller protocol.

Type: Integer

Required: No

**sourceTags**

The key-value pairs that can be used to tag and organize the source.

Type: String to string map

Required: No

**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: No

**vpcInterfaceName**

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

Type: String

Required: No

**whitelistCidr**

The range of IP addresses that should be allowed to contribute content to your source. 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: No

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# SilentAudio

Configures settings for the `SilentAudio` metric.

## Contents

**state**

Indicates whether the `SilentAudio` metric is enabled or disabled.

Type: String

Valid Values: `ENABLED | DISABLED`

Required: No

**thresholdSeconds**

Specifies the number of consecutive seconds of silence that triggers an event or alert.

Type: Integer

Required: No

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# Source

The settings for the source of the flow.

## Contents

**name**

The name of the source.

Type: String

Required: Yes

**sourceArn**

The ARN of the source.

Type: String

Required: Yes

**connectedRouterOutputArn**

The ARN of the router output that's currently connected to this source.

Type: String

Required: No

**dataTransferSubscriberFeePercent**

Percentage from 0-100 of the data transfer cost to be billed to the subscriber.

Type: Integer

Required: No

**decryption**

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

Type: Encryption object

Required: No

**description**

A description for the source. This value is not used or seen outside of the current MediaConnect account.

Type: String

Required: No

**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: No

**gatewayBridgeSource**

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

Type: GatewayBridgeSource object

Required: No

**ingestIp**

The IP address that the flow will be listening on for incoming content.

Type: String

Required: No

**ingestPort**

The port that the flow will be listening on for incoming content.

Type: Integer

Required: No

**mediaStreamSourceConfigurations**

The media streams that are associated with the source, and the parameters for those associations.

Type: Array of MediaStreamSourceConfiguration objects

Required: No

**peerIpAddress**

The IP address of the device that is currently sending content to this source.

> **Note**
>
> - For sources that use protocols where you specify the origin (such as SRT Caller), this value matches the configured origin address.
> - For sources that use listener protocols (such as SRT Listener or RTP), this value shows the address of the connected sender.
> - Peer IP addresses aren't available for entitlements and CDI/ST2110 sources.
> - The peer IP address might not be visible for flows that haven't been started yet, or flows that were started before May 2025. In these cases, restart your flow to see the peer IP address.

Type: String

Required: No

**routerIntegrationState**

Indicates if router integration is enabled or disabled on the flow source.

Type: String

Valid Values: `ENABLED | DISABLED`

Required: No

**routerIntegrationTransitDecryption**

The decryption configuration for the flow source when router integration is enabled.

Type: FlowTransitEncryption object

Required: No

**senderControlPort**

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

Type: Integer

Required: No

**senderIpAddress**

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

Type: String

Required: No

**transport**

Attributes related to the transport stream that are used in the source.

Type: Transport object

Required: No

**vpcInterfaceName**

The name of the VPC interface that is used for this source.

Type: String

Required: No

**whitelistCidr**

The range of IP addresses that should be allowed to contribute content to your source. 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: No

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# 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.

## Contents

**primarySource**

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

Type: String

Required: No

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# SrtCallerRouterInputConfiguration

The configuration settings for a router input using the SRT (Secure Reliable Transport) protocol in caller mode, including the source address and port, minimum latency, stream ID, and decryption key configuration.

## Contents

**minimumLatencyMilliseconds**

The minimum latency in milliseconds for the SRT protocol in caller mode.

Type: Long

Valid Range: Minimum value of 10. Maximum value of 10000.

Required: Yes

**sourceAddress**

The source IP address for the SRT protocol in caller mode.

Type: String

Required: Yes

**sourcePort**

The source port number for the SRT protocol in caller mode.

Type: Integer

Valid Range: Minimum value of 1024. Maximum value of 65535.

Required: Yes

**decryptionConfiguration**

Specifies the decryption settings for an SRT caller input, including the encryption key configuration and associated parameters.

Type: SrtDecryptionConfiguration object

Required: No

**streamId**

The stream ID for the SRT protocol in caller mode.

Type: String

Required: No

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# SrtCallerRouterOutputConfiguration

The configuration settings for a router output using the SRT (Secure Reliable Transport) protocol in caller mode, including the destination address and port, minimum latency, stream ID, and encryption key configuration.

## Contents

**destinationAddress**

The destination IP address for the SRT protocol in caller mode.

Type: String

Required: Yes

**destinationPort**

The destination port number for the SRT protocol in caller mode.

Type: Integer

Valid Range: Minimum value of 1024. Maximum value of 65535.

Required: Yes

**minimumLatencyMilliseconds**

The minimum latency in milliseconds for the SRT protocol in caller mode.

Type: Long

Valid Range: Minimum value of 10. Maximum value of 10000.

Required: Yes

**encryptionConfiguration**

Defines the encryption settings for an SRT caller output, including the encryption key configuration and associated parameters.

Type: SrtEncryptionConfiguration object

Required: No

**streamId**

The stream ID for the SRT protocol in caller mode.

Type: String

Required: No

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# SrtDecryptionConfiguration

Contains the configuration settings for decrypting SRT streams, including the encryption key details and decryption parameters.

## Contents

**encryptionKey**

Specifies the encryption key configuration used for decrypting SRT streams, including the key source and associated credentials.

Type: SecretsManagerEncryptionKeyConfiguration object

Required: Yes

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# SrtEncryptionConfiguration

Contains the configuration settings for encrypting SRT streams, including the encryption key details and encryption parameters.

## Contents

**encryptionKey**

Specifies the encryption key configuration used for encrypting SRT streams, including the key source and associated credentials.

Type: SecretsManagerEncryptionKeyConfiguration object

Required: Yes

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# SrtListenerRouterInputConfiguration

The configuration settings for a router input using the SRT (Secure Reliable Transport) protocol in listener mode, including the port, minimum latency, and decryption key configuration.

## Contents

**minimumLatencyMilliseconds**

The minimum latency in milliseconds for the SRT protocol in listener mode.

Type: Long

Valid Range: Minimum value of 10. Maximum value of 10000.

Required: Yes

**port**

The port number for the SRT protocol in listener mode.

Type: Integer

Valid Range: Minimum value of 3000. Maximum value of 30000.

Required: Yes

**decryptionConfiguration**

Specifies the decryption settings for an SRT listener input, including the encryption key configuration and associated parameters.

Type: SrtDecryptionConfiguration object

Required: No

## See Also

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

- AWS SDK for C++

- AWS SDK for Java V2
- AWS SDK for Ruby V3

# SrtListenerRouterOutputConfiguration

The configuration settings for a router output using the SRT (Secure Reliable Transport) protocol in listener mode, including the port, minimum latency, and encryption key configuration.

## Contents

**minimumLatencyMilliseconds**

The minimum latency in milliseconds for the SRT protocol in listener mode.

Type: Long

Valid Range: Minimum value of 10. Maximum value of 10000.

Required: Yes

**port**

The port number for the SRT protocol in listener mode.

Type: Integer

Valid Range: Minimum value of 3000. Maximum value of 30000.

Required: Yes

**encryptionConfiguration**

Defines the encryption settings for an SRT listener output, including the encryption key configuration and associated parameters.

Type: SrtEncryptionConfiguration object

Required: No

## See Also

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

- AWS SDK for C++

- AWS SDK for Java V2
- AWS SDK for Ruby V3

# StandardRouterInputConfiguration

The configuration settings for a standard router input, including the protocol, protocol-specific configuration, network interface, and availability zone.

## Contents

**networkInterfaceArn**

The Amazon Resource Name (ARN) of the network interface associated with the standard router input.

Type: String

Pattern: `arn:(aws[a-zA-Z-]*):mediaconnect:[a-z0-9-]+:[0-9]{12}:routerNetworkInterface:[a-z0-9]{12}`

Required: Yes

**protocolConfiguration**

The configuration settings for the protocol used by the standard router input.

Type: RouterInputProtocolConfiguration object

**Note:** This object is a Union. Only one member of this object can be specified or returned.

Required: Yes

**protocol**

The protocol used by the standard router input.

Type: String

Valid Values: `RTP | RIST | SRT_CALLER | SRT_LISTENER`

Required: No

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# StandardRouterInputStreamDetails

Configuration details for a standard router input stream type.

## Contents

**sourceIpAddress**

The source IP address for the standard router input stream.

Type: String

Required: No

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# StandardRouterOutputConfiguration

The configuration settings for a standard router output, including the protocol, protocol-specific configuration, network interface, and availability zone.

## Contents

**networkInterfaceArn**

The Amazon Resource Name (ARN) of the network interface associated with the standard router output.

Type: String

Pattern: `arn:(aws[a-zA-Z-]*):mediaconnect:[a-z0-9-]+:[0-9]{12}:routerNetworkInterface:[a-z0-9]{12}`

Required: Yes

**protocolConfiguration**

The configuration settings for the protocol used by the standard router output.

Type: RouterOutputProtocolConfiguration object

**Note:** This object is a Union. Only one member of this object can be specified or returned.

Required: Yes

**protocol**

The protocol used by the standard router output.

Type: String

Valid Values: `RTP | RIST | SRT_CALLER | SRT_LISTENER`

Required: No

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# StandardRouterOutputStreamDetails

Configuration details for a standard router output stream type. Contains information about the destination IP address and connection state for basic output routing.

## Contents

**destinationIpAddress**

The IP address where the output stream will be sent. This is the destination address that will receive the routed media content.

Type: String

Required: No

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# ThumbnailDetails

The details of the thumbnail, including thumbnail base64 string, timecode and the time when thumbnail was generated.

## Contents

**flowArn**

The ARN of the flow that DescribeFlowSourceThumbnail was performed on.

Type: String

Required: Yes

**thumbnailMessages**

Status code and messages about the flow source thumbnail.

Type: Array of MessageDetail objects

Required: Yes

**thumbnail**

Thumbnail Base64 string.

Type: String

Required: No

**timecode**

Timecode of thumbnail.

Type: String

Required: No

**timestamp**

The timestamp of when thumbnail was generated.

Type: Timestamp

Required: No

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# Transport

Attributes related to the transport stream that are used in a source or output.

## Contents

**protocol**

The protocol that is used by the source or output.

> **Note**
>
> AWS Elemental MediaConnect no longer supports the Fujitsu QoS protocol. This reference is maintained for legacy purposes only.

Type: String

Valid Values: `zixi-push | rtp-fec | rtp | zixi-pull | rist | st2110-jpegxs | cdi | srt-listener | srt-caller | fujitsu-qos | udp | ndi-speed-hq`

Required: Yes

**cidrAllowList**

The range of IP addresses that should be allowed to initiate output requests to this flow. 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 strings

Required: No

**maxBitrate**

The smoothing max bitrate (in bps) for RIST, RTP, and RTP-FEC streams.

Type: Integer

Required: No

**maxLatency**

The maximum latency in milliseconds. This parameter applies only to RIST-based and Zixi-based streams.

Type: Integer

Required: No

**maxSyncBuffer**

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

Type: Integer

Required: No

**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: No

**ndiProgramName**

A suffix for the name of the NDI® sender that the flow creates. If a custom name isn't specified, MediaConnect uses the output name.

Type: String

Required: No

**ndiSourceSettings**

The settings for the NDI source. This includes the exact name of the upstream NDI sender that you want to connect to your source.

Type: NdiSourceSettings object

Required: No

**ndiSpeedHqQuality**

A quality setting for the NDI Speed HQ encoder.

Type: Integer

Required: No

**remoteId**

The remote ID for the Zixi-pull stream.

Type: String

Required: No

**senderControlPort**

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

Type: Integer

Required: No

**senderIpAddress**

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

Type: String

Required: No

**smoothingLatency**

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

Type: Integer

Required: No

**sourceListenerAddress**

Source IP or domain name for SRT-caller protocol.

Type: String

Required: No

**sourceListenerPort**

Source port for SRT-caller protocol.

Type: Integer

Required: No

**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: No

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# TransportMediaInfo

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

## Contents

**programs**

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

Type: Array of TransportStreamProgram objects

Required: Yes

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# TransportStream

The metadata of an elementary transport stream.

## Contents

**pid**

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

Type: Integer

Required: Yes

**streamType**

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

Type: String

Required: Yes

**channels**

The number of channels in the audio stream.

Type: Integer

Required: No

**codec**

The codec used by the stream.

Type: String

Required: No

**frameRate**

The frame rate used by the video stream.

Type: String

Required: No

**frameResolution**

The frame resolution used by the video stream.

Type: FrameResolution object

Required: No

**sampleRate**

The sample rate used by the audio stream.

Type: Integer

Required: No

**sampleSize**

The sample bit size used by the audio stream.

Type: Integer

Required: No

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# TransportStreamProgram

The metadata of a single transport stream program.

## Contents

**pcrPid**

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

Type: Integer

Required: Yes

**programNumber**

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

Type: Integer

Required: Yes

**programPid**

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

Type: Integer

Required: Yes

**streams**

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

Type: Array of TransportStream objects

Required: Yes

**programName**

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

Type: String

Required: No

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# UpdateBridgeFlowSourceRequest

Update the flow source of the bridge.

## Contents

**flowArn**

The Amazon Resource Name (ARN) that identifies the MediaConnect resource from which to delete tags.

Type: String

Pattern: `arn:.+:mediaconnect.+:flow:.+`

Required: No

**flowVpcInterfaceAttachment**

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

Type: VpcInterfaceAttachment object

Required: No

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# UpdateBridgeNetworkOutputRequest

Update an existing network output.

## Contents

**ipAddress**

The network output IP Address.

Type: String

Required: No

**networkName**

The network output's gateway network name.

Type: String

Required: No

**port**

The network output port.

Type: Integer

Required: No

**protocol**

The network output protocol.

> **Note**
>
> AWS Elemental MediaConnect no longer supports the Fujitsu QoS protocol. This reference is maintained for legacy purposes only.

Type: String

Valid Values: `zixi-push | rtp-fec | rtp | zixi-pull | rist | st2110-jpegxs | cdi | srt-listener | srt-caller | fujitsu-qos | udp | ndi-speed-hq`

Required: No

**ttl**

The network output TTL.

Type: Integer

Required: No

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# UpdateBridgeNetworkSourceRequest

Update the network source of the bridge.

## Contents

**multicastIp**

The network source multicast IP.

Type: String

Required: No

**multicastSourceSettings**

The settings related to the multicast source.

Type: MulticastSourceSettings object

Required: No

**networkName**

The network source's gateway network name.

Type: String

Required: No

**port**

The network source port.

Type: Integer

Required: No

**protocol**

The network source protocol.

> **Note**
>
> AWS Elemental MediaConnect no longer supports the Fujitsu QoS protocol. This reference is maintained for legacy purposes only.

Type: String

Valid Values: `zixi-push | rtp-fec | rtp | zixi-pull | rist | st2110-jpegxs | cdi | srt-listener | srt-caller | fujitsu-qos | udp | ndi-speed-hq`

Required: No

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# UpdateEgressGatewayBridgeRequest

Update an existing egress-type bridge.

## Contents

**maxBitrate**

The maximum expected bitrate (in bps).

Type: Integer

Required: No

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# UpdateEncryption

Information about the encryption of the flow.

## Contents

**algorithm**

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

Type: String

Valid Values: `aes128 | aes192 | aes256`

Required: No

**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: No

**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: No

**keyType**

The type of key that is used for the encryption. If no keyType is provided, the service will use the default setting (static-key).

Type: String

Valid Values: `speke | static-key | srt-password`

Required: No

**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: No

**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: No

**roleArn**

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

Type: String

Required: No

**secretArn**

The ARN of the secret that you created in AWS Secrets Manager to store the encryption key. This parameter is required for static key encryption and is not valid for SPEKE encryption.

Type: String

Required: No

**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: No

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# UpdateFailoverConfig

The settings for source failover.

## Contents

**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

Valid Values: `MERGE | FAILOVER`

Required: No

**recoveryWindow**

Recovery window time to look for dash-7 packets.

Type: Integer

Required: No

**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.

Type: SourcePriority object

Required: No

**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

Valid Values: `ENABLED | DISABLED`

Required: No

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# UpdateGatewayBridgeSourceRequest

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

## Contents

**bridgeArn**

The ARN of the bridge feeding this flow.

Type: String

Pattern: `arn:.+:mediaconnect.+:bridge:.+`

Required: No

**vpcInterfaceAttachment**

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

Type: VpcInterfaceAttachment object

Required: No

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# UpdateIngressGatewayBridgeRequest

Update an existing ingress-type bridge.

## Contents

**maxBitrate**

The maximum expected bitrate (in bps).

Type: Integer

Required: No

**maxOutputs**

The maximum number of expected outputs.

Type: Integer

Required: No

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# UpdateMaintenance

Update maintenance setting for a flow.

## Contents

**maintenanceDay**

A day of a week when the maintenance will happen.

Type: String

Valid Values: `Monday | Tuesday | Wednesday | Thursday | Friday | Saturday | Sunday`

Required: No

**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: No

**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: No

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2

- AWS SDK for Ruby V3

# VideoMonitoringSetting

Specifies the configuration for video stream metrics monitoring.

## Contents

**blackFrames**

Detects video frames that are black.

Type: BlackFrames object

Required: No

**frozenFrames**

Detects video frames that have not changed.

Type: FrozenFrames object

Required: No

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# VpcInterface

The settings for a VPC source.

## Contents

**name**

Immutable and has to be a unique against other VpcInterfaces in this Flow.

Type: String

Required: Yes

**networkInterfaceIds**

IDs of the network interfaces created in customer's account by MediaConnect.

Type: Array of strings

Required: Yes

**networkInterfaceType**

The type of network interface.

Type: String

Valid Values: `ena | efa`

Required: Yes

**roleArn**

A role Arn MediaConnect can assume to create ENIs in your account.

Type: String

Required: Yes

**securityGroupIds**

Security Group IDs to be used on ENI.

Type: Array of strings

Required: Yes

**subnetId**

Subnet must be in the AZ of the Flow.

Type: String

Required: Yes

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# VpcInterfaceAttachment

The settings for attaching a VPC interface to an resource.

## Contents

**vpcInterfaceName**

The name of the VPC interface to use for this resource.

Type: String

Required: No

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# VpcInterfaceRequest

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

## Contents

**name**

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

Type: String

Required: Yes

**roleArn**

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

Type: String

Required: Yes

**securityGroupIds**

A virtual firewall to control inbound and outbound traffic.

Type: Array of strings

Required: Yes

**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: Yes

**networkInterfaceType**

The type of network interface.

Type: String

Valid Values: `ena | efa`

Required: No

**vpcInterfaceTags**

The key-value pairs that can be used to tag and organize the VPC network interface.

Type: String to string map

Required: No

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# VpcRouterNetworkInterfaceConfiguration

The configuration settings for a router network interface within a VPC, including the security group IDs and subnet ID.

## Contents

**securityGroupIds**

The IDs of the security groups to associate with the router network interface within the VPC.

Type: Array of strings

Array Members: Minimum number of 1 item. Maximum number of 5 items.

Required: Yes

**subnetId**

The ID of the subnet within the VPC to associate the router network interface with.

Type: String

Required: Yes

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# WindowMaintenanceSchedule

Defines a specific time window for maintenance operations.

## Contents

**end**

The end time of the maintenance window.

Type: Timestamp

Required: Yes

**scheduledTime**

The date and time when the maintenance window is scheduled to occur.

Type: Timestamp

Required: Yes

**start**

The start time of the maintenance window.

Type: Timestamp

Required: Yes

## See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# Common Parameters

The following list contains the parameters that all actions use for signing Signature Version 4 requests with a query string. Any action-specific parameters are listed in the topic for that action. For more information about Signature Version 4, see Signing AWS API requests in the *IAM User Guide*.

**Action**

The action to be performed.

Type: string

Required: Yes

**Version**

The API version that the request is written for, expressed in the format YYYY-MM-DD.

Type: string

Required: Yes

**X-Amz-Algorithm**

The hash algorithm that you used to create the request signature.

Condition: Specify this parameter when you include authentication information in a query string instead of in the HTTP authorization header.

Type: string

Valid Values: `AWS4-HMAC-SHA256`

Required: Conditional

**X-Amz-Credential**

The credential scope value, which is a string that includes your access key, the date, the region you are targeting, the service you are requesting, and a termination string ("aws4_request"). The value is expressed in the following format: *access_key*/*YYYYMMDD*/*region*/*service*/aws4_request.

For more information, see Create a signed AWS API request in the *IAM User Guide*.

Condition: Specify this parameter when you include authentication information in a query string instead of in the HTTP authorization header.

Type: string

Required: Conditional

**X-Amz-Date**

The date that is used to create the signature. The format must be ISO 8601 basic format (YYYYMMDD'T'HHMMSS'Z'). For example, the following date time is a valid X-Amz-Date value: `20120325T120000Z`.

Condition: X-Amz-Date is optional for all requests; it can be used to override the date used for signing requests. If the Date header is specified in the ISO 8601 basic format, X-Amz-Date is not required. When X-Amz-Date is used, it always overrides the value of the Date header. For more information, see Elements of an AWS API request signature in the *IAM User Guide*.

Type: string

Required: Conditional

**X-Amz-Security-Token**

The temporary security token that was obtained through a call to AWS Security Token Service (AWS STS). For a list of services that support temporary security credentials from AWS STS, see AWS services that work with IAM in the *IAM User Guide*.

Condition: If you're using temporary security credentials from AWS STS, you must include the security token.

Type: string

Required: Conditional

**X-Amz-Signature**

Specifies the hex-encoded signature that was calculated from the string to sign and the derived signing key.

Condition: Specify this parameter when you include authentication information in a query string instead of in the HTTP authorization header.

Type: string

Required: Conditional

**X-Amz-SignedHeaders**

Specifies all the HTTP headers that were included as part of the canonical request. For more information about specifying signed headers, see Create a signed AWS API request in the *IAM User Guide*.

Condition: Specify this parameter when you include authentication information in a query string instead of in the HTTP authorization header.

Type: string

Required: Conditional

# Common Errors

This section lists the errors common to the API actions of all AWS services. For errors specific to an API action for this service, see the topic for that API action.

**AccessDeniedException**

You do not have sufficient access to perform this action.

HTTP Status Code: 403

**ExpiredTokenException**

The security token included in the request is expired

HTTP Status Code: 403

**IncompleteSignature**

The request signature does not conform to AWS standards.

HTTP Status Code: 403

**InternalFailure**

The request processing has failed because of an unknown error, exception or failure.

HTTP Status Code: 500

**MalformedHttpRequestException**

Problems with the request at the HTTP level, e.g. we can't decompress the body according to the decompression algorithm specified by the content-encoding.

HTTP Status Code: 400

**NotAuthorized**

You do not have permission to perform this action.

HTTP Status Code: 401

**OptInRequired**

The AWS access key ID needs a subscription for the service.

HTTP Status Code: 403

**RequestAbortedException**

Convenient exception that can be used when a request is aborted before a reply is sent back (e.g. client closed connection).

HTTP Status Code: 400

**RequestEntityTooLargeException**

Problems with the request at the HTTP level. The request entity is too large.

HTTP Status Code: 413

**RequestExpired**

The request reached the service more than 15 minutes after the date stamp on the request or more than 15 minutes after the request expiration date (such as for pre-signed URLs), or the date stamp on the request is more than 15 minutes in the future.

HTTP Status Code: 400

**RequestTimeoutException**

Problems with the request at the HTTP level. Reading the Request timed out.

HTTP Status Code: 408

**ServiceUnavailable**

The request has failed due to a temporary failure of the server.

HTTP Status Code: 503

**ThrottlingException**

The request was denied due to request throttling.

HTTP Status Code: 400

**UnrecognizedClientException**

The X.509 certificate or AWS access key ID provided does not exist in our records.

HTTP Status Code: 403

**UnknownOperationException**

The action or operation requested is invalid. Verify that the action is typed correctly.

HTTP Status Code: 404

**ValidationError**

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

HTTP Status Code: 400