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Welcome

Amazon Kinesis Data Analytics is a fully managed service that you can use to process and analyze streaming data using SQL or Java. The service enables you to quickly author and run SQL or Java code against streaming sources to perform time series analytics, feed real-time dashboards, and create real-time metrics.

This document was last published on April 3, 2020.
Actions

The following actions are supported:

- AddApplicationCloudWatchLoggingOption (p. 3)
- AddApplicationInput (p. 6)
- AddApplicationInputProcessingConfiguration (p. 10)
- AddApplicationOutput (p. 13)
- AddApplicationReferenceDataSource (p. 17)
- AddApplicationVpcConfiguration (p. 21)
- CreateApplication (p. 24)
- CreateApplicationSnapshot (p. 33)
- DeleteApplication (p. 35)
- DeleteApplicationCloudWatchLoggingOption (p. 37)
- DeleteApplicationInputProcessingConfiguration (p. 40)
- DeleteApplicationOutput (p. 43)
- DeleteApplicationReferenceDataSource (p. 46)
- DeleteApplicationSnapshot (p. 49)
- DeleteApplicationVpcConfiguration (p. 51)
- DescribeApplication (p. 54)
- DescribeApplicationSnapshot (p. 59)
- DiscoverInputSchema (p. 61)
- ListApplications (p. 65)
- ListApplicationSnapshots (p. 67)
- ListTagsForResource (p. 70)
- StartApplication (p. 72)
- StopApplication (p. 74)
- TagResource (p. 76)
- UntagResource (p. 78)
- UpdateApplication (p. 80)
AddApplicationCloudWatchLoggingOption

Adds an Amazon CloudWatch log stream to monitor application configuration errors.

Request Syntax

```
{
  "ApplicationName": "string",
  "CloudWatchLoggingOption": {
    "LogStreamARN": "string"
  },
  "CurrentApplicationVersionId": number
}
```

Request Parameters

The request accepts the following data in JSON format.

**ApplicationName (p. 3)**

The Kinesis Data Analytics application name.

- Type: String
- Pattern: `[a-zA-Z0-9_.-]+`
- Required: Yes

**CloudWatchLoggingOption (p. 3)**

Provides the Amazon CloudWatch log stream Amazon Resource Name (ARN).

- Type: CloudWatchLoggingOption (p. 114) object
- Required: Yes

**CurrentApplicationVersionId (p. 3)**

The version ID of the Kinesis Data Analytics application. You can retrieve the application version ID using DescribeApplication (p. 54).

- Type: Long
- Valid Range: Minimum value of 1. Maximum value of 999999999.
- Required: Yes

Response Syntax

```
{
  "ApplicationARN": "string",
  "ApplicationVersionId": number,
  "CloudWatchLoggingOptionDescriptions": [
    {
      "CloudWatchLoggingOptionId": "string",
      "LogStreamARN": "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.

**ApplicationARN (p. 3)**

The application's ARN.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.

Pattern: arn:.*

**ApplicationVersionId (p. 3)**

The new version ID of the Kinesis Data Analytics application. Kinesis Data Analytics updates the ApplicationVersionId each time you change the CloudWatch logging options.

Type: Long

Valid Range: Minimum value of 1. Maximum value of 999999999.

**CloudWatchLoggingOptionDescriptions (p. 3)**

The descriptions of the current CloudWatch logging options for the Kinesis Data Analytics application.

Type: Array of CloudWatchLoggingOptionDescription (p. 115) objects

**Errors**

**ConcurrentModificationException**

Exception thrown as a result of concurrent modifications to an application. This error can be the result of attempting to modify an application without using the current application ID.

HTTP Status Code: 400

**InvalidApplicationConfigurationException**

The user-provided application configuration is not valid.

HTTP Status Code: 400

**InvalidArgumentException**

The specified input parameter value is not valid.

HTTP Status Code: 400

**InvalidRequestException**

The request JSON is not valid for the operation.
HTTP Status Code: 400

ResourceInUseException

The application is not available for this operation.

HTTP Status Code: 400

ResourceNotFoundException

Specified application can't be found.

HTTP Status Code: 400

See Also

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

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

Adds a streaming source to your SQL-based Amazon Kinesis Data Analytics application.

You can add a streaming source when you create an application, or you can use this operation to add a streaming source after you create an application. For more information, see CreateApplication (p. 24).

Any configuration update, including adding a streaming source using this operation, results in a new version of the application. You can use the DescribeApplication (p. 54) operation to find the current application version.

Request Syntax

```
{
  "ApplicationName": "string",
  "CurrentApplicationVersionId": number,
  "Input": {
    "InputParallelism": {
      "Count": number
    },
    "InputProcessingConfiguration": {
      "InputLambdaProcessor": {
        "ResourceARN": "string"
      }
    },
    "InputSchema": {
      "RecordColumns": [
        {
          "Mapping": "string",
          "Name": "string",
          "SqlType": "string"
        }
      ],
      "RecordEncoding": "string",
      "RecordFormat": {
        "MappingParameters": {
          "CSVMappingParameters": {
            "RecordColumnDelimiter": "string",
            "RecordRowDelimiter": "string"
          },
          "JSONMappingParameters": {
            "RecordRowPath": "string"
          }
        },
        "RecordFormatType": "string"
      }
    },
    "KinesisFirehoseInput": {
      "ResourceARN": "string"
    },
    "KinesisStreamsInput": {
      "ResourceARN": "string"
    },
    "NamePrefix": "string"
  }
}
```

Request Parameters

The request accepts the following data in JSON format.
ApplicationName (p. 6)

The name of your existing application to which you want to add the streaming source.

Type: String


Pattern: [a-zA-Z0-9_.-]+

Required: Yes

CurrentApplicationVersionId (p. 6)

The current version of your application. You can use the DescribeApplication (p. 54) operation to find the current application version.

Type: Long

Valid Range: Minimum value of 1. Maximum value of 999999999.

Required: Yes

Input (p. 6)

The Input (p. 129) to add.

Type: Input (p. 129) object

Required: Yes

Response Syntax

```json
{
  "ApplicationARN": "string",
  "ApplicationVersionId": number,
  "InputDescriptions": [
    {
      "InAppStreamNames": [ "string" ],
      "InputId": "string",
      "InputParallelism": {
        "Count": number
      },
      "InputProcessingConfigurationDescription": {
        "InputLambdaProcessorDescription": {
          "ResourceARN": "string",
          "RoleARN": "string"
        }
      },
      "InputSchema": {
        "RecordColumns": [
          {
            "Mapping": "string",
            "Name": "string",
            "SqlType": "string"
          }
        ],
        "RecordEncoding": "string",
        "RecordFormat": {
          "MappingParameters": {
            "CSVMappingParameters": {
              "RecordColumnDelimiter": "string",
              "RecordRowDelimiter": "string"
            }
          }
        }
      }
    }
  ]
}
```

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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.

**ApplicationARN (p. 7)**

The Amazon Resource Name (ARN) of the application.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.

Pattern: arn:.*

**ApplicationVersionId (p. 7)**

Provides the current application version.

Type: Long

Valid Range: Minimum value of 1. Maximum value of 999999999.

**InputDescriptions (p. 7)**

Describes the application input configuration.

Type: Array of InputDescription (p. 131) objects

**Errors**

**CodeValidationException**

The user-provided application code (query) is not valid. This can be a simple syntax error.

HTTP Status Code: 400
ConcurrentModificationException

Exception thrown as a result of concurrent modifications to an application. This error can be the result of attempting to modify an application without using the current application ID.

HTTP Status Code: 400

InvalidArgumentException

The specified input parameter value is not valid.

HTTP Status Code: 400

InvalidRequestException

The request JSON is not valid for the operation.

HTTP Status Code: 400

ResourceInUseException

The application is not available for this operation.

HTTP Status Code: 400

ResourceNotFoundException

Specified application can't be found.

HTTP Status Code: 400

See Also

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

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

Adds an InputProcessingConfiguration (p. 138) to an SQL-based Kinesis Data Analytics application. An input processor pre-processes records on the input stream before the application's SQL code executes. Currently, the only input processor available is AWS Lambda.

Request Syntax

```json
{
  "ApplicationName": "string",
  "CurrentApplicationVersionId": number,
  "InputId": "string",
  "InputProcessingConfiguration": {
    "InputLambdaProcessor": {
      "ResourceARN": "string"
    }
  }
}
```

Request Parameters

The request accepts the following data in JSON format.

**ApplicationName (p. 10)**

The name of the application to which you want to add the input processing configuration.

- Type: String
- Pattern: [a-zA-Z0-9_.-]+
- Required: Yes

**CurrentApplicationVersionId (p. 10)**

The version of the application to which you want to add the input processing configuration. You can use the DescribeApplication (p. 54) operation to get the current application version. If the version specified is not the current version, the ConcurrentModificationException is returned.

- Type: Long
- Valid Range: Minimum value of 1. Maximum value of 999999999.
- Required: Yes

**InputId (p. 10)**

The ID of the input configuration to add the input processing configuration to. You can get a list of the input IDs for an application using the DescribeApplication (p. 54) operation.

- Type: String
- Pattern: [a-zA-Z0-9_.-]+
- Required: Yes
InputProcessingConfiguration (p. 10)

The InputProcessingConfiguration (p. 138) to add to the application.

Type: InputProcessingConfiguration (p. 138) object

Required: Yes

Response Syntax

```
{
    "ApplicationARN": "string",
    "ApplicationVersionId": number,
    "InputId": "string",
    "InputProcessingConfigurationDescription": {
        "InputLambdaProcessorDescription": {
            "ResourceARN": "string",
            "RoleARN": "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.

ApplicationARN (p. 11)

The Amazon Resource Name (ARN) of the application.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.

Pattern: arn:.*

ApplicationVersionId (p. 11)

Provides the current application version.

Type: Long

Valid Range: Minimum value of 1. Maximum value of 999999999.

InputId (p. 11)

The input ID that is associated with the application input. This is the ID that Amazon Kinesis Data Analytics assigns to each input configuration that you add to your application.

Type: String


Pattern: [a-zA-Z0-9_.-]+

InputProcessingConfigurationDescription (p. 11)

The description of the preprocessor that executes on records in this input before the application's code is run.
Errors

ConcurrentModificationException

Exception thrown as a result of concurrent modifications to an application. This error can be the result of attempting to modify an application without using the current application ID.

HTTP Status Code: 400

InvalidArgumentException

The specified input parameter value is not valid.

HTTP Status Code: 400

InvalidRequestException

The request JSON is not valid for the operation.

HTTP Status Code: 400

ResourceInUseException

The application is not available for this operation.

HTTP Status Code: 400

ResourceNotFoundException

Specified application can't be found.

HTTP Status Code: 400

See Also

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

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

Adds an external destination to your SQL-based Amazon Kinesis Data Analytics application.

If you want Kinesis Data Analytics to deliver data from an in-application stream within your application to an external destination (such as an Kinesis data stream, a Kinesis Data Firehose delivery stream, or an AWS Lambda function), you add the relevant configuration to your application using this operation. You can configure one or more outputs for your application. Each output configuration maps an in-application stream and an external destination.

You can use one of the output configurations to deliver data from your in-application error stream to an external destination so that you can analyze the errors.

Any configuration update, including adding a streaming source using this operation, results in a new version of the application. You can use the DescribeApplication (p. 54) operation to find the current application version.

Request Syntax

```json
{
   "ApplicationName": "string",
   "CurrentApplicationVersionId": number,
   "Output": {
      "DestinationSchema": {
         "RecordFormatType": "string"
      },
      "KinesisFirehoseOutput": {
         "ResourceARN": "string"
      },
      "KinesisStreamsOutput": {
         "ResourceARN": "string"
      },
      "LambdaOutput": {
         "ResourceARN": "string"
      },
      "Name": "string"
   }
}
```

Request Parameters

The request accepts the following data in JSON format.

**ApplicationName (p. 13)**

The name of the application to which you want to add the output configuration.

Type: String


Pattern: [a-zA-Z0-9_-.]+

Required: Yes

**CurrentApplicationVersionId (p. 13)**

The version of the application to which you want to add the output configuration. You can use the DescribeApplication (p. 54) operation to get the current application version. If the version specified is not the current version, the ConcurrentModificationException is returned.
Type: Long

Valid Range: Minimum value of 1. Maximum value of 999999999.

Required: Yes

Output (p. 13)

An array of objects, each describing one output configuration. In the output configuration, you specify the name of an in-application stream, a destination (that is, a Kinesis data stream, a Kinesis Data Firehose delivery stream, or an AWS Lambda function), and record the formation to use when writing to the destination.

Type: Output (p. 165) object

Required: Yes

Response Syntax

```json
{
  "ApplicationARN": "string",
  "ApplicationVersionId": number,
  "OutputDescriptions": [
    {
      "DestinationSchema": {
        "RecordFormatType": "string"
      },
      "KinesisFirehoseOutputDescription": {
        "ResourceARN": "string",
        "RoleARN": "string"
      },
      "KinesisStreamsOutputDescription": {
        "ResourceARN": "string",
        "RoleARN": "string"
      },
      "LambdaOutputDescription": {
        "ResourceARN": "string",
        "RoleARN": "string"
      },
      "Name": "string",
      "OutputId": "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.

ApplicationARN (p. 14)

The application Amazon Resource Name (ARN).

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.

Pattern: arn:.*
**ApplicationVersionId (p. 14)**

The updated application version ID. Kinesis Data Analytics increments this ID when the application is updated.

Type: Long

Valid Range: Minimum value of 1. Maximum value of 999999999.

**OutputDescriptions (p. 14)**

Describes the application output configuration. For more information, see Configuring Application Output.

Type: Array of **OutputDescription (p. 166) objects**

**Errors**

**ConcurrentModificationException**

Exception thrown as a result of concurrent modifications to an application. This error can be the result of attempting to modify an application without using the current application ID.

HTTP Status Code: 400

**InvalidArgumentException**

The specified input parameter value is not valid.

HTTP Status Code: 400

**InvalidRequestException**

The request JSON is not valid for the operation.

HTTP Status Code: 400

**ResourceInUseException**

The application is not available for this operation.

HTTP Status Code: 400

**ResourceNotFoundException**

Specified application can't be found.

HTTP Status Code: 400

**See Also**

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
See Also

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

Adds a reference data source to an existing SQL-based Amazon Kinesis Data Analytics application.

Kinesis Data Analytics reads reference data (that is, an Amazon S3 object) and creates an in-application table within your application. In the request, you provide the source (S3 bucket name and object key name), name of the in-application table to create, and the necessary mapping information that describes how data in an Amazon S3 object maps to columns in the resulting in-application table.

Request Syntax

```
{
  "ApplicationName": "string",
  "CurrentApplicationVersionId": number,
  "ReferenceDataSource": {
    "ReferenceSchema": {
      "RecordColumns": [
        {
          "Mapping": "string",
          "Name": "string",
          "SqlType": "string"
        }
      ],
      "RecordEncoding": "string",
      "RecordFormat": {
        "MappingParameters": {
          "CSVMappingParameters": {
            "RecordColumnDelimiter": "string",
            "RecordRowDelimiter": "string"
          },
          "JSONMappingParameters": {
            "RecordRowPath": "string"
          }
        },
        "RecordFormatType": "string"
      }
    },
    "S3ReferenceDataSource": {
      "BucketARN": "string",
      "FileKey": "string"
    },
    "TableName": "string"
  }
}
```

Request Parameters

The request accepts the following data in JSON format.

**ApplicationName (p. 17)**

The name of an existing application.

Type: String


Pattern: [a-zA-Z0-9_.-]+

Required: Yes
CurrentApplicationVersionId (p. 17)

The version of the application for which you are adding the reference data source. You can use the DescribeApplication (p. 54) operation to get the current application version. If the version specified is not the current version, the ConcurrentModificationException is returned.

Type: Long

Valid Range: Minimum value of 1. Maximum value of 999999999.

Required: Yes

ReferenceDataSource (p. 17)

The reference data source can be an object in your Amazon S3 bucket. Kinesis Data Analytics reads the object and copies the data into the in-application table that is created. You provide an S3 bucket, object key name, and the resulting in-application table that is created.

Type: ReferenceDataSource (p. 179) object

Required: Yes

Response Syntax

```json
{
   "ApplicationARN": "string",
   "ApplicationVersionId": number,
   "ReferenceDataSourceDescriptions": [
      {
         "ReferenceId": "string",
         "ReferenceSchema": {
            "RecordColumns": [
               {
                  "Mapping": "string",
                  "Name": "string",
                  "SqlType": "string"
               }
            ],
            "RecordEncoding": "string",
            "RecordFormat": {
               "MappingParameters": {
                  "CSVMappingParameters": {
                     "RecordColumnDelimiter": "string",
                     "RecordRowDelimiter": "string"
                  },
                  "JSONMappingParameters": {
                     "RecordRowPath": "string"
                  }
               },
               "RecordFormatType": "string"
            }
         },
         "S3ReferenceDataSourceDescription": {
            "BucketARN": "string",
            "FileKey": "string",
            "ReferenceRoleARN": "string"
         },
         "TableName": "string"
      }
   ]
}
```

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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.

ApplicationARN (p. 18)

The application Amazon Resource Name (ARN).
Type: String
Length Constraints: Minimum length of 1. Maximum length of 2048.
Pattern: arn:.*

ApplicationVersionId (p. 18)

The updated application version ID. Amazon Kinesis Data Analytics increments this ID when the application is updated.
Type: Long
Valid Range: Minimum value of 1. Maximum value of 999999999.

ReferenceDataSourceDescriptions (p. 18)

Describes reference data sources configured for the application.
Type: Array of ReferenceDataSourceDescription (p. 180) objects

Errors

ConcurrentModificationException

Exception thrown as a result of concurrent modifications to an application. This error can be the result of attempting to modify an application without using the current application ID.

HTTP Status Code: 400

InvalidArgumentException

The specified input parameter value is not valid.

HTTP Status Code: 400

InvalidRequestException

The request JSON is not valid for the operation.

HTTP Status Code: 400

ResourceInUseException

The application is not available for this operation.

HTTP Status Code: 400

ResourceNotFoundException

Specified application can't be found.

HTTP Status Code: 400
See Also

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

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

Adds a Virtual Private Cloud (VPC) configuration to the application. Applications can use VPCs to store and access resources securely.

Note the following about VPC configurations for Kinesis Data Analytics applications:

- VPC configurations are not supported for SQL applications.
- When a VPC is added to a Kinesis Data Analytics application, the application can no longer be accessed from the Internet directly. To enable Internet access to the application, add an Internet gateway to your VPC.

Request Syntax

```json
{
  "ApplicationName": "string",
  "CurrentApplicationVersionId": number,
  "VpcConfiguration": {
    "SecurityGroupIds": [ "string" ],
    "SubnetIds": [ "string" ]
  }
}
```

Request Parameters

The request accepts the following data in JSON format.

**ApplicationName (p. 21)**

The name of an existing application.

Type: String


Pattern: [a-zA-Z0-9_.-]+

Required: Yes

**CurrentApplicationVersionId (p. 21)**

The version of the application to which you want to add the input processing configuration. You can use the DescribeApplication (p. 54) operation to get the current application version. If the version specified is not the current version, the ConcurrentModificationException is returned.

Type: Long

Valid Range: Minimum value of 1. Maximum value of 999999999.

Required: Yes

**VpcConfiguration (p. 21)**

Description of the VPC to add to the application.

Type: VpcConfiguration (p. 200) object

Required: Yes
Response Syntax

```
{  "ApplicationARN": "string",
   "ApplicationVersionId": number,
   "VpcConfigurationDescription": {
      "SecurityGroupIds": [ "string" ],
      "SubnetIds": [ "string" ],
      "VpcConfigurationId": "string",
      "VpcId": "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.

**ApplicationARN (p. 22)**

The ARN of the application.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.

Pattern: arn:.*

**ApplicationVersionId (p. 22)**

Provides the current application version. Kinesis Data Analytics updates the ApplicationVersionId each time you update the application.

Type: Long

Valid Range: Minimum value of 1. Maximum value of 999999999.

**VpcConfigurationDescription (p. 22)**

The parameters of the new VPC configuration.

Type: VpcConfigurationDescription (p. 201) object

Errors

**ConcurrentModificationException**

Exception thrown as a result of concurrent modifications to an application. This error can be the result of attempting to modify an application without using the current application ID.

HTTP Status Code: 400

**InvalidArgumentException**

The specified input parameter value is not valid.

HTTP Status Code: 400
ResourceInUseException
The application is not available for this operation.
HTTP Status Code: 400
ResourceNotFoundException
Specified application can't be found.
HTTP Status Code: 400

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

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

Creates an Amazon Kinesis Data Analytics application. For information about creating a Kinesis Data Analytics application, see Creating an Application.

Request Syntax

```json
{
   "ApplicationConfiguration": {
      "ApplicationCodeConfiguration": {
         "CodeContent": {
            "S3ContentLocation": {
               "BucketARN": "string",
               "FileKey": "string",
               "ObjectVersion": "string"
            },
            "TextContent": "string",
            "ZipFileContent": blob
         },
         "CodeContentType": "string"
      },
      "ApplicationSnapshotConfiguration": {
         "SnapshotsEnabled": boolean
      },
      "EnvironmentProperties": {
         "PropertyGroups": [{
            "PropertyGroupId": "string",
            "PropertyMap": {
               "string": "string"
            }
         }]
      }
   },
   "FlinkApplicationConfiguration": {
      "CheckpointConfiguration": {
         "CheckpointingEnabled": boolean,
         "CheckpointInterval": number,
         "ConfigurationType": "string",
         "MinPauseBetweenCheckpoints": number
      },
      "MonitoringConfiguration": {
         "ConfigurationType": "string",
         "LogLevel": "string",
         "MetricsLevel": "string"
      },
      "ParallelismConfiguration": {
         "AutoScalingEnabled": boolean,
         "ConfigurationType": "string",
         "Parallelism": number,
         "ParallelismPerKPU": number
      }
   },
   "SqlApplicationConfiguration": {
      "Inputs": [
         {
            "InputParallelism": {
               "Count": number
            },
            "InputProcessingConfiguration": {
               "InputLambdaProcessor": {
                  "ResourceARN": "string"
               }
            }
         }
      ]
   }
}
```

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"InputSchema": { 
  "RecordColumns": [ 
    { 
      "Mapping": "string",
      "Name": "string",
      "SqlType": "string"
    }
  ],
  "RecordEncoding": "string",
  "RecordFormat": { 
    "MappingParameters": { 
      "CSVMappingParameters": { 
        "RecordColumnDelimiter": "string",
        "RecordRowDelimiter": "string"
      },
      "JSONMappingParameters": { 
        "RecordRowPath": "string"
      }
    },
    "RecordFormatType": "string"
  }
},
"KinesisFirehoseInput": { 
  "ResourceARN": "string"
},
"KinesisStreamsInput": { 
  "ResourceARN": "string"
},
"NamePrefix": "string"
],
"Outputs": [ 
  { 
    "DestinationSchema": { 
      "RecordFormatType": "string"
    },
    "KinesisFirehoseOutput": { 
      "ResourceARN": "string"
    },
    "KinesisStreamsOutput": { 
      "ResourceARN": "string"
    },
    "LambdaOutput": { 
      "ResourceARN": "string"
    },
    "Name": "string"
  }
],
"ReferenceDataSources": [ 
  { 
    "ReferenceSchema": { 
      "RecordColumns": [ 
        { 
          "Mapping": "string",
          "Name": "string",
          "SqlType": "string"
        }
      ],
      "RecordEncoding": "string",
      "RecordFormat": { 
        "MappingParameters": { 
          "CSVMappingParameters": { 
            "RecordColumnDelimiter": "string",
            "RecordRowDelimiter": "string"
          }
        }
      }
    }
  }
]
Request Parameters

The request accepts the following data in JSON format.

**ApplicationConfiguration (p. 24)**

Use this parameter to configure the application.

Type: ApplicationConfiguration (p. 94) object

Required: No

**ApplicationDescription (p. 24)**

A summary description of the application.

Type: String

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

Required: No

**ApplicationName (p. 24)**

The name of your application (for example, sample-app).
Response Syntax

```json
{
  "ApplicationDetail": {
    "ApplicationARN": "string",
    "ApplicationConfigurationDescription": {
      "ApplicationCodeConfigurationDescription": {
        "CodeContentDescription": {
          "CodeMD5": "string",
          "CodeSize": number,
          "S3ApplicationCodeLocationDescription": {
            "CloudWatchLoggingOptions": [CloudWatchLoggingOption] (p. 114)
          } (p. 24)
        } (p. 24)
      } (p. 24)
    } (p. 24)
  } (p. 24)
}
```

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Response Syntax

```json
{
  "BucketARN": "string",
  "FileKey": "string",
  "ObjectVersion": "string"
}
  
  "TextContent": "string"
}
  
  "CodeContentType": "string"
}

"ApplicationSnapshotConfigurationDescription": {
  "SnapshotsEnabled": boolean
}
,

"EnvironmentPropertyDescriptions": {
  "PropertyGroupDescriptions": [
  
  { "PropertyGroupId": "string",
    "PropertyMap": {
      "string": "string"
    }
  }
  ]
}

"FlinkApplicationConfigurationDescription": {
  "CheckpointConfigurationDescription": {
    "CheckpointingEnabled": boolean,
    "CheckpointInterval": number,
    "ConfigurationType": "string",
    "MinPauseBetweenCheckpoints": number
  },
  "JobPlanDescription": "string",
  "MonitoringConfigurationDescription": {
    "ConfigurationType": "string",
    "LogLevel": "string",
    "MetricsLevel": "string"
  },
  "ParallelismConfigurationDescription": {
    "AutoScalingEnabled": boolean,
    "ConfigurationType": "string",
    "CurrentParallelism": number,
    "Parallelism": number,
    "ParallelismPerKPU": number
  }
},

"RunConfigurationDescription": {
  "ApplicationRestoreConfigurationDescription": {
    "ApplicationRestoreType": "string",
    "SnapshotName": "string"
  },
  "FlinkRunConfigurationDescription": {
    "AllowNonRestoredState": boolean
  }
},

"SqlApplicationConfigurationDescription": {
  "InputDescriptions": [
  
  { "InAppStreamNames": [ "string" ],
    "InputId": "string",
    "InputParallelism": {
      "Count": number
    },
    "InputProcessingConfigurationDescription": {
      "InputLambdaProcessorDescription": {
        "ResourceARN": "string",
        "RoleARN": "string"
      }
    }
  },
  "InputSchema": {
```
"RecordColumns": [
  {
    "Mapping": "string",
    "Name": "string",
    "SqlType": "string"
  }
],
"RecordEncoding": "string",
"RecordFormat": {
  "MappingParameters": {
    "CSVMappingParameters": {
      "RecordColumnDelimiter": "string",
      "RecordRowDelimiter": "string"
    },
    "JSONMappingParameters": {
      "RecordRowPath": "string"
    }
  },
  "RecordFormatType": "string"
},
"InputStartingPositionConfiguration": {
  "InputStartingPosition": "string"
},
"KinesisFirehoseInputDescription": {
  "ResourceARN": "string",
  "RoleARN": "string"
},
"KinesisStreamsInputDescription": {
  "ResourceARN": "string",
  "RoleARN": "string"
},
"NamePrefix": "string"
],
"OutputDescriptions": [
  {
    "DestinationSchema": {
      "RecordFormatType": "string"
    },
    "KinesisFirehoseOutputDescription": {
      "ResourceARN": "string",
      "RoleARN": "string"
    },
    "KinesisStreamsOutputDescription": {
      "ResourceARN": "string",
      "RoleARN": "string"
    },
    "LambdaOutputDescription": {
      "ResourceARN": "string",
      "RoleARN": "string"
    },
    "Name": "string",
    "OutputId": "string"
  }
],
"ReferenceDataSourceDescriptions": [
  {
    "ReferenceId": "string",
    "ReferenceSchema": {
      "RecordColumns": [
        {
          "Mapping": "string",
          "Name": "string",
          "SqlType": "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.

**ApplicationDetail (p. 27)**

In response to your `CreateApplication` request, Kinesis Data Analytics returns a response with details of the application it created.

Type: `ApplicationDetail (p. 100)` object
Errors

**CodeValidationException**

The user-provided application code (query) is not valid. This can be a simple syntax error.

HTTP Status Code: 400

**ConcurrentModificationException**

Exception thrown as a result of concurrent modifications to an application. This error can be the result of attempting to modify an application without using the current application ID.

HTTP Status Code: 400

**InvalidArgumentException**

The specified input parameter value is not valid.

HTTP Status Code: 400

**InvalidRequestException**

The request JSON is not valid for the operation.

HTTP Status Code: 400

**LimitExceededException**

The number of allowed resources has been exceeded.

HTTP Status Code: 400

**ResourceInUseException**

The application is not available for this operation.

HTTP Status Code: 400

**ToManyTagsException**

Application created with too many tags, or too many tags added to an application. Note that the maximum number of application tags includes system tags. The maximum number of user-defined application tags is 50.

HTTP Status Code: 400

See Also

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

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

Creates a snapshot of the application's state data.

Request Syntax

```
{
   "ApplicationName": "string",
   "SnapshotName": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

**ApplicationName (p. 33)**

The name of an existing application

Type: String


Pattern: [a-zA-Z0-9_.-]+

Required: Yes

**SnapshotName (p. 33)**

An identifier for the application snapshot.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 256.

Pattern: [a-zA-Z0-9_.-]+

Required: Yes

Response Elements

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

Errors

**InvalidArgumentException**

The specified input parameter value is not valid.

HTTP Status Code: 400

**InvalidRequestException**

The request JSON is not valid for the operation.

HTTP Status Code: 400
LimitExceededException
The number of allowed resources has been exceeded.
HTTP Status Code: 400

ResourceInUseException
The application is not available for this operation.
HTTP Status Code: 400

ResourceNotFoundException
Specified application can't be found.
HTTP Status Code: 400

UnsupportedOperationException
The request was rejected because a specified parameter is not supported or a specified resource is not valid for this operation.
HTTP Status Code: 400

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

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

Deletes the specified application. Kinesis Data Analytics halts application execution and deletes the application.

Request Syntax

```json
{
   "ApplicationName": "string",
   "CreateTimestamp": number
}
```

Request Parameters

The request accepts the following data in JSON format.

**ApplicationName (p. 35)**

The name of the application to delete.

Type: String


Pattern: [a-zA-Z0-9_.-]+

Required: Yes

**CreateTimestamp (p. 35)**

Use the DescribeApplication operation to get this value.

Type: Timestamp

Required: Yes

Response Elements

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

Errors

**ConcurrentModificationException**

Exception thrown as a result of concurrent modifications to an application. This error can be the result of attempting to modify an application without using the current application ID.

HTTP Status Code: 400

**InvalidApplicationConfigurationException**

The user-provided application configuration is not valid.

HTTP Status Code: 400

**InvalidArgumentException**

The specified input parameter value is not valid.
HTTP Status Code: 400

InvalidRequestException

The request JSON is not valid for the operation.

HTTP Status Code: 400

ResourceInUseException

The application is not available for this operation.

HTTP Status Code: 400

ResourceNotFoundException

Specified application can't be found.

HTTP Status Code: 400

See Also

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

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

Deletes an Amazon CloudWatch log stream from an Amazon Kinesis Data Analytics application.

Request Syntax

```json
{
   "ApplicationName": "string",
   "CloudWatchLoggingOptionId": "string",
   "CurrentApplicationVersionId": number
}
```

Request Parameters

The request accepts the following data in JSON format.

**ApplicationName (p. 37)**

The application name.

Type: String


Pattern: [a-zA-Z0-9_.-]+

Required: Yes

**CloudWatchLoggingOptionId (p. 37)**

The CloudWatchLoggingOptionId of the Amazon CloudWatch logging option to delete. You can get the CloudWatchLoggingOptionId by using the DescribeApplication (p. 54) operation.

Type: String


Pattern: [a-zA-Z0-9_.-]+

Required: Yes

**CurrentApplicationVersionId (p. 37)**

The version ID of the application. You can retrieve the application version ID using DescribeApplication (p. 54).

Type: Long

Valid Range: Minimum value of 1. Maximum value of 999999999.

Required: Yes

Response Syntax

```json
{
   "ApplicationARN": "string",
   "ApplicationVersionId": number,
   "CloudWatchLoggingOptionDescriptions": [ ...
```
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.

**ApplicationARN (p. 37)**

The application's Amazon Resource Name (ARN).

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.

Pattern: arn:.*

**ApplicationVersionId (p. 37)**

The version ID of the application. Kinesis Data Analytics updates the ApplicationVersionId each time you change the CloudWatch logging options.

Type: Long

Valid Range: Minimum value of 1. Maximum value of 999999999.

**CloudWatchLoggingOptionDescriptions (p. 37)**

The descriptions of the remaining CloudWatch logging options for the application.

Type: Array of CloudWatchLoggingOptionDescription (p. 115) objects

Errors

**ConcurrentModificationException**

Exception thrown as a result of concurrent modifications to an application. This error can be the result of attempting to modify an application without using the current application ID.

HTTP Status Code: 400

**InvalidApplicationConfigurationException**

The user-provided application configuration is not valid.

HTTP Status Code: 400

**InvalidArgumentException**

The specified input parameter value is not valid.

HTTP Status Code: 400

**InvalidRequestException**

The request JSON is not valid for the operation.
HTTP Status Code: 400

ResourceInUseException
The application is not available for this operation.

HTTP Status Code: 400

ResourceNotFoundException
Specified application can't be found.

HTTP Status Code: 400

See Also

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

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

Deletes an InputProcessingConfiguration (p. 138) from an input.

Request Syntax

```
{
  "ApplicationName": "string",
  "CurrentApplicationVersionId": number,  
  "InputId": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

**ApplicationName (p. 40)**

The name of the application.

Type: String


Pattern: [a-zA-Z0-9_.-]+

Required: Yes

**CurrentApplicationVersionId (p. 40)**

The application version. You can use the DescribeApplication (p. 54) operation to get the current application version. If the version specified is not the current version, the ConcurrentModificationException is returned.

Type: Long

Valid Range: Minimum value of 1. Maximum value of 999999999.

Required: Yes

**InputId (p. 40)**

The ID of the input configuration from which to delete the input processing configuration. You can get a list of the input IDs for an application by using the DescribeApplication (p. 54) operation.

Type: String


Pattern: [a-zA-Z0-9_.-]+

Required: Yes

Response Syntax

```
{
  "ApplicationARN": "string",
  "ApplicationVersionId": number
}
```

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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.

**ApplicationARN (p. 40)**

The Amazon Resource Name (ARN) of the application.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.

Pattern: arn:.*

**ApplicationVersionId (p. 40)**

The current application version ID.

Type: Long

Valid Range: Minimum value of 1. Maximum value of 999999999.

Errors

**ConcurrentModificationException**

Exception thrown as a result of concurrent modifications to an application. This error can be the result of attempting to modify an application without using the current application ID.

HTTP Status Code: 400

**InvalidArgumentException**

The specified input parameter value is not valid.

HTTP Status Code: 400

**InvalidRequestException**

The request JSON is not valid for the operation.

HTTP Status Code: 400

**ResourceInUseException**

The application is not available for this operation.

HTTP Status Code: 400

**ResourceNotFoundException**

Specified application can't be found.

HTTP Status Code: 400

See Also

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

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

Deletes the output destination configuration from your SQL-based Amazon Kinesis Data Analytics application's configuration. Kinesis Data Analytics will no longer write data from the corresponding in-application stream to the external output destination.

Request Syntax

```json
{
    "ApplicationName": "string",
    "CurrentApplicationVersionId": number,
    "OutputId": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

**ApplicationName (p. 43)**

The application name.

Type: String


Pattern: [a-zA-Z0-9_.-]+

Required: Yes

**CurrentApplicationVersionId (p. 43)**

The application version. You can use the DescribeApplication (p. 54) operation to get the current application version. If the version specified is not the current version, the ConcurrentModificationException is returned.

Type: Long

Valid Range: Minimum value of 1. Maximum value of 999999999.

Required: Yes

**OutputId (p. 43)**

The ID of the configuration to delete. Each output configuration that is added to the application (either when the application is created or later) using the AddApplicationOutput (p. 13) operation has a unique ID. You need to provide the ID to uniquely identify the output configuration that you want to delete from the application configuration. You can use the DescribeApplication (p. 54) operation to get the specific OutputId.

Type: String


Pattern: [a-zA-Z0-9_.-]+

Required: Yes
Response Syntax

```json
{
    "ApplicationARN": "string",
    "ApplicationVersionId": 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.

**ApplicationARN (p. 44)**

The application Amazon Resource Name (ARN).

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.

Pattern: arn:.*

**ApplicationVersionId (p. 44)**

The current application version ID.

Type: Long

Valid Range: Minimum value of 1. Maximum value of 999999999.

Errors

**ConcurrentModificationException**

Exception thrown as a result of concurrent modifications to an application. This error can be the result of attempting to modify an application without using the current application ID.

HTTP Status Code: 400

**InvalidArgumentException**

The specified input parameter value is not valid.

HTTP Status Code: 400

**InvalidRequestException**

The request JSON is not valid for the operation.

HTTP Status Code: 400

**ResourceInUseException**

The application is not available for this operation.

HTTP Status Code: 400

**ResourceNotFoundException**

Specified application can't be found.

API Version 2018-05-23
HTTP Status Code: 400

See Also

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

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

Deletes a reference data source configuration from the specified SQL-based Amazon Kinesis Data Analytics application's configuration.

If the application is running, Kinesis Data Analytics immediately removes the in-application table that you created using the AddApplicationReferenceDataSource (p. 17) operation.

Request Syntax

```json
{
   "ApplicationName": "string",
   "CurrentApplicationVersionId": number,
   "ReferenceId": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

**ApplicationName (p. 46)**

The name of an existing application.

Type: String


Pattern: [a-zA-Z0-9_.-]+

Required: Yes

**CurrentApplicationVersionId (p. 46)**

The current application version. You can use the DescribeApplication (p. 54) operation to get the current application version. If the version specified is not the current version, the ConcurrentModificationException is returned.

Type: Long

Valid Range: Minimum value of 1. Maximum value of 999999999.

Required: Yes

**ReferenceId (p. 46)**

The ID of the reference data source. When you add a reference data source to your application using the AddApplicationReferenceDataSource (p. 17), Kinesis Data Analytics assigns an ID. You can use the DescribeApplication (p. 54) operation to get the reference ID.

Type: String


Pattern: [a-zA-Z0-9_.-]+

Required: Yes
Response Syntax

```json
{
   "ApplicationARN": "string",
   "ApplicationVersionId": 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.

**ApplicationARN (p. 47)**

The application Amazon Resource Name (ARN).

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.

Pattern: arn:.*

**ApplicationVersionId (p. 47)**

The updated version ID of the application.

Type: Long

Valid Range: Minimum value of 1. Maximum value of 999999999.

Errors

**ConcurrentModificationException**

Exception thrown as a result of concurrent modifications to an application. This error can be the result of attempting to modify an application without using the current application ID.

HTTP Status Code: 400

**InvalidArgumentException**

The specified input parameter value is not valid.

HTTP Status Code: 400

**InvalidRequestException**

The request JSON is not valid for the operation.

HTTP Status Code: 400

**ResourceInUseException**

The application is not available for this operation.

HTTP Status Code: 400

**ResourceNotFoundException**

Specified application can't be found.
HTTP Status Code: 400

See Also

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

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

Deletes a snapshot of application state.

Request Syntax

```
{
  "ApplicationName": "string",
  "SnapshotCreationTimestamp": number,
  "SnapshotName": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

**ApplicationName (p. 49)**

The name of an existing application.

Type: String


Pattern: [a-zA-Z0-9_.-]+

Required: Yes

**SnapshotCreationTimestamp (p. 49)**

The creation timestamp of the application snapshot to delete. You can retrieve this value using DescribeApplicationSnapshot (p. 59) or ListApplicationSnapshots (p. 67).

Type: Timestamp

Required: Yes

**SnapshotName (p. 49)**

The identifier for the snapshot delete.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 256.

Pattern: [a-zA-Z0-9_.-]+

Required: Yes

Response Elements

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

Errors

**InvalidArgumentException**

The specified input parameter value is not valid.
HTTP Status Code: 400

InvalidRequestException

The request JSON is not valid for the operation.

HTTP Status Code: 400

ResourceInUseException

The application is not available for this operation.

HTTP Status Code: 400

ResourceNotFoundException

Specified application can't be found.

HTTP Status Code: 400

UnsupportedOperationException

The request was rejected because a specified parameter is not supported or a specified resource is not valid for this operation.

HTTP Status Code: 400

See Also

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

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

Removes a VPC configuration from a Kinesis Data Analytics application.

Request Syntax

```json
{
    "ApplicationName": "string",
    "CurrentApplicationVersionId": number,
    "VpcConfigurationId": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

**ApplicationName (p. 51)**

The name of an existing application.

Type: String


Pattern: [a-zA-Z0-9_.-]+

Required: Yes

**CurrentApplicationVersionId (p. 51)**

The current application version ID. You can retrieve the application version ID using DescribeApplication (p. 54).

Type: Long

Valid Range: Minimum value of 1. Maximum value of 999999999.

Required: Yes

**VpcConfigurationId (p. 51)**

The ID of the VPC configuration to delete.

Type: String


Pattern: [a-zA-Z0-9_.-]+

Required: Yes

Response Syntax

```json
{
    "ApplicationARN": "string",
    "ApplicationVersionId": 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.

**ApplicationARN (p. 51)**

The ARN of the Kinesis Data Analytics application.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.

Pattern: arn:.*

**ApplicationVersionId (p. 51)**

The updated version ID of the application.

Type: Long

Valid Range: Minimum value of 1. Maximum value of 999999999.

Errors

**ConcurrentModificationException**

Exception thrown as a result of concurrent modifications to an application. This error can be the result of attempting to modify an application without using the current application ID.

HTTP Status Code: 400

**InvalidArgumentException**

The specified input parameter value is not valid.

HTTP Status Code: 400

**ResourceInUseException**

The application is not available for this operation.

HTTP Status Code: 400

**ResourceNotFoundException**

Specified application can't be found.

HTTP Status Code: 400

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go

API Version 2018-05-23
See Also

- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
DescribeApplication

Returns information about a specific Amazon Kinesis Data Analytics application.

If you want to retrieve a list of all applications in your account, use the ListApplications (p. 65) operation.

Request Syntax

```
{
    "ApplicationName": "string",
    "IncludeAdditionalDetails": boolean
}
```

Request Parameters

The request accepts the following data in JSON format.

**ApplicationName (p. 54)**

The name of the application.

Type: String


Pattern: [a-zA-Z0-9_.-]+

Required: Yes

**IncludeAdditionalDetails (p. 54)**

Displays verbose information about a Kinesis Data Analytics application, including the application's job plan.

Type: Boolean

Required: No

Response Syntax

```
{
    "ApplicationDetail": {
        "ApplicationARN": "string",
        "ApplicationConfigurationDescription": {
            "ApplicationCodeConfigurationDescription": {
                "CodeContentDescription": {
                    "CodeMD5": "string",
                    "CodeSize": number,
                    "S3ApplicationCodeLocationDescription": {
                        "BucketARN": "string",
                        "FileKey": "string",
                        "ObjectVersion": "string"
                    },
                    "TextContent": "string"
                }
            },
            "CodeContentType": "string"
        }
    }
}
```
"ApplicationSnapshotConfigurationDescription": {
  "SnapshotsEnabled": boolean
},
"EnvironmentPropertyDescriptions": {
  "PropertyGroupDescriptions": [ 
    {
      "PropertyGroupId": "string",
      "PropertyMap": {
        "string": "string"
      }
    }
  ]
},
"FlinkApplicationConfigurationDescription": {
  "CheckpointConfigurationDescription": {
    "CheckpointingEnabled": boolean,
    "CheckpointInterval": number,
    "ConfigurationType": "string",
    "MinPauseBetweenCheckpoints": number
  },
  "JobPlanDescription": "string",
  "MonitoringConfigurationDescription": {
    "ConfigurationType": "string",
    "LogLevel": "string",
    "MetricsLevel": "string"
  },
  "ParallelismConfigurationDescription": {
    "AutoScalingEnabled": boolean,
    "ConfigurationType": "string",
    "CurrentParallelism": number,
    "Parallelism": number,
    "ParallelismPerKPU": number
  }
},
"RunConfigurationDescription": {
  "ApplicationRestoreConfigurationDescription": {
    "ApplicationRestoreType": "string",
    "SnapshotName": "string"
  },
  "FlinkRunConfigurationDescription": {
    "AllowNonRestoredState": boolean
  }
},
"SqlApplicationConfigurationDescription": {
  "InputDescriptions": [ 
    {
      "InAppStreamNames": [ "string" ],
      "InputId": "string",
      "InputParallelism": {
        "Count": number
      },
      "InputProcessingConfigurationDescription": {
        "InputLambdaProcessorDescription": {
          "ResourceARN": "string",
          "RoleARN": "string"
        }
      },
      "InputSchema": {
        "RecordColumns": [ 
          {
            "Mapping": "string",
            "Name": "string",
            "SqlType": "string"
          }
        ],
        "RecordEncoding": "string"
      }
    }
  ]
}
"RecordFormat": {
  "MappingParameters": {
    "CSVMappingParameters": {
      "RecordColumnDelimiter": "string",
      "RecordRowDelimiter": "string"
    },
    "JSONMappingParameters": {
      "RecordRowPath": "string"
    }
  },
  "RecordFormatType": "string"
},
"InputStartingPositionConfiguration": {
  "InputStartingPosition": "string"
},
"KinesisFirehoseInputDescription": {
  "ResourceARN": "string",
  "RoleARN": "string"
},
"KinesisStreamsInputDescription": {
  "ResourceARN": "string",
  "RoleARN": "string"
},
"NamePrefix": "string"
],
"OutputDescriptions": [
  {
    "DestinationSchema": {
      "RecordFormatType": "string"
    },
    "KinesisFirehoseOutputDescription": {
      "ResourceARN": "string",
      "RoleARN": "string"
    },
    "KinesisStreamsOutputDescription": {
      "ResourceARN": "string",
      "RoleARN": "string"
    },
    "LambdaOutputDescription": {
      "ResourceARN": "string",
      "RoleARN": "string"
    },
    "Name": "string",
    "OutputId": "string"
  }
],
"ReferenceDataSourceDescriptions": [
  {
    "ReferenceId": "string",
    "ReferenceSchema": {
      "RecordColumns": [
        {
          "Mapping": "string",
          "Name": "string",
          "SqlType": "string"
        }
      ],
      "RecordEncoding": "string",
      "RecordFormat": {
        "MappingParameters": {
          "CSVMappingParameters": {
            "RecordColumnDelimiter": "string",
            "RecordRowDelimiter": "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.

ApplicationDetail (p. 54)

Provides a description of the application, such as the application’s Amazon Resource Name (ARN), status, and latest version.

Type: ApplicationDetail (p. 100) object

Errors

InvalidArgumentException

The specified input parameter value is not valid.
HTTP Status Code: 400

**InvalidRequestException**

The request JSON is not valid for the operation.

HTTP Status Code: 400

**ResourceNotFoundException**

Specified application can't be found.

HTTP Status Code: 400

### See Also

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

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

Returns information about a snapshot of application state data.

Request Syntax

```json
{
    "ApplicationName": "string",
    "SnapshotName": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

**ApplicationName (p. 59)**

The name of an existing application.

Type: String


Pattern: [a-zA-Z0-9_.-]+

Required: Yes

**SnapshotName (p. 59)**

The identifier of an application snapshot. You can retrieve this value using ListApplicationSnapshots (p. 67).

Type: String

Length Constraints: Minimum length of 1. Maximum length of 256.

Pattern: [a-zA-Z0-9_.-]+

Required: Yes

Response Syntax

```json
{
    "SnapshotDetails": {
        "ApplicationVersionId": number,
        "SnapshotCreationTimestamp": number,
        "SnapshotName": "string",
        "SnapshotStatus": "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.

API Version 2018-05-23
**SnapshotDetails (p. 59)**

An object containing information about the application snapshot.

Type: `SnapshotDetails (p. 193)` object

**Errors**

**InvalidArgumentException**

The specified input parameter value is not valid.

HTTP Status Code: 400

**ResourceNotFoundException**

Specified application can't be found.

HTTP Status Code: 400

**UnsupportedOperationException**

The request was rejected because a specified parameter is not supported or a specified resource is not valid for this operation.

HTTP Status Code: 400

**See Also**

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

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

Infers a schema for an SQL-based Amazon Kinesis Data Analytics application by evaluating sample records on the specified streaming source (Kinesis data stream or Kinesis Data Firehose delivery stream) or Amazon S3 object. In the response, the operation returns the inferred schema and also the sample records that the operation used to infer the schema.

You can use the inferred schema when configuring a streaming source for your application. When you create an application using the Kinesis Data Analytics console, the console uses this operation to infer a schema and show it in the console user interface.

Request Syntax

```json
{
    "InputProcessingConfiguration": {
        "InputLambdaProcessor": {
            "ResourceARN": "string"
        }
    },
    "InputStartingPositionConfiguration": {
        "InputStartingPosition": "string"
    },
    "ResourceARN": "string",
    "S3Configuration": {
        "BucketARN": "string",
        "FileKey": "string"
    },
    "ServiceExecutionRole": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

**InputProcessingConfiguration (p. 61)**

The `InputProcessingConfiguration` to use to preprocess the records before discovering the schema of the records.

Type: `InputProcessingConfiguration` object

Required: No

**InputStartingPositionConfiguration (p. 61)**

The point at which you want Kinesis Data Analytics to start reading records from the specified streaming source discovery purposes.

Type: `InputStartingPositionConfiguration` object

Required: No

**ResourceARN (p. 61)**

The Amazon Resource Name (ARN) of the streaming source.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.
Pattern: arn:.*
Required: No

S3Configuration (p. 61)
Specify this parameter to discover a schema from data in an Amazon S3 object.
Type: S3Configuration (p. 187) object
Required: No

ServiceExecutionRole (p. 61)
The ARN of the role that is used to access the streaming source.
Type: String
Length Constraints: Minimum length of 1. Maximum length of 2048.
Pattern: arn:aws:iam::*:role/?[a-zA-Z0-9+=,.@-_//]+
Required: Yes

Response Syntax

```json
{
  "InputSchema": {
    "RecordColumns": [
      {
        "Mapping": "string",
        "Name": "string",
        "SqlType": "string"
      }
    ],
    "RecordEncoding": "string",
    "RecordFormat": {
      "MappingParameters": {
        "CSVMappingParameters": {
          "RecordColumnDelimiter": "string",
          "RecordRowDelimiter": "string"
        },
        "JSONMappingParameters": {
          "RecordRowPath": "string"
        }
      },
      "RecordFormatType": "string"
    }
  }
},
"ParsedInputRecords": [
  "string"
],
"ProcessedInputRecords": [ "string" ],
"RawInputRecords": [ "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.
**InputSchema (p. 62)**

The schema inferred from the streaming source. It identifies the format of the data in the streaming source and how each data element maps to corresponding columns in the in-application stream that you can create.

Type: `SourceSchema (p. 194)` object

**ParsedInputRecords (p. 62)**

An array of elements, where each element corresponds to a row in a stream record (a stream record can have more than one row).

Type: Array of arrays of strings

**ProcessedInputRecords (p. 62)**

The stream data that was modified by the processor specified in the `InputProcessingConfiguration` parameter.

Type: Array of strings

**RawInputRecords (p. 62)**

The raw stream data that was sampled to infer the schema.

Type: Array of strings

---

**Errors**

**InvalidArgumentException**

The specified input parameter value is not valid.

HTTP Status Code: 400

**InvalidRequestException**

The request JSON is not valid for the operation.

HTTP Status Code: 400

**ResourceProvisionedThroughputExceededException**

Discovery failed to get a record from the streaming source because of the Amazon Kinesis Streams `ProvisionedThroughputExceededException`. For more information, see `GetRecords` in the Amazon Kinesis Streams API Reference.

HTTP Status Code: 400

**ServiceUnavailableException**

The service cannot complete the request.

HTTP Status Code: 500

**UnableToDetectSchemaException**

The data format is not valid. Amazon Kinesis Data Analytics cannot detect the schema for the given streaming source.

HTTP Status Code: 400
See Also

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

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

Returns a list of Amazon Kinesis Data Analytics applications in your account. For each application, the response includes the application name, Amazon Resource Name (ARN), and status.

If you want detailed information about a specific application, use DescribeApplication (p. 54).

Request Syntax

```json
{
  "Limit": number,
  "NextToken": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

Limit (p. 65)

The maximum number of applications to list.

Type: Integer


Required: No

NextToken (p. 65)

If a previous command returned a pagination token, pass it into this value to retrieve the next set of results. For more information about pagination, see Using the AWS Command Line Interface's Pagination Options.

Type: String


Pattern: [a-zA-Z0-9_.-]+

Required: No

Response Syntax

```json
{
  "ApplicationSummaries": [
    {
      "ApplicationARN": "string",
      "ApplicationName": "string",
      "ApplicationStatus": "string",
      "ApplicationVersionId": number,
      "RuntimeEnvironment": "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.

**ApplicationSummaries (p. 65)**

A list of `ApplicationSummary` objects.

*Type: Array of `ApplicationSummary (p. 106)` objects*

**NextToken (p. 65)**

The pagination token for the next set of results, or `null` if there are no additional results. Pass this token into a subsequent command to retrieve the next set of items. For more information about pagination, see Using the AWS Command Line Interface's Pagination Options.

*Type: String*


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

Errors

**InvalidRequestException**

The request JSON is not valid for the operation.

*HTTP Status Code: 400*

See Also

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

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

Lists information about the current application snapshots.

Request Syntax

```
{
   "ApplicationName": "string",
   "Limit": number,
   "NextToken": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

**ApplicationName (p. 67)**

The name of an existing application.

- Type: String
- Pattern: [a-zA-Z0-9_.-]+
- Required: Yes

**Limit (p. 67)**

The maximum number of application snapshots to list.

- Type: Integer
- Required: No

**NextToken (p. 67)**

Use this parameter if you receive a NextToken response in a previous request that indicates that there is more output available. Set it to the value of the previous call's NextToken response to indicate where the output should continue from.

- Type: String
- Required: No

Response Syntax

```
{
   "NextToken": "string",
   "SnapshotSummaries": [
   {
      "ApplicationVersionId": number,
      ...
   }
   ...
}
```

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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 (p. 67)

The token for the next set of results, or null if there are no additional results.

Type: String


SnapshotSummaries (p. 67)

A collection of objects containing information about the application snapshots.

Type: Array of SnapshotDetails (p. 193) objects

Errors

InvalidArgumentException

The specified input parameter value is not valid.

HTTP Status Code: 400

UnsupportedOperationException

The request was rejected because a specified parameter is not supported or a specified resource is not valid for this operation.

HTTP Status Code: 400

See Also

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

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

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ListTagsForResource

Retrieves the list of key-value tags assigned to the application. For more information, see Using Tagging.

Request Syntax

```
{
    "ResourceARN": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

ResourceARN (p. 70)

The ARN of the application for which to retrieve tags.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.

Pattern: `arn:aws:kinesisanalytics:[a-z]{2}-[a-z]+-[\d\{}1\d\}:\d\{12\}:+application/ [a-zA-Z0-9_.-]{1,128}`

Required: Yes

Response Syntax

```
{
    "Tags": [
        
        
    ]
}
```

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 (p. 70)

The key-value tags assigned to the application.

Type: Array of Tag (p. 199) objects

Array Members: Minimum number of 1 item. Maximum number of 200 items.
Errors

**ConcurrentModificationException**

Exception thrown as a result of concurrent modifications to an application. This error can be the result of attempting to modify an application without using the current application ID.

HTTP Status Code: 400

**InvalidArgumentException**

The specified input parameter value is not valid.

HTTP Status Code: 400

**ResourceNotFoundException**

Specified application can't be found.

HTTP Status Code: 400

See Also

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

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

Starts the specified Amazon Kinesis Data Analytics application. After creating an application, you must exclusively call this operation to start your application.

Request Syntax

```json
{
  "ApplicationName": "string",
  "RunConfiguration": {
    "ApplicationRestoreConfiguration": {
      "ApplicationRestoreType": "string",
      "SnapshotName": "string"
    },
    "FlinkRunConfiguration": {
      "AllowNonRestoredState": boolean
    },
    "SqlRunConfigurations": [
      {
        "InputId": "string",
        "InputStartingPositionConfiguration": {
          "InputStartingPosition": "string"
        }
      }
    ]
  }
}
```

Request Parameters

The request accepts the following data in JSON format.

**ApplicationName (p. 72)**

The name of the application.

Type: String


Pattern: [a-zA-Z0-9_.-]+

Required: Yes

**RunConfiguration (p. 72)**

Identifies the run configuration (start parameters) of a Kinesis Data Analytics application.

Type: RunConfiguration (p. 183) object

Required: Yes

Response Elements

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

InvalidApplicationConfigurationException
The user-provided application configuration is not valid.

HTTP Status Code: 400

InvalidArgumentException
The specified input parameter value is not valid.

HTTP Status Code: 400

InvalidRequestException
The request JSON is not valid for the operation.

HTTP Status Code: 400

ResourceInUseException
The application is not available for this operation.

HTTP Status Code: 400

ResourceNotFoundException
Specified application can't be found.

HTTP Status Code: 400

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

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

Stops the application from processing data. You can stop an application only if it is in the running state. You can use the DescribeApplication (p. 54) operation to find the application state.

Request Syntax

```
{
   "ApplicationName": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

**ApplicationName (p. 74)**

The name of the running application to stop.

- Type: String
- Pattern: [a-zA-Z0-9_.-]+
- Required: Yes

Response Elements

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

Errors

**InvalidApplicationConfigurationException**

The user-provided application configuration is not valid.

HTTP Status Code: 400

**InvalidArgumentException**

The specified input parameter value is not valid.

HTTP Status Code: 400

**InvalidRequestException**

The request JSON is not valid for the operation.

HTTP Status Code: 400

**ResourceInUseException**

The application is not available for this operation.

HTTP Status Code: 400

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ResourceNotFoundException

Specified application can't be found.

HTTP Status Code: 400

See Also

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

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

Adds one or more key-value tags to a Kinesis Analytics application. Note that the maximum number of application tags includes system tags. The maximum number of user-defined application tags is 50. For more information, see Using Tagging.

Request Syntax

```json
{
    "ResourceARN": "string",
    "Tags": [
        {
            "Key": "string",
            "Value": "string"
        }
    ]
}
```

Request Parameters

The request accepts the following data in JSON format.

**ResourceARN (p. 76)**

The ARN of the application to assign the tags.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.

Pattern: arn:aws:kinesisanalytics:[a-z]{2}-(a-z)+-\d{1}+:\d{12}+:application/[a-zA-Z0-9_.-]{1,128}

Required: Yes

**Tags (p. 76)**

The key-value tags to assign to the application.

Type: Array of Tag (p. 199) objects

Array Members: Minimum number of 1 item. Maximum number of 200 items.

Required: Yes

Response Elements

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

Errors

**ConcurrentModificationException**

Exception thrown as a result of concurrent modifications to an application. This error can be the result of attempting to modify an application without using the current application ID.
HTTP Status Code: 400

InvalidArgumentException

The specified input parameter value is not valid.

HTTP Status Code: 400

ResourceInUseException

The application is not available for this operation.

HTTP Status Code: 400

ResourceNotFoundException

Specified application can't be found.

HTTP Status Code: 400

TooManyTagsException

Application created with too many tags, or too many tags added to an application. Note that the maximum number of application tags includes system tags. The maximum number of user-defined application tags is 50.

HTTP Status Code: 400

See Also

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

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

Removes one or more tags from a Kinesis Analytics application. For more information, see Using Tagging.

Request Syntax

```json
{
   "ResourceARN": "string",
   "TagKeys": [ "string" ]
}
```

Request Parameters

The request accepts the following data in JSON format.

**ResourceARN (p. 78)**

The ARN of the Kinesis Analytics application from which to remove the tags.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.

Pattern: arn:aws:kinesisanalytics:[a-z]{2}-[a-z]+-[0-9]{12}+:application/\[a-zA-Z0-9-.]{1,128}

Required: Yes

**TagKeys (p. 78)**

A list of keys of tags to remove from the specified application.

Type: Array of strings

Array Members: Minimum number of 1 item. Maximum number of 200 items.


Required: Yes

Response Elements

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

Errors

**ConcurrentModificationException**

Exception thrown as a result of concurrent modifications to an application. This error can be the result of attempting to modify an application without using the current application ID.

HTTP Status Code: 400

**InvalidParameterException**

The specified input parameter value is not valid.
HTTP Status Code: 400
**ResourceInUseException**

The application is not available for this operation.

HTTP Status Code: 400
**ResourceNotFoundException**

Specified application can't be found.

HTTP Status Code: 400
**TooManyTagsException**

Application created with too many tags, or too many tags added to an application. Note that the maximum number of application tags includes system tags. The maximum number of user-defined application tags is 50.

HTTP Status Code: 400

**See Also**

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

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

Updates an existing Amazon Kinesis Data Analytics application. Using this operation, you can update application code, input configuration, and output configuration.

Kinesis Data Analytics updates the ApplicationVersionId each time you update your application.

**Note**

You cannot update the RuntimeEnvironment of an existing application. If you need to update an application's RuntimeEnvironment, you must delete the application and create it again.

**Request Syntax**

```json
{
    "ApplicationConfigurationUpdate": {
        "ApplicationCodeConfigurationUpdate": {
            "CodeContentTypeUpdate": "string",
            "CodeContentUpdate": {
                "S3ContentLocationUpdate": {
                    "BucketARNUpdate": "string",
                    "FileKeyUpdate": "string",
                    "ObjectVersionUpdate": "string"
                },
                "TextContentUpdate": "string",
                "ZipFileContentUpdate": blob
            }
        },
        "ApplicationSnapshotConfigurationUpdate": {
            "SnapshotsEnabledUpdate": boolean
        },
        "EnvironmentPropertyUpdates": {
            "PropertyGroups": [ {
                "PropertyGroupId": "string",
                "PropertyMap": { "string" : "string" }
            } ],
            "FlinkApplicationConfigurationUpdate": {
                "CheckpointConfigurationUpdate": {
                    "CheckpointingEnabledUpdate": boolean,
                    "CheckpointIntervalUpdate": number,
                    "ConfigurationTypeUpdate": "string",
                    "MinPauseBetweenCheckpointsUpdate": number
                },
                "MonitoringConfigurationUpdate": {
                    "ConfigurationTypeUpdate": "string",
                    "LogLevelUpdate": "string",
                    "MetricsLevelUpdate": "string"
                },
                "ParallelismConfigurationUpdate": {
                    "AutoScalingEnabledUpdate": boolean,
                    "ConfigurationTypeUpdate": "string",
                    "ParallelismPerKPUUpdate": number,
                    "ParallelismUpdate": number
                }
            },
            "SqlApplicationConfigurationUpdate": {
                "InputUpdates": [ { "string" : "string" } ]
            }
        }
    }
}

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"InputId": "string",
"InputParallelismUpdate": {
  "CountUpdate": number
},
"InputProcessingConfigurationUpdate": {
  "InputLambdaProcessorUpdate": {
    "ResourceARNUpdate": "string"
  }
},
"InputSchemaUpdate": {
  "RecordColumnUpdates": [
    {
      "Mapping": "string",
      "Name": "string",
      "SqlType": "string"
    }
  ],
  "RecordEncodingUpdate": "string",
  "RecordFormatUpdate": {
    "MappingParameters": {
      "CSVMappingParameters": {
        "RecordColumnDelimiter": "string",
        "RecordRowDelimiter": "string"
      }
    }
  },
  "RecordFormatType": "string"
},
"KinesisFirehoseInputUpdate": {
  "ResourceARNUpdate": "string"
},
"KinesisStreamsInputUpdate": {
  "ResourceARNUpdate": "string"
},
"NamePrefixUpdate": "string"
},
"OutputUpdates": [
  {
    "DestinationSchemaUpdate": {
      "RecordFormatType": "string"
    },
    "KinesisFirehoseOutputUpdate": {
      "ResourceARNUpdate": "string"
    },
    "KinesisStreamsOutputUpdate": {
      "ResourceARNUpdate": "string"
    },
    "LambdaOutputUpdate": {
      "ResourceARNUpdate": "string"
    },
    "NameUpdate": "string",
    "OutputId": "string"
  }
],
"ReferenceDataSourceUpdates": [
  {
    "ReferenceId": "string",
    "ReferenceSchemaUpdate": {
      "RecordColumns": [
        {
          "Mapping": "string",
          "Name": "string"
        }
      ]
    }
  }
]

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Request Parameters

The request accepts the following data in JSON format.

**ApplicationConfigurationUpdate (p. 80)**

Describes application configuration updates.

Type: `ApplicationConfigurationUpdate (p. 98)` object

Required: No
ApplicationName (p. 80)

The name of the application to update.

Type: String


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

Required: Yes

CloudWatchLoggingOptionUpdates (p. 80)

Describes application Amazon CloudWatch logging option updates. You can only update existing CloudWatch logging options with this action. To add a new CloudWatch logging option, use AddApplicationCloudWatchLoggingOption (p. 3).

Type: Array of CloudWatchLoggingOptionUpdate (p. 116) objects

Required: No

CurrentApplicationVersionId (p. 80)

The current application version ID. You can retrieve the application version ID using DescribeApplication (p. 54).

Type: Long

Valid Range: Minimum value of 1. Maximum value of 999999999.

Required: Yes

RunConfigurationUpdate (p. 80)

Describes updates to the application's starting parameters.

Type: RunConfigurationUpdate (p. 185) object

Required: No

ServiceExecutionRoleUpdate (p. 80)

Describes updates to the service execution role.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.

Pattern: arn:aws:iam::\d{12}:role/?[a-zA-Z0-9+=,.@\-_]+

Required: No

Response Syntax

```json
{
   "ApplicationDetail": {
      "ApplicationARN": "string",
      "ApplicationConfigurationDescription": {
         "ApplicationCodeConfigurationDescription": {
            "CodeContentDescription": {
               "CodeMD5": "string",
            }
         }
      }
   }
}
```

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"CodeSize": number,
"S3ApplicationCodeLocationDescription": {
  "BucketARN": "string",
  "FileKey": "string",
  "ObjectVersion": "string"
},
"TextContent": "string"
},
"CodeContentType": "string"
},
"ApplicationSnapshotConfigurationDescription": {
  "SnapshotsEnabled": boolean
},
"EnvironmentPropertyDescriptions": {
  "PropertyGroupDescriptions": [
    {
      "PropertyGroupId": "string",
      "PropertyMap": {
        "string": "string"
      }
    }
  ]
},
"FlinkApplicationConfigurationDescription": {
  "CheckpointConfigurationDescription": {
    "CheckpointingEnabled": boolean,
    "CheckpointInterval": number,
    "ConfigurationType": "string",
    "MinPauseBetweenCheckpoints": number
  },
  "JobPlanDescription": "string",
  "MonitoringConfigurationDescription": {
    "ConfigurationType": "string",
    "LogLevel": "string",
    "MetricsLevel": "string"
  },
  "ParallelismConfigurationDescription": {
    "AutoScalingEnabled": boolean,
    "ConfigurationType": "string",
    "CurrentParallelism": number,
    "Parallelism": number,
    "ParallelismPerKPU": number
  }
},
"RunConfigurationDescription": {
  "ApplicationRestoreConfigurationDescription": {
    "ApplicationRestoreType": "string",
    "SnapshotName": "string"
  },
  "FlinkRunConfigurationDescription": {
    "AllowNonRestoredState": boolean
  }
},
"SqlApplicationConfigurationDescription": {
  "InputDescriptions": [
    {
      "InAppStreamNames": [ "string" ],
      "InputId": "string",
      "InputParallelism": {
        "Count": number
      },
      "InputProcessingConfigurationDescription": {
        "InputLambdaProcessorDescription": {
          "ResourceARN": "string",
          "RoleARN": "string"
        }
      }
    }
  ]
}
Amazon Kinesis Analytics kinesisanalytics
Response Syntax

```
},
  "InputSchema": {
    "RecordColumns": [
    {
      "Mapping": "string",
      "Name": "string",
      "SqlType": "string"
    }
    ],
    "RecordEncoding": "string",
    "RecordFormat": {
      "MappingParameters": {
        "CSVMappingParameters": {
          "RecordColumnDelimiter": "string",
          "RecordRowDelimiter": "string"
        },
        "JSONMappingParameters": {
          "RecordRowPath": "string"
        }
      },
      "RecordFormatType": "string"
    },
    "InputStartingPositionConfiguration": {
      "InputStartingPosition": "string"
    },
    "KinesisFirehoseInputDescription": {
      "ResourceARN": "string",
      "RoleARN": "string"
    },
    "KinesisStreamsInputDescription": {
      "ResourceARN": "string",
      "RoleARN": "string"
    },
    "NamePrefix": "string"
  }
],
  "OutputDescriptions": [
  {
    "DestinationSchema": {
      "RecordFormatType": "string"
    },
    "KinesisFirehoseOutputDescription": {
      "ResourceARN": "string",
      "RoleARN": "string"
    },
    "KinesisStreamsOutputDescription": {
      "ResourceARN": "string",
      "RoleARN": "string"
    },
    "LambdaOutputDescription": {
      "ResourceARN": "string",
      "RoleARN": "string"
    },
    "Name": "string",
    "OutputId": "string"
  }
  ],
  "ReferenceDataSourceDescriptions": [
  {
    "ReferenceId": "string",
    "ReferenceSchema": {
      "RecordColumns": [
      {
        "Mapping": "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.

ApplicationDetail (p. 83)

Describes application updates.

Type: ApplicationDetail (p. 100) object

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Errors

**CodeValidationException**

The user-provided application code (query) is not valid. This can be a simple syntax error.

HTTP Status Code: 400

**ConcurrentModificationException**

Exception thrown as a result of concurrent modifications to an application. This error can be the result of attempting to modify an application without using the current application ID.

HTTP Status Code: 400

**InvalidApplicationConfigurationException**

The user-provided application configuration is not valid.

HTTP Status Code: 400

**InvalidArgumentException**

The specified input parameter value is not valid.

HTTP Status Code: 400

**InvalidRequestException**

The request JSON is not valid for the operation.

HTTP Status Code: 400

**ResourceInUseException**

The application is not available for this operation.

HTTP Status Code: 400

**ResourceNotFoundException**

Specified application can't be found.

HTTP Status Code: 400

See Also

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

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

The Amazon Kinesis Analytics 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:

- ApplicationCodeConfiguration (p. 91)
- ApplicationCodeConfigurationDescription (p. 92)
- ApplicationCodeConfigurationUpdate (p. 93)
- ApplicationConfiguration (p. 94)
- ApplicationConfigurationDescription (p. 96)
- ApplicationConfigurationUpdate (p. 98)
- ApplicationDetail (p. 100)
- ApplicationRestoreConfiguration (p. 102)
- ApplicationSnapshotConfiguration (p. 103)
- ApplicationSnapshotConfigurationDescription (p. 104)
- ApplicationSnapshotConfigurationUpdate (p. 105)
- ApplicationSummary (p. 106)
- CheckpointConfiguration (p. 108)
- CheckpointConfigurationDescription (p. 110)
- CheckpointConfigurationUpdate (p. 112)
- CloudWatchLoggingOption (p. 114)
- CloudWatchLoggingOptionDescription (p. 115)
- CloudWatchLoggingOptionUpdate (p. 116)
- CodeContent (p. 117)
- CodeContentDescription (p. 118)
- CodeContentUpdate (p. 119)
- CSVMappingParameters (p. 120)
- DestinationSchema (p. 121)
- EnvironmentProperties (p. 122)
- EnvironmentPropertyDescriptions (p. 123)
- EnvironmentPropertyUpdates (p. 124)
- FlinkApplicationConfiguration (p. 125)
- FlinkApplicationConfigurationDescription (p. 126)
- FlinkApplicationConfigurationUpdate (p. 127)
- FlinkRunConfiguration (p. 128)
- Input (p. 129)
- InputDescription (p. 131)
- InputLambdaProcessor (p. 133)
- InputLambdaProcessorDescription (p. 134)
- InputLambdaProcessorUpdate (p. 135)
• InputParallelism (p. 136)
• InputParallelismUpdate (p. 137)
• InputProcessingConfiguration (p. 138)
• InputProcessingConfigurationDescription (p. 139)
• InputProcessingConfigurationUpdate (p. 140)
• InputSchemaUpdate (p. 141)
• InputStartingPositionConfiguration (p. 142)
• InputUpdate (p. 143)
• JSONMappingParameters (p. 145)
• KinesisFirehoseInput (p. 146)
• KinesisFirehoseInputDescription (p. 147)
• KinesisFirehoseInputUpdate (p. 148)
• KinesisFirehoseOutput (p. 149)
• KinesisFirehoseOutputDescription (p. 150)
• KinesisFirehoseOutputUpdate (p. 151)
• KinesisStreamsInput (p. 152)
• KinesisStreamsInputDescription (p. 153)
• KinesisStreamsInputUpdate (p. 154)
• KinesisStreamsOutput (p. 155)
• KinesisStreamsOutputDescription (p. 156)
• KinesisStreamsOutputUpdate (p. 157)
• LambdaOutput (p. 158)
• LambdaOutputDescription (p. 159)
• LambdaOutputUpdate (p. 160)
• MappingParameters (p. 161)
• MonitoringConfiguration (p. 162)
• MonitoringConfigurationDescription (p. 163)
• MonitoringConfigurationUpdate (p. 164)
• Output (p. 165)
• OutputDescription (p. 166)
• OutputUpdate (p. 168)
• ParallelismConfiguration (p. 170)
• ParallelismConfigurationDescription (p. 172)
• ParallelismConfigurationUpdate (p. 174)
• PropertyGroup (p. 176)
• RecordColumn (p. 177)
• RecordFormat (p. 178)
• ReferenceDataSource (p. 179)
• ReferenceDataSourceDescription (p. 180)
• ReferenceDataSourceUpdate (p. 181)
• RunConfiguration (p. 183)
• RunConfigurationDescription (p. 184)
• RunConfigurationUpdate (p. 185)
• S3ApplicationCodeLocationDescription (p. 186)
• S3Configuration (p. 187)
• S3ContentLocation (p. 188)
• S3ContentLocationUpdate (p. 189)
• S3ReferenceDataSource (p. 190)
• S3ReferenceDataSourceDescription (p. 191)
• S3ReferenceDataSourceUpdate (p. 192)
• SnapshotDetails (p. 193)
• SourceSchema (p. 194)
• SqlApplicationConfiguration (p. 195)
• SqlApplicationConfigurationDescription (p. 196)
• SqlApplicationConfigurationUpdate (p. 197)
• SqlRunConfiguration (p. 198)
• Tag (p. 199)
• VpcConfiguration (p. 200)
• VpcConfigurationDescription (p. 201)
• VpcConfigurationUpdate (p. 202)
ApplicationCodeConfiguration

Describes code configuration for a Java-based Kinesis Data Analytics application.

Contents

CodeContent

The location and type of the application code.

Type: CodeContent (p. 117) object

Required: No

CodeContentType

Specifies whether the code content is in text or zip format.

Type: String

Valid Values: PLAINTEXT | ZIPFILE

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 Go
- AWS SDK for Java
- AWS SDK for Ruby V3
ApplicationCodeConfigurationDescription

Describes code configuration for a Java-based Kinesis Data Analytics application.

Contents

**CodeContentDescription**

Describes details about the location and format of the application code.

Type: CodeContentDescription (p. 118) object

Required: No

**CodeContentType**

Specifies whether the code content is in text or zip format.

Type: String

Valid Values: PLAINTEXT | ZIPFILE

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 Go
- AWS SDK for Java
- AWS SDK for Ruby V3
ApplicationCodeConfigurationUpdate

Describes updates to a Java-based Amazon Kinesis Data Analytics application.

Contents

CodeContentTypeUpdate

Describes updates to the code content type.

Type: String

Valid Values: PLAINTEXT | ZIPFILE

Required: No

CodeContentUpdate

Describes updates to the code content of an application.

Type: CodeContentUpdate (p. 119) 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 Go
- AWS SDK for Java
- AWS SDK for Ruby V3
ApplicationConfiguration

Specifies the creation parameters for an Amazon Kinesis Data Analytics application.

Contents

ApplicationCodeConfiguration

The code location and type parameters for a Java-based Kinesis Data Analytics application.

Type: ApplicationCodeConfiguration (p. 91) object

Required: Yes

ApplicationSnapshotConfiguration

Describes whether snapshots are enabled for a Java-based Kinesis Data Analytics application.

Type: ApplicationSnapshotConfiguration (p. 103) object

Required: No

EnvironmentProperties

Describes execution properties for a Java-based Kinesis Data Analytics application.

Type: EnvironmentProperties (p. 122) object

Required: No

FlinkApplicationConfiguration

The creation and update parameters for a Java-based Kinesis Data Analytics application.

Type: FlinkApplicationConfiguration (p. 125) object

Required: No

SqlApplicationConfiguration

The creation and update parameters for an SQL-based Kinesis Data Analytics application.

Type: SqlApplicationConfiguration (p. 195) object

Required: No

VpcConfigurations

The array of descriptions of VPC configurations available to the application.

Type: Array of VpcConfiguration (p. 200) 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 Go
- AWS SDK for Java
• AWS SDK for Ruby V3
ApplicationConfigurationDescription

Describes details about the application code and starting parameters for an Amazon Kinesis Data Analytics application.

Contents

ApplicationCodeConfigurationDescription

The details about the application code for a Java-based Kinesis Data Analytics application.

Type: ApplicationCodeConfigurationDescription (p. 92) object

Required: No

ApplicationSnapshotConfigurationDescription

Describes whether snapshots are enabled for a Java-based Kinesis Data Analytics application.

Type: ApplicationSnapshotConfigurationDescription (p. 104) object

Required: No

EnvironmentPropertyDescriptions

Describes execution properties for a Java-based Kinesis Data Analytics application.

Type: EnvironmentPropertyDescriptions (p. 123) object

Required: No

FlinkApplicationConfigurationDescription

The details about a Java-based Kinesis Data Analytics application.

Type: FlinkApplicationConfigurationDescription (p. 126) object

Required: No

RunConfigurationDescription

The details about the starting properties for a Kinesis Data Analytics application.

Type: RunConfigurationDescription (p. 184) object

Required: No

SqlApplicationConfigurationDescription

The details about inputs, outputs, and reference data sources for an SQL-based Kinesis Data Analytics application.

Type: SqlApplicationConfigurationDescription (p. 196) object

Required: No

VpcConfigurationDescriptions

The array of descriptions of VPC configurations available to the application.

Type: Array of VpcConfigurationDescription (p. 201) 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 Go
- AWS SDK for Java
- AWS SDK for Ruby V3
ApplicationConfigurationUpdate

Describes updates to an application's configuration.

Contents

ApplicationCodeConfigurationUpdate

Describes updates to a Java-based Kinesis Data Analytics application's code configuration.

Type: ApplicationCodeConfigurationUpdate (p. 93) object

Required: No

ApplicationSnapshotConfigurationUpdate

Describes whether snapshots are enabled for a Java-based Kinesis Data Analytics application.

Type: ApplicationSnapshotConfigurationUpdate (p. 105) object

Required: No

EnvironmentPropertyUpdates

Describes updates to the environment properties for a Java-based Kinesis Data Analytics application.

Type: EnvironmentPropertyUpdates (p. 124) object

Required: No

FlinkApplicationConfigurationUpdate

Describes updates to a Java-based Kinesis Data Analytics application's configuration.

Type: FlinkApplicationConfigurationUpdate (p. 127) object

Required: No

SqlApplicationConfigurationUpdate

Describes updates to an SQL-based Kinesis Data Analytics application's configuration.

Type: SqlApplicationConfigurationUpdate (p. 197) object

Required: No

VpcConfigurationUpdates

Updates to the array of descriptions of VPC configurations available to the application.

Type: Array of VpcConfigurationUpdate (p. 202) 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 Go
- AWS SDK for Java
Amazon Kinesis Analytics kinesisanalytics
See Also

- AWS SDK for Ruby V3
ApplicationDetail

Describes the application, including the application Amazon Resource Name (ARN), status, latest version, and input and output configurations.

Contents

**ApplicationARN**

The ARN of the application.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.

Pattern: `arn:*`

Required: Yes

**ApplicationConfigurationDescription**

Provides details about the application's SQL or Java code and starting parameters.

Type: `ApplicationConfigurationDescription (p. 96) object`

Required: No

**ApplicationDescription**

The description of the application.

Type: String

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

Required: No

**ApplicationName**

The name of the application.

Type: String


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

Required: Yes

**ApplicationStatus**

The status of the application.

Type: String

Valid Values: DELETING | STARTING | STOPPING | READY | RUNNING | UPDATING

Required: Yes

**ApplicationVersionId**

Provides the current application version. Kinesis Data Analytics updates the ApplicationVersionId each time you update the application.
Type: Long
Valid Range: Minimum value of 1. Maximum value of 999999999.
Required: Yes

CloudWatchLoggingOptionDescriptions
Describes the application Amazon CloudWatch logging options.
Type: Array of CloudWatchLoggingOptionDescription (p. 115) objects
Required: No

CreateTimestamp
The current timestamp when the application was created.
Type: Timestamp
Required: No

LastUpdateTimestamp
The current timestamp when the application was last updated.
Type: Timestamp
Required: No

RuntimeEnvironment
The runtime environment for the application (SQL-1.0, FLINK-1_6, or FLINK-1_8).
Type: String
Valid Values: SQL-1_0 | FLINK-1_6 | FLINK-1_8
Required: Yes

ServiceExecutionRole
Specifies the IAM role that the application uses to access external resources.
Type: String
Length Constraints: Minimum length of 1. Maximum length of 2048.
Pattern: arn:aws:iam::\d{12}:role/\?[a-zA-Z_0-9+=,.@-_/]+
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 Go
- AWS SDK for Java
- AWS SDK for Ruby V3
ApplicationRestoreConfiguration

Specifies the method and snapshot to use when restarting an application using previously saved application state.

Contents

ApplicationRestoreType

Specifies how the application should be restored.

Type: String

Valid Values: SKIP_RESTORE_FROM_SNAPSHOT | RESTORE_FROM_LATEST_SNAPSHOT | RESTORE_FROM_CUSTOM_SNAPSHOT

Required: Yes

SnapshotName

The identifier of an existing snapshot of application state to use to restart an application. The application uses this value if RESTORE_FROM_CUSTOM_SNAPSHOT is specified for the ApplicationRestoreType.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 256.

Pattern: [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 Go
- AWS SDK for Java
- AWS SDK for Ruby V3
ApplicationSnapshotConfiguration

Describes whether snapshots are enabled for a Java-based Kinesis Data Analytics application.

Contents

SnapshotsEnabled

Describes whether snapshots are enabled for a Java-based Kinesis Data Analytics application.

Type: Boolean

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 Go
- AWS SDK for Java
- AWS SDK for Ruby V3
ApplicationSnapshotConfigurationDescription

Describes whether snapshots are enabled for a Java-based Kinesis Data Analytics application.

Contents

SnapshotsEnabled

Describes whether snapshots are enabled for a Java-based Kinesis Data Analytics application.

Type: Boolean
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 Go
- AWS SDK for Java
- AWS SDK for Ruby V3
ApplicationSnapshotConfigurationUpdate

Describes updates to whether snapshots are enabled for a Java-based Kinesis Data Analytics application.

Contents

SnapshotsEnabledUpdate

Describes updates to whether snapshots are enabled for a Java-based Kinesis Data Analytics application.

Type: Boolean
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 Go
- AWS SDK for Java
- AWS SDK for Ruby V3
ApplicationSummary

Provides application summary information, including the application Amazon Resource Name (ARN), name, and status.

Contents

**ApplicationARN**

The ARN of the application.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.

Pattern: arn:.*

Required: Yes

**ApplicationName**

The name of the application.

Type: String


Pattern: [a-zA-Z0-9_.-]+

Required: Yes

**ApplicationStatus**

The status of the application.

Type: String

Valid Values: DELETING | STARTING | STOPPING | READY | RUNNING | UPDATING

Required: Yes

**ApplicationVersionId**

Provides the current application version.

Type: Long

Valid Range: Minimum value of 1. Maximum value of 999999999.

Required: Yes

**RuntimeEnvironment**

The runtime environment for the application (SQL-1.0, FLINK-1.6, or FLINK-1.8).

Type: String

Valid Values: SQL-1_0 | FLINK-1_6 | FLINK-1_8

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 Go
- AWS SDK for Java
- AWS SDK for Ruby V3
CheckpointConfiguration

Describes an application's checkpointing configuration. Checkpointing is the process of persisting application state for fault tolerance. For more information, see Checkpoints for Fault Tolerance in the Apache Flink Documentation.

Contents

CheckpointingEnabled

Describes whether checkpointing is enabled for a Java-based Kinesis Data Analytics application.

Note
If CheckpointConfiguration.ConfigurationType is DEFAULT, the application will use a CheckpointingEnabled value of true, even if this value is set to another value using this API or in application code.

Type: Boolean

Required: No

CheckpointInterval

Describes the interval in milliseconds between checkpoint operations.

Note
If CheckpointConfiguration.ConfigurationType is DEFAULT, the application will use a CheckpointInterval value of 60000, even if this value is set to another value using this API or in application code.

Type: Long

Valid Range: Minimum value of 1.

Required: No

ConfigurationType

Describes whether the application uses Amazon Kinesis Data Analytics' default checkpointing behavior. You must set this property to CUSTOM in order to set the CheckpointingEnabled, CheckpointInterval, or MinPauseBetweenCheckpoints parameters.

Note
If this value is set to DEFAULT, the application will use the following values, even if they are set to other values using APIs or application code:

- **CheckpointingEnabled**: true
- **CheckpointInterval**: 60000
- **MinPauseBetweenCheckpoints**: 5000

Type: String

Valid Values: DEFAULT | CUSTOM

Required: Yes

MinPauseBetweenCheckpoints

Describes the minimum time in milliseconds after a checkpoint operation completes that a new checkpoint operation can start. If a checkpoint operation takes longer than the CheckpointInterval, the application otherwise performs continual checkpoint operations. For more information, see Tuning Checkpointing in the Apache Flink Documentation.
Note
If CheckpointConfiguration.ConfigurationType is DEFAULT, the application will use a MinPauseBetweenCheckpoints value of 5000, even if this value is set using this API or in application code.

Type: Long
Valid Range: Minimum value of 0.
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 Go
- AWS SDK for Java
- AWS SDK for Ruby V3
CheckpointConfigurationDescription

Describes checkpointing parameters for a Java-based Amazon Kinesis Data Analytics application.

Contents

CheckpointingEnabled

Describes whether checkpointing is enabled for a Java-based Kinesis Data Analytics application.

Note
If CheckpointConfiguration.ConfigurationType is DEFAULT, the application will use a CheckpointingEnabled value of true, even if this value is set to another value using this API or in application code.

Type: Boolean
Required: No

CheckpointInterval

Describes the interval in milliseconds between checkpoint operations.

Note
If CheckpointConfiguration.ConfigurationType is DEFAULT, the application will use a CheckpointInterval value of 60000, even if this value is set to another value using this API or in application code.

Type: Long
Valid Range: Minimum value of 1.
Required: No

ConfigurationType

Describes whether the application uses the default checkpointing behavior in Kinesis Data Analytics.

Note
If this value is set to DEFAULT, the application will use the following values, even if they are set to other values using APIs or application code:

- CheckpointingEnabled: true
- CheckpointInterval: 60000
- MinPauseBetweenCheckpoints: 5000

Type: String
Valid Values: DEFAULT | CUSTOM
Required: No

MinPauseBetweenCheckpoints

Describes the minimum time in milliseconds after a checkpoint operation completes that a new checkpoint operation can start.

Note
If CheckpointConfiguration.ConfigurationType is DEFAULT, the application will use a MinPauseBetweenCheckpoints value of 5000, even if this value is set using this API or in application code.

Type: Long
Valid Range: Minimum value of 0.
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 Go
- AWS SDK for Java
- AWS SDK for Ruby V3
CheckpointConfigurationUpdate

Describes updates to the checkpointing parameters for a Java-based Amazon Kinesis Data Analytics application.

Contents

CheckpointingEnabledUpdate

Describes updates to whether checkpointing is enabled for an application.

Note
If CheckpointConfiguration.ConfigurationType is DEFAULT, the application will use a CheckpointingEnabled value of true, even if this value is set to another value using this API or in application code.

Type: Boolean
Required: No

CheckpointIntervalUpdate

Describes updates to the interval in milliseconds between checkpoint operations.

Note
If CheckpointConfiguration.ConfigurationType is DEFAULT, the application will use a CheckpointInterval value of 60000, even if this value is set to another value using this API or in application code.

Type: Long
Valid Range: Minimum value of 1.
Required: No

ConfigurationTypeUpdate

Describes updates to whether the application uses the default checkpointing behavior of Kinesis Data Analytics. You must set this property to CUSTOM in order to set the CheckpointingEnabled, CheckpointInterval, or MinPauseBetweenCheckpoints parameters.

Note
If this value is set to DEFAULT, the application will use the following values, even if they are set to other values using APIs or application code:

- CheckpointingEnabled: true
- CheckpointInterval: 60000
- MinPauseBetweenCheckpoints: 5000

Type: String
Valid Values: DEFAULT | CUSTOM
Required: No

MinPauseBetweenCheckpointsUpdate

Describes updates to the minimum time in milliseconds after a checkpoint operation completes that a new checkpoint operation can start.

Note
If CheckpointConfiguration.ConfigurationType is DEFAULT, the application will use a MinPauseBetweenCheckpoints value of 5000, even if this value is set using this API or in application code.
Type: Long

Valid Range: Minimum value of 0.

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 Go
- AWS SDK for Java
- AWS SDK for Ruby V3
CloudWatchLoggingOption

Provides a description of Amazon CloudWatch logging options, including the log stream Amazon Resource Name (ARN).

Contents

LogStreamARN

The ARN of the CloudWatch log to receive application messages.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.

Pattern: arn:.*

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 Go
- AWS SDK for Java
- AWS SDK for Ruby V3
CloudWatchLoggingOptionDescription

Describes the Amazon CloudWatch logging option.

Contents

CloudWatchLoggingOptionId

The ID of the CloudWatch logging option description.

Type: String


Pattern: [a-zA-Z0-9_.-]+

Required: No

LogStreamARN

The Amazon Resource Name (ARN) of the CloudWatch log to receive application messages.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.

Pattern: arn:.*

Required: Yes

RoleARN

The IAM ARN of the role to use to send application messages.

Note
Provided for backward compatibility. Applications created with the current API version have an application-level service execution role rather than a resource-level role.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.

Pattern: arn:aws:iam::\d{12}:role/\?[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 Go
- AWS SDK for Java
- AWS SDK for Ruby V3
CloudWatchLoggingOptionUpdate

Describes the Amazon CloudWatch logging option updates.

Contents

CloudWatchLoggingOptionId

The ID of the CloudWatch logging option to update

Type: String


Pattern: [a-zA-Z0-9_.-]+

Required: Yes

LogStreamARNUpdate

The Amazon Resource Name (ARN) of the CloudWatch log to receive application messages.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.

Pattern: arn:.*

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 Go
- AWS SDK for Java
- AWS SDK for Ruby V3
CodeContent

Specifies either the application code, or the location of the application code, for a Java-based Amazon Kinesis Data Analytics application.

Contents

S3ContentLocation

Information about the Amazon S3 bucket containing the application code.

Type: S3ContentLocation (p. 188) object

Required: No

TextContent

The text-format code for a Java-based Kinesis Data Analytics application.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 102400.

Required: No

ZipFileContent

The zip-format code for a Java-based Kinesis Data Analytics application.

Type: Base64-encoded binary data object

Length Constraints: Minimum length of 0. Maximum length of 52428800.

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 Go
- AWS SDK for Java
- AWS SDK for Ruby V3
CodeContentDescription

Describes details about the application code for a Java-based Kinesis Data Analytics application.

Contents

CodeMD5

The checksum that can be used to validate zip-format code.

Type: String

Length Constraints: Fixed length of 128.

Required: No

CodeSize

The size in bytes of the application code. Can be used to validate zip-format code.

Type: Long

Valid Range: Minimum value of 0. Maximum value of 52428800.

Required: No

S3ApplicationCodeLocationDescription

The S3 bucket Amazon Resource Name (ARN), file key, and object version of the application code stored in Amazon S3.

Type: S3ApplicationCodeLocationDescription (p. 186) object

Required: No

TextContent

The text-format code

Type: String

Length Constraints: Minimum length of 0. Maximum length of 102400.

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 Go
- AWS SDK for Java
- AWS SDK for Ruby V3
CodeContentUpdate

Describes an update to the code of a Java-based Kinesis Data Analytics application.

Contents

S3ContentLocationUpdate

Describes an update to the location of code for an application.

Type: S3ContentLocationUpdate (p. 189) object

Required: No

TextContentUpdate

Describes an update to the text code for an application.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 102400.

Required: No

ZipFileContentUpdate

Describes an update to the zipped code for an application.

Type: Base64-encoded binary data object

Length Constraints: Minimum length of 0. Maximum length of 52428800.

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 Go
- AWS SDK for Java
- AWS SDK for Ruby V3
CSVMappingParameters

For an SQL-based application, provides additional mapping information when the record format uses delimiters, such as CSV. For example, the following sample records use CSV format, where the records use the \"\n\" as the row delimiter and a comma (\",\") as the column delimiter:

"name1", "address1"
"name2", "address2"

Contents

RecordColumnDelimiter

The column delimiter. For example, in a CSV format, a comma (\",\") is the typical column delimiter.

Type: String

Length Constraints: Minimum length of 1.

Required: Yes

RecordRowDelimiter

The row delimiter. For example, in a CSV format, \"\n\" is the typical row delimiter.

Type: String

Length Constraints: Minimum length of 1.

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 Go
- AWS SDK for Java
- AWS SDK for Ruby V3
DestinationSchema

Describes the data format when records are written to the destination in an SQL-based Amazon Kinesis Data Analytics application.

Contents

**RecordFormatType**

Specifies the format of the records on the output stream.

Type: String

Valid Values: JSON | CSV

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 Go
- AWS SDK for Java
- AWS SDK for Ruby V3
EnvironmentProperties

Describes execution properties for a Java-based Kinesis Data Analytics application.

Contents

PropertyGroups

Describes the execution property groups.

Type: Array of PropertyGroup (p. 176) objects

Array Members: Maximum number of 50 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 Go
- AWS SDK for Java
- AWS SDK for Ruby V3
EnvironmentPropertyDescriptions

Describes the execution properties for a Java-based Amazon Kinesis Data Analytics application.

Contents

PropertyGroupDescriptions

Describes the execution property groups.

Type: Array of PropertyGroup (p. 176) objects

Array Members: Maximum number of 50 items.

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 Go
- AWS SDK for Java
- AWS SDK for Ruby V3
EnvironmentPropertyUpdates

Describes updates to the execution property groups for a Java-based Amazon Kinesis Data Analytics application.

Contents

PropertyGroups

Describes updates to the execution property groups.

Type: Array of PropertyGroup (p. 176) objects

Array Members: Maximum number of 50 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 Go
- AWS SDK for Java
- AWS SDK for Ruby V3
FlinkApplicationConfiguration

Describes configuration parameters for a Java-based Amazon Kinesis Data Analytics application.

Contents

CheckpointConfiguration

Describes an application's checkpointing configuration. Checkpointing is the process of persisting application state for fault tolerance. For more information, see Checkpoints for Fault Tolerance in the Apache Flink Documentation.

Type: CheckpointConfiguration (p. 108) object

Required: No

MonitoringConfiguration

Describes configuration parameters for Amazon CloudWatch logging for an application.

Type: MonitoringConfiguration (p. 162) object

Required: No

ParallelismConfiguration

Describes parameters for how an application executes multiple tasks simultaneously.

Type: ParallelismConfiguration (p. 170) 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 Go
- AWS SDK for Java
- AWS SDK for Ruby V3
FlinkApplicationConfigurationDescription

Describes configuration parameters for a Java-based Amazon Kinesis Data Analytics application.

Contents

CheckpointConfigurationDescription

Describes an application's checkpointing configuration. Checkpointing is the process of persisting application state for fault tolerance.

Type: CheckpointConfigurationDescription (p. 110) object

Required: No

JobPlanDescription

The job plan for an application. For more information about the job plan, see Jobs and Scheduling in the Apache Flink Documentation. To retrieve the job plan for the application, use the DescribeApplication:IncludeAdditionalDetails (p. 54) parameter of the DescribeApplication (p. 54) operation.

Type: String

Required: No

MonitoringConfigurationDescription

Describes configuration parameters for Amazon CloudWatch logging for an application.

Type: MonitoringConfigurationDescription (p. 163) object

Required: No

ParallelismConfigurationDescription

Describes parameters for how an application executes multiple tasks simultaneously.

Type: ParallelismConfigurationDescription (p. 172) 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 Go
- AWS SDK for Java
- AWS SDK for Ruby V3
FlinkApplicationConfigurationUpdate

Describes updates to the configuration parameters for a Java-based Amazon Kinesis Data Analytics application.

Contents

CheckpointConfigurationUpdate

Describes updates to an application's checkpointing configuration. Checkpointing is the process of persisting application state for fault tolerance.

Type: CheckpointConfigurationUpdate (p. 112) object

Required: No

MonitoringConfigurationUpdate

Describes updates to the configuration parameters for Amazon CloudWatch logging for an application.

Type: MonitoringConfigurationUpdate (p. 164) object

Required: No

ParallelismConfigurationUpdate

Describes updates to the parameters for how an application executes multiple tasks simultaneously.

Type: ParallelismConfigurationUpdate (p. 174) 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 Go
- AWS SDK for Java
- AWS SDK for Ruby V3
FlinkRunConfiguration

Describes the starting parameters for an Apache Flink-based Kinesis Data Analytics application.

Contents

AllowNonRestoredState

When restoring from a snapshot, specifies whether the runtime is allowed to skip a state that cannot be mapped to the new program. This will happen if the program is updated between snapshots to remove stateful parameters, and state data in the snapshot no longer corresponds to valid application data. For more information, see Allowing Non-Restored State in the Apache Flink documentation.

Type: Boolean
Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V3
Input

When you configure the application input for an SQL-based Amazon Kinesis Data Analytics application, you specify the streaming source, the in-application stream name that is created, and the mapping between the two.

Contents

InputParallelism

Describes the number of in-application streams to create.

Type: InputParallelism (p. 136) object

Required: No

InputProcessingConfiguration

The InputProcessingConfiguration (p. 138) for the input. An input processor transforms records as they are received from the stream, before the application's SQL code executes. Currently, the only input processing configuration available is InputLambdaProcessor (p. 133).

Type: InputProcessingConfiguration (p. 138) object

Required: No

InputSchema

Describes the format of the data in the streaming source, and how each data element maps to corresponding columns in the in-application stream that is being created.

Also used to describe the format of the reference data source.

Type: SourceSchema (p. 194) object

Required: Yes

KinesisFirehoseInput

If the streaming source is an Amazon Kinesis Data Firehose delivery stream, identifies the delivery stream's ARN.

Type: KinesisFirehoseInput (p. 146) object

Required: No

KinesisStreamsInput

If the streaming source is an Amazon Kinesis data stream, identifies the stream's Amazon Resource Name (ARN).

Type: KinesisStreamsInput (p. 152) object

Required: No

NamePrefix

The name prefix to use when creating an in-application stream. Suppose that you specify a prefix "MyInApplicationStream." Kinesis Data Analytics then creates one or more (as per the InputParallelism count you specified) in-application streams with the names "MyInApplicationStream_001," "MyInApplicationStream_002," and so on.

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 Go
- AWS SDK for Java
- AWS SDK for Ruby V3
InputDescription

Describes the application input configuration for an SQL-based Amazon Kinesis Data Analytics application.

Contents

InAppStreamNames

Returns the in-application stream names that are mapped to the stream source.

Type: Array of strings


Required: No

InputId

The input ID that is associated with the application input. This is the ID that Kinesis Data Analytics assigns to each input configuration that you add to your application.

Type: String


Pattern: [a-zA-Z0-9_.-]+

Required: No

InputParallelism

Describes the configured parallelism (number of in-application streams mapped to the streaming source).

Type: InputParallelism (p. 136) object

Required: No

InputProcessingConfigurationDescription

The description of the preprocessor that executes on records in this input before the application's code is run.

Type: InputProcessingConfigurationDescription (p. 139) object

Required: No

InputSchema

Describes the format of the data in the streaming source, and how each data element maps to corresponding columns in the in-application stream that is being created.

Type: SourceSchema (p. 194) object

Required: No

InputStartingPositionConfiguration

The point at which the application is configured to read from the input stream.

Type: InputStartingPositionConfiguration (p. 142) object
Required: No

**KinesisFirehoseInputDescription**

If a Kinesis Data Firehose delivery stream is configured as a streaming source, provides the delivery stream's ARN.

Type: `KinesisFirehoseInputDescription` (p. 147) object

Required: No

**KinesisStreamsInputDescription**

If a Kinesis data stream is configured as a streaming source, provides the Kinesis data stream's Amazon Resource Name (ARN).

Type: `KinesisStreamsInputDescription` (p. 153) object

Required: No

**NamePrefix**

The in-application name prefix.

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 Go
- AWS SDK for Java
- AWS SDK for Ruby V3
InputLambdaProcessor

An object that contains the Amazon Resource Name (ARN) of the AWS Lambda function that is used to preprocess records in the stream in an SQL-based Amazon Kinesis Data Analytics application.

Contents

ResourceARN

The ARN of the AWS Lambda function that operates on records in the stream.

Note
To specify an earlier version of the Lambda function than the latest, include the Lambda function version in the Lambda function ARN. For more information about Lambda ARNs, see Example ARNs: AWS Lambda

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.

Pattern: arn:.*

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 Go
- AWS SDK for Java
- AWS SDK for Ruby V3
InputLambdaProcessorDescription

For an SQL-based Amazon Kinesis Data Analytics application, an object that contains the Amazon Resource Name (ARN) of the AWS Lambda function that is used to preprocess records in the stream.

Contents

ResourceARN

The ARN of the AWS Lambda function that is used to preprocess the records in the stream.

Note
To specify an earlier version of the Lambda function than the latest, include the Lambda function version in the Lambda function ARN. For more information about Lambda ARNs, see Example ARNs: AWS Lambda

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.

Pattern: arn:.*

Required: Yes

RoleARN

The ARN of the IAM role that is used to access the AWS Lambda function.

Note
Provided for backward compatibility. Applications that are created with the current API version have an application-level service execution role rather than a resource-level role.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.

Pattern: arn:aws:iam::\d{12}:role/?[a-zA-Z_0-9+=,.@\-_]+

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 Go
- AWS SDK for Java
- AWS SDK for Ruby V3
InputLambdaProcessorUpdate

For an SQL-based Amazon Kinesis Data Analytics application, represents an update to the InputLambdaProcessor (p. 133) that is used to preprocess the records in the stream.

Contents

ResourceARNUpdate

The Amazon Resource Name (ARN) of the new AWS Lambda function that is used to preprocess the records in the stream.

Note
To specify an earlier version of the Lambda function than the latest, include the Lambda function version in the Lambda function ARN. For more information about Lambda ARNs, see Example ARNs: AWS Lambda

Type: String
Length Constraints: Minimum length of 1. Maximum length of 2048.

Pattern: arn:.*
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 Go
- AWS SDK for Java
- AWS SDK for Ruby V3
InputParallelism

For an SQL-based Amazon Kinesis Data Analytics application, describes the number of in-application streams to create for a given streaming source.

Contents

Count

The number of in-application streams to create.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 64.

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 Go
- AWS SDK for Java
- AWS SDK for Ruby V3
InputParallelismUpdate

For an SQL-based Amazon Kinesis Data Analytics application, provides updates to the parallelism count.

Contents

CountUpdate

The number of in-application streams to create for the specified streaming source.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 64.

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 Go
- AWS SDK for Java
- AWS SDK for Ruby V3
InputProcessingConfiguration

For an SQL-based Amazon Kinesis Data Analytics application, describes a processor that is used to preprocess the records in the stream before being processed by your application code. Currently, the only input processor available is AWS Lambda.

Contents

InputLambdaProcessor

The InputLambdaProcessor (p. 133) that is used to preprocess the records in the stream before being processed by your application code.

Type: InputLambdaProcessor (p. 133) 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 Go
- AWS SDK for Java
- AWS SDK for Ruby V3
InputProcessingConfigurationDescription

For an SQL-based Amazon Kinesis Data Analytics application, provides the configuration information about an input processor. Currently, the only input processor available is AWS Lambda.

Contents

InputLambdaProcessorDescription

Provides configuration information about the associated InputLambdaProcessorDescription (p. 134)

Type: InputLambdaProcessorDescription (p. 134) 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 Go
- AWS SDK for Java
- AWS SDK for Ruby V3
InputProcessingConfigurationUpdate

For an SQL-based Amazon Kinesis Data Analytics application, describes updates to an InputProcessingConfiguration (p. 138).

Contents

InputLambdaProcessorUpdate

Provides update information for an InputLambdaProcessor (p. 133).

Type: InputLambdaProcessorUpdate (p. 135) 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 Go
- AWS SDK for Java
- AWS SDK for Ruby V3
InputSchemaUpdate

Describes updates for an SQL-based Amazon Kinesis Data Analytics application's input schema.

Contents

RecordColumnUpdates

A list of RecordColumn objects. Each object describes the mapping of the streaming source element to the corresponding column in the in-application stream.

Type: Array of RecordColumn (p. 177) objects

Array Members: Minimum number of 1 item. Maximum number of 1000 items.

Required: No

RecordEncodingUpdate

Specifies the encoding of the records in the streaming source; for example, UTF-8.

Type: String

Pattern: UTF-8

Required: No

RecordFormatUpdate

Specifies the format of the records on the streaming source.

Type: RecordFormat (p. 178) 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 Go
- AWS SDK for Java
- AWS SDK for Ruby V3
InputStartingPositionConfiguration

Describes the point at which the application reads from the streaming source.

Contents

InputStartingPosition

The starting position on the stream.

- **NOW** - Start reading just after the most recent record in the stream, and start at the request timestamp that the customer issued.
- **TRIM_HORIZON** - Start reading at the last untrimmed record in the stream, which is the oldest record available in the stream. This option is not available for an Amazon Kinesis Data Firehose delivery stream.
- **LAST_STOPPED_POINT** - Resume reading from where the application last stopped reading.

Type: String

Valid Values: NOW | TRIM_HORIZON | LAST_STOPPED_POINT

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 Go
- AWS SDK for Java
- AWS SDK for Ruby V3
InputUpdate

For an SQL-based Amazon Kinesis Data Analytics application, describes updates to a specific input configuration (identified by the InputId of an application).

Contents

InputId

The input ID of the application input to be updated.

Type: String


Pattern: [a-zA-Z0-9_.-]+

Required: Yes

InputParallelismUpdate

Describes the parallelism updates (the number of in-application streams Kinesis Data Analytics creates for the specific streaming source).

Type: InputParallelismUpdate (p. 137) object

Required: No

InputProcessingConfigurationUpdate

Describes updates to an InputProcessingConfiguration (p. 138).

Type: InputProcessingConfigurationUpdate (p. 140) object

Required: No

InputSchemaUpdate

Describes the data format on the streaming source, and how record elements on the streaming source map to columns of the in-application stream that is created.

Type: InputSchemaUpdate (p. 141) object

Required: No

KinesisFirehoseInputUpdate

If a Kinesis Data Firehose delivery stream is the streaming source to be updated, provides an updated stream ARN.

Type: KinesisFirehoseInputUpdate (p. 148) object

Required: No

KinesisStreamInputUpdate

If a Kinesis data stream is the streaming source to be updated, provides an updated stream Amazon Resource Name (ARN).

Type: KinesisStreamInputUpdate (p. 154) object

Required: No
NamePrefixUpdate

The name prefix for in-application streams that Kinesis Data Analytics creates for the specific streaming source.

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 Go
- AWS SDK for Java
- AWS SDK for Ruby V3
JSONMappingParameters

For an SQL-based Amazon Kinesis Data Analytics application, provides additional mapping information when JSON is the record format on the streaming source.

Contents

RecordRowPath

The path to the top-level parent that contains the records.

Type: String

Length Constraints: Minimum length of 1.

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 Go
- AWS SDK for Java
- AWS SDK for Ruby V3
KinesisFirehoseInput

For an SQL-based Amazon Kinesis Data Analytics application, identifies a Kinesis Data Firehose delivery stream as the streaming source. You provide the delivery stream's Amazon Resource Name (ARN).

Contents

ResourceARN

The Amazon Resource Name (ARN) of the delivery stream.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.

Pattern: arn:.*

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 Go
- AWS SDK for Java
- AWS SDK for Ruby V3
KinesisFirehoseInputDescription

Describes the Amazon Kinesis Data Firehose delivery stream that is configured as the streaming source in the application input configuration.

Contents

ResourceARN

The Amazon Resource Name (ARN) of the delivery stream.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.

Pattern: arn:.*

Required: Yes

RoleARN

The ARN of the IAM role that Kinesis Data Analytics assumes to access the stream.

Note

Provided for backward compatibility. Applications that are created with the current API version have an application-level service execution role rather than a resource-level role.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.

Pattern: arn:aws:iam::\d{12}:role/\?[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 Go
- AWS SDK for Java
- AWS SDK for Ruby V3
KinesisFirehoseInputUpdate

For an SQL-based Amazon Kinesis Data Analytics application, when updating application input configuration, provides information about a Kinesis Data Firehose delivery stream as the streaming source.

Contents

ResourceARNUpdate

The Amazon Resource Name (ARN) of the input delivery stream to read.

Type: String
Length Constraints: Minimum length of 1. Maximum length of 2048.
Pattern: arn:.*
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 Go
- AWS SDK for Java
- AWS SDK for Ruby V3
KinesisFirehoseOutput

For an SQL-based Amazon Kinesis Data Analytics application, when configuring application output, identifies a Kinesis Data Firehose delivery stream as the destination. You provide the stream Amazon Resource Name (ARN) of the delivery stream.

Contents

ResourceARN

The ARN of the destination delivery stream to write to.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.

Pattern: arn:.*

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 Go
- AWS SDK for Java
- AWS SDK for Ruby V3
KinesisFirehoseOutputDescription

For an SQL-based Amazon Kinesis Data Analytics application's output, describes the Kinesis Data Firehose delivery stream that is configured as its destination.

Contents

**ResourceARN**

The Amazon Resource Name (ARN) of the delivery stream.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.

Pattern: arn:.*

Required: Yes

**RoleARN**

The ARN of the IAM role that Kinesis Data Analytics can assume to access the stream.

*Note*

Provided for backward compatibility. Applications that are created with the current API version have an application-level service execution role rather than a resource-level role.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.

Pattern: arn:aws:iam::\d{12}:role/?[a-zA-Z_0-9+=,.@\-_]+

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 Go
- AWS SDK for Java
- AWS SDK for Ruby V3
KinesisFirehoseOutputUpdate

For an SQL-based Amazon Kinesis Data Analytics application, when updating an output configuration using the UpdateApplication (p. 80) operation, provides information about a Kinesis Data Firehose delivery stream that is configured as the destination.

Contents

ResourceARNUpdate

The Amazon Resource Name (ARN) of the delivery stream to write to.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.

Pattern: arn:.*

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 Go
- AWS SDK for Java
- AWS SDK for Ruby V3
KinesisStreamsInput

Identifies an Amazon Kinesis data stream as the streaming source. You provide the stream’s Amazon Resource Name (ARN).

Contents

ResourceARN

The ARN of the input Kinesis data stream to read.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.

Pattern: arn:.*

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 Go
- AWS SDK for Java
- AWS SDK for Ruby V3
**KinesisStreamsInputDescription**

For an SQL-based Amazon Kinesis Data Analytics application, describes the Kinesis data stream that is configured as the streaming source in the application input configuration.

**Contents**

**ResourceARN**

The Amazon Resource Name (ARN) of the Kinesis data stream.

- **Type:** String
- **Length Constraints:** Minimum length of 1. Maximum length of 2048.
- **Pattern:** `arn:.*`
- **Required:** Yes

**RoleARN**

The ARN of the IAM role that Kinesis Data Analytics can assume to access the stream.

- **Note**
  Provided for backward compatibility. Applications that are created with the current API version have an application-level service execution role rather than a resource-level role.

- **Type:** String
- **Length Constraints:** Minimum length of 1. Maximum length of 2048.
- **Pattern:** `arn:aws:iam::\d{12}:role/?[a-zA-Z_0-9+=,.@\-_/]+`
- **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 Go
- AWS SDK for Java
- AWS SDK for Ruby V3
KinesisStreamsInputUpdate

When you update the input configuration for an SQL-based Amazon Kinesis Data Analytics application, provides information about an Amazon Kinesis stream as the streaming source.

Contents

ResourceARNUpdate

The Amazon Resource Name (ARN) of the input Kinesis data stream to read.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.

Pattern: arn:.*

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 Go
- AWS SDK for Java
- AWS SDK for Ruby V3
KinesisStreamsOutput

When you configure an SQL-based Amazon Kinesis Data Analytics application’s output, identifies a Kinesis data stream as the destination. You provide the stream Amazon Resource Name (ARN).

Contents

ResourceARN

The ARN of the destination Kinesis data stream to write to.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.

Pattern: arn:.*

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 Go
- AWS SDK for Java
- AWS SDK for Ruby V3
KinesisStreamsOutputDescription

For an SQL-based Amazon Kinesis Data Analytics application's output, describes the Kinesis data stream that is configured as its destination.

Contents

ResourceARN

The Amazon Resource Name (ARN) of the Kinesis data stream.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.

Pattern: arn:.*

Required: Yes

RoleARN

The ARN of the IAM role that Kinesis Data Analytics can assume to access the stream.

Note
Provided for backward compatibility. Applications that are created with the current API version have an application-level service execution role rather than a resource-level role.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.

Pattern: arn:aws:iam::\d{12}:role/?[a-zA-Z_0-9+=,.@\-_/]+

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 Go
- AWS SDK for Java
- AWS SDK for Ruby V3
KinesisStreamsOutputUpdate

When you update an SQL-based Amazon Kinesis Data Analytics application's output configuration using the UpdateApplication (p. 80) operation, provides information about a Kinesis data stream that is configured as the destination.

Contents

ResourceARNUpdate

The Amazon Resource Name (ARN) of the Kinesis data stream where you want to write the output.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.

Pattern: arn:.*

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 Go
- AWS SDK for Java
- AWS SDK for Ruby V3
LambdaOutput

When you configure an SQL-based Amazon Kinesis Data Analytics application's output, identifies an AWS Lambda function as the destination. You provide the function Amazon Resource Name (ARN) of the Lambda function.

Contents

ResourceARN

The Amazon Resource Name (ARN) of the destination Lambda function to write to.

Note
To specify an earlier version of the Lambda function than the latest, include the Lambda function version in the Lambda function ARN. For more information about Lambda ARNs, see Example ARNs: AWS Lambda

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.

Pattern: arn:.*

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 Go
- AWS SDK for Java
- AWS SDK for Ruby V3
LambdaOutputDescription

For an SQL-based Amazon Kinesis Data Analytics application output, describes the AWS Lambda function that is configured as its destination.

Contents

ResourceARN

The Amazon Resource Name (ARN) of the destination Lambda function.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.

Pattern: arn:.*

Required: Yes

RoleARN

The ARN of the IAM role that Kinesis Data Analytics can assume to write to the destination function.

Note
Provided for backward compatibility. Applications that are created with the current API version have an application-level service execution role rather than a resource-level role.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.

Pattern: arn:aws:iam::\d{12}:role/?[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 Go
- AWS SDK for Java
- AWS SDK for Ruby V3
LambdaOutputUpdate

When you update an SQL-based Amazon Kinesis Data Analytics application's output configuration using the UpdateApplication (p. 80) operation, provides information about an AWS Lambda function that is configured as the destination.

Contents

ResourceARNUpdate

The Amazon Resource Name (ARN) of the destination AWS Lambda function.

**Note**
To specify an earlier version of the Lambda function than the latest, include the Lambda function version in the Lambda function ARN. For more information about Lambda ARNs, see Example ARNs: AWS Lambda

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.

Pattern: arn:.*

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 Go
- AWS SDK for Java
- AWS SDK for Ruby V3
MappingParameters

When you configure an SQL-based Amazon Kinesis Data Analytics application's input at the time of creating or updating an application, provides additional mapping information specific to the record format (such as JSON, CSV, or record fields delimited by some delimiter) on the streaming source.

Contents

CSVMappingParameters

Provides additional mapping information when the record format uses delimiters (for example, CSV).

Type: CSVMappingParameters (p. 120) object

Required: No

JSONMappingParameters

Provides additional mapping information when JSON is the record format on the streaming source.

Type: JSONMappingParameters (p. 145) 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 Go
- AWS SDK for Java
- AWS SDK for Ruby V3
Amazon Kinesis Analytics kinesisanalytics
MonitoringConfiguration

MonitoringConfiguration

Describes configuration parameters for Amazon CloudWatch logging for a Java-based Kinesis Data Analytics application. For more information about CloudWatch logging, see Monitoring.

Contents

**ConfigurationType**

Describes whether to use the default CloudWatch logging configuration for an application. You must set this property to CUSTOM in order to set the LogLevel or MetricsLevel parameters.

Type: String

Valid Values: DEFAULT | CUSTOM

Required: Yes

**LogLevel**

Describes the verbosity of the CloudWatch Logs for an application.

Type: String

Valid Values: INFO | WARN | ERROR | DEBUG

Required: No

**MetricsLevel**

Describes the granularity of the CloudWatch Logs for an application.

Type: String

Valid Values: APPLICATION | TASK | OPERATOR | PARALLELISM

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 Go
- AWS SDK for Java
- AWS SDK for Ruby V3

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MonitoringConfigurationDescription

Describes configuration parameters for CloudWatch logging for a Java-based Kinesis Data Analytics application.

Contents

ConfigurationType

Describes whether to use the default CloudWatch logging configuration for an application.

Type: String

Valid Values: DEFAULT | CUSTOM

Required: No

LogLevel

Describes the verbosity of the CloudWatch Logs for an application.

Type: String

Valid Values: INFO | WARN | ERROR | DEBUG

Required: No

MetricsLevel

Describes the granularity of the CloudWatch Logs for an application.

Type: String

Valid Values: APPLICATION | TASK | OPERATOR | PARALLELISM

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 Go
- AWS SDK for Java
- AWS SDK for Ruby V3
MonitoringConfigurationUpdate

Describes updates to configuration parameters for Amazon CloudWatch logging for a Java-based Kinesis Data Analytics application.

Contents

ConfigurationTypeUpdate

Describes updates to whether to use the default CloudWatch logging configuration for an application. You must set this property to CUSTOM in order to set the LogLevel or MetricsLevel parameters.

Type: String

Valid Values: DEFAULT | CUSTOM

Required: No

LogLevelUpdate

Describes updates to the verbosity of the CloudWatch Logs for an application.

Type: String

Valid Values: INFO | WARN | ERROR | DEBUG

Required: No

MetricsLevelUpdate

Describes updates to the granularity of the CloudWatch Logs for an application.

Type: String

Valid Values: APPLICATION | TASK | OPERATOR | PARALLELISM

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 Go
- AWS SDK for Java
- AWS SDK for Ruby V3
Output

Describes an SQL-based Amazon Kinesis Data Analytics application's output configuration, in which you identify an in-application stream and a destination where you want the in-application stream data to be written. The destination can be a Kinesis data stream or a Kinesis Data Firehose delivery stream.

Contents

DestinationSchema

Describes the data format when records are written to the destination.

Type: DestinationSchema (p. 121) object

Required: Yes

KinesisFirehoseOutput

Identifies an Amazon Kinesis Data Firehose delivery stream as the destination.

Type: KinesisFirehoseOutput (p. 149) object

Required: No

KinesisStreamsOutput

Identifies an Amazon Kinesis data stream as the destination.

Type: KinesisStreamsOutput (p. 155) object

Required: No

LambdaOutput

Identifies an AWS Lambda function as the destination.

Type: LambdaOutput (p. 158) object

Required: No

Name

The name of the in-application stream.

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 Go
- AWS SDK for Java
- AWS SDK for Ruby V3
OutputDescription

For an SQL-based Amazon Kinesis Data Analytics application, describes the application output configuration, which includes the in-application stream name and the destination where the stream data is written. The destination can be a Kinesis data stream or a Kinesis Data Firehose delivery stream.

Contents

DestinationSchema

The data format used for writing data to the destination.

Type: DestinationSchema (p. 121) object

Required: No

KinesisFirehoseOutputDescription

Describes the Kinesis Data Firehose delivery stream that is configured as the destination where output is written.

Type: KinesisFirehoseOutputDescription (p. 150) object

Required: No

KinesisStreamsOutputDescription

Describes the Kinesis data stream that is configured as the destination where output is written.

Type: KinesisStreamsOutputDescription (p. 156) object

Required: No

LambdaOutputDescription

Describes the Lambda function that is configured as the destination where output is written.

Type: LambdaOutputDescription (p. 159) object

Required: No

Name

The name of the in-application stream that is configured as output.

Type: String


Required: No

OutputId

A unique identifier for the output configuration.

Type: String


Pattern: [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 Go
- AWS SDK for Java
- AWS SDK for Ruby V3
OutputUpdate

For an SQL-based Amazon Kinesis Data Analytics application, describes updates to the output configuration identified by the OutputId.

Contents

DestinationsSchemaUpdate

Describes the data format when records are written to the destination.

Type: DestinationsSchema (p. 121) object

Required: No

KinesisFirehoseOutputUpdate

Describes a Kinesis Data Firehose delivery stream as the destination for the output.

Type: KinesisFirehoseOutputUpdate (p. 151) object

Required: No

KinesisStreamsOutputUpdate

Describes a Kinesis data stream as the destination for the output.

Type: KinesisStreamsOutputUpdate (p. 157) object

Required: No

LambdaOutputUpdate

Describes an AWS Lambda function as the destination for the output.

Type: LambdaOutputUpdate (p. 160) object

Required: No

NameUpdate

If you want to specify a different in-application stream for this output configuration, use this field to specify the new in-application stream name.

Type: String


Required: No

OutputId

Identifies the specific output configuration that you want to update.

Type: String


Pattern: [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 Go
- AWS SDK for Java
- AWS SDK for Ruby V3
ParallelismConfiguration

Describes parameters for how a Java-based Amazon Kinesis Data Analytics application executes multiple tasks simultaneously. For more information about parallelism, see Parallel Execution in the Apache Flink Documentation.

Contents

AutoScalingEnabled

Describes whether the Kinesis Data Analytics service can increase the parallelism of the application in response to increased throughput.

Type: Boolean

Required: No

ConfigurationType

Describes whether the application uses the default parallelism for the Kinesis Data Analytics service. You must set this property to CUSTOM in order to change your application's AutoScalingEnabled, Parallelism, or ParallelismPerKPU properties.

Type: String

Valid Values: DEFAULT | CUSTOM

Required: Yes

Parallelism

Describes the initial number of parallel tasks that a Java-based Kinesis Data Analytics application can perform. If AutoScalingEnabled is set to True, Kinesis Data Analytics increases the CurrentParallelism value in response to application load. The service can increase the CurrentParallelism value up to the maximum parallelism, which is ParallelismPerKPU times the maximum KPUs for the application. The maximum KPUs for an application is 32 by default, and can be increased by requesting a limit increase. If application load is reduced, the service can reduce the CurrentParallelism value down to the Parallelism setting.

Type: Integer

Valid Range: Minimum value of 1.

Required: No

ParallelismPerKPU

Describes the number of parallel tasks that a Java-based Kinesis Data Analytics application can perform per Kinesis Processing Unit (KPU) used by the application. For more information about KPUs, see Amazon Kinesis Data Analytics Pricing.

Type: Integer

Valid Range: Minimum 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:
See Also

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V3
**ParallelismConfigurationDescription**

Describes parameters for how a Java-based Kinesis Data Analytics application executes multiple tasks simultaneously.

**Contents**

**AutoScalingEnabled**

Describes whether the Kinesis Data Analytics service can increase the parallelism of the application in response to increased throughput.

- **Type**: Boolean
- **Required**: No

**ConfigurationType**

Describes whether the application uses the default parallelism for the Kinesis Data Analytics service.

- **Type**: String
- **Valid Values**: DEFAULT | CUSTOM
- **Required**: No

**CurrentParallelism**

Describes the current number of parallel tasks that a Java-based Kinesis Data Analytics application can perform. If `AutoScalingEnabled` is set to True, Kinesis Data Analytics can increase this value in response to application load. The service can increase this value up to the maximum parallelism, which is `ParalellismPerKPU` times the maximum KPUs for the application. The maximum KPUs for an application is 32 by default, and can be increased by requesting a limit increase. If application load is reduced, the service can reduce the `CurrentParallelism` value down to the `Parallelism` setting.

- **Type**: Integer
- **Valid Range**: Minimum value of 1.
- **Required**: No

**Parallelism**

Describes the initial number of parallel tasks that a Java-based Kinesis Data Analytics application can perform. If `AutoScalingEnabled` is set to True, then Kinesis Data Analytics can increase the `CurrentParallelism` value in response to application load. The service can increase `CurrentParallelism` up to the maximum parallelism, which is `ParalellismPerKPU` times the maximum KPUs for the application. The maximum KPUs for an application is 32 by default, and can be increased by requesting a limit increase. If application load is reduced, the service can reduce the `CurrentParallelism` value down to the `Parallelism` setting.

- **Type**: Integer
- **Valid Range**: Minimum value of 1.
- **Required**: No

**ParalellismPerKPU**

Describes the number of parallel tasks that a Java-based Kinesis Data Analytics application can perform per Kinesis Processing Unit (KPU) used by the application.
Type: Integer

Valid Range: Minimum 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 Go
- AWS SDK for Java
- AWS SDK for Ruby V3
ParallelismConfigurationUpdate

Describes updates to parameters for how a Java-based Kinesis Data Analytics application executes multiple tasks simultaneously.

Contents

AutoScalingEnabledUpdate

Describes updates to whether the Kinesis Data Analytics service can increase the parallelism of the application in response to increased throughput.

Type: Boolean
Required: No

ConfigurationTypeUpdate

Describes updates to whether the application uses the default parallelism for the Kinesis Data Analytics service, or if a custom parallelism is used. You must set this property to CUSTOM in order to change your application's AutoScalingEnabled, Parallelism, or ParallelismPerKPU properties.

Type: String
Valid Values: DEFAULT | CUSTOM
Required: No

ParallelismPerKPUUpdate

Describes updates to the number of parallel tasks an application can perform per Kinesis Processing Unit (KPU) used by the application.

Type: Integer
Valid Range: Minimum value of 1.
Required: No

ParallelismUpdate

Describes updates to the initial number of parallel tasks an application can perform. If AutoScalingEnabled is set to True, then Kinesis Data Analytics can increase the CurrentParallelism value in response to application load. The service can increase CurrentParallelism up to the maximum parallelism, which is ParallelismPerKPU times the maximum KPUs for the application. The maximum KPUs for an application is 32 by default, and can be increased by requesting a limit increase. If application load is reduced, the service will reduce CurrentParallelism down to the Parallelism setting.

Type: Integer
Valid Range: Minimum 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:
See Also

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V3
PropertyGroup

Property key-value pairs passed into a Java-based Kinesis Data Analytics application.

Contents

PropertyGroupId

Describes the key of an application execution property key-value pair.

Type: String


Pattern: [ a-zA-Z0-9_.- ]+

Required: Yes

PropertyMap

Describes the value of an application execution property key-value pair.

Type: String to string map

Key Length Constraints: Minimum length of 1. Maximum length of 2048.

Value Length Constraints: Minimum length of 1. Maximum length of 2048.

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 Go
- AWS SDK for Java
- AWS SDK for Ruby V3
RecordColumn

For an SQL-based Amazon Kinesis Data Analytics application, describes the mapping of each data element in the streaming source to the corresponding column in the in-application stream.

Also used to describe the format of the reference data source.

Contents

Mapping

A reference to the data element in the streaming input or the reference data source.

Type: String

Required: No

Name

The name of the column that is created in the in-application input stream or reference table.

Type: String

Required: Yes

SqlType

The type of column created in the in-application input stream or reference table.

Type: String

Length Constraints: Minimum length of 1.

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 Go
- AWS SDK for Java
- AWS SDK for Ruby V3
RecordFormat

For an SQL-based Amazon Kinesis Data Analytics application, describes the record format and relevant mapping information that should be applied to schematize the records on the stream.

Contents

MappingParameters

When you configure application input at the time of creating or updating an application, provides additional mapping information specific to the record format (such as JSON, CSV, or record fields delimited by some delimiter) on the streaming source.

Type: MappingParameters (p. 161) object

Required: No

RecordFormatType

The type of record format.

Type: String

Valid Values: JSON | CSV

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 Go
- AWS SDK for Java
- AWS SDK for Ruby V3
ReferenceDataSource

For an SQL-based Amazon Kinesis Data Analytics application, describes the reference data source by providing the source information (Amazon S3 bucket name and object key name), the resulting in-application table name that is created, and the necessary schema to map the data elements in the Amazon S3 object to the in-application table.

Contents

ReferenceSchema

Describes the format of the data in the streaming source, and how each data element maps to corresponding columns created in the in-application stream.

Type: `SourceSchema (p. 194)` object

Required: Yes

S3ReferenceDataSource

Identifies the S3 bucket and object that contains the reference data. A Kinesis Data Analytics application loads reference data only once. If the data changes, you call the `UpdateApplication (p. 80)` operation to trigger reloading of data into your application.

Type: `S3ReferenceDataSource (p. 190)` object

Required: No

TableName

The name of the in-application table to create.

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 Go
- AWS SDK for Java
- AWS SDK for Ruby V3
ReferenceDataSourceDescription

For an SQL-based Amazon Kinesis Data Analytics application, describes the reference data source configured for an application.

Contents

ReferenceId

The ID of the reference data source. This is the ID that Kinesis Data Analytics assigns when you add the reference data source to your application using the CreateApplication (p. 24) or UpdateApplication (p. 80) operation.

Type: String


Pattern: [a-zA-Z0-9_.-]+

Required: Yes

ReferenceSchema

Describes the format of the data in the streaming source, and how each data element maps to corresponding columns created in the in-application stream.

Type: SourceSchema (p. 194) object

Required: No

S3ReferenceDataSourceDescription

Provides the Amazon S3 bucket name, the object key name that contains the reference data.

Type: S3ReferenceDataSourceDescription (p. 191) object

Required: Yes

TableName

The in-application table name created by the specific reference data source configuration.

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 Go
- AWS SDK for Java
- AWS SDK for Ruby V3
ReferenceDataSourceUpdate

When you update a reference data source configuration for a SQL-based Amazon Kinesis Data Analytics application, this object provides all the updated values (such as the source bucket name and object key name), the in-application table name that is created, and updated mapping information that maps the data in the Amazon S3 object to the in-application reference table that is created.

Contents

ReferenceId

The ID of the reference data source that is being updated. You can use the DescribeApplication operation to get this value.

Type: String


Pattern: [a-zA-Z0-9_.-]+

Required: Yes

ReferenceSchemaUpdate

Describes the format of the data in the streaming source, and how each data element maps to corresponding columns created in the in-application stream.

Type: SourceSchema object

Required: No

S3ReferenceDataSourceUpdate

Describes the S3 bucket name, object key name, and IAM role that Kinesis Data Analytics can assume to read the Amazon S3 object on your behalf and populate the in-application reference table.

Type: S3ReferenceDataSourceUpdate object

Required: No

TableNameUpdate

The in-application table name that is created by this update.

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 Go
- AWS SDK for Java
- AWS SDK for Ruby V3
RunConfiguration

Describes the starting parameters for an Amazon Kinesis Data Analytics application.

Contents

ApplicationRestoreConfiguration

Describes the restore behavior of a restarting application.

Type: ApplicationRestoreConfiguration (p. 102) object

Required: No

FlinkRunConfiguration

Describes the starting parameters for an Apache Flink-based Kinesis Data Analytics application.

Type: FlinkRunConfiguration (p. 128) object

Required: No

SqlRunConfigurations

Describes the starting parameters for an SQL-based Kinesis Data Analytics application.

Type: Array of SqlRunConfiguration (p. 198) 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 Go
- AWS SDK for Java
- AWS SDK for Ruby V3
RunConfigurationDescription

Describes the starting properties for a Kinesis Data Analytics application.

Contents

ApplicationRestoreConfigurationDescription

Describes the restore behavior of a restarting application.

Type: ApplicationRestoreConfiguration (p. 102) object

Required: No

FlinkRunConfigurationDescription

Describes the starting parameters for an Apache Flink-based Kinesis Data Analytics application.

Type: FlinkRunConfiguration (p. 128) 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 Go
- AWS SDK for Java
- AWS SDK for Ruby V3
RunConfigurationUpdate

Describes the updates to the starting parameters for a Kinesis Data Analytics application.

Contents

ApplicationRestoreConfiguration

Describes updates to the restore behavior of a restarting application.

Type: ApplicationRestoreConfiguration (p. 102) object

Required: No

FlinkRunConfiguration

Describes the starting parameters for an Apache Flink-based Kinesis Data Analytics application.

Type: FlinkRunConfiguration (p. 128) 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 Go
- AWS SDK for Java
- AWS SDK for Ruby V3
S3ApplicationCodeLocationDescription

Describes the location of a Java-based Amazon Kinesis Data Analytics application's code stored in an S3 bucket.

Contents

BucketARN

The Amazon Resource Name (ARN) for the S3 bucket containing the application code.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.

Pattern: arn:.*

Required: Yes

FileKey

The file key for the object containing the application code.

Type: String


Required: Yes

ObjectVersion

The version of the object containing the application code.

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 Go
- AWS SDK for Java
- AWS SDK for Ruby V3
S3Configuration

For an SQL-based Amazon Kinesis Data Analytics application, provides a description of an Amazon S3 data source, including the Amazon Resource Name (ARN) of the S3 bucket and the name of the Amazon S3 object that contains the data.

Contents

BucketARN

The ARN of the S3 bucket that contains the data.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.

Pattern: arn:.*

Required: Yes

FileKey

The name of the object that contains the data.

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 Go
- AWS SDK for Java
- AWS SDK for Ruby V3
S3ContentLocation

For a Java-based Amazon Kinesis Data Analytics application, provides a description of an Amazon S3 object, including the Amazon Resource Name (ARN) of the S3 bucket, the name of the Amazon S3 object that contains the data, and the version number of the Amazon S3 object that contains the data.

Contents

BucketARN

The Amazon Resource Name (ARN) for the S3 bucket containing the application code.
Type: String
Length Constraints: Minimum length of 1. Maximum length of 2048.
Pattern: arn:.*
Required: Yes

FileKey

The file key for the object containing the application code.
Type: String
Required: Yes

ObjectVersion

The version of the object containing the application code.
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 Go
- AWS SDK for Java
- AWS SDK for Ruby V3
S3ContentLocationUpdate

Describes an update for the Amazon S3 code content location for a Java-based Amazon Kinesis Data Analytics application.

Contents

BucketARNUpdate

The new Amazon Resource Name (ARN) for the S3 bucket containing the application code.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.

Pattern: arn:.*

Required: No

FileKeyUpdate

The new file key for the object containing the application code.

Type: String


Required: No

ObjectVersionUpdate

The new version of the object containing the application code.

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 Go
- AWS SDK for Java
- AWS SDK for Ruby V3
S3ReferenceDataSource

For an SQL-based Amazon Kinesis Data Analytics application, identifies the Amazon S3 bucket and object that contains the reference data.

A Kinesis Data Analytics application loads reference data only once. If the data changes, you call the UpdateApplication (p. 80) operation to trigger reloading of data into your application.

Contents

BucketARN
   The Amazon Resource Name (ARN) of the S3 bucket.
   Type: String
   Length Constraints: Minimum length of 1. Maximum length of 2048.
   Pattern: arn:*
   Required: No

FileKey
   The object key name containing the reference data.
   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 Go
- AWS SDK for Java
- AWS SDK for Ruby V3
S3ReferenceDataSourceDescription

For an SQL-based Amazon Kinesis Data Analytics application, provides the bucket name and object key name that stores the reference data.

Contents

BucketARN
The Amazon Resource Name (ARN) of the S3 bucket.
Type: String
Length Constraints: Minimum length of 1. Maximum length of 2048.
Pattern: arn:*
Required: Yes

FileKey
Amazon S3 object key name.
Type: String
Required: Yes

ReferenceRoleARN
The ARN of the IAM role that Kinesis Data Analytics can assume to read the Amazon S3 object on your behalf to populate the in-application reference table.

Note
Provided for backward compatibility. Applications that are created with the current API version have an application-level service execution role rather than a resource-level role.
Type: String
Length Constraints: Minimum length of 1. Maximum length of 2048.
Pattern: arn:aws:iam::\d{12}:role/?[a-zA-Z_0-9+=,.@-_/]+
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 Go
- AWS SDK for Java
- AWS SDK for Ruby V3
S3ReferenceDataSourceUpdate

For an SQL-based Amazon Kinesis Data Analytics application, describes the Amazon S3 bucket name and object key name for an in-application reference table.

Contents

**BucketARNUpdate**

The Amazon Resource Name (ARN) of the S3 bucket.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.

Pattern: arn:.*

Required: No

**FileKeyUpdate**

The object key name.

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 Go
- AWS SDK for Java
- AWS SDK for Ruby V3
SnapshotDetails

Provides details about a snapshot of application state.

Contents

ApplicationVersionId

The current application version ID when the snapshot was created.

Type: Long

Valid Range: Minimum value of 1. Maximum value of 999999999.

Required: Yes

SnapshotCreationTimestamp

The timestamp of the application snapshot.

Type: Timestamp

Required: No

SnapshotName

The identifier for the application snapshot.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 256.

Pattern: [a-zA-Z0-9_.-]+

Required: Yes

SnapshotStatus

The status of the application snapshot.

Type: String

Valid Values: CREATING | READY | DELETING | FAILED

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 Go
- AWS SDK for Java
- AWS SDK for Ruby V3

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SourceSchema

For an SQL-based Amazon Kinesis Data Analytics application, describes the format of the data in the streaming source, and how each data element maps to corresponding columns created in the in-application stream.

Contents

**RecordColumns**

A list of `RecordColumn` objects.

Type: Array of `RecordColumn (p. 177)` objects

Array Members: Minimum number of 1 item. Maximum number of 1000 items.

Required: Yes

**RecordEncoding**

Specifies the encoding of the records in the streaming source. For example, UTF-8.

Type: String

Pattern: `UTF-8`

Required: No

**RecordFormat**

Specifies the format of the records on the streaming source.

Type: `RecordFormat (p. 178)` 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 Go
- AWS SDK for Java
- AWS SDK for Ruby V3
SqlApplicationConfiguration

Describes the inputs, outputs, and reference data sources for an SQL-based Kinesis Data Analytics application.

Contents

Inputs

The array of Input (p. 129) objects describing the input streams used by the application.

Type: Array of Input (p. 129) objects

Required: No

Outputs

The array of Output (p. 165) objects describing the destination streams used by the application.

Type: Array of Output (p. 165) objects

Required: No

ReferenceDataSources

The array of ReferenceDataSource (p. 179) objects describing the reference data sources used by the application.

Type: Array of ReferenceDataSource (p. 179) 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 Go
- AWS SDK for Java
- AWS SDK for Ruby V3
SqlApplicationConfigurationDescription

Describes the inputs, outputs, and reference data sources for an SQL-based Kinesis Data Analytics application.

Contents

InputDescriptions

The array of InputDescription (p. 131) objects describing the input streams used by the application.

Type: Array of InputDescription (p. 131) objects

Required: No

OutputDescriptions

The array of OutputDescription (p. 166) objects describing the destination streams used by the application.

Type: Array of OutputDescription (p. 166) objects

Required: No

ReferenceDataSourceDescriptions

The array of ReferenceDataSourceDescription (p. 180) objects describing the reference data sources used by the application.

Type: Array of ReferenceDataSourceDescription (p. 180) 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 Go
- AWS SDK for Java
- AWS SDK for Ruby V3
SqlApplicationConfigurationUpdate

Describes updates to the input streams, destination streams, and reference data sources for an SQL-based Kinesis Data Analytics application.

Contents

InputUpdates

The array of InputUpdate (p. 143) objects describing the new input streams used by the application.

Type: Array of InputUpdate (p. 143) objects

Required: No

OutputUpdates

The array of OutputUpdate (p. 168) objects describing the new destination streams used by the application.

Type: Array of OutputUpdate (p. 168) objects

Required: No

ReferenceDataSourceUpdates

The array of ReferenceDataSourceUpdate (p. 181) objects describing the new reference data sources used by the application.

Type: Array of ReferenceDataSourceUpdate (p. 181) 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 Go
- AWS SDK for Java
- AWS SDK for Ruby V3
SqlRunConfiguration

Describes the starting parameters for an SQL-based Kinesis Data Analytics application.

Contents

**InputId**

The input source ID. You can get this ID by calling the DescribeApplication (p. 54) operation.

Type: String


Pattern: [a-zA-Z0-9_.-]+

Required: Yes

**InputStartingPositionConfiguration**

The point at which you want the application to start processing records from the streaming source.

Type: InputStartingPositionConfiguration (p. 142) 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 Go
- AWS SDK for Java
- AWS SDK for Ruby V3
Tag

A key-value pair (the value is optional) that you can define and assign to AWS resources. If you specify a tag that already exists, the tag value is replaced with the value that you specify in the request. Note that the maximum number of application tags includes system tags. The maximum number of user-defined application tags is 50. For more information, see Using Tagging.

Contents

Key

The key of the key-value tag.

Type: String


Required: Yes

Value

The value of the key-value tag. The value is optional.

Type: String

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

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V3
VpcConfiguration

Describes the parameters of a VPC used by the application.

Contents

SecurityGroupIds

The array of SecurityGroup IDs used by the VPC configuration.

Type: Array of strings

Array Members: Minimum number of 1 item. Maximum number of 5 items.

Required: Yes

SubnetIds

The array of Subnet IDs used by the VPC configuration.

Type: Array of strings

Array Members: Minimum number of 1 item. Maximum number of 16 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 Go
- AWS SDK for Java
- AWS SDK for Ruby V3
VpcConfigurationDescription

Describes the parameters of a VPC used by the application.

Contents

SecurityGroupIds

The array of SecurityGroup IDs used by the VPC configuration.

Type: Array of strings

Array Members: Minimum number of 1 item. Maximum number of 5 items.

Required: Yes

SubnetIds

The array of Subnet IDs used by the VPC configuration.

Type: Array of strings

Array Members: Minimum number of 1 item. Maximum number of 16 items.

Required: Yes

VpcConfigurationId

The ID of the VPC configuration.

Type: String


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

Required: Yes

VpcId

The ID of the associated VPC.

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 Go
- AWS SDK for Java
- AWS SDK for Ruby V3
VpcConfigurationUpdate

Describes updates to the VPC configuration used by the application.

Contents

SecurityGroupIdUpdates

Describes updates to the array of SecurityGroup IDs used by the VPC configuration.

Type: Array of strings

Array Members: Minimum number of 1 item. Maximum number of 5 items.

Required: No

SubnetIdUpdates

Describes updates to the array of Subnet IDs used by the VPC configuration.

Type: Array of strings

Array Members: Minimum number of 1 item. Maximum number of 16 items.

Required: No

VpcConfigurationId

Describes an update to the ID of the VPC configuration.

Type: String


Pattern: [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 Go
- AWS SDK for Java
- AWS SDK for Ruby V3