

Amazon Managed Workflows for Apache Airflow



Amazon Managed Workflows for Apache Airflow: Amazon MWAA

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Welcome

This section contains the Amazon Managed Workflows for Apache Airflow (MWAA) API reference documentation. For more information, see [What is Amazon MWAA?](#).

Endpoints

- `api.airflow.{region}.amazonaws.com` - This endpoint is used for environment management.
 - [CreateEnvironment](#)
 - [DeleteEnvironment](#)
 - [GetEnvironment](#)
 - [ListEnvironments](#)
 - [ListTagsForResource](#)
 - [TagResource](#)
 - [UntagResource](#)
 - [UpdateEnvironment](#)
- `env.airflow.{region}.amazonaws.com` - This endpoint is used to operate the Airflow environment.
 - [CreateCliToken](#)
 - [CreateWebLoginToken](#)

Regions

For a list of supported regions, see [Amazon MWAA endpoints and quotas](#) in the *Amazon General Reference*.

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Actions

The following actions are supported:

- [CreateCliToken](#)
- [CreateEnvironment](#)
- [CreateWebLoginToken](#)
- [DeleteEnvironment](#)
- [GetEnvironment](#)
- [ListEnvironments](#)
- [ListTagsForResource](#)
- [PublishMetrics](#)
- [TagResource](#)
- [UntagResource](#)
- [UpdateEnvironment](#)

CreateCliToken

Creates a CLI token for the Airflow CLI. To learn more, see [Creating an Apache Airflow CLI token](#).

Request Syntax

```
POST /clitoken/Name HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

Name

The name of the Amazon MWAA environment. For example, MyMWAAEnvironment.

Length Constraints: Minimum length of 1. Maximum length of 80.

Pattern: `[a-zA-Z][0-9a-zA-Z-_]*`

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

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

{
  "CliToken": "string",
  "WebServerHostname": "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.

CliToken

An Airflow CLI login token.

Type: String

WebServerHostname

The Airflow web server hostname for the environment.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 255.

Pattern: (([a-zA-Z0-9]|[a-zA-Z0-9][a-zA-Z0-9\-*][a-zA-Z0-9])\.)*([A-Za-z0-9]|[A-Za-z0-9][A-Za-z0-9\-*][A-Za-z0-9])

Errors

For information about the errors that are common to all actions, see [Common Errors](#).

ResourceNotFoundException

ResourceNotFoundException: The resource is not available.

HTTP Status Code: 404

See Also

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

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

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

CreateEnvironment

Creates an Amazon Managed Workflows for Apache Airflow (MWAA) environment.

Request Syntax

```
PUT /environments/Name HTTP/1.1
Content-type: application/json

{
  "AirflowConfigurationOptions": {
    "string" : "string"
  },
  "AirflowVersion": "string",
  "DagS3Path": "string",
  "EndpointManagement": "string",
  "EnvironmentClass": "string",
  "ExecutionRoleArn": "string",
  "KmsKey": "string",
  "LoggingConfiguration": {
    "DagProcessingLogs": {
      "Enabled": boolean,
      "LogLevel": "string"
    },
    "SchedulerLogs": {
      "Enabled": boolean,
      "LogLevel": "string"
    },
    "TaskLogs": {
      "Enabled": boolean,
      "LogLevel": "string"
    },
    "WebserverLogs": {
      "Enabled": boolean,
      "LogLevel": "string"
    },
    "WorkerLogs": {
      "Enabled": boolean,
      "LogLevel": "string"
    }
  },
  "MaxWebservers": number,
  "MaxWorkers": number,
```

```
"MinWebservers": number,
"MinWorkers": number,
"NetworkConfiguration": {
  "SecurityGroupIds": [ "string" ],
  "SubnetIds": [ "string" ]
},
"PluginsS3ObjectVersion": "string",
"PluginsS3Path": "string",
"RequirementsS3ObjectVersion": "string",
"RequirementsS3Path": "string",
"Schedulers": number,
"SourceBucketArn": "string",
"StartupScriptS3ObjectVersion": "string",
"StartupScriptS3Path": "string",
"Tags": {
  "string" : "string"
},
"WebserverAccessMode": "string",
"WeeklyMaintenanceWindowStart": "string"
}
```

URI Request Parameters

The request uses the following URI parameters.

Name

The name of the Amazon MWAA environment. For example, MyMWAAEnvironment.

Length Constraints: Minimum length of 1. Maximum length of 80.

Pattern: [a-zA-Z][0-9a-zA-Z-_*]

Required: Yes

Request Body

The request accepts the following data in JSON format.

AirflowConfigurationOptions

A list of key-value pairs containing the Apache Airflow configuration options you want to attach to your environment. For more information, see [Apache Airflow configuration options](#).

Type: String to string map

Key Length Constraints: Minimum length of 1. Maximum length of 64.

Key Pattern: `[a-z]+([a-z0-9._]*[a-z0-9_]+)?`

Value Length Constraints: Minimum length of 1. Maximum length of 65536.

Value Pattern: `[-~]+`

Required: No

AirflowVersion

The Apache Airflow version for your environment. If no value is specified, it defaults to the latest version. For more information, see [Apache Airflow versions on Amazon Managed Workflows for Apache Airflow \(MWAA\)](#).

Valid values: 1.10.12, 2.0.2, 2.2.2, 2.4.3, 2.5.1, 2.6.3, 2.7.2, 2.8.1

Type: String

Length Constraints: Minimum length of 1. Maximum length of 32.

Pattern: `[0-9a-z.]+`

Required: No

DagS3Path

The relative path to the DAGs folder on your Amazon S3 bucket. For example, dags. For more information, see [Adding or updating DAGs](#).

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1024.

Pattern: `.*`

Required: Yes

EndpointManagement

Defines whether the VPC endpoints configured for the environment are created, and managed, by the customer or by Amazon MWAA. If set to SERVICE, Amazon MWAA will create and manage the required VPC endpoints in your VPC. If set to CUSTOMER, you must create, and

manage, the VPC endpoints for your VPC. If you choose to create an environment in a shared VPC, you must set this value to CUSTOMER. In a shared VPC deployment, the environment will remain in PENDING status until you create the VPC endpoints. If you do not take action to create the endpoints within 72 hours, the status will change to CREATE_FAILED. You can delete the failed environment and create a new one.

Type: String

Valid Values: CUSTOMER | SERVICE

Required: No

EnvironmentClass

The environment class type. Valid values: mw1.small, mw1.medium, mw1.large, mw1.xlarge, and mw1.2xlarge. For more information, see [Amazon MWAA environment class](#).

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1024.

Required: No

ExecutionRoleArn

The Amazon Resource Name (ARN) of the execution role for your environment. An execution role is an Amazon Identity and Access Management (IAM) role that grants MWAA permission to access Amazon services and resources used by your environment. For example, arn:aws:iam::123456789:role/my-execution-role. For more information, see [Amazon MWAA Execution role](#).

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1224.

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

Required: Yes

KmsKey

The Amazon Key Management Service (KMS) key to encrypt the data in your environment. You can use an Amazon owned CMK, or a Customer managed CMK (advanced). For more information, see [Create an Amazon MWAA environment](#).

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1224.

Pattern: (((arn:aws(-[a-z]+)?:kms:[a-z]{2}-[a-z]+-\d:\d+)?key\|)?[a-f0-9]{8}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{12}|(arn:aws(-[a-z]+)?:kms:[a-z]{2}-[a-z]+-\d:\d+)?alias/.+)

Required: No

LoggingConfiguration

Defines the Apache Airflow logs to send to CloudWatch Logs.

Type: [LoggingConfigurationInput](#) object

Required: No

MaxWebservers

The maximum number of web servers that you want to run in your environment. Amazon MWAA scales the number of Apache Airflow web servers up to the number you specify for `MaxWebservers` when you interact with your Apache Airflow environment using Apache Airflow REST API, or the Apache Airflow CLI. For example, in scenarios where your workload requires network calls to the Apache Airflow REST API with a high transaction-per-second (TPS) rate, Amazon MWAA will increase the number of web servers up to the number set in `MaxWebservers`. As TPS rates decrease Amazon MWAA disposes of the additional web servers, and scales down to the number set in `MinWebservers`.

Valid values: Accepts between 2 and 5. Defaults to 2.

Type: Integer

Valid Range: Minimum value of 2.

Required: No

MaxWorkers

The maximum number of workers that you want to run in your environment. MWAA scales the number of Apache Airflow workers up to the number you specify in the `MaxWorkers` field. For example, 20. When there are no more tasks running, and no more in the queue, MWAA disposes of the extra workers leaving the one worker that is included with your environment, or the number you specify in `MinWorkers`.

Type: Integer

Valid Range: Minimum value of 1.

Required: No

MinWebservers

The minimum number of web servers that you want to run in your environment. Amazon MWAA scales the number of Apache Airflow web servers up to the number you specify for `MaxWebservers` when you interact with your Apache Airflow environment using Apache Airflow REST API, or the Apache Airflow CLI. As the transaction-per-second rate, and the network load, decrease, Amazon MWAA disposes of the additional web servers, and scales down to the number set in `MinxWebserers`.

Valid values: Accepts between 2 and 5. Defaults to 2.

Type: Integer

Valid Range: Minimum value of 2.

Required: No

MinWorkers

The minimum number of workers that you want to run in your environment. MWAA scales the number of Apache Airflow workers up to the number you specify in the `MaxWorkers` field. When there are no more tasks running, and no more in the queue, MWAA disposes of the extra workers leaving the worker count you specify in the `MinWorkers` field. For example, 2.

Type: Integer

Valid Range: Minimum value of 1.

Required: No

NetworkConfiguration

The VPC networking components used to secure and enable network traffic between the Amazon resources for your environment. For more information, see [About networking on Amazon MWAA](#).

Type: [NetworkConfiguration](#) object

Required: Yes

PluginsS3ObjectVersion

The version of the plugins.zip file on your Amazon S3 bucket. You must specify a version each time a plugins.zip file is updated. For more information, see [How S3 Versioning works](#).

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1024.

Required: No

PluginsS3Path

The relative path to the plugins.zip file on your Amazon S3 bucket. For example, plugins.zip. If specified, then the plugins.zip version is required. For more information, see [Installing custom plugins](#).

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1024.

Pattern: .*

Required: No

RequirementsS3ObjectVersion

The version of the requirements.txt file on your Amazon S3 bucket. You must specify a version each time a requirements.txt file is updated. For more information, see [How S3 Versioning works](#).

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1024.

Required: No

RequirementsS3Path

The relative path to the requirements.txt file on your Amazon S3 bucket. For example, requirements.txt. If specified, then a version is required. For more information, see [Installing Python dependencies](#).

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1024.

Pattern: .*

Required: No

Schedulers

The number of Apache Airflow schedulers to run in your environment. Valid values:

- v2 - Accepts between 2 to 5. Defaults to 2.
- v1 - Accepts 1.

Type: Integer

Valid Range: Maximum value of 5.

Required: No

SourceBucketArn

The Amazon Resource Name (ARN) of the Amazon S3 bucket where your DAG code and supporting files are stored. For example, `arn:aws:s3:::my-airflow-bucket-unique-name`. For more information, see [Create an Amazon S3 bucket for Amazon MWAA](#).

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1224.

Pattern: `arn:aws(-[a-z]+)?:s3:::[a-z0-9.\-]+`

Required: Yes

StartupScriptS3ObjectVersion

The version of the startup shell script in your Amazon S3 bucket. You must specify the [version ID](#) that Amazon S3 assigns to the file every time you update the script.

Version IDs are Unicode, UTF-8 encoded, URL-ready, opaque strings that are no more than 1,024 bytes long. The following is an example:

```
3sL4kqtJlcpXroDTDmJ+rmSpXd3dIbrHY+MTRCxf3vjVBH40Nr8X8gdRQBpUMLUo
```

For more information, see [Using a startup script](#).

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1024.

Required: No

StartupScriptS3Path

The relative path to the startup shell script in your Amazon S3 bucket. For example, `s3://mwa-environment/startup.sh`.

Amazon MWAA runs the script as your environment starts, and before running the Apache Airflow process. You can use this script to install dependencies, modify Apache Airflow configuration options, and set environment variables. For more information, see [Using a startup script](#).

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1024.

Pattern: `.*`

Required: No

Tags

The key-value tag pairs you want to associate to your environment. For example, "Environment": "Staging". For more information, see [Tagging Amazon resources](#).

Type: String to string map

Map Entries: Maximum number of 50 items.

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

Key Pattern: `([\p{L}\p{Z}\p{N}_.:/+\\-@]*)`

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

Value Pattern: `([\p{L}\p{Z}\p{N}_.:/+\\-@]*)`

Required: No

WebserverAccessMode

Defines the access mode for the Apache Airflow *web server*. For more information, see [Apache Airflow access modes](#).

Type: String

Valid Values: PRIVATE_ONLY | PUBLIC_ONLY

Required: No

WeeklyMaintenanceWindowStart

The day and time of the week in Coordinated Universal Time (UTC) 24-hour standard time to start weekly maintenance updates of your environment in the following format: DAY:HH:MM. For example: TUE:03:30. You can specify a start time in 30 minute increments only.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 9.

Pattern: .*(MON|TUE|WED|THU|FRI|SAT|SUN):([01]\d|2[0-3]):(00|30).*

Required: No

Response Syntax

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

{
  "Arn": "string"
}
```

Response Elements

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

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

Arn

The Amazon Resource Name (ARN) returned in the response for the environment.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1224.

Pattern: `arn:aws(-[a-z]+)?:airflow:[a-z0-9\-_]+\:\d{12}:environment/\w+.*`

Errors

For information about the errors that are common to all actions, see [Common Errors](#).

InternalServerError

InternalServerError: An internal error has occurred.

HTTP Status Code: 500

ValidationException

ValidationException: The provided input is not valid.

HTTP Status Code: 400

See Also

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

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

CreateWebLoginToken

Creates a web login token for the Airflow Web UI. To learn more, see [Creating an Apache Airflow web login token](#).

Request Syntax

```
POST /webtoken/Name HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

Name

The name of the Amazon MWAA environment. For example, MyMWAAEnvironment.

Length Constraints: Minimum length of 1. Maximum length of 80.

Pattern: `[a-zA-Z][0-9a-zA-Z-_]*`

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

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

{
  "AirflowIdentity": "string",
  "IamIdentity": "string",
  "WebServerHostname": "string",
  "WebToken": "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.

AirflowIdentity

The user name of the Apache Airflow identity creating the web login token.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

IamIdentity

The name of the IAM identity creating the web login token. This might be an IAM user, or an assumed or federated identity. For example, `assumed-role/Admin/your-name`.

Type: String

WebServerHostname

The Airflow web server hostname for the environment.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 255.

Pattern: `(([a-zA-Z0-9]|[a-zA-Z0-9][a-zA-Z0-9\-\-]*[a-zA-Z0-9])\.)*([A-Za-z0-9]|[A-Za-z0-9][A-Za-z0-9\-\-]*[A-Za-z0-9])`

WebToken

An Airflow web server login token.

Type: String

Errors

For information about the errors that are common to all actions, see [Common Errors](#).

AccessDeniedException

Access to the Apache Airflow Web UI or CLI has been denied due to insufficient permissions. To learn more, see [Accessing an Amazon MWAA environment](#).

HTTP Status Code: 403

InternalServerError

InternalServerError: An internal error has occurred.

HTTP Status Code: 500

ResourceNotFoundException

ResourceNotFoundException: The resource is not available.

HTTP Status Code: 404

ValidationException

ValidationException: The provided input is not valid.

HTTP Status Code: 400

See Also

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

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

DeleteEnvironment

Deletes an Amazon Managed Workflows for Apache Airflow (MWAA) environment.

Request Syntax

```
DELETE /environments/Name HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

Name

The name of the Amazon MWAA environment. For example, MyMWAAEnvironment.

Length Constraints: Minimum length of 1. Maximum length of 80.

Pattern: `[a-zA-Z][0-9a-zA-Z-_]*`

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

```
HTTP/1.1 200
```

Response Elements

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

Errors

For information about the errors that are common to all actions, see [Common Errors](#).

InternalServerErrorException

InternalServerErrorException: An internal error has occurred.

HTTP Status Code: 500

ResourceNotFoundException

ResourceNotFoundException: The resource is not available.

HTTP Status Code: 404

ValidationException

ValidationException: The provided input is not valid.

HTTP Status Code: 400

See Also

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

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

GetEnvironment

Describes an Amazon Managed Workflows for Apache Airflow (MWAA) environment.

Request Syntax

```
GET /environments/Name HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

Name

The name of the Amazon MWAA environment. For example, MyMWAAEnvironment.

Length Constraints: Minimum length of 1. Maximum length of 80.

Pattern: [a-zA-Z][0-9a-zA-Z-_*]

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

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

{
  "Environment": {
    "AirflowConfigurationOptions": {
      "string" : "string"
    },
    "AirflowVersion": "string",
    "Arn": "string",
    "CeleryExecutorQueue": "string",
    "CreatedAt": number,
    "DagS3Path": "string",
    "DatabaseVpcEndpointService": "string",
```

```
"EndpointManagement": "string",
"EnvironmentClass": "string",
"ExecutionRoleArn": "string",
"KmsKey": "string",
"LastUpdate": {
  "CreatedAt": number,
  "Error": {
    "ErrorCode": "string",
    "ErrorMessage": "string"
  },
  "Source": "string",
  "Status": "string"
},
"LoggingConfiguration": {
  "DagProcessingLogs": {
    "CloudWatchLogGroupArn": "string",
    "Enabled": boolean,
    "LogLevel": "string"
  },
  "SchedulerLogs": {
    "CloudWatchLogGroupArn": "string",
    "Enabled": boolean,
    "LogLevel": "string"
  },
  "TaskLogs": {
    "CloudWatchLogGroupArn": "string",
    "Enabled": boolean,
    "LogLevel": "string"
  },
  "WebserverLogs": {
    "CloudWatchLogGroupArn": "string",
    "Enabled": boolean,
    "LogLevel": "string"
  },
  "WorkerLogs": {
    "CloudWatchLogGroupArn": "string",
    "Enabled": boolean,
    "LogLevel": "string"
  }
},
"MaxWebservers": number,
"MaxWorkers": number,
"MinWebservers": number,
"MinWorkers": number,
```

```
"Name": "string",
"NetworkConfiguration": {
  "SecurityGroupIds": [ "string" ],
  "SubnetIds": [ "string" ]
},
"PluginsS3ObjectVersion": "string",
"PluginsS3Path": "string",
"RequirementsS3ObjectVersion": "string",
"RequirementsS3Path": "string",
"Schedulers": number,
"ServiceRoleArn": "string",
"SourceBucketArn": "string",
"StartupScriptS3ObjectVersion": "string",
"StartupScriptS3Path": "string",
"Status": "string",
"Tags": {
  "string" : "string"
},
"WebserverAccessMode": "string",
"WebserverUrl": "string",
"WebserverVpcEndpointService": "string",
"WeeklyMaintenanceWindowStart": "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.

Environment

An object containing all available details about the environment.

Type: [Environment](#) object

Errors

For information about the errors that are common to all actions, see [Common Errors](#).

InternalServerErrorException

InternalServerErrorException: An internal error has occurred.

HTTP Status Code: 500

ResourceNotFoundException

ResourceNotFoundException: The resource is not available.

HTTP Status Code: 404

ValidationException

ValidationException: The provided input is not valid.

HTTP Status Code: 400

See Also

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

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

ListEnvironments

Lists the Amazon Managed Workflows for Apache Airflow (MWAA) environments.

Request Syntax

```
GET /environments?MaxResults=MaxResults&NextToken=NextToken HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

MaxResults

The maximum number of results to retrieve per page. For example, 5 environments per page.

Valid Range: Minimum value of 1. Maximum value of 25.

NextToken

Retrieves the next page of the results.

Length Constraints: Minimum length of 0. Maximum length of 2048.

Request Body

The request does not have a request body.

Response Syntax

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

{
  "Environments": [ "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.

Environments

Returns a list of Amazon MWAA environments.

Type: Array of strings

Length Constraints: Minimum length of 1. Maximum length of 80.

Pattern: `[a-zA-Z][0-9a-zA-Z-]*`

NextToken

Retrieves the next page of the results.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 2048.

Errors

For information about the errors that are common to all actions, see [Common Errors](#).

InternalServerError

InternalServerError: An internal error has occurred.

HTTP Status Code: 500

ValidationException

ValidationException: The provided input is not valid.

HTTP Status Code: 400

See Also

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

- [Amazon Command Line Interface](#)

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

ListTagsForResource

Lists the key-value tag pairs associated to the Amazon Managed Workflows for Apache Airflow (MWAA) environment. For example, "Environment": "Staging".

Request Syntax

```
GET /tags/ResourceArn HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

ResourceArn

The Amazon Resource Name (ARN) of the Amazon MWAA environment. For example, `arn:aws:airflow:us-east-1:123456789012:environment/MyMWAAEnvironment`.

Length Constraints: Minimum length of 1. Maximum length of 1224.

Pattern: `arn:aws(-[a-z]+)?:airflow:[a-z0-9\-_]+\:\d{12}:environment/\w+.*`

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

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

{
  "Tags": {
    "string" : "string"
  }
}
```

Response Elements

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

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

Tags

The key-value tag pairs associated to your environment. For more information, see [Tagging Amazon resources](#).

Type: String to string map

Map Entries: Maximum number of 50 items.

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

Key Pattern: (`([\p{L}\p{Z}\p{N}_ :/=+\-@]*)`)

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

Value Pattern: (`([\p{L}\p{Z}\p{N}_ :/=+\-@]*)`)

Errors

For information about the errors that are common to all actions, see [Common Errors](#).

InternalServerError

InternalServerError: An internal error has occurred.

HTTP Status Code: 500

ResourceNotFoundException

ResourceNotFoundException: The resource is not available.

HTTP Status Code: 404

ValidationException

ValidationException: The provided input is not valid.

HTTP Status Code: 400

See Also

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

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

PublishMetrics

This action has been deprecated.

Internal only. Publishes environment health metrics to Amazon CloudWatch.

Request Syntax

```
POST /metrics/environments/EnvironmentName HTTP/1.1
Content-type: application/json
```

```
{
  "MetricData": [
    {
      "Dimensions": [
        {
          "Name": "string",
          "Value": "string"
        }
      ],
      "MetricName": "string",
      "StatisticValues": {
        "Maximum": number,
        "Minimum": number,
        "SampleCount": number,
        "Sum": number
      },
      "Timestamp": number,
      "Unit": "string",
      "Value": number
    }
  ]
}
```

URI Request Parameters

The request uses the following URI parameters.

EnvironmentName

Internal only. The name of the environment.

Length Constraints: Minimum length of 1. Maximum length of 80.

Pattern: `[a-zA-Z][0-9a-zA-Z-_]*`

Required: Yes

Request Body

The request accepts the following data in JSON format.

MetricData

This parameter has been deprecated.

Internal only. Publishes metrics to Amazon CloudWatch. To learn more about the metrics published to Amazon CloudWatch, see [Amazon MWAA performance metrics in Amazon CloudWatch](#).

Type: Array of [MetricDatum](#) objects

Required: Yes

Response Syntax

```
HTTP/1.1 200
```

Response Elements

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

Errors

For information about the errors that are common to all actions, see [Common Errors](#).

InternalServerError

InternalServerError: An internal error has occurred.

HTTP Status Code: 500

ValidationException

ValidationException: The provided input is not valid.

HTTP Status Code: 400

See Also

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

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

TagResource

Associates key-value tag pairs to your Amazon Managed Workflows for Apache Airflow (MWAA) environment.

Request Syntax

```
POST /tags/ResourceArn HTTP/1.1
Content-type: application/json
```

```
{
  "Tags": {
    "string" : "string"
  }
}
```

URI Request Parameters

The request uses the following URI parameters.

ResourceArn

The Amazon Resource Name (ARN) of the Amazon MWAA environment. For example, `arn:aws:airflow:us-east-1:123456789012:environment/MyMWAAEnvironment`.

Length Constraints: Minimum length of 1. Maximum length of 1224.

Pattern: `arn:aws(-[a-z]+)?:airflow:[a-z0-9\-_]+\:\d{12}:environment/\w+.*`

Required: Yes

Request Body

The request accepts the following data in JSON format.

Tags

The key-value tag pairs you want to associate to your environment. For example, `"Environment": "Staging"`. For more information, see [Tagging Amazon resources](#).

Type: String to string map

Map Entries: Maximum number of 50 items.

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

Key Pattern: (`([\p{L}\p{Z}\p{N}_.:/=+\-@]*)`)

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

Value Pattern: (`([\p{L}\p{Z}\p{N}_.:/=+\-@]*)`)

Required: Yes

Response Syntax

```
HTTP/1.1 200
```

Response Elements

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

Errors

For information about the errors that are common to all actions, see [Common Errors](#).

InternalServerError

InternalServerError: An internal error has occurred.

HTTP Status Code: 500

ResourceNotFoundException

ResourceNotFoundException: The resource is not available.

HTTP Status Code: 404

ValidationException

ValidationException: The provided input is not valid.

HTTP Status Code: 400

See Also

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

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

UntagResource

Removes key-value tag pairs associated to your Amazon Managed Workflows for Apache Airflow (MWAA) environment. For example, "Environment": "Staging".

Request Syntax

```
DELETE /tags/ResourceArn?tagKeys=tagKeys HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

ResourceArn

The Amazon Resource Name (ARN) of the Amazon MWAA environment. For example, `arn:aws:airflow:us-east-1:123456789012:environment/MyMWAAEnvironment`.

Length Constraints: Minimum length of 1. Maximum length of 1224.

Pattern: `arn:aws(-[a-z]+)?:airflow:[a-z0-9\-_]+\:\d{12}:environment/\w+.*`

Required: Yes

tagKeys

The key-value tag pair you want to remove. For example, "Environment": "Staging".

Array Members: Minimum number of 0 items. Maximum number of 50 items.

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

Pattern: `([\p{L}\p{Z}\p{N}_.:/=+\-@]*)`

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

```
HTTP/1.1 200
```

Response Elements

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

Errors

For information about the errors that are common to all actions, see [Common Errors](#).

InternalServerErrorException

InternalServerErrorException: An internal error has occurred.

HTTP Status Code: 500

ResourceNotFoundException

ResourceNotFoundException: The resource is not available.

HTTP Status Code: 404

ValidationException

ValidationException: The provided input is not valid.

HTTP Status Code: 400

See Also

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

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

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

UpdateEnvironment

Updates an Amazon Managed Workflows for Apache Airflow (MWAA) environment.

Request Syntax

```
PATCH /environments/Name HTTP/1.1
Content-type: application/json
```

```
{
  "AirflowConfigurationOptions": {
    "string" : "string"
  },
  "AirflowVersion": "string",
  "DagS3Path": "string",
  "EnvironmentClass": "string",
  "ExecutionRoleArn": "string",
  "LoggingConfiguration": {
    "DagProcessingLogs": {
      "Enabled": boolean,
      "LogLevel": "string"
    },
    "SchedulerLogs": {
      "Enabled": boolean,
      "LogLevel": "string"
    },
    "TaskLogs": {
      "Enabled": boolean,
      "LogLevel": "string"
    },
    "WebserverLogs": {
      "Enabled": boolean,
      "LogLevel": "string"
    },
    "WorkerLogs": {
      "Enabled": boolean,
      "LogLevel": "string"
    }
  },
  "MaxWebservers": number,
  "MaxWorkers": number,
  "MinWebservers": number,
  "MinWorkers": number,
}
```

```
"NetworkConfiguration": {  
  "SecurityGroupIds": [ "string" ]  
},  
"PluginsS3ObjectVersion": "string",  
"PluginsS3Path": "string",  
"RequirementsS3ObjectVersion": "string",  
"RequirementsS3Path": "string",  
"Schedulers": number,  
"SourceBucketArn": "string",  
"StartupScriptS3ObjectVersion": "string",  
"StartupScriptS3Path": "string",  
"WebserverAccessMode": "string",  
"WeeklyMaintenanceWindowStart": "string"  
}
```

URI Request Parameters

The request uses the following URI parameters.

Name

The name of your Amazon MWAA environment. For example, MyMWAAEnvironment.

Length Constraints: Minimum length of 1. Maximum length of 80.

Pattern: [a-zA-Z][0-9a-zA-Z-_*]

Required: Yes

Request Body

The request accepts the following data in JSON format.

AirflowConfigurationOptions

A list of key-value pairs containing the Apache Airflow configuration options you want to attach to your environment. For more information, see [Apache Airflow configuration options](#).

Type: String to string map

Key Length Constraints: Minimum length of 1. Maximum length of 64.

Key Pattern: [a-z]+([a-z0-9._]*[a-z0-9_]+)?

Value Length Constraints: Minimum length of 1. Maximum length of 65536.

Value Pattern: [-~]+

Required: No

AirflowVersion

The Apache Airflow version for your environment. To upgrade your environment, specify a newer version of Apache Airflow supported by Amazon MWAA.

Before you upgrade an environment, make sure your requirements, DAGs, plugins, and other resources used in your workflows are compatible with the new Apache Airflow version. For more information about updating your resources, see [Upgrading an Amazon MWAA environment](#).

Valid values: 1.10.12, 2.0.2, 2.2.2, 2.4.3, 2.5.1, 2.6.3, 2.7.2, 2.8.1.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 32.

Pattern: [0-9a-z.]+

Required: No

DagS3Path

The relative path to the DAGs folder on your Amazon S3 bucket. For example, dags. For more information, see [Adding or updating DAGs](#).

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1024.

Pattern: .*

Required: No

EnvironmentClass

The environment class type. Valid values: mw1.small, mw1.medium, mw1.large, mw1.xlarge, and mw1.2xlarge. For more information, see [Amazon MWAA environment class](#).

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1024.

Required: No

ExecutionRoleArn

The Amazon Resource Name (ARN) of the execution role in IAM that allows MWAA to access Amazon resources in your environment. For example, `arn:aws:iam::123456789:role/my-execution-role`. For more information, see [Amazon MWAA Execution role](#).

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1224.

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

Required: No

LoggingConfiguration

The Apache Airflow log types to send to CloudWatch Logs.

Type: [LoggingConfigurationInput](#) object

Required: No

MaxWebserver

The maximum number of web servers that you want to run in your environment. Amazon MWAA scales the number of Apache Airflow web servers up to the number you specify for `MaxWebserver` when you interact with your Apache Airflow environment using Apache Airflow REST API, or the Apache Airflow CLI. For example, in scenarios where your workload requires network calls to the Apache Airflow REST API with a high transaction-per-second (TPS) rate, Amazon MWAA will increase the number of web servers up to the number set in `MaxWebserver`. As TPS rates decrease Amazon MWAA disposes of the additional web servers, and scales down to the number set in `MinWebserver`.

Valid values: Accepts between 2 and 5. Defaults to 2.

Type: Integer

Valid Range: Minimum value of 2.

Required: No

MaxWorkers

The maximum number of workers that you want to run in your environment. MWAA scales the number of Apache Airflow workers up to the number you specify in the `MaxWorkers` field. For example, 20. When there are no more tasks running, and no more in the queue, MWAA disposes of the extra workers leaving the one worker that is included with your environment, or the number you specify in `MinWorkers`.

Type: Integer

Valid Range: Minimum value of 1.

Required: No

MinWebservers

The minimum number of web servers that you want to run in your environment. Amazon MWAA scales the number of Apache Airflow web servers up to the number you specify for `MaxWebservers` when you interact with your Apache Airflow environment using Apache Airflow REST API, or the Apache Airflow CLI. As the transaction-per-second rate, and the network load, decrease, Amazon MWAA disposes of the additional web servers, and scales down to the number set in `MinWebservers`.

Valid values: Accepts between 2 and 5. Defaults to 2.

Type: Integer

Valid Range: Minimum value of 2.

Required: No

MinWorkers

The minimum number of workers that you want to run in your environment. MWAA scales the number of Apache Airflow workers up to the number you specify in the `MaxWorkers` field. When there are no more tasks running, and no more in the queue, MWAA disposes of the extra workers leaving the worker count you specify in the `MinWorkers` field. For example, 2.

Type: Integer

Valid Range: Minimum value of 1.

Required: No

NetworkConfiguration

The VPC networking components used to secure and enable network traffic between the Amazon resources for your environment. For more information, see [About networking on Amazon MWAA](#).

Type: [UpdateNetworkConfigurationInput](#) object

Required: No

PluginsS3ObjectVersion

The version of the plugins.zip file on your Amazon S3 bucket. You must specify a version each time a plugins.zip file is updated. For more information, see [How S3 Versioning works](#).

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1024.

Required: No

PluginsS3Path

The relative path to the plugins.zip file on your Amazon S3 bucket. For example, plugins.zip. If specified, then the plugins.zip version is required. For more information, see [Installing custom plugins](#).

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1024.

Pattern: .*

Required: No

RequirementsS3ObjectVersion

The version of the requirements.txt file on your Amazon S3 bucket. You must specify a version each time a requirements.txt file is updated. For more information, see [How S3 Versioning works](#).

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1024.

Required: No

RequirementsS3Path

The relative path to the `requirements.txt` file on your Amazon S3 bucket. For example, `requirements.txt`. If specified, then a file version is required. For more information, see [Installing Python dependencies](#).

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1024.

Pattern: `.*`

Required: No

Schedulers

The number of Apache Airflow schedulers to run in your Amazon MWAA environment.

Type: Integer

Valid Range: Maximum value of 5.

Required: No

SourceBucketArn

The Amazon Resource Name (ARN) of the Amazon S3 bucket where your DAG code and supporting files are stored. For example, `arn:aws:s3:::my-airflow-bucket-unique-name`. For more information, see [Create an Amazon S3 bucket for Amazon MWAA](#).

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1224.

Pattern: `arn:aws(-[a-z]+)?:s3:::[a-z0-9.\-]+`

Required: No

StartupScriptS3ObjectVersion

The version of the startup shell script in your Amazon S3 bucket. You must specify the [version ID](#) that Amazon S3 assigns to the file every time you update the script.

Version IDs are Unicode, UTF-8 encoded, URL-ready, opaque strings that are no more than 1,024 bytes long. The following is an example:

3sL4kqtJlcpXroDTDmJ+rmSpXd3dIbrHY+MTRCxf3vjVBH40Nr8X8gdRQBpUMLUo

For more information, see [Using a startup script](#).

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1024.

Required: No

[StartupScriptS3Path](#)

The relative path to the startup shell script in your Amazon S3 bucket. For example, `s3://mwa-environment/startup.sh`.

Amazon MWAA runs the script as your environment starts, and before running the Apache Airflow process. You can use this script to install dependencies, modify Apache Airflow configuration options, and set environment variables. For more information, see [Using a startup script](#).

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1024.

Pattern: `.*`

Required: No

[WebserverAccessMode](#)

The Apache Airflow *Web server* access mode. For more information, see [Apache Airflow access modes](#).

Type: String

Valid Values: `PRIVATE_ONLY` | `PUBLIC_ONLY`

Required: No

[WeeklyMaintenanceWindowStart](#)

The day and time of the week in Coordinated Universal Time (UTC) 24-hour standard time to start weekly maintenance updates of your environment in the following format: `DAY:HH:MM`. For example: `TUE:03:30`. You can specify a start time in 30 minute increments only.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 9.

Pattern: `.*(MON|TUE|WED|THU|FRI|SAT|SUN):([01]\d|2[0-3]):(00|30).*`

Required: No

Response Syntax

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

{
  "Arn": "string"
}
```

Response Elements

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

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

Arn

The Amazon Resource Name (ARN) of the Amazon MWAA environment. For example, `arn:aws:airflow:us-east-1:123456789012:environment/MyMWAAEnvironment`.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1224.

Pattern: `arn:aws(-[a-z]+)?:airflow:[a-z0-9\-_]+\:\d{12}:environment/\w+.*`

Errors

For information about the errors that are common to all actions, see [Common Errors](#).

InternalServerError

InternalServerError: An internal error has occurred.

HTTP Status Code: 500

ResourceNotFoundException

ResourceNotFoundException: The resource is not available.

HTTP Status Code: 404

ValidationException

ValidationException: The provided input is not valid.

HTTP Status Code: 400

See Also

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

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

Data Types

The AmazonMWAA 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:

- [Dimension](#)
- [Environment](#)
- [LastUpdate](#)
- [LoggingConfiguration](#)
- [LoggingConfigurationInput](#)
- [MetricDatum](#)
- [ModuleLoggingConfiguration](#)
- [ModuleLoggingConfigurationInput](#)
- [NetworkConfiguration](#)
- [StatisticSet](#)
- [UpdateError](#)
- [UpdateNetworkConfigurationInput](#)

Dimension

This data type has been deprecated.

Internal only. Represents the dimensions of a metric. To learn more about the metrics published to Amazon CloudWatch, see [Amazon MWAA performance metrics in Amazon CloudWatch](#).

Contents

Name

Internal only. The name of the dimension.

Type: String

Required: Yes

Value

Internal only. The value of the dimension.

Type: String

Required: Yes

See Also

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

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

Environment

Describes an Amazon Managed Workflows for Apache Airflow (MWAA) environment.

Contents

AirflowConfigurationOptions

A list of key-value pairs containing the Apache Airflow configuration options attached to your environment. For more information, see [Apache Airflow configuration options](#).

Type: String to string map

Key Length Constraints: Minimum length of 1. Maximum length of 64.

Key Pattern: `[a-z]+([a-z0-9._]*[a-z0-9_]++)?`

Value Length Constraints: Minimum length of 1. Maximum length of 65536.

Value Pattern: `[-~]+`

Required: No

AirflowVersion

The Apache Airflow version on your environment.

Valid values: 1.10.12, 2.0.2, 2.2.2, 2.4.3, 2.5.1, 2.6.3, 2.7.2, 2.8.1.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 32.

Pattern: `[0-9a-z.]+`

Required: No

Arn

The Amazon Resource Name (ARN) of the Amazon MWAA environment.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1224.

Pattern: `arn:aws(-[a-z]+)?:airflow:[a-z0-9\-\-]+:\d{12}:environment/\w+.*`

Required: No

CeleryExecutorQueue

The queue ARN for the environment's [Celery Executor](#). Amazon MWAA uses a Celery Executor to distribute tasks across multiple workers. When you create an environment in a shared VPC, you must provide access to the Celery Executor queue from your VPC.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1224.

Pattern: `arn:aws(-[a-z]+)?:sqs:[a-z0-9\-\-]+:\d{12}:[a-zA-Z_0-9+=,.\@-_/\-]+`

Required: No

CreatedAt

The day and time the environment was created.

Type: Timestamp

Required: No

DagS3Path

The relative path to the DAGs folder in your Amazon S3 bucket. For example, `s3://mwa-environment/dags`. For more information, see [Adding or updating DAGs](#).

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1024.

Pattern: `.*`

Required: No

DatabaseVpcEndpointService

The VPC endpoint for the environment's Amazon RDS database.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1224.

Pattern: (`[a-z.-]+`)?com\.amazonaws\.vpce\.`[a-z0-9\-_]+`\.`[a-zA-Z_0-9+=,.\@-_/_]+`

Required: No

EndpointManagement

Defines whether the VPC endpoints configured for the environment are created, and managed, by the customer or by Amazon MWAA. If set to `SERVICE`, Amazon MWAA will create and manage the required VPC endpoints in your VPC. If set to `CUSTOMER`, you must create, and manage, the VPC endpoints in your VPC.

Type: String

Valid Values: `CUSTOMER` | `SERVICE`

Required: No

EnvironmentClass

The environment class type. Valid values: `mw1.small`, `mw1.medium`, `mw1.large`, `mw1.xlarge`, and `mw1.2xlarge`. For more information, see [Amazon MWAA environment class](#).

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1024.

Required: No

ExecutionRoleArn

The Amazon Resource Name (ARN) of the execution role in IAM that allows MWAA to access Amazon resources in your environment. For example, `arn:aws:iam::123456789:role/my-execution-role`. For more information, see [Amazon MWAA Execution role](#).

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1224.

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

Required: No

KmsKey

The Amazon KMS encryption key used to encrypt the data in your environment.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1224.

Pattern: (((arn:aws(-[a-z]+)? :kms:[a-z]{2}-[a-z]+-\d:\d+)?key\|)?[a-f0-9]{8}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{12}|(arn:aws(-[a-z]+)? :kms:[a-z]{2}-[a-z]+-\d:\d+)?alias/.+)

Required: No

LastUpdate

The status of the last update on the environment.

Type: [LastUpdate](#) object

Required: No

LoggingConfiguration

The Apache Airflow logs published to CloudWatch Logs.

Type: [LoggingConfiguration](#) object

Required: No

MaxWebservers

The maximum number of web servers that you want to run in your environment. Amazon MWAA scales the number of Apache Airflow web servers up to the number you specify for `MaxWebservers` when you interact with your Apache Airflow environment using Apache Airflow REST API, or the Apache Airflow CLI. For example, in scenarios where your workload requires network calls to the Apache Airflow REST API with a high transaction-per-second (TPS) rate, Amazon MWAA will increase the number of web servers up to the number set in `MaxWebservers`. As TPS rates decrease Amazon MWAA disposes of the additional web servers, and scales down to the number set in `MinxWebservers`.

Valid values: Accepts between 2 and 5. Defaults to 2.

Type: Integer

Valid Range: Minimum value of 2.

Required: No

MaxWorkers

The maximum number of workers that run in your environment. For example, 20.

Type: Integer

Valid Range: Minimum value of 1.

Required: No

MinWebservers

The minimum number of web servers that you want to run in your environment. Amazon MWAA scales the number of Apache Airflow web servers up to the number you specify for `MaxWebservers` when you interact with your Apache Airflow environment using Apache Airflow REST API, or the Apache Airflow CLI. As the transaction-per-second rate, and the network load, decrease, Amazon MWAA disposes of the additional web servers, and scales down to the number set in `MinxWebserers`.

Valid values: Accepts between 2 and 5. Defaults to 2.

Type: Integer

Valid Range: Minimum value of 2.

Required: No

MinWorkers

The minimum number of workers that run in your environment. For example, 2.

Type: Integer

Valid Range: Minimum value of 1.

Required: No

Name

The name of the Amazon MWAA environment. For example, `MyMWAAEnvironment`.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 80.

Pattern: `[a-zA-Z][0-9a-zA-Z-_]*`

Required: No

NetworkConfiguration

Describes the VPC networking components used to secure and enable network traffic between the Amazon resources for your environment. For more information, see [About networking on Amazon MWAA](#).

Type: [NetworkConfiguration](#) object

Required: No

PluginsS3ObjectVersion

The version of the `plugins.zip` file in your Amazon S3 bucket. You must specify the [version ID](#) that Amazon S3 assigns to the file.

Version IDs are Unicode, UTF-8 encoded, URL-ready, opaque strings that are no more than 1,024 bytes long. The following is an example:

```
3sL4kqtJlcpXroDTDmJ+rmSpXd3dIbrHY+MTRCxf3vjVBH40Nr8X8gdRQBpUMLUo
```

For more information, see [Installing custom plugins](#).

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1024.

Required: No

PluginsS3Path

The relative path to the file in your Amazon S3 bucket. For example, `s3://mwaa-environment/plugins.zip`. For more information, see [Installing custom plugins](#).

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1024.

Pattern: .*

Required: No

RequirementsS3ObjectVersion

The version of the `requirements.txt` file on your Amazon S3 bucket. You must specify the [version ID](#) that Amazon S3 assigns to the file.

Version IDs are Unicode, UTF-8 encoded, URL-ready, opaque strings that are no more than 1,024 bytes long. The following is an example:

```
3sL4kqtJlcpXroDTDmJ+rmSpXd3dIbrHY+MTRCxf3vjVBH40Nr8X8gdRQBpUMLUo
```

For more information, see [Installing Python dependencies](#).

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1024.

Required: No

RequirementsS3Path

The relative path to the `requirements.txt` file in your Amazon S3 bucket. For example, `s3://mwa-environment/requirements.txt`. For more information, see [Installing Python dependencies](#).

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1024.

Pattern: .*

Required: No

Schedulers

The number of Apache Airflow schedulers that run in your Amazon MWAA environment.

Type: Integer

Valid Range: Maximum value of 5.

Required: No

ServiceRoleArn

The Amazon Resource Name (ARN) for the service-linked role of the environment. For more information, see [Amazon MWAA Service-linked role](#).

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1224.

Pattern: `arn:aws(-[a-z]+)?:iam::\d{12}:role/?[a-zA-Z_0-9+=,.\@-_/\d]{1,1224}`

Required: No

SourceBucketArn

The Amazon Resource Name (ARN) of the Amazon S3 bucket where your DAG code and supporting files are stored. For example, `arn:aws:s3:::my-airflow-bucket-unique-name`. For more information, see [Create an Amazon S3 bucket for Amazon MWAA](#).

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1224.

Pattern: `arn:aws(-[a-z]+)?:s3:::[a-z0-9.\-]{1,1224}`

Required: No

StartupScriptS3ObjectVersion

The version of the startup shell script in your Amazon S3 bucket. You must specify the [version ID](#) that Amazon S3 assigns to the file.

Version IDs are Unicode, UTF-8 encoded, URL-ready, opaque strings that are no more than 1,024 bytes long. The following is an example:

```
3sL4kqtJlcpXroDTdmJ+rmSpXd3dIbrHY+MTRCxf3vjVBH40Nr8X8gdRQBpUMLUo
```

For more information, see [Using a startup script](#).

Type: String

Required: No

StartupScriptS3Path

The relative path to the startup shell script in your Amazon S3 bucket. For example, `s3://mwa-environment/startup.sh`.

Amazon MWAA runs the script as your environment starts, and before running the Apache Airflow process. You can use this script to install dependencies, modify Apache Airflow configuration options, and set environment variables. For more information, see [Using a startup script](#).

Type: String

Required: No

Status

The status of the Amazon MWAA environment.

Valid values:

- **CREATING** - Indicates the request to create the environment is in progress.
- **CREATING_SNAPSHOT** - Indicates the request to update environment details, or upgrade the environment version, is in progress and Amazon MWAA is creating a storage volume snapshot of the Amazon RDS database cluster associated with the environment. A database snapshot is a backup created at a specific point in time. Amazon MWAA uses snapshots to recover environment metadata if the process to update or upgrade an environment fails.
- **CREATE_FAILED** - Indicates the request to create the environment failed, and the environment could not be created.
- **AVAILABLE** - Indicates the request was successful and the environment is ready to use.
- **PENDING** - Indicates the request was successful, but the process to create the environment is paused until you create the required VPC endpoints in your VPC. After you create the VPC endpoints, the process resumes.
- **UPDATING** - Indicates the request to update the environment is in progress.
- **ROLLING_BACK** - Indicates the request to update environment details, or upgrade the environment version, failed and Amazon MWAA is restoring the environment using the latest storage volume snapshot.
- **DELETING** - Indicates the request to delete the environment is in progress.
- **DELETED** - Indicates the request to delete the environment is complete, and the environment has been deleted.

- **UNAVAILABLE** - Indicates the request failed, but the environment did not return to its previous state and is not stable.
- **UPDATE_FAILED** - Indicates the request to update the environment failed, and the environment was restored to its previous state successfully and is ready to use.
- **MAINTENANCE** - Indicates that the environment is undergoing maintenance. Depending on the type of work Amazon MWAA is performing, your environment might become unavailable during this process. After all operations are done, your environment will return to its status prior to maintenance operations.

We recommend reviewing our troubleshooting guide for a list of common errors and their solutions. For more information, see [Amazon MWAA troubleshooting](#).

Type: String

Valid Values: CREATING | CREATE_FAILED | AVAILABLE | UPDATING | DELETING | DELETED | UNAVAILABLE | UPDATE_FAILED | ROLLING_BACK | CREATING_SNAPSHOT | PENDING | MAINTENANCE

Required: No

Tags

The key-value tag pairs associated to your environment. For example, "Environment": "Staging". For more information, see [Tagging Amazon resources](#).

Type: String to string map

Map Entries: Maximum number of 50 items.

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

Key Pattern: (`([\p{L}\p{Z}\p{N}_.:/+\\-@]*)`)

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

Value Pattern: (`([\p{L}\p{Z}\p{N}_.:/+\\-@]*)`)

Required: No

WebserverAccessMode

The Apache Airflow *web server* access mode. For more information, see [Apache Airflow access modes](#).

Type: String

Valid Values: PRIVATE_ONLY | PUBLIC_ONLY

Required: No

WebserverUrl

The Apache Airflow *web server* host name for the Amazon MWAA environment. For more information, see [Accessing the Apache Airflow UI](#).

Type: String

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

Pattern: https://.+

Required: No

WebserverVpcEndpointService

The VPC endpoint for the environment's web server.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1224.

Pattern: ([a-z.-]+)?com\.amazonaws\.vpce\. [a-z0-9\-_]+\. [a-zA-Z_0-9+=, .@\-_/_]+

Required: No

WeeklyMaintenanceWindowStart

The day and time of the week in Coordinated Universal Time (UTC) 24-hour standard time that weekly maintenance updates are scheduled. For example: TUE:03:30.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 9.

Pattern: .*(MON|TUE|WED|THU|FRI|SAT|SUN):([01]\d|2[0-3]):(00|30).*

Required: No

See Also

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

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

LastUpdate

Describes the status of the last update on the environment, and any errors that were encountered.

Contents

CreatedAt

The day and time of the last update on the environment.

Type: Timestamp

Required: No

Error

The error that was encountered during the last update of the environment.

Type: [UpdateError](#) object

Required: No

Source

The source of the last update to the environment. Includes internal processes by Amazon MWAA, such as an environment maintenance update.

Type: String

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

Pattern: .+

Required: No

Status

The status of the last update on the environment.

Type: String

Valid Values: SUCCESS | PENDING | FAILED

Required: No

See Also

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

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

LoggingConfiguration

Describes the Apache Airflow log types that are published to CloudWatch Logs.

Contents

DagProcessingLogs

The Airflow DAG processing logs published to CloudWatch Logs and the log level.

Type: [ModuleLoggingConfiguration](#) object

Required: No

SchedulerLogs

The Airflow scheduler logs published to CloudWatch Logs and the log level.

Type: [ModuleLoggingConfiguration](#) object

Required: No

TaskLogs

The Airflow task logs published to CloudWatch Logs and the log level.

Type: [ModuleLoggingConfiguration](#) object

Required: No

WebserverLogs

The Airflow web server logs published to CloudWatch Logs and the log level.

Type: [ModuleLoggingConfiguration](#) object

Required: No

WorkerLogs

The Airflow worker logs published to CloudWatch Logs and the log level.

Type: [ModuleLoggingConfiguration](#) object

Required: No

See Also

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

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

LoggingConfigurationInput

Defines the Apache Airflow log types to send to CloudWatch Logs.

Contents

DagProcessingLogs

Publishes Airflow DAG processing logs to CloudWatch Logs.

Type: [ModuleLoggingConfigurationInput](#) object

Required: No

SchedulerLogs

Publishes Airflow scheduler logs to CloudWatch Logs.

Type: [ModuleLoggingConfigurationInput](#) object

Required: No

TaskLogs

Publishes Airflow task logs to CloudWatch Logs.

Type: [ModuleLoggingConfigurationInput](#) object

Required: No

WebserverLogs

Publishes Airflow web server logs to CloudWatch Logs.

Type: [ModuleLoggingConfigurationInput](#) object

Required: No

WorkerLogs

Publishes Airflow worker logs to CloudWatch Logs.

Type: [ModuleLoggingConfigurationInput](#) object

Required: No

See Also

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

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

MetricDatum

This data type has been deprecated.

Internal only. Collects Apache Airflow metrics. To learn more about the metrics published to Amazon CloudWatch, see [Amazon MWAA performance metrics in Amazon CloudWatch](#).

Contents

MetricName

Internal only. The name of the metric.

Type: String

Required: Yes

Timestamp

Internal only. The time the metric data was received.

Type: Timestamp

Required: Yes

Dimensions

This member has been deprecated.

Internal only. The dimensions associated with the metric.

Type: Array of [Dimension](#) objects

Required: No

StatisticValues

This member has been deprecated.

Internal only. The statistical values for the metric.

Type: [StatisticSet](#) object

Required: No

Unit

Internal only. The unit used to store the metric.

Type: String

Valid Values: Seconds | Microseconds | Milliseconds | Bytes | Kilobytes | Megabytes | Gigabytes | Terabytes | Bits | Kilobits | Megabits | Gigabits | Terabits | Percent | Count | Bytes/Second | Kilobytes/Second | Megabytes/Second | Gigabytes/Second | Terabytes/Second | Bits/Second | Kilobits/Second | Megabits/Second | Gigabits/Second | Terabits/Second | Count/Second | None

Required: No

Value

Internal only. The value for the metric.

Type: Double

Required: No

See Also

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

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

ModuleLoggingConfiguration

Describes the Apache Airflow log details for the log type (e.g. DagProcessingLogs).

Contents

CloudWatchLogGroupArn

The Amazon Resource Name (ARN) for the CloudWatch Logs group where the Apache Airflow log type (e.g. DagProcessingLogs) is published. For example, `arn:aws:logs:us-east-1:123456789012:log-group:airflow-MyMWAAEnvironment-MwaaEnvironment-DAGProcessing:*`.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1224.

Pattern: `arn:aws(-[a-z]+)?:logs:[a-z0-9\-\-]+\:\d{12}:log-group:\w+.*`

Required: No

Enabled

Indicates whether the Apache Airflow log type (e.g. DagProcessingLogs) is enabled.

Type: Boolean

Required: No

LogLevel

The Apache Airflow log level for the log type (e.g. DagProcessingLogs).

Type: String

Valid Values: CRITICAL | ERROR | WARNING | INFO | DEBUG

Required: No

See Also

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

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

ModuleLoggingConfigurationInput

Enables the Apache Airflow log type (e.g. DagProcessingLogs) and defines the log level to send to CloudWatch Logs (e.g. INFO).

Contents

Enabled

Indicates whether to enable the Apache Airflow log type (e.g. DagProcessingLogs).

Type: Boolean

Required: Yes

LogLevel

Defines the Apache Airflow log level (e.g. INFO) to send to CloudWatch Logs.

Type: String

Valid Values: CRITICAL | ERROR | WARNING | INFO | DEBUG

Required: Yes

See Also

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

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

NetworkConfiguration

Describes the VPC networking components used to secure and enable network traffic between the Amazon resources for your environment. For more information, see [About networking on Amazon MWAA](#).

Contents

SecurityGroupIds

A list of security group IDs. For more information, see [Security in your VPC on Amazon MWAA](#).

Type: Array of strings

Array Members: Minimum number of 1 item. Maximum number of 5 items.

Length Constraints: Minimum length of 1. Maximum length of 1024.

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

Required: No

SubnetIds

A list of subnet IDs. For more information, see [About networking on Amazon MWAA](#).

Type: Array of strings

Array Members: Fixed number of 2 items.

Length Constraints: Minimum length of 1. Maximum length of 1024.

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

Required: No

See Also

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

- [Amazon SDK for C++](#)

- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

StatisticSet

This data type has been deprecated.

Internal only. Represents a set of statistics that describe a specific metric. To learn more about the metrics published to Amazon CloudWatch, see [Amazon MWAA performance metrics in Amazon CloudWatch](#).

Contents

Maximum

Internal only. The maximum value of the sample set.

Type: Double

Required: No

Minimum

Internal only. The minimum value of the sample set.

Type: Double

Required: No

SampleCount

Internal only. The number of samples used for the statistic set.

Type: Integer

Required: No

Sum

Internal only. The sum of values for the sample set.

Type: Double

Required: No

See Also

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

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

UpdateError

Describes the error(s) encountered with the last update of the environment.

Contents

ErrorCode

The error code that corresponds to the error with the last update.

Type: String

Required: No

ErrorMessage

The error message that corresponds to the error code.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1024.

Pattern: . +

Required: No

See Also

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

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

UpdateNetworkConfigurationInput

Defines the VPC networking components used to secure and enable network traffic between the Amazon resources for your environment. For more information, see [About networking on Amazon MWAA](#).

Contents

SecurityGroupIds

A list of security group IDs. A security group must be attached to the same VPC as the subnets. For more information, see [Security in your VPC on Amazon MWAA](#).

Type: Array of strings

Array Members: Minimum number of 1 item. Maximum number of 5 items.

Length Constraints: Minimum length of 1. Maximum length of 1024.

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

Required: Yes

See Also

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

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

Common Parameters

The following list contains the parameters that all actions use for signing Signature Version 4 requests with a query string. Any action-specific parameters are listed in the topic for that action. For more information about Signature Version 4, see [Signing Amazon API requests](#) in the *IAM User Guide*.

Action

The action to be performed.

Type: string

Required: Yes

Version

The API version that the request is written for, expressed in the format YYYY-MM-DD.

Type: string

Required: Yes

X-Amz-Algorithm

The hash algorithm that you used to create the request signature.

Condition: Specify this parameter when you include authentication information in a query string instead of in the HTTP authorization header.

Type: string

Valid Values: AWS4-HMAC-SHA256

Required: Conditional

X-Amz-Credential

The credential scope value, which is a string that includes your access key, the date, the region you are targeting, the service you are requesting, and a termination string ("aws4_request"). The value is expressed in the following format: *access_key/YYYYMMDD/region/service/aws4_request*.

For more information, see [Create a signed Amazon API request](#) in the *IAM User Guide*.

Condition: Specify this parameter when you include authentication information in a query string instead of in the HTTP authorization header.

Type: string

Required: Conditional

X-Amz-Date

The date that is used to create the signature. The format must be ISO 8601 basic format (YYYYMMDD'T'HHMMSS'Z'). For example, the following date time is a valid X-Amz-Date value: 20120325T120000Z.

Condition: X-Amz-Date is optional for all requests; it can be used to override the date used for signing requests. If the Date header is specified in the ISO 8601 basic format, X-Amz-Date is not required. When X-Amz-Date is used, it always overrides the value of the Date header. For more information, see [Elements of an Amazon API request signature](#) in the *IAM User Guide*.

Type: string

Required: Conditional

X-Amz-Security-Token

The temporary security token that was obtained through a call to Amazon Security Token Service (Amazon STS). For a list of services that support temporary security credentials from Amazon STS, see [Amazon Web Services that work with IAM](#) in the *IAM User Guide*.

Condition: If you're using temporary security credentials from Amazon STS, you must include the security token.

Type: string

Required: Conditional

X-Amz-Signature

Specifies the hex-encoded signature that was calculated from the string to sign and the derived signing key.

Condition: Specify this parameter when you include authentication information in a query string instead of in the HTTP authorization header.

Type: string

Required: Conditional

X-Amz-SignedHeaders

Specifies all the HTTP headers that were included as part of the canonical request. For more information about specifying signed headers, see [Create a signed Amazon API request](#) in the *IAM User Guide*.

Condition: Specify this parameter when you include authentication information in a query string instead of in the HTTP authorization header.

Type: string

Required: Conditional

Common Errors

This section lists the errors common to the API actions of all Amazon services. For errors specific to an API action for this service, see the topic for that API action.

AccessDeniedException

You do not have sufficient access to perform this action.

HTTP Status Code: 403

ExpiredTokenException

The security token included in the request is expired

HTTP Status Code: 403

IncompleteSignature

The request signature does not conform to Amazon standards.

HTTP Status Code: 403

InternalFailure

The request processing has failed because of an unknown error, exception or failure.

HTTP Status Code: 500

MalformedHttpRequestException

Problems with the request at the HTTP level, e.g. we can't decompress the body according to the decompression algorithm specified by the content-encoding.

HTTP Status Code: 400

NotAuthorized

You do not have permission to perform this action.

HTTP Status Code: 401

OptInRequired

The Amazon access key ID needs a subscription for the service.

HTTP Status Code: 403

RequestAbortedException

Convenient exception that can be used when a request is aborted before a reply is sent back (e.g. client closed connection).

HTTP Status Code: 400

RequestEntityTooLargeException

Problems with the request at the HTTP level. The request entity is too large.

HTTP Status Code: 413

RequestExpired

The request reached the service more than 15 minutes after the date stamp on the request or more than 15 minutes after the request expiration date (such as for pre-signed URLs), or the date stamp on the request is more than 15 minutes in the future.

HTTP Status Code: 400

RequestTimeoutException

Problems with the request at the HTTP level. Reading the Request timed out.

HTTP Status Code: 408

ServiceUnavailable

The request has failed due to a temporary failure of the server.

HTTP Status Code: 503

ThrottlingException

The request was denied due to request throttling.

HTTP Status Code: 400

UnrecognizedClientException

The X.509 certificate or Amazon access key ID provided does not exist in our records.

HTTP Status Code: 403

UnknownOperationException

The action or operation requested is invalid. Verify that the action is typed correctly.

HTTP Status Code: 404

ValidationError

The input fails to satisfy the constraints specified by an Amazon service.

HTTP Status Code: 400