CloudWatch Evidently API Reference API Version 2021-02-01



CloudWatch Evidently: API Reference

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Table of Contents

	chEvaluateFeature
Dat	Request Syntax
	URI Request Parameters
	Request Body
	Response Syntax
	Response Elements
	Errors
-	See Also
Cre	ateExperiment
	Request Syntax
	URI Request Parameters
	Response Syntax
	Response Elements
	Errors
	See Also
Cre	ateFeature
	Request Syntax
	URI Request Parameters
	Request Body
	Response Syntax
	Response Elements
	Errors
_	See Also
Cre	ateLaunch
	Request Syntax
	URI Request Parameters
	Request Body
	Response Syntax
	Response Elements
	Errors
	See Also
Cre	ateProject
	Request Syntax
	URI Request Parameters
	Request Body
	Response Syntax
	Response Elements
	Errors
	See Also
Del	eteExperiment
Det	Request Syntax
	URI Request Parameters
	Request Body
	Response Syntax
	Response Elements
	Errors
	See Also
Del	eteFeature
	Request Syntax
	URI Request Parameters
	Request Body

Response Syntax	27
Response Elements	27
Errors	27
See Also	28
DeleteLaunch	29
Request Syntax	
URI Request Parameters	
Request Body	
Response Syntax	
Response Elements	
Errors	
See Also	
DeleteProject	
Request Syntax	
URI Request Parameters	
Request Body	
Response Syntax	
Response Elements	
Errors	31
See Also	
EvaluateFeature	
Request Syntax	33
URI Request Parameters	33
Request Body	33
Response Syntax	34
Response Elements	34
Errors	35
See Also	
GetExperiment	
Request Syntax	
URI Request Parameters	
Request Body	
Response Syntax	
·	
Response Elements	
Errors	
See Also	
GetExperimentResults	
Request Syntax	
URI Request Parameters	
Request Body	
Response Syntax	
Response Elements	42
Errors	42
See Also	43
GetFeature	44
Request Syntax	44
URI Request Parameters	
Request Body	
Response Syntax	
Response Elements	
Errors	
See Also	
GetLaunch	
Request Syntax	
URI Request Parameters	
Request Body	
Response Syntax	47

Response Elements	48
Errors	48
See Also	49
GetProject	50
Request Syntax	
URI Request Parameters	
Request Body	
Response Syntax	
Response Elements	
Errors	
See Also	
ListExperiments	
Request Syntax	
URI Request Parameters	
Request Body	
Response Syntax	
Response Elements	
Errors	
See Also	
ListFeatures	
Request Syntax	
URI Request Parameters	
Request Body	
Response Syntax	
Response Elements	
Errors	
See Also	58
ListLaunches	
Request Syntax	59
URI Request Parameters	59
Request Body	59
Response Syntax	59
Response Elements	
Errors	61
See Also	61
ListProjects	
Request Syntax	
URI Request Parameters	
Request Body	
Response Syntax	
Response Elements	
Errors	
See Also	
ListTagsForResource	
Request Syntax	
URI Request Parameters	
Request Body	
Response Syntax	
Response Elements	
Errors	
See Also	
PutProjectEvents	
Request Syntax	
URI Request Parameters	
Request Body	67
Response Syntax	
Response Elements	68

Erre	ors	68
See	e Also	68
StartExp	eriment	70
Red	quest Syntax	70
	l Request Parameters	
	quest Body	
	sponse Syntax	
	sponse Elements	
	ors	
	e Also	
	nch	
	quest Syntax	
	I Request Parameters	
	quest Body	
	·	
	sponse Syntax	
	sponse Elements	
	ors	
	e Also	
	eriment	
Red	quest Syntax	76
UR	I Request Parameters	76
Red	quest Body	76
Res	sponse Syntax	77
Res	sponse Elements	77
Erre	ors	77
See	e Also	78
StopLaur	nch	79
	quest Syntax	
	I Request Parameters	
	quest Body	
	sponse Syntax	
	sponse Elements	
	ors	
	e Also	
	urce	
	quest Syntax	
	I Request Parameters	
	quest Body	
	sponse Syntax	
Res	sponse Elements	
	ors	
See	e Also	83
UntagRes	source	84
Red	quest Syntax	84
UR	I Request Parameters	84
	quest Body	
	sponse Syntax	
	sponse Elements	
	ors	
	e Also	
	xperiment	
	quest Syntax	
	I Request Parameters	
	quest Body	
	sponse Syntax	
	sponse Elements	
Frr	ors	QC

	See Also	. 89
	UpdateFeature	
	Request Syntax	
	URI Request Parameters	
	Request Body	
	Response Syntax	
	Response Elements	
	Errors	
	See Also	
	UpdateLaunch	
	Request Syntax	
	URI Request Parameters	
	Request Body	
	Response Syntax	
	Response Elements	. 98
	Errors	. 99
	See Also	. 99
	UpdateProject	100
	Request Syntax	100
	URI Request Parameters	
	Request Body	
	Response Syntax	
	Response Elements	
	Errors	
	See Also	
	UpdateProjectDataDelivery	
	Request Syntax	
	URI Request Parameters	
	Request Body	
	Response Syntax	
	Response Elements	
	Errors	104
	See Also	
Data	Types	106
	CloudWatchLogsDestination	108
	Contents	108
	See Also	108
	CloudWatchLogsDestinationConfig	
	Contents	
	See Also	
		110
	Contents	
	See Also	
	EvaluationResult	
	Contents	
	See Also	
	EvaluationRule	
	Contents	
	See Also	
	Event	
	Contents	114
	See Also	114
	Experiment	115
	Contents	
	See Also	_
	ExperimentExecution	
	Contents	

See Also	119
ExperimentReport	
Contents	
See Also	
ExperimentResultsData	
Contents	
See Also	
ExperimentSchedule	
Contents	
See Also	
Feature	
Contents	
See Also	
FeatureSummary	
Contents	
See Also	
Launch	
Contents	
See Also	
LaunchExecution	132
Contents	132
See Also	132
LaunchGroup	133
Contents	133
See Also	133
LaunchGroupConfig	
Contents	
See Also	
MetricDefinition	
Contents	
See Also	
MetricDefinitionConfig	
Contents	
See Also	
MetricGoal	
Contents	
See Also	
MetricGoalConfig	
Contents	
See Also	
MetricMonitor	
Contents	
See Also	
MetricMonitorConfig	143
Contents	143
See Also	143
OnlineAbConfig	144
Contents	144
See Also	144
OnlineAbDefinition	145
Contents	
See Also	
Project	
Contents	
See Also	
ProjectDataDelivery	
Contents	

See Also		149
ProjectDataDeliveryConfig		150
See Also		150
· · · · · · · · · · · · · · · · · · ·		
•		
<u> </u>		156
		156
		157
ScheduledSplitConfig		158
Contents		158
See Also		158
ScheduledSplitsLaunchConfig		159
		160
		160
•		
		_
		164
		164
		165
See Also		165
Variation		166
Contents		166
		166
		167
		167
		168
IIIOII EIIOI3	••••••••••••••••••••••••••••••••••	1,0

Welcome

You can use Amazon CloudWatch Evidently to safely validate new features by serving them to a specified percentage of your users while you roll out the feature. You can monitor the performance of the new feature to help you decide when to ramp up traffic to your users. This helps you reduce risk and identify unintended consequences before you fully launch the feature.

You can also conduct A/B experiments to make feature design decisions based on evidence and data. An experiment can test as many as five variations at once. Evidently collects experiment data and analyzes it using statistical methods. It also provides clear recommendations about which variations perform better. You can test both user-facing features and backend features.

This document was last published on June 2, 2022.

Actions

The following actions are supported:

- BatchEvaluateFeature (p. 3)
- CreateExperiment (p. 6)
- CreateFeature (p. 11)
- CreateLaunch (p. 16)
- CreateProject (p. 21)
- DeleteExperiment (p. 25)
- DeleteFeature (p. 27)
- DeleteLaunch (p. 29)
- DeleteProject (p. 31)
- EvaluateFeature (p. 33)
- GetExperiment (p. 36)
- GetExperimentResults (p. 39)
- GetFeature (p. 44)
- GetLaunch (p. 47)
- GetProject (p. 50)
- ListExperiments (p. 53)
- ListFeatures (p. 56)
- ListLaunches (p. 59)
- ListProjects (p. 62)
- ListTagsForResource (p. 65)
- PutProjectEvents (p. 67)
- StartExperiment (p. 70)
- StartLaunch (p. 73)
- StopExperiment (p. 76)
- StopLaunch (p. 79)
- TagResource (p. 82)
- UntagResource (p. 84)
- UpdateExperiment (p. 86)
- UpdateFeature (p. 91)
- UpdateLaunch (p. 96)
- UpdateProject (p. 100)
- UpdateProjectDataDelivery (p. 103)

BatchEvaluateFeature

This operation assigns feature variation to user sessions. For each user session, you pass in an entityID that represents the user. Evidently then checks the evaluation rules and assigns the variation.

The first rules that are evaluated are the override rules. If the user's entityID matches an override rule, the user is served the variation specified by that rule.

Next, if there is a launch of the feature, the user might be assigned to a variation in the launch. The chance of this depends on the percentage of users that are allocated to that launch. If the user is enrolled in the launch, the variation they are served depends on the allocation of the various feature variations used for the launch.

If the user is not assigned to a launch, and there is an ongoing experiment for this feature, the user might be assigned to a variation in the experiment. The chance of this depends on the percentage of users that are allocated to that experiment. If the user is enrolled in the experiment, the variation they are served depends on the allocation of the various feature variations used for the experiment.

If the user is not assigned to a launch or experiment, they are served the default variation.

Request Syntax

URI Request Parameters

The request uses the following URI parameters.

project (p. 3)

The name or ARN of the project that contains the feature being evaluated.

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

```
Pattern: ([-a-zA-Z0-9._]*)|(arn:[^:]*:[^:]*:[^:]*:[^:]*:project/[-a-zA-Z0-9._]*)
```

Required: Yes

Request Body

The request accepts the following data in JSON format.

```
requests (p. 3)
```

An array of structures, where each structure assigns a feature variation to one user session.

Type: Array of EvaluationRequest (p. 110) objects

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

Required: Yes

Response Syntax

```
HTTP/1.1 200
Content-type: application/json
   "results": [
      {
         "details": "string",
         "entityId": "string",
         "feature": "string",
         "project": "string",
         "reason": "string",
         "value": {
            "boolValue": boolean,
            "doubleValue": number,
            "longValue": number,
            "stringValue": "string"
         "variation": "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.

```
results (p. 4)
```

An array of structures, where each structure displays the results of one feature evaluation assignment to one user session.

Type: Array of EvaluationResult (p. 111) objects

Errors

For information about the errors that are common to all actions, see Common Errors (p. 170).

AccessDeniedException

You do not have sufficient permissions to perform this action.

HTTP Status Code: 403

ResourceNotFoundException

The request references a resource that does not exist.

HTTP Status Code: 404

CloudWatch Evidently API Reference See Also

ThrottlingException

The request was denied because of request throttling. Retry the request.

HTTP Status Code: 429

ValidationException

The value of a parameter in the request caused an error.

HTTP Status Code: 400

See Also

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

CreateExperiment

Creates an Evidently *experiment*. Before you create an experiment, you must create the feature to use for the experiment.

An experiment helps you make feature design decisions based on evidence and data. An experiment can test as many as five variations at once. Evidently collects experiment data and analyzes it by statistical methods, and provides clear recommendations about which variations perform better.

Don't use this operation to update an existing experiment. Instead, use UpdateExperiment.

Request Syntax

```
POST /projects/project/experiments HTTP/1.1
Content-type: application/json
   "description": "string",
   "metricGoals": [
          "desiredChange": "string",
          "metricDefinition": {
            "entityIdKey": "string",
"eventPattern": "string",
             "name": "string",
             "unitLabel": "string",
             "valueKey": "string"
          }
      }
   ],
   "name": "string",
   "onlineAbConfig": {
      "controlTreatmentName": "string",
      "treatmentWeights": {
         "string" : number
   },
   "randomizationSalt": "string",
   "samplingRate": number,
   "tags": {
      "string" : "string"
   }.
   "treatments": [
          "description": "string",
          "feature": "string",
          "name": "string",
          "variation": "string"
      }
   ]
```

URI Request Parameters

The request uses the following URI parameters.

project (p. 6)

The name or ARN of the project that you want to create the new experiment in.

CloudWatch Evidently API Reference Request Body

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

```
Pattern: ([-a-zA-Z0-9._]*)|(arn:[^:]*:[^:]*:[^:]*:[^:]*:project/[-a-zA-Z0-9._]*)
Required: Yes
```

Request Body

The request accepts the following data in JSON format.

```
description (p. 6)
```

An optional description of the experiment.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 160.

Pattern: .*
Required: No

metricGoals (p. 6)

An array of structures that defines the metrics used for the experiment, and whether a higher or lower value for each metric is the goal.

Type: Array of MetricGoalConfig (p. 141) objects

Array Members: Minimum number of 1 item. Maximum number of 3 items.

Required: Yes

name (p. 6)

A name for the new experiment.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 127.

Pattern: ^[-a-zA-Z0-9._]*\$

Required: Yes onlineAbConfig (p. 6)

A structure that contains the configuration of which variation to use as the "control" version. tThe "control" version is used for comparison with other variations. This structure also specifies how much experiment traffic is allocated to each variation.

Type: OnlineAbConfig (p. 144) object

Required: No

randomizationSalt (p. 6)

When Evidently assigns a particular user session to an experiment, it must use a randomization ID to determine which variation the user session is served. This randomization ID is a combination of the entity ID and randomizationSalt. If you omit randomizationSalt, Evidently uses the experiment name as the randomizationSalt.

CloudWatch Evidently API Reference Response Syntax

Type: String

Length Constraints: Minimum length of 0. Maximum length of 127.

Pattern: .*

Required: No

samplingRate (p. 6)

The portion of the available audience that you want to allocate to this experiment, in thousandths of a percent. The available audience is the total audience minus the audience that you have allocated to overrides or current launches of this feature.

This is represented in thousandths of a percent. For example, specify 10,000 to allocate 10% of the available audience.

Type: Long

Valid Range: Minimum value of 0. Maximum value of 100000.

Required: No

tags (p. 6)

Assigns one or more tags (key-value pairs) to the experiment.

Tags can help you organize and categorize your resources. You can also use them to scope user permissions by granting a user permission to access or change only resources with certain tag values.

Tags don't have any semantic meaning to AWS and are interpreted strictly as strings of characters.

You can associate as many as 50 tags with an experiment.

For more information, see Tagging AWS resources.

Type: String to string map

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

Key Pattern: ^(?!aws:)[a-zA-Z+-=._:/]+\$

Value Length Constraints: Minimum length of 0. Maximum length of 256.

Required: No

treatments (p. 6)

An array of structures that describe the configuration of each feature variation used in the experiment.

Type: Array of TreatmentConfig (p. 162) objects

Array Members: Minimum number of 0 items. Maximum number of 5 items.

Required: Yes

Response Syntax

HTTP/1.1 200

```
Content-type: application/json
{
   "experiment": {
      "arn": "string",
      "createdTime": number,
      "description": "string",
      "execution": {
        "endedTime": number,
         "startedTime": number
      "lastUpdatedTime": number,
      "metricGoals": [
         {
            "desiredChange": "string",
            "metricDefinition": {
               "entityIdKey": "string",
               "eventPattern": "string",
               "name": "string",
               "unitLabel": "string",
               "valueKey": "string"
         }
      ],
      "name": "string",
      "onlineAbDefinition": {
         "controlTreatmentName": "string",
         "treatmentWeights": {
            "string" : number
         }
      "project": "string",
      "randomizationSalt": "string",
      "samplingRate": number,
      "schedule": {
         "analysisCompleteTime": number
      },
      "status": "string",
      "statusReason": "string",
      "tags": {
         "string" : "string"
      "treatments": [
         {
            "description": "string",
            "featureVariations": {
               "string" : "string"
            "name": "string"
      "type": "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.

experiment (p. 8)

A structure containing the configuration details of the experiment that you created.

Type: Experiment (p. 115) object

Errors

For information about the errors that are common to all actions, see Common Errors (p. 170).

AccessDeniedException

You do not have sufficient permissions to perform this action.

HTTP Status Code: 403

ConflictException

A resource was in an inconsistent state during an update or a deletion.

HTTP Status Code: 409
ResourceNotFoundException

The request references a resource that does not exist.

HTTP Status Code: 404

ServiceQuotaExceededException

The request would cause a service quota to be exceeded.

HTTP Status Code: 402

ValidationException

The value of a parameter in the request caused an error.

HTTP Status Code: 400

See Also

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

CreateFeature

Creates an Evidently *feature* that you want to launch or test. You can define up to five variations of a feature, and use these variations in your launches and experiments. A feature must be created in a project. For information about creating a project, see <u>CreateProject</u>.

Don't use this operation to update an existing feature. Instead, use UpdateFeature.

Request Syntax

```
POST /projects/project/features HTTP/1.1
Content-type: application/json
   "defaultVariation": "string",
   "description": "string",
   "entityOverrides": {
      "string" : "string"
   "evaluationStrategy": "string",
   "name": "string",
   "tags": {
      "string" : "string"
   "variations": [
      {
         "name": "string",
         "value": {
            "boolValue": boolean,
            "doubleValue": number,
            "longValue": number,
            "stringValue": "string"
      }
   ]
```

URI Request Parameters

The request uses the following URI parameters.

```
project (p. 11)
```

The name or ARN of the project that is to contain the new feature.

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

```
Pattern: ([-a-zA-Z0-9._]*)|(arn:[^:]*:[^:]*:[^:]*:[^:]*:project/[-a-zA-Z0-9._]*)
```

Required: Yes

Request Body

The request accepts the following data in JSON format.

defaultVariation (p. 11)

The name of the variation to use as the default variation. The default variation is served to users who are not allocated to any ongoing launches or experiments of this feature.

This variation must also be listed in the variations structure.

If you omit defaultVariation, the first variation listed in the variations structure is used as the default variation.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 127.

Pattern: ^[-a-zA-Z0-9.]*\$

Required: No description (p. 11)

An optional description of the feature.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 160.

Pattern: .*

Required: No

entityOverrides (p. 11)

Specify users that should always be served a specific variation of a feature. Each user is specified by a key-value pair. For each key, specify a user by entering their user ID, account ID, or some other identifier. For the value, specify the name of the variation that they are to be served.

Type: String to string map

Map Entries: Minimum number of 0 items. Maximum number of 20 items.

Key Length Constraints: Minimum length of 1. Maximum length of 512.

Key Pattern: .*

Value Length Constraints: Minimum length of 1. Maximum length of 127.

Value Pattern: ^[-a-zA-Z0-9.]*\$

Required: No

evaluationStrategy (p. 11)

Specify ALL_RULES to activate the traffic allocation specified by any ongoing launches or experiments. Specify DEFAULT_VARIATION to serve the default variation to all users instead.

Type: String

Valid Values: ALL_RULES | DEFAULT_VARIATION

Required: No

name (p. 11)

The name for the new feature.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 127.

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

Required: Yes

tags (p. 11)
```

Assigns one or more tags (key-value pairs) to the feature.

Tags can help you organize and categorize your resources. You can also use them to scope user permissions by granting a user permission to access or change only resources with certain tag values.

Tags don't have any semantic meaning to AWS and are interpreted strictly as strings of characters.

You can associate as many as 50 tags with a feature.

For more information, see Tagging AWS resources.

Type: String to string map

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

```
Key Pattern: ^(?!aws:)[a-zA-Z+-=._:/]+$
```

Value Length Constraints: Minimum length of 0. Maximum length of 256.

```
Required: No variations (p. 11)
```

An array of structures that contain the configuration of the feature's different variations.

Type: Array of VariationConfig (p. 167) objects

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

Required: Yes

Response Syntax

```
HTTP/1.1 200
Content-type: application/json
   "feature": {
      "arn": "string",
      "createdTime": number,
      "defaultVariation": "string",
      "description": "string",
      "entityOverrides": {
         "string" : "string"
      "evaluationRules": [
            "name": "string",
            "type": "string"
      "evaluationStrategy": "string",
      "lastUpdatedTime": number,
      "name": "string"
      "project": "string",
```

```
"status": "string",
"tags": {
    "string" : "string"
},
"valueType": "string",
"variations": [
    {
        "name": "string",
        "value": {
            "boolValue": boolean,
            "doubleValue": number,
            "longValue": number,
            "stringValue": "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.

feature (p. 13)

A structure that contains information about the new feature.

Type: Feature (p. 124) object

Errors

For information about the errors that are common to all actions, see Common Errors (p. 170).

AccessDeniedException

You do not have sufficient permissions to perform this action.

HTTP Status Code: 403

ConflictException

A resource was in an inconsistent state during an update or a deletion.

HTTP Status Code: 409

ResourceNotFoundException

The request references a resource that does not exist.

HTTP Status Code: 404

ServiceQuotaExceededException

The request would cause a service quota to be exceeded.

HTTP Status Code: 402

ValidationException

The value of a parameter in the request caused an error.

HTTP Status Code: 400

See Also

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

CreateLaunch

Creates a *launch* of a given feature. Before you create a launch, you must create the feature to use for the launch.

You can use a launch to safely validate new features by serving them to a specified percentage of your users while you roll out the feature. You can monitor the performance of the new feature to help you decide when to ramp up traffic to more users. This helps you reduce risk and identify unintended consequences before you fully launch the feature.

Don't use this operation to update an existing launch. Instead, use UpdateLaunch.

Request Syntax

```
POST /projects/project/launches HTTP/1.1
Content-type: application/json
   "description": "string",
   "groups": [
          "description": "string",
          "feature": "string",
          "name": "string",
          "variation": "string"
      }
   ],
   "metricMonitors": [
          "metricDefinition": {
             "entityIdKey": "string",
"eventPattern": "string",
             "name": "string",
             "unitLabel": "string",
             "valueKey": "string"
      }
   ],
   "name": "string",
   "randomizationSalt": "string",
   "scheduledSplitsConfig": {
      "steps": [
             "groupWeights": {
                "string" : number
             "startTime": number
      ]
   "tags": {
      "string" : "string"
}
```

URI Request Parameters

The request uses the following URI parameters.

CloudWatch Evidently API Reference Request Body

project (p. 16)

The name or ARN of the project that you want to create the launch in.

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

```
Pattern: ([-a-zA-Z0-9._]*)|(arn:[^:]*:[^:]*:[^:]*:[^:]*:project/[-a-zA-Z0-9._]*)
```

Required: Yes

Request Body

The request accepts the following data in JSON format.

```
description (p. 16)
```

An optional description for the launch.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 160.

Pattern: .*

Required: No

groups (p. 16)

An array of structures that contains the feature and variations that are to be used for the launch.

Type: Array of LaunchGroupConfig (p. 134) objects

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

Required: Yes

metricMonitors (p. 16)

An array of structures that define the metrics that will be used to monitor the launch performance.

Type: Array of MetricMonitorConfig (p. 143) objects

Array Members: Minimum number of 0 items. Maximum number of 3 items.

Required: No

name (p. 16)

The name for the new launch.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 127.

Pattern: ^[-a-zA-Z0-9._]*\$

Required: Yes

randomizationSalt (p. 16)

When Evidently assigns a particular user session to a launch, it must use a randomization ID to determine which variation the user session is served. This randomization ID is a combination of the

CloudWatch Evidently API Reference Response Syntax

entity ID and randomizationSalt. If you omit randomizationSalt, Evidently uses the launch name as the randomizationsSalt.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 127.

Pattern: .*

Required: No

scheduledSplitsConfig (p. 16)

An array of structures that define the traffic allocation percentages among the feature variations during each step of the launch.

Type: ScheduledSplitsLaunchConfig (p. 159) object

Required: No

tags (p. 16)

Assigns one or more tags (key-value pairs) to the launch.

Tags can help you organize and categorize your resources. You can also use them to scope user permissions by granting a user permission to access or change only resources with certain tag values.

Tags don't have any semantic meaning to AWS and are interpreted strictly as strings of characters.

You can associate as many as 50 tags with a launch.

For more information, see Tagging AWS resources.

Type: String to string map

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

Key Pattern: ^(?!aws:)[a-zA-Z+-=._:/]+\$

Value Length Constraints: Minimum length of 0. Maximum length of 256.

Required: No

Response Syntax

```
"name": "string"
      }
   ],
   "lastUpdatedTime": number,
   "metricMonitors": [
      {
         "metricDefinition": {
            "entityIdKey": "string",
            "eventPattern": "string",
            "name": "string",
            "unitLabel": "string",
            "valueKey": "string"
      }
   "name": "string",
   "project": "string",
   "randomizationSalt": "string",
   "scheduledSplitsDefinition": {
      "steps": [
            "groupWeights": {
               "string" : number
            "startTime": number
         }
      ]
   "status": "string",
   "statusReason": "string",
   "tags": {
      "string" : "string"
   "type": "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.

launch (p. 18)

A structure that contains the configuration of the launch that was created.

Type: Launch (p. 129) object

Errors

For information about the errors that are common to all actions, see Common Errors (p. 170).

AccessDeniedException

You do not have sufficient permissions to perform this action.

HTTP Status Code: 403

ConflictException

A resource was in an inconsistent state during an update or a deletion.

CloudWatch Evidently API Reference See Also

HTTP Status Code: 409 ResourceNotFoundException

The request references a resource that does not exist.

HTTP Status Code: 404

${\bf Service Quota Exceeded Exception}$

The request would cause a service quota to be exceeded.

HTTP Status Code: 402

ValidationException

The value of a parameter in the request caused an error.

HTTP Status Code: 400

See Also

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

CreateProject

Creates a project, which is the logical object in Evidently that can contain features, launches, and experiments. Use projects to group similar features together.

To update an existing project, use UpdateProject.

Request Syntax

```
POST /projects HTTP/1.1
Content-type: application/json

{
    "dataDelivery": {
        "cloudWatchLogs": {
            "logGroup": "string"
        },
        "s3Destination": {
            "bucket": "string",
            "prefix": "string"
        }
    },
    "description": "string",
    "name": "string",
    "tags": {
        "string" : "string"
    }
}
```

URI Request Parameters

The request does not use any URI parameters.

Request Body

The request accepts the following data in JSON format.

```
dataDelivery (p. 21)
```

A structure that contains information about where Evidently is to store evaluation events for longer term storage, if you choose to do so. If you choose not to store these events, Evidently deletes them after using them to produce metrics and other experiment results that you can view.

```
Type: ProjectDataDeliveryConfig (p. 150) object
```

Required: No description (p. 21)

An optional description of the project.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 160.

Pattern: .*
Required: No

name (p. 21)

The name for the project.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 127.

Pattern: ^[-a-zA-Z0-9._]*\$

Required: Yes

tags (p. 21)

Assigns one or more tags (key-value pairs) to the project.

Tags can help you organize and categorize your resources. You can also use them to scope user permissions by granting a user permission to access or change only resources with certain tag values.

Tags don't have any semantic meaning to AWS and are interpreted strictly as strings of characters.

You can associate as many as 50 tags with a project.

For more information, see Tagging AWS resources.

Type: String to string map

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

Key Pattern: ^(?!aws:)[a-zA-Z+-=._:/]+\$

Value Length Constraints: Minimum length of 0. Maximum length of 256.

Required: No

Response Syntax

```
HTTP/1.1 200
Content-type: application/json
   "project": {
      "activeExperimentCount": number,
      "activeLaunchCount": number,
      "arn": "string",
      "createdTime": number,
      "dataDelivery": {
         "cloudWatchLogs": {
            "logGroup": "string"
         "s3Destination": {
            "bucket": "string",
            "prefix": "string"
         }
      },
      "description": "string",
      "experimentCount": number,
      "featureCount": number,
      "lastUpdatedTime": number,
      "launchCount": number,
      "name": "string",
      "status": "string",
```

CloudWatch Evidently API Reference Response Elements

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.

```
project (p. 22)
```

A structure that contains information about the created project.

Type: Project (p. 146) object

Errors

For information about the errors that are common to all actions, see Common Errors (p. 170).

AccessDeniedException

You do not have sufficient permissions to perform this action.

HTTP Status Code: 403

ConflictException

A resource was in an inconsistent state during an update or a deletion.

HTTP Status Code: 409

ServiceQuotaExceededException

The request would cause a service quota to be exceeded.

HTTP Status Code: 402

ValidationException

The value of a parameter in the request caused an error.

HTTP Status Code: 400

See Also

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

CloudWatch Evidently API Reference See Also

- AWS SDK for Python
- AWS SDK for Ruby V3

DeleteExperiment

Deletes an Evidently experiment. The feature used for the experiment is not deleted.

To stop an experiment without deleting it, use StopExperiment.

Request Syntax

```
DELETE /projects/project/experiments/experiment HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

```
experiment (p. 25)
```

The name of the experiment to delete.

Length Constraints: Minimum length of 1. Maximum length of 127.

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

Required: Yes

project (p. 25)

The name or ARN of the project that contains the experiment to delete.

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

```
Pattern: ([-a-zA-Z0-9._]*)|(arn:[^:]*:[^:]*:[^:]*:[^:]*:project/[-a-zA-Z0-9._]*)
```

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 (p. 170).

AccessDeniedException

You do not have sufficient permissions to perform this action.

CloudWatch Evidently API Reference See Also

HTTP Status Code: 403

ConflictException

A resource was in an inconsistent state during an update or a deletion.

HTTP Status Code: 409 InternalServerException

Unexpected error while processing the request. Retry the request.

HTTP Status Code: 500

ResourceNotFoundException

The request references a resource that does not exist.

HTTP Status Code: 404
ServiceUnavailableException

The service was unavailable. Retry the request.

HTTP Status Code: 503

ValidationException

The value of a parameter in the request caused an error.

HTTP Status Code: 400

See Also

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

DeleteFeature

Deletes an Evidently feature.

Request Syntax

```
DELETE /projects/project/features/feature HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

```
feature (p. 27)
```

The name of the feature to delete.

Length Constraints: Minimum length of 1. Maximum length of 127.

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

Required: Yes

project (p. 27)

The name or ARN of the project that contains the feature to delete.

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

```
Pattern: ([-a-zA-Z0-9._]*)|(arn:[^:]*:[^:]*:[^:]*:[^:]*:project/[-a-zA-Z0-9._]*)
```

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 (p. 170).

AccessDeniedException

You do not have sufficient permissions to perform this action.

CloudWatch Evidently API Reference See Also

HTTP Status Code: 403

ConflictException

A resource was in an inconsistent state during an update or a deletion.

HTTP Status Code: 409

ResourceNotFoundException

The request references a resource that does not exist.

HTTP Status Code: 404

ThrottlingException

The request was denied because of request throttling. Retry the request.

HTTP Status Code: 429

ValidationException

The value of a parameter in the request caused an error.

HTTP Status Code: 400

See Also

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

DeleteLaunch

Deletes an Evidently launch. The feature used for the launch is not deleted.

To stop a launch without deleting it, use StopLaunch.

Request Syntax

```
DELETE /projects/project/launches/launch HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

```
launch (p. 29)
```

The name of the launch to delete.

Length Constraints: Minimum length of 1. Maximum length of 127.

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

Required: Yes

project (p. 29)

The name or ARN of the project that contains the launch to delete.

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

```
Pattern: ([-a-zA-Z0-9._]*)|(arn:[^:]*:[^:]*:[^:]*:[^:]*:project/[-a-zA-Z0-9._]*)
```

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 (p. 170).

AccessDeniedException

You do not have sufficient permissions to perform this action.

CloudWatch Evidently API Reference See Also

HTTP Status Code: 403

ConflictException

A resource was in an inconsistent state during an update or a deletion.

HTTP Status Code: 409

ResourceNotFoundException

The request references a resource that does not exist.

HTTP Status Code: 404

ThrottlingException

The request was denied because of request throttling. Retry the request.

HTTP Status Code: 429

ValidationException

The value of a parameter in the request caused an error.

HTTP Status Code: 400

See Also

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

DeleteProject

Deletes an Evidently project. Before you can delete a project, you must delete all the features that the project contains. To delete a feature, use DeleteFeature.

Request Syntax

```
DELETE /projects/project HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

```
project (p. 31)
```

The name or ARN of the project to delete.

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

```
Pattern: ([-a-zA-Z0-9._]*)|(arn:[^:]*:[^:]*:[^:]*:[^:]*:project/[-a-zA-Z0-9._]*)
```

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 (p. 170).

AccessDeniedException

You do not have sufficient permissions to perform this action.

HTTP Status Code: 403

ConflictException

A resource was in an inconsistent state during an update or a deletion.

HTTP Status Code: 409

ResourceNotFoundException

The request references a resource that does not exist.

HTTP Status Code: 404

ThrottlingException

The request was denied because of request throttling. Retry the request.

HTTP Status Code: 429

ValidationException

The value of a parameter in the request caused an error.

HTTP Status Code: 400

See Also

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

EvaluateFeature

This operation assigns a feature variation to one given user session. You pass in an entityID that represents the user. Evidently then checks the evaluation rules and assigns the variation.

The first rules that are evaluated are the override rules. If the user's entityID matches an override rule, the user is served the variation specified by that rule.

Next, if there is a launch of the feature, the user might be assigned to a variation in the launch. The chance of this depends on the percentage of users that are allocated to that launch. If the user is enrolled in the launch, the variation they are served depends on the allocation of the various feature variations used for the launch.

If the user is not assigned to a launch, and there is an ongoing experiment for this feature, the user might be assigned to a variation in the experiment. The chance of this depends on the percentage of users that are allocated to that experiment. If the user is enrolled in the experiment, the variation they are served depends on the allocation of the various feature variations used for the experiment.

If the user is not assigned to a launch or experiment, they are served the default variation.

Request Syntax

```
POST /projects/project/evaluations/feature HTTP/1.1
Content-type: application/json
{
    "entityId": "string",
    "evaluationContext": "string"
}
```

URI Request Parameters

The request uses the following URI parameters.

```
feature (p. 33)
```

The name of the feature being evaluated.

Length Constraints: Minimum length of 1. Maximum length of 127.

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

Required: Yes

project (p. 33)
```

The name or ARN of the project that contains this feature.

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

```
Pattern: ([-a-zA-Z0-9._]*)|(arn:[^:]*:[^:]*:[^:]*:[^:]*:project/[-a-zA-Z0-9._]*)
Required: Yes
```

Request Body

The request accepts the following data in JSON format.

entityId (p. 33)

An internal ID that represents a unique user of the application. This entityID is checked against any override rules assigned for this feature.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 512.

Pattern: .*

Required: Yes

evaluationContext (p. 33)

A JSON block of attributes that you can optionally pass in. This JSON block is included in the evaluation events sent to Evidently from the user session.

Type: String
Required: No

Response Syntax

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

{
    "details": "string",
    "reason": "string",
    "value": {
        "boolValue": boolean,
        "doubleValue": number,
        "longValue": number,
        "stringValue": "string"
    },
    "variation": "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.

details (p. 34)

If this user was assigned to a launch or experiment, this field lists the launch or experiment name.

Type: String

reason (p. 34)

Specifies the reason that the user session was assigned this variation. Possible values include DEFAULT, meaning the user was served the default variation; LAUNCH_RULE_MATCH, if the user session was enrolled in a launch; EXPERIMENT_RULE_MATCH, if the user session was enrolled in an experiment; or ENTITY_OVERRIDES_MATCH, if the user's entityId matches an override rule.

Type: String

CloudWatch Evidently API Reference Errors

value (p. 34)

The value assigned to this variation to differentiate it from the other variations of this feature.

Type: VariableValue (p. 165) object variation (p. 34)

The name of the variation that was served to the user session.

Type: String

Errors

For information about the errors that are common to all actions, see Common Errors (p. 170).

AccessDeniedException

You do not have sufficient permissions to perform this action.

HTTP Status Code: 403
ResourceNotFoundException

The request references a resource that does not exist.

HTTP Status Code: 404

ThrottlingException

The request was denied because of request throttling. Retry the request.

HTTP Status Code: 429

ValidationException

The value of a parameter in the request caused an error.

HTTP Status Code: 400

See Also

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

GetExperiment

Returns the details about one experiment. You must already know the experiment name. To retrieve a list of experiments in your account, use ListExperiments.

Request Syntax

```
GET /projects/project/experiments/experiment HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

```
experiment (p. 36)
```

The name of the experiment that you want to see the details of.

Length Constraints: Minimum length of 1. Maximum length of 127.

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

Required: Yes

project (p. 36)
```

The name or ARN of the project that contains the experiment.

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

```
Pattern: ([-a-zA-Z0-9._]*)|(arn:[^:]*:[^:]*:[^:]*:[^:]*:project/[-a-zA-Z0-9._]*)
```

Required: Yes

Request Body

The request does not have a request body.

```
"metricDefinition": {
              "entityIdKey": "string",
               "eventPattern": "string",
               "name": "string",
               "unitLabel": "string",
               "valueKey": "string"
            }
         }
      "name": "string",
      "onlineAbDefinition": {
         "controlTreatmentName": "string",
         "treatmentWeights": {
            "string" : number
         }
      },
      "project": "string",
      "randomizationSalt": "string",
      "samplingRate": number,
      "schedule": {
         "analysisCompleteTime": number
      "status": "string",
      "statusReason": "string",
      "tags": {
         "string" : "string"
      },
      "treatments": [
            "description": "string",
            "featureVariations": {
               "string" : "string"
            "name": "string"
         }
      "type": "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.

```
experiment (p. 36)
```

A structure containing the configuration details of the experiment.

Type: Experiment (p. 115) object

Errors

For information about the errors that are common to all actions, see Common Errors (p. 170).

AccessDeniedException

You do not have sufficient permissions to perform this action.

HTTP Status Code: 403

ResourceNotFoundException

The request references a resource that does not exist.

HTTP Status Code: 404

ThrottlingException

The request was denied because of request throttling. Retry the request.

HTTP Status Code: 429

ValidationException

The value of a parameter in the request caused an error.

HTTP Status Code: 400

See Also

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

GetExperimentResults

Retrieves the results of a running or completed experiment. No results are available until there have been 100 events for each variation and at least 10 minutes have passed since the start of the experiment.

Experiment results are available up to 63 days after the start of the experiment. They are not available after that because of CloudWatch data retention policies.

Request Syntax

```
POST /projects/project/experiments/experiment/results HTTP/1.1
Content-type: application/json

{
    "baseStat": "string",
    "endTime": number,
    "metricNames": [ "string" ],
    "period": number,
    "reportNames": [ "string" ],
    "resultStats": [ "string" ],
    "startTime": number,
    "treatmentNames": [ "string" ]
}
```

URI Request Parameters

The request uses the following URI parameters.

```
experiment (p. 39)
```

The name of the experiment to retrieve the results of.

Length Constraints: Minimum length of 1. Maximum length of 127.

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

Required: Yes

project (p. 39)
```

The name or ARN of the project that contains the experiment that you want to see the results of.

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

```
Pattern: ([-a-zA-Z0-9._]*)|(arn:[^:]*:[^:]*:[^:]*:[^:]*:project/[-a-zA-Z0-9._]*)
Required: Yes
```

Request Body

The request accepts the following data in JSON format.

```
baseStat (p. 39)
```

The statistic used to calculate experiment results. Currently the only valid value is mean, which uses the mean of the collected values as the statistic.

CloudWatch Evidently API Reference Request Body

Type: String

Valid Values: Mean

Required: No endTime (p. 39)

The date and time that the experiment ended, if it is completed. This must be no longer than 30 days after the experiment start time.

Type: Timestamp

Required: No metricNames (p. 39)

The names of the experiment metrics that you want to see the results of.

Type: Array of strings

Array Members: Fixed number of 1 item.

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

Pattern: ^[\S]+\$

Required: Yes

period (p. 39)

In seconds, the amount of time to aggregate results together.

Type: Long

Valid Range: Minimum value of 300. Maximum value of 90000.

Required: No reportNames (p. 39)

The names of the report types that you want to see. Currently, BayesianInference is the only valid value.

Type: Array of strings

Array Members: Minimum number of 0 items. Maximum number of 5 items.

Valid Values: BayesianInference

Required: No resultStats (p. 39)

The statistics that you want to see in the returned results.

- PValue specifies to use p-values for the results. A p-value is used in hypothesis testing to measure how often you are willing to make a mistake in rejecting the null hypothesis. A general practice is to reject the null hypothesis and declare that the results are statistically significant when the p-value is less than 0.05.
- ConfidenceInterval specifies a confidence interval for the results. The confidence interval
 represents the range of values for the chosen metric that is likely to contain the true difference
 between the baseStat of a variation and the baseline. Evidently returns the 95% confidence
 interval.

- TreatmentEffect is the difference in the statistic specified by the baseStat parameter between each variation and the default variation.
- BaseStat returns the statistical values collected for the metric for each variation. The statistic uses the same statistic specified in the baseStat parameter. Therefore, if baseStat is mean, this returns the mean of the values collected for each variation.

Type: Array of strings

Array Members: Minimum number of 0 items. Maximum number of 5 items.

```
Valid Values: BaseStat | TreatmentEffect | ConfidenceInterval | PValue
```

Required: No startTime (p. 39)

The date and time that the experiment started.

Type: Timestamp

Required: No treatmentNames (p. 39)

The names of the experiment treatments that you want to see the results for.

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 127.

Pattern: ^[-a-zA-Z0-9._]*\$

Required: Yes

```
HTTP/1.1 200
Content-type: application/json
   "details": "string",
   "reports": [
         "content": "string",
         "metricName": "string",
         "reportName": "string",
         "treatmentName": "string"
      }
   ],
   "resultsData": [
      {
         "metricName": "string",
         "resultStat": "string"
         "treatmentName": "string",
         "values": [ number ]
      }
   ],
   "timestamps": [ 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.

details (p. 41)

If the experiment doesn't yet have enough events to provide valid results, this field is returned with the message Not enough events to generate results. If there are enough events to provide valid results, this field is not returned.

Type: String reports (p. 41)

An array of structures that include the reports that you requested.

Type: Array of ExperimentReport (p. 120) objects

Array Members: Minimum number of 0 items. Maximum number of 1000 items.

resultsData (p. 41)

An array of structures that include experiment results including metric names and values.

Type: Array of ExperimentResultsData (p. 121) objects

Array Members: Minimum number of 0 items. Maximum number of 1000 items.

timestamps (p. 41)

The timestamps of each result returned.

Type: Array of timestamps

Array Members: Minimum number of 0 items. Maximum number of 100800 items.

Errors

For information about the errors that are common to all actions, see Common Errors (p. 170).

AccessDeniedException

You do not have sufficient permissions to perform this action.

HTTP Status Code: 403

ConflictException

A resource was in an inconsistent state during an update or a deletion.

HTTP Status Code: 409

ResourceNotFoundException

The request references a resource that does not exist.

HTTP Status Code: 404

ThrottlingException

The request was denied because of request throttling. Retry the request.

CloudWatch Evidently API Reference See Also

HTTP Status Code: 429

ValidationException

The value of a parameter in the request caused an error.

HTTP Status Code: 400

See Also

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

GetFeature

Returns the details about one feature. You must already know the feature name. To retrieve a list of features in your account, use ListFeatures.

Request Syntax

```
GET /projects/project/features/feature HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

```
feature (p. 44)
```

The name of the feature that you want to retrieve information for.

Length Constraints: Minimum length of 1. Maximum length of 127.

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

Required: Yes

project (p. 44)
```

The name or ARN of the project that contains the feature.

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

```
Pattern: ([-a-zA-Z0-9._]*)|(arn:[^:]*:[^:]*:[^:]*:[^:]*:project/[-a-zA-Z0-9._]*)
```

Required: Yes

Request Body

The request does not have a request body.

```
٦,
      "evaluationStrategy": "string",
      "lastUpdatedTime": number,
      "name": "string",
      "project": "string",
      "status": "string",
      "tags": {
         "string" : "string"
      "valueType": "string",
      "variations": [
            "name": "string",
            "value": {
               "boolValue": boolean,
               "doubleValue": number,
               "longValue": number,
               "stringValue": "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.

feature (p. 44)

A structure containing the configuration details of the feature.

Type: Feature (p. 124) object

Errors

For information about the errors that are common to all actions, see Common Errors (p. 170).

AccessDeniedException

You do not have sufficient permissions to perform this action.

HTTP Status Code: 403

ResourceNotFoundException

The request references a resource that does not exist.

HTTP Status Code: 404

ThrottlingException

The request was denied because of request throttling. Retry the request.

HTTP Status Code: 429

ValidationException

The value of a parameter in the request caused an error.

HTTP Status Code: 400

See Also

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

GetLaunch

Returns the details about one launch. You must already know the launch name. To retrieve a list of launches in your account, use ListLaunches.

Request Syntax

```
GET /projects/project/launches/launch HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

```
launch (p. 47)
```

The name of the launch that you want to see the details of.

Length Constraints: Minimum length of 1. Maximum length of 127.

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

Required: Yes

project (p. 47)
```

The name or ARN of the project that contains the launch.

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

```
Pattern: ([-a-zA-Z0-9._]*)|(arn:[^:]*:[^:]*:[^:]*:[^:]*:project/[-a-zA-Z0-9._]*)
```

Required: Yes

Request Body

The request does not have a request body.

```
"featureVariations": {
                "string" : "string"
             "name": "string"
      "lastUpdatedTime": number,
      "metricMonitors": [
             "metricDefinition": {
                "entityIdKey": "string",
"eventPattern": "string",
                "name": "string",
                "unitLabel": "string",
                "valueKey": "string"
         }
      ],
      "name": "string",
      "project": "string",
      "randomizationSalt": "string",
      "scheduledSplitsDefinition": {
         "steps": [
                "groupWeights": {
                   "string" : number
                "startTime": number
         ]
      "status": "string",
      "statusReason": "string",
      "tags": {
         "string" : "string"
      "type": "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.

launch (p. 47)

A structure containing the configuration details of the launch.

Type: Launch (p. 129) object

Errors

For information about the errors that are common to all actions, see Common Errors (p. 170).

${\bf Access Denied Exception}$

You do not have sufficient permissions to perform this action.

HTTP Status Code: 403

ResourceNotFoundException

The request references a resource that does not exist.

HTTP Status Code: 404

ThrottlingException

The request was denied because of request throttling. Retry the request.

HTTP Status Code: 429

ValidationException

The value of a parameter in the request caused an error.

HTTP Status Code: 400

See Also

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

GetProject

Returns the details about one launch. You must already know the project name. To retrieve a list of projects in your account, use ListProjects.

Request Syntax

```
GET /projects/project HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

```
project (p. 50)
```

The name or ARN of the project that you want to see the details of.

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

```
Pattern: ([-a-zA-Z0-9._]*)|(arn:[^:]*:[^:]*:[^:]*:[^:]*:project/[-a-zA-Z0-9._]*)
```

Required: Yes

Request Body

The request does not have a request body.

```
HTTP/1.1 200
Content-type: application/json
   "project": {
      "activeExperimentCount": number,
      "activeLaunchCount": number,
      "arn": "string",
      "createdTime": number,
      "dataDelivery": {
         "cloudWatchLogs": {
            "logGroup": "string"
         "s3Destination": {
            "bucket": "string",
            "prefix": "string"
         }
      "description": "string",
      "experimentCount": number,
      "featureCount": number,
      "lastUpdatedTime": number,
      "launchCount": number,
      "name": "string",
      "status": "string",
      "tags": {
```

CloudWatch Evidently API Reference Response Elements

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.

```
project (p. 50)
```

A structure containing the configuration details of the project.

Type: Project (p. 146) object

Errors

For information about the errors that are common to all actions, see Common Errors (p. 170).

AccessDeniedException

You do not have sufficient permissions to perform this action.

HTTP Status Code: 403

ResourceNotFoundException

The request references a resource that does not exist.

HTTP Status Code: 404

ThrottlingException

The request was denied because of request throttling. Retry the request.

HTTP Status Code: 429

ValidationException

The value of a parameter in the request caused an error.

HTTP Status Code: 400

See Also

- AWS Command Line Interface
- AWS SDK for .NET
- · AWS SDK for C++
- · AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- · AWS SDK for Python

CloudWatch Evidently API Reference See Also

• AWS SDK for Ruby V3		

ListExperiments

Returns configuration details about all the experiments in the specified project.

Request Syntax

 $\texttt{GET /projects/} \\ project / experiments? \texttt{maxResults=} \\ \texttt{maxResults} \\ \texttt{\&nextToken=} \\ \texttt{nextToken} \\ \texttt{\&status=} \\ \texttt{status=} \\ \texttt{MTTP/1.1}$

URI Request Parameters

The request uses the following URI parameters.

```
maxResults (p. 53)
```

The maximum number of results to include in the response.

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

```
nextToken (p. 53)
```

The token to use when requesting the next set of results. You received this token from a previous ListExperiments operation.

Length Constraints: Minimum length of 1. Maximum length of 8192.

```
Pattern: .*
project (p. 53)
```

The name or ARN of the project to return the experiment list from.

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

```
Pattern: ([-a-zA-Z0-9._]*)|(arn:[^:]*:[^:]*:[^:]*:[^:]*:project/[-a-zA-Z0-9._]*)
```

Required: Yes

status (p. 53)

Use this optional parameter to limit the returned results to only the experiments with the status that you specify here.

```
Valid Values: CREATED | UPDATING | RUNNING | COMPLETED | CANCELLED
```

Request Body

The request does not have a request body.

```
HTTP/1.1 200
Content-type: application/json
{
    "experiments": [
```

```
"arn": "string",
      "createdTime": number,
      "description": "string",
      "execution": {
         "endedTime": number,
         "startedTime": number
      "lastUpdatedTime": number,
      "metricGoals": [
         {
            "desiredChange": "string",
            "metricDefinition": {
               "entityIdKey": "string",
               "eventPattern": "string",
               "name": "string",
               "unitLabel": "string",
               "valueKey": "string"
            }
         }
      ],
      "name": "string",
      "onlineAbDefinition": {
         "controlTreatmentName": "string",
         "treatmentWeights": {
            "string" : number
      },
      "project": "string",
      "randomizationSalt": "string",
      "samplingRate": number,
      "schedule": {
         "analysisCompleteTime": number
      "status": "string",
      "statusReason": "string",
      "tags": {
         "string" : "string"
      "treatments": [
            "description": "string",
            "featureVariations": {
               "string" : "string"
            "name": "string"
      ],
      "type": "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.

experiments (p. 53)

An array of structures that contain the configuration details of the experiments in the specified project.

CloudWatch Evidently API Reference Errors

Type: Array of Experiment (p. 115) objects nextToken (p. 53)

The token to use in a subsequent ListExperiments operation to return the next set of results.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 8192.

Pattern: .*

Errors

For information about the errors that are common to all actions, see Common Errors (p. 170).

AccessDeniedException

You do not have sufficient permissions to perform this action.

HTTP Status Code: 403

Resource Not Found Exception

The request references a resource that does not exist.

HTTP Status Code: 404

ValidationException

The value of a parameter in the request caused an error.

HTTP Status Code: 400

See Also

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

ListFeatures

Returns configuration details about all the features in the specified project.

Request Syntax

```
GET /projects/project/features?maxResults=maxResults&nextToken=nextToken HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

```
maxResults (p. 56)
```

The maximum number of results to include in the response.

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

```
nextToken (p. 56)
```

The token to use when requesting the next set of results. You received this token from a previous ListFeatures operation.

Length Constraints: Minimum length of 1. Maximum length of 8192.

```
Pattern: .*
project (p. 56)
```

The name or ARN of the project to return the feature list from.

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

```
Pattern: ([-a-zA-Z0-9._]*)|(arn:[^:]*:[^:]*:[^:]*:[^:]*:project/[-a-zA-Z0-9._]*)
```

Required: Yes

Request Body

The request does not have a request body.

```
}
],
    "evaluationStrategy": "string",
    "lastUpdatedTime": number,
    "name": "string",
    "project": "string",
    "status": "string",
    "tags": {
        "string" : "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.

```
features (p. 56)
```

An array of structures that contain the configuration details of the features in the specified project.

```
Type: Array of FeatureSummary (p. 127) objects nextToken (p. 56)
```

The token to use in a subsequent ListFeatures operation to return the next set of results.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 8192.

Pattern: .*

Errors

For information about the errors that are common to all actions, see Common Errors (p. 170).

AccessDeniedException

You do not have sufficient permissions to perform this action.

HTTP Status Code: 403

ResourceNotFoundException

The request references a resource that does not exist.

HTTP Status Code: 404

ThrottlingException

The request was denied because of request throttling. Retry the request.

HTTP Status Code: 429

ValidationException

The value of a parameter in the request caused an error.

HTTP Status Code: 400

See Also

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

ListLaunches

Returns configuration details about all the launches in the specified project.

Request Syntax

 $\texttt{GET /projects/} \\ project \\ / launches? \texttt{maxResults=} \\ \texttt{maxResults} \\ \texttt{\&nextToken=} \\ \texttt{nextToken} \\ \texttt{\&status=} \\ \texttt{status=} \\ \texttt{http/1.1}$

URI Request Parameters

The request uses the following URI parameters.

```
maxResults (p. 59)
```

The maximum number of results to include in the response.

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

```
nextToken (p. 59)
```

The token to use when requesting the next set of results. You received this token from a previous ListLaunches operation.

Length Constraints: Minimum length of 1. Maximum length of 8192.

```
Pattern: .*
project (p. 59)
```

The name or ARN of the project to return the launch list from.

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

```
Pattern: ([-a-zA-Z0-9._]*)|(arn:[^:]*:[^:]*:[^:]*:[^:]*:project/[-a-zA-Z0-9._]*)
```

Required: Yes

status (p. 59)

Use this optional parameter to limit the returned results to only the launches with the status that you specify here.

```
Valid Values: CREATED | UPDATING | RUNNING | COMPLETED | CANCELLED
```

Request Body

The request does not have a request body.

```
HTTP/1.1 200
Content-type: application/json
{
    "launches": [
```

```
"arn": "string",
         "createdTime": number,
         "description": "string",
         "execution": {
             "endedTime": number,
             "startedTime": number
         },
         "groups": [
             {
                "description": "string",
                "featureVariations": {
                   "string" : "string"
                "name": "string"
             }
         ],
         "lastUpdatedTime": number,
         "metricMonitors": [
                "metricDefinition": {
                   "entityIdKey": "string",
"eventPattern": "string",
                   "name": "string",
                   "unitLabel": "string",
                   "valueKey": "string"
                }
             }
         ],
         "name": "string",
         "project": "string",
         "randomizationSalt": "string",
         "scheduledSplitsDefinition": {
             "steps": [
                {
                   "groupWeights": {
                      "string" : number
                   "startTime": number
                }
             ]
         "status": "string",
         "statusReason": "string",
         "tags": {
             "string" : "string"
         "type": "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.

launches (p. 59)

An array of structures that contain the configuration details of the launches in the specified project.

Type: Array of Launch (p. 129) objects

CloudWatch Evidently API Reference Errors

nextToken (p. 59)

The token to use in a subsequent ListLaunches operation to return the next set of results.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 8192.

Pattern: .*

Errors

For information about the errors that are common to all actions, see Common Errors (p. 170).

AccessDeniedException

You do not have sufficient permissions to perform this action.

HTTP Status Code: 403

ThrottlingException

The request was denied because of request throttling. Retry the request.

HTTP Status Code: 429

ValidationException

The value of a parameter in the request caused an error.

HTTP Status Code: 400

See Also

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

ListProjects

Returns configuration details about all the projects in the current Region in your account.

Request Syntax

```
GET /projects?maxResults=maxResults&nextToken=nextToken HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

```
maxResults (p. 62)
```

The maximum number of results to include in the response.

Valid Range: Minimum value of 1. Maximum value of 50.

```
nextToken (p. 62)
```

The token to use when requesting the next set of results. You received this token from a previous ListProjects operation.

Length Constraints: Minimum length of 1. Maximum length of 8192.

```
Pattern: .*
```

Request Body

The request does not have a request body.

```
HTTP/1.1 200
Content-type: application/json
   "nextToken": "string",
   "projects": [
      {
         "activeExperimentCount": number,
         "activeLaunchCount": number,
         "arn": "string",
         "createdTime": number,
         "description": "string",
         "experimentCount": number,
         "featureCount": number,
         "lastUpdatedTime": number,
         "launchCount": number,
         "name": "string",
         "status": "string"
         "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.

```
nextToken (p. 62)
```

The token to use in a subsequent ListProjects operation to return the next set of results.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 8192.

Pattern: .*
projects (p. 62)

An array of structures that contain the configuration details of the projects in the Region.

Type: Array of ProjectSummary (p. 151) objects

Errors

For information about the errors that are common to all actions, see Common Errors (p. 170).

AccessDeniedException

You do not have sufficient permissions to perform this action.

HTTP Status Code: 403

ThrottlingException

The request was denied because of request throttling. Retry the request.

HTTP Status Code: 429

ValidationException

The value of a parameter in the request caused an error.

HTTP Status Code: 400

See Also

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

- AWS SDK for Python
- AWS SDK for Ruby V3

ListTagsForResource

Displays the tags associated with an Evidently resource.

Request Syntax

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

URI Request Parameters

The request uses the following URI parameters.

```
resourceArn (p. 65)
```

The ARN of the resource that you want to see the tags of.

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

```
Pattern: arn:[^:]*:[^:]*:[^:]*:.*
```

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 (p. 65)
```

The list of tag keys and values associated with the resource you specified.

Type: String to string map

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

```
Key Pattern: ^(?!aws:)[a-zA-Z+-=._:/]+$
```

Value Length Constraints: Minimum length of 0. Maximum length of 256.

Errors

For information about the errors that are common to all actions, see Common Errors (p. 170).

ConflictException

A resource was in an inconsistent state during an update or a deletion.

HTTP Status Code: 409

ResourceNotFoundException

The request references a resource that does not exist.

HTTP Status Code: 404

ValidationException

The value of a parameter in the request caused an error.

HTTP Status Code: 400

See Also

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

PutProjectEvents

Sends performance events to Evidently. These events can be used to evaluate a launch or an experiment.

Request Syntax

URI Request Parameters

The request uses the following URI parameters.

```
project (p. 67)
```

The name or ARN of the project to write the events to.

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

```
Pattern: ([-a-zA-Z0-9._]*)|(arn:[^:]*:[^:]*:[^:]*:[^:]*:project/[-a-zA-Z0-9._]*)
```

Required: Yes

Request Body

The request accepts the following data in JSON format.

```
events (p. 67)
```

An array of event structures that contain the performance data that is being sent to Evidently.

```
Type: Array of Event (p. 114) objects
```

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

Required: Yes

Response Syntax

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

CloudWatch Evidently API Reference Response Elements

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.

```
eventResults (p. 67)
```

A structure that contains Evidently's response to the sent events, including an event ID and error codes, if any.

Type: Array of PutProjectEventsResultEntry (p. 154) objects

failedEventCount (p. 67)

The number of events in the operation that could not be used by Evidently.

Type: Integer

Errors

For information about the errors that are common to all actions, see Common Errors (p. 170).

AccessDeniedException

You do not have sufficient permissions to perform this action.

HTTP Status Code: 403

Resource Not Found Exception

The request references a resource that does not exist.

HTTP Status Code: 404

ThrottlingException

The request was denied because of request throttling. Retry the request.

HTTP Status Code: 429

ValidationException

The value of a parameter in the request caused an error.

HTTP Status Code: 400

See Also

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

StartExperiment

Starts an existing experiment. To create an experiment, use CreateExperiment.

Request Syntax

```
POST /projects/project/experiments/experiment/start HTTP/1.1
Content-type: application/json
{
    "analysisCompleteTime": number
}
```

URI Request Parameters

The request uses the following URI parameters.

```
experiment (p. 70)
```

The name of the experiment to start.

Length Constraints: Minimum length of 1. Maximum length of 127.

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

Required: Yes

project (p. 70)

The name or ARN of the project that contains the experiment to start.

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

```
Pattern: ([-a-zA-Z0-9._]*)|(arn:[^:]*:[^:]*:[^:]*:[^:]*:project/[-a-zA-Z0-9._]*)
```

Required: Yes

Request Body

The request accepts the following data in JSON format.

```
analysisCompleteTime (p. 70)
```

The date and time to end the experiment. This must be no more than 30 days after the experiment starts.

Type: Timestamp

Required: Yes

Response Syntax

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

CloudWatch Evidently API Reference Response Elements

```
{
   "startedTime": 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.

```
startedTime (p. 70)
```

A timestamp that indicates when the experiment started.

Type: Timestamp

Errors

For information about the errors that are common to all actions, see Common Errors (p. 170).

AccessDeniedException

You do not have sufficient permissions to perform this action.

HTTP Status Code: 403

ConflictException

A resource was in an inconsistent state during an update or a deletion.

HTTP Status Code: 409

ResourceNotFoundException

The request references a resource that does not exist.

HTTP Status Code: 404

ServiceQuotaExceededException

The request would cause a service quota to be exceeded.

HTTP Status Code: 402

ThrottlingException

The request was denied because of request throttling. Retry the request.

HTTP Status Code: 429

ValidationException

The value of a parameter in the request caused an error.

HTTP Status Code: 400

See Also

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

StartLaunch

Starts an existing launch. To create a launch, use CreateLaunch.

Request Syntax

```
POST /projects/project/launches/launch/start HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

```
launch (p. 73)
```

The name of the launch to start.

Length Constraints: Minimum length of 1. Maximum length of 127.

```
Pattern: ^[-a-zA-Z0-9._]*$
Required: Yes
```

project (p. 73)

The name or ARN of the project that contains the launch to start.

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

```
Pattern: ([-a-zA-Z0-9._]*)|(arn:[^:]*:[^:]*:[^:]*:[^:]*:project/[-a-zA-Z0-9._]*)
```

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

```
"name": "string"
      }
   ],
   "lastUpdatedTime": number,
   "metricMonitors": [
      {
         "metricDefinition": {
            "entityIdKey": "string",
            "eventPattern": "string",
            "name": "string",
            "unitLabel": "string",
            "valueKey": "string"
      }
   "name": "string",
   "project": "string",
   "randomizationSalt": "string",
   "scheduledSplitsDefinition": {
      "steps": [
            "groupWeights": {
               "string" : number
            "startTime": number
         }
      ]
   "status": "string",
   "statusReason": "string",
   "tags": {
      "string" : "string"
   "type": "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.

launch (p. 73)

A structure that contains information about the launch that was started.

Type: Launch (p. 129) object

Errors

For information about the errors that are common to all actions, see Common Errors (p. 170).

AccessDeniedException

You do not have sufficient permissions to perform this action.

HTTP Status Code: 403

ConflictException

A resource was in an inconsistent state during an update or a deletion.

HTTP Status Code: 409

ResourceNotFoundException

The request references a resource that does not exist.

HTTP Status Code: 404

ServiceQuotaExceededException

The request would cause a service quota to be exceeded.

HTTP Status Code: 402

ThrottlingException

The request was denied because of request throttling. Retry the request.

HTTP Status Code: 429

ValidationException

The value of a parameter in the request caused an error.

HTTP Status Code: 400

See Also

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

StopExperiment

Stops an experiment that is currently running. If you stop an experiment, you can't resume it or restart it.

Request Syntax

```
POST /projects/project/experiments/experiment/cancel HTTP/1.1
Content-type: application/json
{
    "desiredState": "string",
    "reason": "string"
}
```

URI Request Parameters

The request uses the following URI parameters.

```
experiment (p. 76)

The name of the experiment to stop.
Length Constraints: Minimum length of 1. Maximum length of 127.

Pattern: ^[-a-zA-Z0-9._]*$

Required: Yes

project (p. 76)

The name or ARN of the project that contains the experiment to stop.
Length Constraints: Minimum length of 0. Maximum length of 2048.

Pattern: ([-a-zA-Z0-9._]*)|(arn:[^:]*:[^:]*:[^:]*:project/[-a-zA-Z0-9._]*)
```

Request Body

Required: Yes

The request accepts the following data in JSON format.

```
desiredState (p. 76)

Specify whether the experiment is to be considered COMPLETED or CANCELLED after it stops.

Type: String

Valid Values: COMPLETED | CANCELLED

Required: No

reason (p. 76)

A string that describes why you are stopping the experiment.

Type: String
```

CloudWatch Evidently API Reference Response Syntax

Length Constraints: Minimum length of 0. Maximum length of 160.

Pattern: .*
Required: No

Response Syntax

```
HTTP/1.1 200
Content-type: application/json
{
    "endedTime": 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.

```
endedTime (p. 77)
```

The date and time that the experiment stopped.

Type: Timestamp

Errors

For information about the errors that are common to all actions, see Common Errors (p. 170).

AccessDeniedException

You do not have sufficient permissions to perform this action.

HTTP Status Code: 403

ConflictException

A resource was in an inconsistent state during an update or a deletion.

HTTP Status Code: 409

ResourceNotFoundException

The request references a resource that does not exist.

HTTP Status Code: 404

ServiceQuotaExceededException

The request would cause a service quota to be exceeded.

HTTP Status Code: 402

ThrottlingException

The request was denied because of request throttling. Retry the request.

HTTP Status Code: 429

ValidationException

The value of a parameter in the request caused an error.

HTTP Status Code: 400

See Also

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

StopLaunch

Stops a launch that is currently running. After you stop a launch, you will not be able to resume it or restart it. Also, it will not be evaluated as a rule for traffic allocation, and the traffic that was allocated to the launch will instead be available to the feature's experiment, if there is one. Otherwise, all traffic will be served the default variation after the launch is stopped.

Request Syntax

```
POST /projects/project/launches/launch/cancel HTTP/1.1
Content-type: application/json
{
    "desiredState": "string",
    "reason": "string"
}
```

URI Request Parameters

The request uses the following URI parameters.

```
launch (p. 79)
```

The name of the launch to stop.

Length Constraints: Minimum length of 1. Maximum length of 127.

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

Required: Yes

project (p. 79)

The name or ARN of the project that contains the launch that you want to stop.

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

```
Pattern: ([-a-zA-Z0-9._]*)|(arn:[^:]*:[^:]*:[^:]*:[^:]*:project/[-a-zA-Z0-9._]*)
```

Required: Yes

Request Body

The request accepts the following data in JSON format.

```
desiredState (p. 79)
```

Specify whether to consider the launch as COMPLETED or CANCELLED after it stops.

```
Type: String
```

Valid Values: COMPLETED | CANCELLED

Required: No

CloudWatch Evidently API Reference Response Syntax

reason (p. 79)

A string that describes why you are stopping the launch.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 160.

Pattern: .*
Required: No

Response Syntax

```
HTTP/1.1 200
Content-type: application/json
{
    "endedTime": 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.

endedTime (p. 80)

The date and time that the launch stopped.

Type: Timestamp

Errors

For information about the errors that are common to all actions, see Common Errors (p. 170).

AccessDeniedException

You do not have sufficient permissions to perform this action.

HTTP Status Code: 403

ResourceNotFoundException

The request references a resource that does not exist.

HTTP Status Code: 404

ThrottlingException

The request was denied because of request throttling. Retry the request.

HTTP Status Code: 429

ValidationException

The value of a parameter in the request caused an error.

HTTP Status Code: 400

See Also

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

TagResource

Assigns one or more tags (key-value pairs) to the specified CloudWatch Evidently resource. Projects, features, launches, and experiments can be tagged.

Tags can help you organize and categorize your resources. You can also use them to scope user permissions by granting a user permission to access or change only resources with certain tag values.

Tags don't have any semantic meaning to AWS and are interpreted strictly as strings of characters.

You can use the TagResource action with a resource that already has tags. If you specify a new tag key for the resource, this tag is appended to the list of tags associated with the alarm. If you specify a tag key that is already associated with the resource, the new tag value that you specify replaces the previous value for that tag.

You can associate as many as 50 tags with a resource.

For more information, see Tagging AWS resources.

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 (p. 82)
```

The ARN of the CloudWatch Evidently resource that you're adding tags to.

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

```
Pattern: arn:[^:]*:[^:]*:[^:]*:.*
```

Required: Yes

Request Body

The request accepts the following data in JSON format.

```
tags (p. 82)
```

The list of key-value pairs to associate with the resource.

Type: String to string map

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

CloudWatch Evidently API Reference Response Syntax

Key Pattern: ^(?!aws:)[a-zA-Z+-=._:/]+\$

Value Length Constraints: Minimum length of 0. Maximum length of 256.

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 (p. 170).

ConflictException

A resource was in an inconsistent state during an update or a deletion.

HTTP Status Code: 409
ResourceNotFoundException

The request references a resource that does not exist.

HTTP Status Code: 404

ValidationException

The value of a parameter in the request caused an error.

HTTP Status Code: 400

See Also

- · AWS Command Line Interface
- · AWS SDK for .NET
- AWS SDK for C++
- · AWS SDK for Go
- AWS SDK for Java V2
- 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 the specified resource.

Request Syntax

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

URI Request Parameters

The request uses the following URI parameters.

```
resourceArn (p. 84)
```

The ARN of the CloudWatch Evidently resource that you're removing tags from.

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

```
Pattern: arn: [^:]*:[^:]*:[^:]*:.*
```

Required: Yes

tagKeys (p. 84)

The list of tag keys to remove from the resource.

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

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

```
Pattern: ^(?!aws:)[a-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 (p. 170).

ConflictException

A resource was in an inconsistent state during an update or a deletion.

HTTP Status Code: 409 ResourceNotFoundException

The request references a resource that does not exist.

HTTP Status Code: 404

ValidationException

The value of a parameter in the request caused an error.

HTTP Status Code: 400

See Also

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

UpdateExperiment

Updates an Evidently experiment.

Don't use this operation to update an experiment's tag. Instead, use TagResource.

Request Syntax

```
PATCH /projects/project/experiments/experiment HTTP/1.1
Content-type: application/json
   "description": "string",
   "metricGoals": [
         "desiredChange": "string",
         "metricDefinition": {
            "entityIdKey": "string",
            "eventPattern": "string",
            "name": "string",
            "unitLabel": "string",
            "valueKey": "string"
         }
      }
   ],
   "onlineAbConfig": {
      "controlTreatmentName": "string",
      "treatmentWeights": {
         "string" : number
      }
   },
   "randomizationSalt": "string",
   "samplingRate": number,
   "treatments": [
         "description": "string",
         "feature": "string",
         "name": "string",
         "variation": "string"
   ]
}
```

URI Request Parameters

The request uses the following URI parameters.

```
experiment (p. 86)
```

The name of the experiment to update.

Length Constraints: Minimum length of 1. Maximum length of 127.

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

Required: Yes

project (p. 86)

The name or ARN of the project that contains the experiment that you want to update.

CloudWatch Evidently API Reference Request Body

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

```
Pattern: ([-a-zA-Z0-9._]*)|(arn:[^:]*:[^:]*:[^:]*:[^:]*:project/[-a-zA-Z0-9._]*)
Required: Yes
```

Request Body

The request accepts the following data in JSON format.

description (p. 86)

An optional description of the experiment.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 160.

Pattern: .*

Required: No

metricGoals (p. 86)

An array of structures that defines the metrics used for

An array of structures that defines the metrics used for the experiment, and whether a higher or lower value for each metric is the goal.

Type: Array of MetricGoalConfig (p. 141) objects

Array Members: Minimum number of 1 item. Maximum number of 3 items.

Required: No onlineAbConfig (p. 86)

A structure that contains the configuration of which variation o use as the "control" version. The "control" version is used for comparison with other variations. This structure also specifies how much experiment traffic is allocated to each variation.

Type: OnlineAbConfig (p. 144) object

Required: No

randomizationSalt (p. 86)

When Evidently assigns a particular user session to an experiment, it must use a randomization ID to determine which variation the user session is served. This randomization ID is a combination of the entity ID and randomizationSalt. If you omit randomizationSalt, Evidently uses the experiment name as the randomizationSalt.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 127.

Pattern: .*

Required: No
samplingRate (p. 86)

The portion of the available audience that you want to allocate to this experiment, in thousandths of a percent. The available audience is the total audience minus the audience that you have allocated to overrides or current launches of this feature.

This is represented in thousandths of a percent. For example, specify 20,000 to allocate 20% of the available audience.

Type: Long

Valid Range: Minimum value of 0. Maximum value of 100000.

Required: No treatments (p. 86)

An array of structures that define the variations being tested in the experiment.

Type: Array of TreatmentConfig (p. 162) objects

Array Members: Minimum number of 0 items. Maximum number of 5 items.

Required: No

Response Syntax

```
HTTP/1.1 200
Content-type: application/json
   "experiment": {
      "arn": "string",
      "createdTime": number,
      "description": "string",
      "execution": {
         "endedTime": number,
         "startedTime": number
      "lastUpdatedTime": number,
      "metricGoals": [
         {
            "desiredChange": "string",
            "metricDefinition": {
               "entityIdKey": "string",
               "eventPattern": "string",
               "name": "string",
               "unitLabel": "string",
               "valueKey": "string"
         }
      ],
      "name": "string",
      "onlineAbDefinition": {
         "controlTreatmentName": "string",
         "treatmentWeights": {
            "string" : number
      "project": "string",
      "randomizationSalt": "string",
      "samplingRate": number,
      "schedule": {
         "analysisCompleteTime": number
      "status": "string",
      "statusReason": "string",
      "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.

```
experiment (p. 88)
```

A structure containing the configuration details of the experiment that was updated.

Type: Experiment (p. 115) object

Errors

For information about the errors that are common to all actions, see Common Errors (p. 170).

AccessDeniedException

You do not have sufficient permissions to perform this action.

HTTP Status Code: 403

ConflictException

A resource was in an inconsistent state during an update or a deletion.

HTTP Status Code: 409

ResourceNotFoundException

The request references a resource that does not exist.

HTTP Status Code: 404

ValidationException

The value of a parameter in the request caused an error.

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 V2
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

UpdateFeature

Updates an existing feature.

You can't use this operation to update the tags of an existing feature. Instead, use TagResource.

Request Syntax

```
PATCH /projects/project/features/feature HTTP/1.1
Content-type: application/json
   "addOrUpdateVariations": [
         "name": "string",
         "value": {
            "boolValue": boolean,
            "doubleValue": number,
            "longValue": number,
            "stringValue": "string"
         }
      }
   ],
   "defaultVariation": "string",
   "description": "string",
   "entityOverrides": {
      "string" : "string"
   },
   "evaluationStrategy": "string",
   "removeVariations": [ "string" ]
```

URI Request Parameters

The request uses the following URI parameters.

```
feature (p. 91)
```

The name of the feature to be updated.

Length Constraints: Minimum length of 1. Maximum length of 127.

```
Pattern: ^[-a-zA-Z0-9._]*$
Required: Yes
```

project (p. 91)

The name or ARN of the project that contains the feature to be updated.

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

```
Pattern: ([-a-zA-Z0-9._]*)|(arn:[^:]*:[^:]*:[^:]*:[^:]*:project/[-a-zA-Z0-9._]*)
Required: Yes
```

Request Body

The request accepts the following data in JSON format.

addOrUpdateVariations (p. 91)

To update variation configurations for this feature, or add new ones, specify this structure. In this array, include any variations that you want to add or update. If the array includes a variation name that already exists for this feature, it is updated. If it includes a new variation name, it is added as a new variation.

Type: Array of VariationConfig (p. 167) objects

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

Required: No

defaultVariation (p. 91)

The name of the variation to use as the default variation. The default variation is served to users who are not allocated to any ongoing launches or experiments of this feature.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 127.

Pattern: ^[-a-zA-Z0-9._]*\$

Required: No

description (p. 91)

An optional description of the feature.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 160.

Pattern: .*

Required: No

entityOverrides (p. 91)

Specified users that should always be served a specific variation of a feature. Each user is specified by a key-value pair. For each key, specify a user by entering their user ID, account ID, or some other identifier. For the value, specify the name of the variation that they are to be served.

Type: String to string map

Map Entries: Minimum number of 0 items. Maximum number of 20 items.

Key Length Constraints: Minimum length of 1. Maximum length of 512.

Key Pattern: .*

Value Length Constraints: Minimum length of 1. Maximum length of 127.

Value Pattern: ^[-a-zA-z0-9._]*\$

Required: No

evaluationStrategy (p. 91)

Specify ALL_RULES to activate the traffic allocation specified by any ongoing launches or experiments. Specify DEFAULT_VARIATION to serve the default variation to all users instead.

Type: String

```
Valid Values: ALL_RULES | DEFAULT_VARIATION
```

Required: No

removeVariations (p. 91)

Removes a variation from the feature. If the variation you specify doesn't exist, then this makes no change and does not report an error.

This operation fails if you try to remove a variation that is part of an ongoing launch or experiment.

Type: Array of strings

Array Members: Minimum number of 0 items. Maximum number of 5 items.

Length Constraints: Minimum length of 1. Maximum length of 127.

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

Required: No

Response Syntax

```
HTTP/1.1 200
Content-type: application/json
   "feature": {
      "arn": "string",
      "createdTime": number,
      "defaultVariation": "string",
      "description": "string",
      "entityOverrides": {
         "string" : "string"
      "evaluationRules": [
         {
            "name": "string",
            "type": "string"
      "evaluationStrategy": "string",
      "lastUpdatedTime": number,
      "name": "string",
      "project": "string",
      "status": "string",
      "tags": {
         "string" : "string"
      "valueType": "string",
      "variations": [
            "name": "string",
            "value": {
               "boolValue": boolean,
                "doubleValue": number,
                "longValue": number,
                "stringValue": "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.

```
feature (p. 93)
```

A structure that contains information about the updated feature.

Type: Feature (p. 124) object

Errors

For information about the errors that are common to all actions, see Common Errors (p. 170).

AccessDeniedException

You do not have sufficient permissions to perform this action.

HTTP Status Code: 403

ConflictException

A resource was in an inconsistent state during an update or a deletion.

HTTP Status Code: 409

ResourceNotFoundException

The request references a resource that does not exist.

HTTP Status Code: 404

ServiceQuotaExceededException

The request would cause a service quota to be exceeded.

HTTP Status Code: 402

ValidationException

The value of a parameter in the request caused an error.

HTTP Status Code: 400

See Also

- AWS Command Line Interface
- · AWS SDK for .NET
- · AWS SDK for C++
- · AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for JavaScript

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

UpdateLaunch

Updates a launch of a given feature.

Don't use this operation to update the tags of an existing launch. Instead, use TagResource.

Request Syntax

```
PATCH /projects/project/launches/launch HTTP/1.1
Content-type: application/json
   "description": "string",
   "groups": [
         "description": "string",
         "feature": "string",
         "name": "string",
         "variation": "string"
      }
   ],
   "metricMonitors": [
      {
         "metricDefinition": {
            "entityIdKey": "string",
            "eventPattern": "string",
            "name": "string",
            "unitLabel": "string",
            "valueKey": "string"
      }
   ],
   "randomizationSalt": "string",
   "scheduledSplitsConfig": {
      "steps": [
            "groupWeights": {
               "string" : number
            "startTime": number
      ]
   }
}
```

URI Request Parameters

The request uses the following URI parameters.

```
launch (p. 96)
```

The name of the launch that is to be updated.

Length Constraints: Minimum length of 1. Maximum length of 127.

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

Required: Yes

project (p. 96)

The name or ARN of the project that contains the launch that you want to update.

CloudWatch Evidently API Reference Request Body

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

```
Pattern: ([-a-zA-Z0-9._]*)|(arn:[^:]*:[^:]*:[^:]*:[^:]*:project/[-a-zA-Z0-9._]*)
Required: Yes
```

Request Body

The request accepts the following data in JSON format.

description (p. 96)

An optional description for the launch.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 160.

Pattern: .*

Required: No
groups (p. 96)

An array of structures that contains the feature and variations that are to be used for the launch.

Type: Array of LaunchGroupConfig (p. 134) objects

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

Required: No

metricMonitors (p. 96)

An array of structures that define the metrics that will be used to monitor the launch performance.

Type: Array of MetricMonitorConfig (p. 143) objects

Array Members: Minimum number of 0 items. Maximum number of 3 items.

Required: No

randomizationSalt (p. 96)

When Evidently assigns a particular user session to a launch, it must use a randomization ID to determine which variation the user session is served. This randomization ID is a combination of the entity ID and randomizationSalt. If you omit randomizationSalt, Evidently uses the launch name as the randomizationSalt.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 127.

Pattern: .*
Required: No

scheduledSplitsConfig (p. 96)

An array of structures that define the traffic allocation percentages among the feature variations during each step of the launch.

Type: ScheduledSplitsLaunchConfig (p. 159) object

Required: No

Response Syntax

```
HTTP/1.1 200
Content-type: application/json
   "launch": {
      "arn": "string",
      "createdTime": number,
      "description": "string",
      "execution": {
         "endedTime": number,
         "startedTime": number
      "groups": [
         {
            "description": "string",
            "featureVariations": {
               "string" : "string"
            "name": "string"
         }
      ],
"lastUpdatedTime": number,
      "metricMonitors": [
         {
            "metricDefinition": {
               "entityIdKey": "string",
                "eventPattern": "string",
               "name": "string",
               "unitLabel": "string",
                "valueKey": "string"
            }
         }
      ],
      "name": "string",
      "project": "string",
      "randomizationSalt": "string",
      "scheduledSplitsDefinition": {
         "steps": [
                "groupWeights": {
                   "string" : number
                "startTime": number
         ]
      "status": "string",
      "statusReason": "string",
      "tags": {
         "string" : "string"
      "type": "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.

CloudWatch Evidently API Reference Errors

launch (p. 98)

A structure that contains the new configuration of the launch that was updated.

Type: Launch (p. 129) object

Errors

For information about the errors that are common to all actions, see Common Errors (p. 170).

AccessDeniedException

You do not have sufficient permissions to perform this action.

HTTP Status Code: 403

ConflictException

A resource was in an inconsistent state during an update or a deletion.

HTTP Status Code: 409

Resource Not Found Exception

The request references a resource that does not exist.

HTTP Status Code: 404

ValidationException

The value of a parameter in the request caused an error.

HTTP Status Code: 400

See Also

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

UpdateProject

Updates the description of an existing project.

To create a new project, use CreateProject.

Don't use this operation to update the data storage options of a project. Instead, use UpdateProjectDataDelivery.

Don't use this operation to update the tags of a project. Instead, use TagResource.

Request Syntax

```
PATCH /projects/project HTTP/1.1
Content-type: application/json

{
    "description": "string"
}
```

URI Request Parameters

The request uses the following URI parameters.

```
project (p. 100)
```

The name or ARN of the project to update.

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

```
Pattern: ([-a-zA-Z0-9._]*)|(arn:[^:]*:[^:]*:[^:]*:[^:]*:project/[-a-zA-Z0-9._]*)
```

Required: Yes

Request Body

The request accepts the following data in JSON format.

```
description (p. 100)
```

An optional description of the project.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 160.

Pattern: .*
Required: No

Response Syntax

```
HTTP/1.1 200
```

```
Content-type: application/json
   "project": {
      "activeExperimentCount": number,
      "activeLaunchCount": number,
      "arn": "string",
      "createdTime": number,
      "dataDelivery": {
         "cloudWatchLogs": {
            "logGroup": "string"
         "s3Destination": {
            "bucket": "string",
            "prefix": "string"
      "description": "string",
      "experimentCount": number,
      "featureCount": number,
      "lastUpdatedTime": number,
      "launchCount": number,
      "name": "string"
      "status": "string",
      "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.

```
project (p. 100)
```

A structure containing information about the updated project.

Type: Project (p. 146) object

Errors

For information about the errors that are common to all actions, see Common Errors (p. 170).

AccessDeniedException

You do not have sufficient permissions to perform this action.

HTTP Status Code: 403

ResourceNotFoundException

The request references a resource that does not exist.

HTTP Status Code: 404

ServiceQuotaExceededException

The request would cause a service quota to be exceeded.

CloudWatch Evidently API Reference See Also

HTTP Status Code: 402

ValidationException

The value of a parameter in the request caused an error.

HTTP Status Code: 400

See Also

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

UpdateProjectDataDelivery

Updates the data storage options for this project. If you store evaluation events, you an keep them and analyze them on your own. If you choose not to store evaluation events, Evidently deletes them after using them to produce metrics and other experiment results that you can view.

You can't specify both cloudWatchLogs and s3Destination in the same operation.

Request Syntax

```
PATCH /projects/project/data-delivery HTTP/1.1
Content-type: application/json

{
    "cloudWatchLogs": {
        "logGroup": "string"
    },
    "s3Destination": {
        "bucket": "string",
        "prefix": "string"
    }
}
```

URI Request Parameters

The request uses the following URI parameters.

```
project (p. 103)
```

The name or ARN of the project that you want to modify the data storage options for.

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

```
Pattern: ([-a-zA-Z0-9._]*)|(arn:[^:]*:[^:]*:[^:]*:[^:]*:project/[-a-zA-Z0-9._]*)
```

Required: Yes

Request Body

The request accepts the following data in JSON format.

```
cloudWatchLogs (p. 103)
```

A structure containing the CloudWatch Logs log group where you want to store evaluation events.

Type: CloudWatchLogsDestinationConfig (p. 109) object

```
Required: No s3Destination (p. 103)
```

A structure containing the S3 bucket name and bucket prefix where you want to store evaluation events.

Type: S3DestinationConfig (p. 156) object

Required: No

Response Syntax

```
HTTP/1.1 200
Content-type: application/json
   "project": {
      "activeExperimentCount": number,
      "activeLaunchCount": number,
      "arn": "string",
      "createdTime": number,
      "dataDelivery": {
         "cloudWatchLogs": {
            "logGroup": "string"
         "s3Destination": {
            "bucket": "string",
            "prefix": "string"
         }
      "description": "string",
      "experimentCount": number,
      "featureCount": number,
      "lastUpdatedTime": number,
      "launchCount": number,
      "name": "string",
      "status": "string",
      "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.

```
project (p. 104)
```

A structure containing details about the project that you updated.

Type: Project (p. 146) object

Errors

For information about the errors that are common to all actions, see Common Errors (p. 170).

AccessDeniedException

You do not have sufficient permissions to perform this action.

HTTP Status Code: 403

${\bf Conflict Exception}$

A resource was in an inconsistent state during an update or a deletion.

HTTP Status Code: 409

ResourceNotFoundException

The request references a resource that does not exist.

HTTP Status Code: 404

ServiceQuotaExceededException

The request would cause a service quota to be exceeded.

HTTP Status Code: 402

ValidationException

The value of a parameter in the request caused an error.

HTTP Status Code: 400

See Also

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

Data Types

The Amazon CloudWatch Evidently 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:

- CloudWatchLogsDestination (p. 108)
- CloudWatchLogsDestinationConfig (p. 109)
- EvaluationRequest (p. 110)
- EvaluationResult (p. 111)
- EvaluationRule (p. 113)
- Event (p. 114)
- Experiment (p. 115)
- ExperimentExecution (p. 119)
- ExperimentReport (p. 120)
- ExperimentResultsData (p. 121)
- ExperimentSchedule (p. 123)
- Feature (p. 124)
- FeatureSummary (p. 127)
- Launch (p. 129)
- LaunchExecution (p. 132)
- LaunchGroup (p. 133)
- LaunchGroupConfig (p. 134)
- MetricDefinition (p. 136)
- MetricDefinitionConfig (p. 138)
- MetricGoal (p. 140)
- MetricGoalConfig (p. 141)
- MetricMonitor (p. 142)
- MetricMonitorConfig (p. 143)
- OnlineAbConfig (p. 144)
- OnlineAbDefinition (p. 145)
- Project (p. 146)
- ProjectDataDelivery (p. 149)
- ProjectDataDeliveryConfig (p. 150)
- ProjectSummary (p. 151)
- PutProjectEventsResultEntry (p. 154)
- S3Destination (p. 155)
- S3DestinationConfig (p. 156)
- ScheduledSplit (p. 157)
- ScheduledSplitConfig (p. 158)
- ScheduledSplitsLaunchConfig (p. 159)

- ScheduledSplitsLaunchDefinition (p. 160)
- Treatment (p. 161)
- TreatmentConfig (p. 162)
- ValidationExceptionField (p. 164)
- VariableValue (p. 165)
- Variation (p. 166)
- VariationConfig (p. 167)

CloudWatchLogsDestination

A structure containing the CloudWatch Logs log group where the project stores evaluation events.

Contents

logGroup

The name of the log group where the project stores evaluation events.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 512.

Pattern: ^[-a-zA-Z0-9._/]+\$

Required: No

See Also

- AWS SDK for C++
- · AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3

CloudWatchLogsDestinationConfig

A structure containing the CloudWatch Logs log group where the project stores evaluation events.

Contents

logGroup

The name of the log group where the project stores evaluation events.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 512.

Pattern: ^[-a-zA-Z0-9._/]+\$

Required: No

See Also

- AWS SDK for C++
- · AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3

EvaluationRequest

This structure assigns a feature variation to one user session.

Contents

entityId

An internal ID that represents a unique user session of the application. This entityID is checked against any override rules assigned for this feature.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 512.

Pattern: .*

Required: Yes

evaluationContext

A JSON block of attributes that you can optionally pass in. This JSON block is included in the evaluation events sent to Evidently from the user session.

Type: String

Required: No

feature

The name of the feature being evaluated.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 127.

Pattern: ^[-a-zA-Z0-9._]*\$

Required: Yes

See Also

- AWS SDK for C++
- · AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3

EvaluationResult

This structure displays the results of one feature evaluation assignment to one user session.

Contents

details

If this user was assigned to a launch or experiment, this field lists the launch or experiment name.

Type: String

Required: No

entityId

An internal ID that represents a unique user session of the application.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 512.

Pattern: .*
Required: Yes

feature

The name of the feature being evaluated.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 127.

Pattern: ^[-a-zA-Z0-9._]*\$

Required: Yes

project

The name or ARN of the project that contains the feature being evaluated.

Type: String

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

Pattern: arn:[^:]*:[^:]*:[^:]*:.*

Required: No

reason

Specifies the reason that the user session was assigned this variation. Possible values include DEFAULT, meaning the user was served the default variation; LAUNCH_RULE_MATCH, if the user session was enrolled in a launch; or EXPERIMENT_RULE_MATCH, if the user session was enrolled in an experiment.

Type: String Required: No

value

The value assigned to this variation to differentiate it from the other variations of this feature.

CloudWatch Evidently API Reference See Also

Type: VariableValue (p. 165) object

Required: No

variation

The name of the variation that was served to the user session.

Type: String Required: No

See Also

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3

EvaluationRule

A structure that contains the information about an evaluation rule for this feature, if it is used in a launch or experiment.

Contents

name

The name of the experiment or launch.

Type: String

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

Required: No

type

This value is aws.evidently.splits if this is an evaluation rule for a launch, and it is aws.evidently.onlineab if this is an evaluation rule for an experiment.

Type: String

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

Required: Yes

See Also

- AWS SDK for C++
- · AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3

Event

A structure that contains the information about one evaluation event or custom event sent to Evidently. This is a JSON payload. If this event specifies a pre-defined event type, the payload must follow the defined event schema.

Contents

data

The event data.

Type: String

Required: Yes

timestamp

The timestamp of the event.

Type: Timestamp

Required: Yes

type

aws.evidently.evaluation specifies an evaluation event, which determines which feature variation that a user sees. aws.evidently.custom specifies a custom event, which generates metrics from user actions such as clicks and checkouts.

Type: String

Valid Values: aws.evidently.evaluation | aws.evidently.custom

Required: Yes

See Also

- · AWS SDK for C++
- · AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3

Experiment

A structure containing the configuration details of an experiment.

Contents

```
arn
```

```
The ARN of the experiment.

Type: String

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

Pattern: arn: [^:]*:[^:]*:[^:]*:project/[-a-zA-Z0-9._]*/experiment/[-a-zA-Z0-9._]*
```

Required: Yes

createdTime

The date and time that the experiment is first created.

Type: Timestamp Required: Yes

description

A description of the experiment.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 160.

Pattern: .*
Required: No

execution

A structure that contains the date and time that the experiment started and ended.

Type: ExperimentExecution (p. 119) object

Required: No lastUpdatedTime

The date and time that the experiment was most recently updated.

Type: Timestamp Required: Yes

metricGoals

An array of structures that defines the metrics used for the experiment, and whether a higher or lower value for each metric is the goal.

Type: Array of MetricGoal (p. 140) objects

Array Members: Minimum number of 1 item. Maximum number of 3 items.

CloudWatch Evidently API Reference Contents

Required: No

name

The name of the experiment.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 127.

Pattern: ^[-a-zA-Z0-9._]*\$

Required: Yes

onlineAbDefinition

A structure that contains the configuration of which variation to use as the "control" version. The "control" version is used for comparison with other variations. This structure also specifies how much experiment traffic is allocated to each variation.

Type: OnlineAbDefinition (p. 145) object

Required: No

project

The name or ARN of the project that contains this experiment.

Type: String

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

Pattern: arn:[^:]*:[^:]*:[^:]*:project/[-a-zA-Z0-9._]*

Required: No randomizationSalt

This value is used when Evidently assigns a particular user session to the experiment. It helps create a randomization ID to determine which variation the user session is served. This randomization ID is a combination of the entity ID and randomizationSalt.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 127.

Pattern: .*

Required: No

samplingRate

In thousandths of a percent, the amount of the available audience that is allocated to this experiment. The available audience is the total audience minus the audience that you have allocated to overrides or current launches of this feature.

This is represented in thousandths of a percent, so a value of 10,000 is 10% of the available audience.

Type: Long

Valid Range: Minimum value of 0. Maximum value of 100000.

Required: No

CloudWatch Evidently API Reference Contents

schedule

A structure that contains the time and date that Evidently completed the analysis of the experiment.

Type: ExperimentSchedule (p. 123) object

Required: No

status

The current state of the experiment.

Type: String

Valid Values: CREATED | UPDATING | RUNNING | COMPLETED | CANCELLED

Required: Yes

statusReason

If the experiment was stopped, this is the string that was entered by the person who stopped the experiment, to explain why it was stopped.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 160.

Pattern: .*

Required: No

tags

The list of tag keys and values associated with this experiment.

Type: String to string map

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

Key Pattern: ^(?!aws:)[a-zA-Z+-=._:/]+\$

Value Length Constraints: Minimum length of 0. Maximum length of 256.

Required: No

treatments

An array of structures that describe the configuration of each feature variation used in the experiment.

Type: Array of Treatment (p. 161) objects

Array Members: Minimum number of 2 items. Maximum number of 5 items.

Required: No

type

The type of this experiment. Currently, this value must be aws.experiment.onlineab.

Type: String

Valid Values: aws.evidently.onlineab

Required: Yes

CloudWatch Evidently API Reference See Also

See Also

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3

ExperimentExecution

This structure contains the date and time that the experiment started and ended.

Contents

endedTime

The date and time that the experiment ended.

Type: Timestamp

Required: No

startedTime

The date and time that the experiment started.

Type: Timestamp

Required: No

See Also

- AWS SDK for C++
- · AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3

ExperimentReport

A structure that contains results of an experiment.

Contents

content

The content of the report.

Type: String

Required: No

metricName

The name of the metric that is analyzed in this experiment report.

Type: String

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

Pattern: ^[\S]+\$

Required: No

reportName

The type of analysis used for this report.

Type: String

Valid Values: BayesianInference

Required: No

treatmentName

The name of the variation that this report pertains to.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 127.

Pattern: ^[-a-zA-Z0-9._]*\$

Required: No

See Also

- · AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3

ExperimentResultsData

A structure that contains experiment results for one metric that is monitored in the experiment.

Contents

```
metricName
```

```
The name of the metric.

Type: String

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

Pattern: ^[\S]+$

Required: No

resultStat
```

JutiStat

The experiment statistic that these results pertain to.

Type: String

Valid Values: Mean | TreatmentEffect | ConfidenceIntervalUpperBound |
ConfidenceIntervalLowerBound | PValue

Required: No **treatmentName**

The treatment, or variation, that returned the values in this structure.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 127.

Pattern: ^[-a-zA-Z0-9._]*\$

Required: No

values

The values for the metricName that were recorded in the experiment.

Type: Array of doubles

Array Members: Minimum number of 0 items. Maximum number of 100800 items.

Required: No

See Also

- AWS SDK for C++
- · AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3

CloudWatch Evidently API Reference See Also	
See Also	

ExperimentSchedule

This structure contains the time and date that Evidently completed the analysis of the experiment.

Contents

analysis Complete Time

The time and date that Evidently completed the analysis of the experiment.

Type: Timestamp

Required: No

See Also

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3

Feature

This structure contains information about one Evidently feature in your account.

Contents

arn

The ARN of the feature.

Type: String

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

```
Pattern: arn:[^:]*:[^:]*:[^:]*:project/[-a-zA-Z0-9._]*/feature/[-a-zA-Z0-9._]*
```

Required: Yes

createdTime

The date and time that the feature is created.

Type: Timestamp

Required: Yes

defaultVariation

The name of the variation that is used as the default variation. The default variation is served to users who are not allocated to any ongoing launches or experiments of this feature.

This variation must also be listed in the variations structure.

If you omit defaultVariation, the first variation listed in the variations structure is used as the default variation.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 127.

Pattern: ^[-a-zA-Z0-9._]*\$

Required: No

description

The description of the feature.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 160.

Pattern: .*

Required: No

entityOverrides

A set of key-value pairs that specify users who should always be served a specific variation of a feature. Each key specifies a user using their user ID, account ID, or some other identifier. The value specifies the name of the variation that the user is to be served.

CloudWatch Evidently API Reference Contents

For the override to be successful, the value of the key must match the entityId used in the EvaluateFeature operation.

Type: String to string map

Map Entries: Minimum number of 0 items. Maximum number of 20 items.

Key Length Constraints: Minimum length of 1. Maximum length of 512.

Key Pattern: .*

Value Length Constraints: Minimum length of 1. Maximum length of 127.

Value Pattern: ^[-a-zA-Z0-9._]*\$

Required: No

evaluationRules

An array of structures that define the evaluation rules for the feature.

Type: Array of EvaluationRule (p. 113) objects

Required: No

evaluationStrategy

If this value is ALL_RULES, the traffic allocation specified by any ongoing launches or experiments is being used. If this is DEFAULT_VARIATION, the default variation is being served to all users.

Type: String

Valid Values: ALL_RULES | DEFAULT_VARIATION

Required: Yes

lastUpdatedTime

The date and time that the feature was most recently updated.

Type: Timestamp

Required: Yes

name

The name of the feature.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 127.

Pattern: ^[-a-zA-Z0-9._]*\$

Required: Yes

project

The name or ARN of the project that contains the feature.

Type: String

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

Pattern: arn:[^:]*:[^:]*:[^:]*:project/[-a-zA-Z0-9._]*

CloudWatch Evidently API Reference See Also

```
Required: No
status
    The current state of the feature.
    Type: String
    Valid Values: AVAILABLE | UPDATING
    Required: Yes
tags
    The list of tag keys and values associated with this feature.
    Type: String to string map
    Key Length Constraints: Minimum length of 1. Maximum length of 128.
    Key Pattern: ^(?!aws:)[a-zA-Z+-=._:/]+$
    Value Length Constraints: Minimum length of 0. Maximum length of 256.
    Required: No
valueType
    Defines the type of value used to define the different feature variations. For more information, see
    Variation types
    Type: String
    Valid Values: STRING | LONG | DOUBLE | BOOLEAN
    Required: Yes
variations
    An array of structures that contain the configuration of the feature's different variations.
    Type: Array of Variation (p. 166) objects
```

See Also

Required: Yes

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3

FeatureSummary

This structure contains information about one Evidently feature in your account.

Contents

arn

The ARN of the feature.

Type: String

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

Pattern: arn:[^:]*:[^:]*:[^:]*:.*

Required: Yes

createdTime

The date and time that the feature is created.

Type: Timestamp

Required: Yes

defaultVariation

The name of the variation that is used as the default variation. The default variation is served to users who are not allocated to any ongoing launches or experiments of this feature.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 127.

Pattern: ^[-a-zA-Z0-9._]*\$

Required: No

evaluationRules

An array of structures that define

Type: Array of EvaluationRule (p. 113) objects

Required: No

evaluationStrategy

If this value is ALL_RULES, the traffic allocation specified by any ongoing launches or experiments is being used. If this is DEFAULT_VARIATION, the default variation is being served to all users.

Type: String

Valid Values: ALL_RULES | DEFAULT_VARIATION

Required: Yes lastUpdatedTime

The date and time that the feature was most recently updated.

Type: Timestamp

```
Required: Yes
name
    The name of the feature.
    Type: String
    Length Constraints: Minimum length of 1. Maximum length of 127.
    Pattern: ^[-a-zA-Z0-9._]*$
    Required: Yes
project
    The name or ARN of the project that contains the feature.
    Type: String
    Length Constraints: Minimum length of 0. Maximum length of 2048.
    Pattern: ([-a-zA-Z0-9._]*)|(arn:[^:]*:[^:]*:[^:]*:[^:]*:project/[-a-zA-
    Z0-9._]*)
    Required: No
status
    The current state of the feature.
    Type: String
    Valid Values: AVAILABLE | UPDATING
    Required: Yes
tags
    The list of tag keys and values associated with this feature.
    Type: String to string map
    Key Length Constraints: Minimum length of 1. Maximum length of 128.
    Key Pattern: ^(?!aws:)[a-zA-Z+-=._:/]+$
    Value Length Constraints: Minimum length of 0. Maximum length of 256.
    Required: No
```

See Also

- · AWS SDK for C++
- · AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3

Launch

This structure contains the configuration details of one Evidently launch.

Contents

Type: Timestamp

Required: Yes

```
arn
   The ARN of the launch.
   Type: String
   Length Constraints: Minimum length of 0. Maximum length of 2048.
   Pattern: arn:[^:]*:[^:]*:[^:]*:[^:]*:project/[-a-zA-Z0-9._]*/launch/[-a-zA-
    Z0-9._]*
   Required: Yes
createdTime
   The date and time that the launch is created.
   Type: Timestamp
    Required: Yes
description
   The description of the launch.
   Type: String
   Length Constraints: Minimum length of 0. Maximum length of 160.
    Pattern: .*
    Required: No
execution
   A structure that contains information about the start and end times of the launch.
   Type: LaunchExecution (p. 132) object
    Required: No
groups
   An array of structures that define the feature variations that are being used in the launch.
   Type: Array of LaunchGroup (p. 133) objects
   Required: No
lastUpdatedTime
   The date and time that the launch was most recently updated.
```

CloudWatch Evidently API Reference Contents

metricMonitors

An array of structures that define the metrics that are being used to monitor the launch performance.

Type: Array of MetricMonitor (p. 142) objects

Array Members: Minimum number of 0 items. Maximum number of 3 items.

Required: No

name

The name of the launch.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 127.

Pattern: ^[-a-zA-Z0-9._]*\$

Required: Yes

project

The name or ARN of the project that contains the launch.

Type: String

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

Pattern: ([-a-zA-Z0-9._]*)|(arn:[^:]*:[^:]*:[^:]*:[^:]*:project/[-a-zA-Z0-9.]*)

Required: No

randomizationSalt

This value is used when Evidently assigns a particular user session to the launch, to help create a randomization ID to determine which variation the user session is served. This randomization ID is a combination of the entity ID and randomizationSalt.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 127.

Pattern: .*

Required: No

scheduledSplitsDefinition

An array of structures that define the traffic allocation percentages among the feature variations during each step of the launch.

Type: ScheduledSplitsLaunchDefinition (p. 160) object

Required: No

status

The current state of the launch.

Type: String

Valid Values: CREATED | UPDATING | RUNNING | COMPLETED | CANCELLED

CloudWatch Evidently API Reference See Also

```
Required: Yes
```

statusReason

If the launch was stopped, this is the string that was entered by the person who stopped the launch, to explain why it was stopped.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 160.

Pattern: .*
Required: No

tags

The list of tag keys and values associated with this launch.

Type: String to string map

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

Key Pattern: ^(?!aws:)[a-zA-Z+-=._:/]+\$

Value Length Constraints: Minimum length of 0. Maximum length of 256.

Required: No

type

The type of launch.

Type: String

Valid Values: aws.evidently.splits

Required: Yes

See Also

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3

LaunchExecution

This structure contains information about the start and end times of the launch.

Contents

endedTime

The date and time that the launch ended.

Type: Timestamp

Required: No

startedTime

The date and time that the launch started.

Type: Timestamp

Required: No

See Also

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3

LaunchGroup

A structure that defines one launch group in a launch. A launch group is a variation of the feature that you are including in the launch.

Contents

description

```
A description of the launch group.
```

Type: String

Length Constraints: Minimum length of 0. Maximum length of 160.

Pattern: .*

Required: No

featureVariations

The feature variation for this launch group. This is a key-value pair.

Type: String to string map

Key Length Constraints: Minimum length of 1. Maximum length of 127.

Key Pattern: ^[-a-zA-Z0-9._]*\$

Value Length Constraints: Minimum length of 1. Maximum length of 127.

Value Pattern: ^[-a-zA-Z0-9._]*\$

Required: Yes

name

The name of the launch group.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 127.

Pattern: ^[-a-zA-Z0-9._]*\$

Required: Yes

See Also

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3

LaunchGroupConfig

A structure that defines one launch group in a launch. A launch group is a variation of the feature that you are including in the launch.

Contents

```
description
```

```
A description of the launch group.
    Type: String
    Length Constraints: Minimum length of 0. Maximum length of 160.
    Pattern: .*
    Required: No
feature
    The feature that this launch is using.
    Type: String
    Length Constraints: Minimum length of 1. Maximum length of 127.
    Pattern: ^[-a-zA-Z0-9._]*$
    Required: Yes
name
    A name for this launch group.
    Type: String
    Length Constraints: Minimum length of 1. Maximum length of 127.
    Pattern: ^[-a-zA-Z0-9._]*$
    Required: Yes
variation
    The feature variation to use for this launch group.
    Type: String
    Length Constraints: Minimum length of 1. Maximum length of 127.
    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++

CloudWatch Evidently API Reference See Also

- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3

MetricDefinition

This structure defines a metric that is being used to evaluate the variations during a launch or experiment.

Contents

entityIdKey

```
The entity, such as a user or session, that does an action that causes a metric value to be recorded.
```

Type: String

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

Pattern: .*

Required: No

eventPattern

The EventBridge event pattern that defines how the metric is recorded.

For more information about EventBridge event patterns, see Amazon EventBridge event patterns.

Type: String

Required: No

name

The name of the metric.

Type: String

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

Pattern: ^[\S]+\$

Required: No

unitLabel

The label for the units that the metric is measuring.

Type: String

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

Pattern: .*

Required: No

valueKey

The value that is tracked to produce the metric.

Type: String

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

Pattern: .*

CloudWatch Evidently API Reference See Also

Required: No

See Also

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3

MetricDefinitionConfig

This structure defines a metric that you want to use to evaluate the variations during a launch or experiment.

Contents

entityIdKey

The entity, such as a user or session, that does an action that causes a metric value to be recorded. An example is userDetails.userID.

Type: String

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

Pattern: .*

Required: Yes

eventPattern

The EventBridge event pattern that defines how the metric is recorded.

For more information about EventBridge event patterns, see Amazon EventBridge event patterns.

Type: String

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

Required: No

name

A name for the metric.

Type: String

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

Pattern: ^[\S]+\$

Required: Yes

unitLabel

A label for the units that the metric is measuring.

Type: String

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

Pattern: .*

Required: No

valueKey

The value that is tracked to produce the metric.

Type: String

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

CloudWatch Evidently API Reference See Also

Pattern: .*

Required: Yes

See Also

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3

MetricGoal

A structure that tells Evidently whether higher or lower values are desired for a metric that is used in an experiment.

Contents

desired Change

INCREASE means that a variation with a higher number for this metric is performing better.

DECREASE means that a variation with a lower number for this metric is performing better.

Type: String

Valid Values: INCREASE | DECREASE

Required: No metricDefinition

A structure that contains details about the metric.

Type: MetricDefinition (p. 136) object

Required: Yes

See Also

- · AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3

MetricGoalConfig

Use this structure to tell Evidently whether higher or lower values are desired for a metric that is used in an experiment.

Contents

desiredChange

INCREASE means that a variation with a higher number for this metric is performing better.

DECREASE means that a variation with a lower number for this metric is performing better.

Type: String

Valid Values: INCREASE | DECREASE

Required: No metricDefinition

A structure that contains details about the metric.

Type: MetricDefinitionConfig (p. 138) object

Required: Yes

See Also

- · AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3

MetricMonitor

A structure that defines a metric to be used to monitor performance of the variations during a launch.

Contents

metricDefinition

A structure that defines the metric.

Type: MetricDefinition (p. 136) object

Required: Yes

See Also

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3

MetricMonitorConfig

A structure that defines a metric to be used to monitor performance of the variations during a launch.

Contents

metricDefinition

A structure that defines the metric.

Type: MetricDefinitionConfig (p. 138) object

Required: Yes

See Also

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3

OnlineAbConfig

A structure that contains the configuration of which variation to use as the "control" version. The "control" version is used for comparison with other variations. This structure also specifies how much experiment traffic is allocated to each variation.

Contents

controlTreatmentName

The name of the variation that is to be the default variation that the other variations are compared to.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 127.

Pattern: ^[-a-zA-Z0-9._]*\$

Required: No **treatmentWeights**

A set of key-value pairs. The keys are variation names, and the values are the portion of experiment traffic to be assigned to that variation. Specify the traffic portion in thousandths of a percent, so 20,000 for a variation would allocate 20% of the experiment traffic to that variation.

Type: String to long map

Key Length Constraints: Minimum length of 1. Maximum length of 127.

Key Pattern: ^[-a-zA-Z0-9._]*\$

Valid Range: Minimum value of 0. Maximum value of 100000.

Required: No

See Also

- · AWS SDK for C++
- · AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3

OnlineAbDefinition

A structure that contains the configuration of which variation to use as the "control" version. The "control" version is used for comparison with other variations. This structure also specifies how much experiment traffic is allocated to each variation.

Contents

controlTreatmentName

The name of the variation that is the default variation that the other variations are compared to.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 127.

Pattern: ^[-a-zA-Z0-9._]*\$

Required: No treatmentWeights

A set of key-value pairs. The keys are variation names, and the values are the portion of experiment traffic to be assigned to that variation. The traffic portion is specified in thousandths of a percent, so 20,000 for a variation would allocate 20% of the experiment traffic to that variation.

Type: String to long map

Key Length Constraints: Minimum length of 1. Maximum length of 127.

Key Pattern: ^[-a-zA-Z0-9._]*\$

Valid Range: Minimum value of 0. Maximum value of 100000.

Required: No

See Also

- · AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3

Project

This structure defines a project, which is the logical object in Evidently that can contain features, launches, and experiments. Use projects to group similar features together.

Contents

activeExperimentCount

```
The number of ongoing experiments currently in the project.
```

Type: Long

Required: No

activeLaunchCount

The number of ongoing launches currently in the project.

Type: Long

Required: No

arn

The name or ARN of the project.

Type: String

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

Pattern: arn:[^:]*:[^:]*:[^:]*:project/[-a-zA-Z0-9._]*

Required: Yes

createdTime

The date and time that the project is created.

Type: Timestamp

Required: Yes

dataDelivery

A structure that contains information about where Evidently is to store evaluation events for longer term storage.

Type: ProjectDataDelivery (p. 149) object

Required: No

description

The user-entered description of the project.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 160.

Pattern: .*
Required: No

CloudWatch Evidently API Reference Contents

experimentCount

The number of experiments currently in the project. This includes all experiments that have been created and not deleted, whether they are ongoing or not.

Type: Long

Required: No

featureCount

The number of features currently in the project.

Type: Long

Required: No

lastUpdatedTime

The date and time that the project was most recently updated.

Type: Timestamp

Required: Yes

launchCount

The number of launches currently in the project. This includes all launches that have been created and not deleted, whether they are ongoing or not.

Type: Long

Required: No

name

The name of the project.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 127.

Pattern: ^[-a-zA-Z0-9.]*\$

Required: Yes

status

The current state of the project.

Type: String

Valid Values: AVAILABLE | UPDATING

Required: Yes

tags

The list of tag keys and values associated with this project.

Type: String to string map

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

Key Pattern: ^(?!aws:)[a-zA-Z+-=._:/]+\$

Value Length Constraints: Minimum length of 0. Maximum length of 256.

CloudWatch Evidently API Reference See Also

Required: No

See Also

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3

ProjectDataDelivery

A structure that contains information about where Evidently is to store evaluation events for longer term storage.

Contents

cloudWatchLogs

If the project stores evaluation events in CloudWatch Logs, this structure stores the log group name.

Type: CloudWatchLogsDestination (p. 108) object

Required: No

s3Destination

If the project stores evaluation events in an Amazon S3 bucket, this structure stores the bucket name and bucket prefix.

Type: S3Destination (p. 155) object

Required: No

See Also

- AWS SDK for C++
- · AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3

ProjectDataDeliveryConfig

A structure that contains information about where Evidently is to store evaluation events for longer term storage.

Contents

cloudWatchLogs

If the project stores evaluation events in CloudWatch Logs, this structure stores the log group name.

Type: CloudWatchLogsDestinationConfig (p. 109) object

Required: No

s3Destination

If the project stores evaluation events in an Amazon S3 bucket, this structure stores the bucket name and bucket prefix.

Type: S3DestinationConfig (p. 156) object

Required: No

See Also

- AWS SDK for C++
- · AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3

ProjectSummary

A structure that contains configuration information about an Evidently project.

Contents

```
activeExperimentCount
    The number of experiments currently in the project.
    Type: Long
    Required: No
activeLaunchCount
    The number of ongoing launches currently in the project.
    Type: Long
    Required: No
arn
    The name or ARN of the project.
    Type: String
    Length Constraints: Minimum length of 0. Maximum length of 2048.
    Pattern: arn:[^:]*:[^:]*:[^:]*:project/[-a-zA-Z0-9._]*
    Required: Yes
createdTime
    The date and time that the project is created.
    Type: Timestamp
    Required: Yes
description
    The description of the project.
    Type: String
    Length Constraints: Minimum length of 0. Maximum length of 160.
    Pattern: .*
    Required: No
experimentCount
    The number of experiments currently in the project.
    Type: Long
    Required: No
featureCount
```

The number of features currently in the project.

CloudWatch Evidently API Reference See Also

Type: Long

Required: No

lastUpdatedTime

The date and time that the project was most recently updated.

Type: Timestamp

Required: Yes

launchCount

The number of launches currently in the project, including launches that are ongoing, completed, and not started yet.

Type: Long

Required: No

name

The name of the project.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 127.

Pattern: ^[-a-zA-Z0-9._]*\$

Required: Yes

status

The current state of the project.

Type: String

Valid Values: AVAILABLE | UPDATING

Required: Yes

tags

The list of tag keys and values associated with this project.

Type: String to string map

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

Key Pattern: ^(?!aws:)[a-zA-Z+-=._:/]+\$

Value Length Constraints: Minimum length of 0. Maximum length of 256.

Required: No

See Also

- · AWS SDK for C++
- · AWS SDK for Go

CloudWatch Evidently API Reference See Also

- AWS SDK for Java V2
- AWS SDK for Ruby V3

PutProjectEventsResultEntry

A structure that contains Evidently's response to the sent events, including an event ID and error codes, if any.

Contents

errorCode

If the PutProjectEvents operation has an error, the error code is returned here.

Type: String

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

Required: No

errorMessage

If the PutProjectEvents operation has an error, the error message is returned here.

Type: String

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

Pattern: .*

Required: No

eventId

A unique ID assigned to this PutProjectEvents operation.

Type: String

Length Constraints: Fixed length of 36.

Pattern: $[a-f0-9]{8}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{12}$

Required: No

See Also

- · AWS SDK for C++
- · AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3

S3Destination

If the project stores evaluation events in an Amazon S3 bucket, this structure stores the bucket name and bucket prefix.

Contents

bucket

The name of the bucket in which Evidently stores evaluation events.

Type: String

Length Constraints: Minimum length of 3. Maximum length of 63.

Pattern: $^[a-z0-9][-a-z0-9]*[a-z0-9]$ \$

Required: No

prefix

The bucket prefix in which Evidently stores evaluation events.

Type: String

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

Pattern: ^[-a-zA-Z0-9!_.*'()/]*\$

Required: No

See Also

- · AWS SDK for C++
- · AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3

S3DestinationConfig

If the project stores evaluation events in an Amazon S3 bucket, this structure stores the bucket name and bucket prefix.

Contents

bucket

The name of the bucket in which Evidently stores evaluation events.

Type: String

Length Constraints: Minimum length of 3. Maximum length of 63.

Pattern: $^[a-z0-9][-a-z0-9]*[a-z0-9]$ \$

Required: No

prefix

The bucket prefix in which Evidently stores evaluation events.

Type: String

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

Pattern: ^[-a-zA-Z0-9!_.*'()/]*\$

Required: No

See Also

- · AWS SDK for C++
- · AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3

ScheduledSplit

This structure defines the traffic allocation percentages among the feature variations during one step of a launch, and the start time of that step.

Contents

groupWeights

The traffic allocation percentages among the feature variations during one step of a launch. This is a set of key-value pairs. The keys are variation names. The values represent the percentage of traffic to allocate to that variation during this step.

Type: String to long map

Map Entries: Minimum number of 0 items. Maximum number of 5 items.

Key Length Constraints: Minimum length of 1. Maximum length of 127.

Key Pattern: ^[-a-zA-Z0-9._]*\$

Valid Range: Minimum value of 0. Maximum value of 100000.

Required: No

startTime

The date and time that this step of the launch starts.

Type: Timestamp

Required: Yes

See Also

- · AWS SDK for C++
- · AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3

ScheduledSplitConfig

This structure defines the traffic allocation percentages among the feature variations during one step of a launch, and the start time of that step.

Contents

groupWeights

The traffic allocation percentages among the feature variations during one step of a launch. This is a set of key-value pairs. The keys are variation names. The values represent the percentage of traffic to allocate to that variation during this step.

Type: String to long map

Map Entries: Minimum number of 0 items. Maximum number of 5 items.

Key Length Constraints: Minimum length of 1. Maximum length of 127.

Key Pattern: ^[-a-zA-Z0-9._]*\$

Valid Range: Minimum value of 0. Maximum value of 100000.

Required: Yes

startTime

The date and time that this step of the launch starts.

Type: Timestamp

Required: Yes

See Also

- · AWS SDK for C++
- · AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3

ScheduledSplitsLaunchConfig

An array of structures that define the traffic allocation percentages among the feature variations during each step of a launch. This also defines the start time of each step.

Contents

steps

An array of structures that define the traffic allocation percentages among the feature variations during each step of the launch. This also defines the start time of each step.

Type: Array of ScheduledSplitConfig (p. 158) objects

Array Members: Minimum number of 1 item. Maximum number of 6 items.

Required: Yes

See Also

- · AWS SDK for C++
- · AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3

ScheduledSplitsLaunchDefinition

An array of structures that define the traffic allocation percentages among the feature variations during each step of a launch. This also defines the start time of each step.

Contents

steps

An array of structures that define the traffic allocation percentages among the feature variations during each step of the launch. This also defines the start time of each step.

Type: Array of ScheduledSplit (p. 157) objects

Array Members: Minimum number of 1 item. Maximum number of 6 items.

Required: No

See Also

- · AWS SDK for C++
- · AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3

Treatment

A structure that defines one treatment in an experiment. A treatment is a variation of the feature that you are including in the experiment.

Contents

description

The description of the treatment.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 160.

Pattern: .*

Required: No

featureVariations

The feature variation used for this treatment. This is a key-value pair. The key is the feature name, and the value is the variation name.

Type: String to string map

Key Length Constraints: Minimum length of 1. Maximum length of 127.

Key Pattern: ^[-a-zA-Z0-9._]*\$

Value Length Constraints: Minimum length of 1. Maximum length of 127.

Value Pattern: ^[-a-zA-Z0-9._]*\$

Required: No

name

The name of this treatment.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 127.

Pattern: ^[-a-zA-Z0-9._]*\$

Required: Yes

See Also

- · AWS SDK for C++
- · AWS SDK for Go
- AWS SDK for Java V2
- · AWS SDK for Ruby V3

TreatmentConfig

A structure that defines one treatment in an experiment. A treatment is a variation of the feature that you are including in the experiment.

Contents

```
description
```

```
A description for this treatment.
    Type: String
    Length Constraints: Minimum length of 0. Maximum length of 160.
    Pattern: .*
    Required: No
feature
    The feature that this experiment is testing.
    Type: String
    Length Constraints: Minimum length of 1. Maximum length of 127.
    Pattern: ^[-a-zA-Z0-9._]*$
    Required: Yes
name
    A name for this treatment.
    Type: String
    Length Constraints: Minimum length of 1. Maximum length of 127.
    Pattern: ^[-a-zA-Z0-9._]*$
    Required: Yes
variation
    The name of the variation to use as this treatment in the experiment.
    Type: String
    Length Constraints: Minimum length of 1. Maximum length of 127.
    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++

CloudWatch Evidently API Reference See Also

- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3

ValidationExceptionField

A structure containing an error name and message.

Contents

message

The error message.

Type: String

Required: Yes

name

The error name.

Type: String

Required: Yes

See Also

- AWS SDK for C++
- · AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3

VariableValue

The value assigned to a feature variation. This structure must contain exactly one field. It can be boolValue, doubleValue, longValue, or stringValue.

Contents

boolValue

If this feature uses the Boolean variation type, this field contains the Boolean value of this variation.

Type: Boolean

Required: No

doubleValue

If this feature uses the double integer variation type, this field contains the double integer value of this variation.

Type: Double

Required: No

longValue

If this feature uses the long variation type, this field contains the long value of this variation.

Type: Long

Valid Range: Minimum value of -9007199254740991. Maximum value of 9007199254740991.

Required: No

stringValue

If this feature uses the string variation type, this field contains the string value of this variation.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 512.

Required: No

See Also

- · AWS SDK for C++
- · AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3

Variation

This structure contains the name and variation value of one variation of a feature.

Contents

name

```
The name of the variation.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 127.

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

Required: No
```

value

The value assigned to this variation.

Type: VariableValue (p. 165) object

Required: No

See Also

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3

VariationConfig

This structure contains the name and variation value of one variation of a feature.

Contents

name

```
The name of the variation.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 127.

Pattern: ^[-a-zA-Z0-9._]*$

Required: Yes
```

value

The value assigned to this variation.

Type: VariableValue (p. 165) object

Required: Yes

See Also

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3

Common Parameters

The following list contains the parameters that all actions use for signing Signature Version 4 requests with a query string. Any action-specific parameters are listed in the topic for that action. For more information about Signature Version 4, see Signature Version 4 Signing Process in the Amazon Web Services General Reference.

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 Task 2: Create a String to Sign for Signature Version 4 in the Amazon Web Services General Reference.

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 Handling Dates in Signature Version 4 in the *Amazon Web Services General Reference*.

Type: string

Required: Conditional

X-Amz-Security-Token

The temporary security token that was obtained through a call to AWS Security Token Service (AWS STS). For a list of services that support temporary security credentials from AWS Security Token Service, go to AWS Services That Work with IAM in the IAM User Guide.

Condition: If you're using temporary security credentials from the AWS Security Token Service, 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 Task 1: Create a Canonical Request For Signature Version 4 in the *Amazon Web Services General Reference*.

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

Type: string

Required: Conditional

Common Errors

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

AccessDeniedException

You do not have sufficient access to perform this action.

HTTP Status Code: 400

IncompleteSignature

The request signature does not conform to AWS standards.

HTTP Status Code: 400

InternalFailure

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

HTTP Status Code: 500

InvalidAction

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

HTTP Status Code: 400

InvalidClientTokenId

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

HTTP Status Code: 403

InvalidParameterCombination

Parameters that must not be used together were used together.

HTTP Status Code: 400

InvalidParameterValue

An invalid or out-of-range value was supplied for the input parameter.

HTTP Status Code: 400

InvalidQueryParameter

The AWS query string is malformed or does not adhere to AWS standards.

HTTP Status Code: 400

MalformedQueryString

The query string contains a syntax error.

HTTP Status Code: 404

MissingAction

The request is missing an action or a required parameter.

HTTP Status Code: 400

MissingAuthenticationToken

The request must contain either a valid (registered) AWS access key ID or X.509 certificate.

HTTP Status Code: 403

MissingParameter

A required parameter for the specified action is not supplied.

HTTP Status Code: 400

NotAuthorized

You do not have permission to perform this action.

HTTP Status Code: 400

OptInRequired

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

HTTP Status Code: 403

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

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

ValidationError

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

HTTP Status Code: 400