aws

API Reference

EventBridge Scheduler

API Version 2021-06-30

EventBridge Scheduler: API Reference

Table of Contents

Welcome

Amazon EventBridge Scheduler is a serverless scheduler that allows you to create, run, and manage tasks from one central, managed service. EventBridge Scheduler delivers your tasks reliably, with built-in mechanisms that adjust your schedules based on the availability of downstream targets. The following reference lists the available API actions, and data types for EventBridge Scheduler.

This document was last published on April 10, 2026.

Actions

The following actions are supported:

- CreateSchedule
- CreateScheduleGroup
- DeleteSchedule
- DeleteScheduleGroup
- GetSchedule
- GetScheduleGroup
- ListScheduleGroups
- ListSchedules
- ListTagsForResource
- TagResource
- UntagResource
- UpdateSchedule

CreateSchedule

Creates the specified schedule.

Request Syntax

```
POST /schedules/Name HTTP/1.1
Content-type: application/json

{
   "ActionAfterCompletion": "string",
   "ClientToken": "string",
   "Description": "string",
   "EndDate": number,
   "FlexibleTimeWindow": {
      "MaximumWindowInMinutes": number,
      "Mode": "string"
   },
   "GroupName": "string",
   "KmsKeyArn": "string",
   "ScheduleExpression": "string",
   "ScheduleExpressionTimezone": "string",
   "StartDate": number,
   "State": "string",
   "Target": {
      "Arn": "string",
      "DeadLetterConfig": {
         "Arn": "string"
      },
      "EcsParameters": {
         "CapacityProviderStrategy": [
            {
               "base": number,
               "capacityProvider": "string",
               "weight": number
            }
         ],
         "EnableECSManagedTags": boolean,
         "EnableExecuteCommand": boolean,
         "Group": "string",
         "LaunchType": "string",
         "NetworkConfiguration": {
            "awsvpcConfiguration": {
```

```
            "AssignPublicIp": "string",
            "SecurityGroups": [ "string" ],
            "Subnets": [ "string" ]
         }
      },
      "PlacementConstraints": [
         {
            "expression": "string",
            "type": "string"
         }
      ],
      "PlacementStrategy": [
         {
            "field": "string",
            "type": "string"
         }
      ],
      "PlatformVersion": "string",
      "PropagateTags": "string",
      "ReferenceId": "string",
      "Tags": [
         {
            "string" : "string"
         }
      ],
      "TaskCount": number,
      "TaskDefinitionArn": "string"
   },
   "EventBridgeParameters": {
      "DetailType": "string",
      "Source": "string"
   },
   "Input": "string",
   "KinesisParameters": {
      "PartitionKey": "string"
   },
   "RetryPolicy": {
      "MaximumEventAgeInSeconds": number,
      "MaximumRetryAttempts": number
   },
   "RoleArn": "string",
   "SageMakerPipelineParameters": {
      "PipelineParameterList": [
         {
```

```
                "Name": "string",
                "Value": "string"
            }
         ]
      },
      "SqsParameters": {
         "MessageGroupId": "string"
      }
   }
}
```

URI Request Parameters

The request uses the following URI parameters.

Name

The name of the schedule that you are creating.

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

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

Required: Yes

Request Body

The request accepts the following data in JSON format.

ActionAfterCompletion

Specifies the action that EventBridge Scheduler applies to the schedule after the schedule completes invoking the target.

Type: String

Valid Values: `NONE | DELETE`

Required: No

ClientToken

Unique, case-sensitive identifier you provide to ensure the idempotency of the request. If you do not specify a client token, EventBridge Scheduler uses a randomly generated token for the request to ensure idempotency.

Type: String

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

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

Required: No

Description

The description you specify for the schedule.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 512.

Required: No

EndDate

The date, in UTC, before which the schedule can invoke its target. Depending on the schedule's recurrence expression, invocations might stop on, or before, the `EndDate` you specify. EventBridge Scheduler ignores `EndDate` for one-time schedules.

Type: Timestamp

Required: No

FlexibleTimeWindow

Allows you to configure a time window during which EventBridge Scheduler invokes the schedule.

Type: FlexibleTimeWindow object

Required: Yes

GroupName

The name of the schedule group to associate with this schedule. If you omit this, the default schedule group is used.

Type: String

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

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

Required: No

KmsKeyArn

The Amazon Resource Name (ARN) for the customer managed KMS key that EventBridge Scheduler will use to encrypt and decrypt your data.

Type: String

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

Pattern: `arn:aws(-[a-z]+)?:kms:[a-z0-9\-]+:\d{12}:(key|alias)\/[0-9a-zA-Z-_]*`

Required: No

ScheduleExpression

The expression that defines when the schedule runs. The following formats are supported.

- `at` expression - `at(yyyy-mm-ddThh:mm:ss)`
- `rate` expression - `rate(value unit)`
- `cron` expression - `cron(fields)`

You can use `at` expressions to create one-time schedules that invoke a target once, at the time and in the time zone, that you specify. You can use `rate` and `cron` expressions to create recurring schedules. Rate-based schedules are useful when you want to invoke a target at regular intervals, such as every 15 minutes or every five days. Cron-based schedules are useful when you want to invoke a target periodically at a specific time, such as at 8:00 am (UTC+0) every 1st day of the month.

A `cron` expression consists of six fields separated by white spaces: `(minutes hours day_of_month month day_of_week year)`.

A `rate` expression consists of a *value* as a positive integer, and a *unit* with the following options: `minute` | `minutes` | `hour` | `hours` | `day` | `days`

For more information and examples, see Schedule types on EventBridge Scheduler in the *EventBridge Scheduler User Guide*.

Type: String

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

Required: Yes

ScheduleExpressionTimezone

The timezone in which the scheduling expression is evaluated.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 50.

Required: No

StartDate

The date, in UTC, after which the schedule can begin invoking its target. Depending on the schedule's recurrence expression, invocations might occur on, or after, the `StartDate` you specify. EventBridge Scheduler ignores `StartDate` for one-time schedules.

Type: Timestamp

Required: No

State

Specifies whether the schedule is enabled or disabled.

Type: String

Valid Values: `ENABLED | DISABLED`

Required: No

Target

The schedule's target.

Type: Target object

Required: Yes

Response Syntax

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

{
   "ScheduleArn": "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.

ScheduleArn

The Amazon Resource Name (ARN) of the schedule.

Type: String

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

Pattern: `arn:aws(-[a-z]+)?:scheduler:[a-z0-9\-]+:\d{12}:schedule\/[0-9a-zA-Z-_.]+\/[0-9a-zA-Z-_.]+`

Errors

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

ConflictException

Updating or deleting the resource can cause an inconsistent state.

HTTP Status Code: 409

InternalServerException

Unexpected error encountered while processing the request.

HTTP Status Code: 500

ResourceNotFoundException

The request references a resource which does not exist.

HTTP Status Code: 404

ServiceQuotaExceededException

The request exceeds a service quota.

HTTP Status Code: 402

ThrottlingException

The request was denied due to request throttling.

HTTP Status Code: 429

ValidationException

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

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

CreateScheduleGroup

Creates the specified schedule group.

Request Syntax

```
POST /schedule-groups/Name HTTP/1.1
Content-type: application/json

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

URI Request Parameters

The request uses the following URI parameters.

Name

The name of the schedule group that you are creating.

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

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

Required: Yes

Request Body

The request accepts the following data in JSON format.

ClientToken

Unique, case-sensitive identifier you provide to ensure the idempotency of the request. If you do not specify a client token, EventBridge Scheduler uses a randomly generated token for the request to ensure idempotency.

Type: String

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

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

Required: No

Tags

The list of tags to associate with the schedule group.

Type: Array of Tag objects

Array Members: Minimum number of 0 items. Maximum number of 200 items.

Required: No

Response Syntax

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

{
   "ScheduleGroupArn": "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.

ScheduleGroupArn

The Amazon Resource Name (ARN) of the schedule group.

Type: String

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

Pattern: `arn:aws(-[a-z]+)?:scheduler:[a-z0-9\-]+:\d{12}:schedule-group\/[0-9a-zA-Z-_.]+`

Errors

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

ConflictException

Updating or deleting the resource can cause an inconsistent state.

HTTP Status Code: 409

InternalServerException

Unexpected error encountered while processing the request.

HTTP Status Code: 500

ServiceQuotaExceededException

The request exceeds a service quota.

HTTP Status Code: 402

ThrottlingException

The request was denied due to request throttling.

HTTP Status Code: 429

ValidationException

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

HTTP Status Code: 400

See Also

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- AWS SDK for Go v2

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

DeleteSchedule

Deletes the specified schedule.

Request Syntax

```
DELETE /schedules/Name?clientToken=ClientToken&groupName=GroupName HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

ClientToken

Unique, case-sensitive identifier you provide to ensure the idempotency of the request. If you do not specify a client token, EventBridge Scheduler uses a randomly generated token for the request to ensure idempotency.

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

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

GroupName

The name of the schedule group associated with this schedule. If you omit this, the default schedule group is used.

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

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

Name

The name of the schedule to delete.

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

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

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

```
HTTP/1.1 200
```

Response Elements

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

Errors

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

ConflictException

Updating or deleting the resource can cause an inconsistent state.

HTTP Status Code: 409

InternalServerException

Unexpected error encountered while processing the request.

HTTP Status Code: 500

ResourceNotFoundException

The request references a resource which does not exist.

HTTP Status Code: 404

ThrottlingException

The request was denied due to request throttling.

HTTP Status Code: 429

ValidationException

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

HTTP Status Code: 400

See Also

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

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

DeleteScheduleGroup

Deletes the specified schedule group. Deleting a schedule group results in EventBridge Scheduler deleting all schedules associated with the group. When you delete a group, it remains in a `DELETING` state until all of its associated schedules are deleted. Schedules associated with the group that are set to run while the schedule group is in the process of being deleted might continue to invoke their targets until the schedule group and its associated schedules are deleted.

> **Note**
>
> This operation is eventually consistent.

Request Syntax

```
DELETE /schedule-groups/Name?clientToken=ClientToken HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

ClientToken

Unique, case-sensitive identifier you provide to ensure the idempotency of the request. If you do not specify a client token, EventBridge Scheduler uses a randomly generated token for the request to ensure idempotency.

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

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

Name

The name of the schedule group to delete.

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

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

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

```
HTTP/1.1 200
```

Response Elements

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

Errors

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

ConflictException

Updating or deleting the resource can cause an inconsistent state.

HTTP Status Code: 409

InternalServerException

Unexpected error encountered while processing the request.

HTTP Status Code: 500

ResourceNotFoundException

The request references a resource which does not exist.

HTTP Status Code: 404

ThrottlingException

The request was denied due to request throttling.

HTTP Status Code: 429

ValidationException

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

HTTP Status Code: 400

See Also

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

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

GetSchedule

Retrieves the specified schedule.

Request Syntax

```
GET /schedules/Name?groupName=GroupName HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

GroupName

The name of the schedule group associated with this schedule. If you omit this, EventBridge Scheduler assumes that the schedule is associated with the default group.

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

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

Name

The name of the schedule to retrieve.

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

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

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

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

{
   "ActionAfterCompletion": "string",
```

```
   "Arn": "string",
   "CreationDate": number,
   "Description": "string",
   "EndDate": number,
   "FlexibleTimeWindow": {
      "MaximumWindowInMinutes": number,
      "Mode": "string"
   },
   "GroupName": "string",
   "KmsKeyArn": "string",
   "LastModificationDate": number,
   "Name": "string",
   "ScheduleExpression": "string",
   "ScheduleExpressionTimezone": "string",
   "StartDate": number,
   "State": "string",
   "Target": {
      "Arn": "string",
      "DeadLetterConfig": {
         "Arn": "string"
      },
      "EcsParameters": {
         "CapacityProviderStrategy": [
            {
               "base": number,
               "capacityProvider": "string",
               "weight": number
            }
         ],
         "EnableECSManagedTags": boolean,
         "EnableExecuteCommand": boolean,
         "Group": "string",
         "LaunchType": "string",
         "NetworkConfiguration": {
            "awsvpcConfiguration": {
               "AssignPublicIp": "string",
               "SecurityGroups": [ "string" ],
               "Subnets": [ "string" ]
            }
         },
         "PlacementConstraints": [
            {
               "expression": "string",
               "type": "string"
```

```
            }
         ],
         "PlacementStrategy": [
            {
               "field": "string",
               "type": "string"
            }
         ],
         "PlatformVersion": "string",
         "PropagateTags": "string",
         "ReferenceId": "string",
         "Tags": [
            {
               "string" : "string"
            }
         ],
         "TaskCount": number,
         "TaskDefinitionArn": "string"
      },
      "EventBridgeParameters": {
         "DetailType": "string",
         "Source": "string"
      },
      "Input": "string",
      "KinesisParameters": {
         "PartitionKey": "string"
      },
      "RetryPolicy": {
         "MaximumEventAgeInSeconds": number,
         "MaximumRetryAttempts": number
      },
      "RoleArn": "string",
      "SageMakerPipelineParameters": {
         "PipelineParameterList": [
            {
               "Name": "string",
               "Value": "string"
            }
         ]
      },
      "SqsParameters": {
         "MessageGroupId": "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.

ActionAfterCompletion

Indicates the action that EventBridge Scheduler applies to the schedule after the schedule completes invoking the target.

Type: String

Valid Values: `NONE | DELETE`

Arn

The Amazon Resource Name (ARN) of the schedule.

Type: String

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

Pattern: `arn:aws(-[a-z]+)?:scheduler:[a-z0-9\-]+:\d{12}:schedule\/[0-9a-zA-Z-_.]+\/[0-9a-zA-Z-_.]+`

CreationDate

The time at which the schedule was created.

Type: Timestamp

Description

The description of the schedule.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 512.

EndDate

The date, in UTC, before which the schedule can invoke its target. Depending on the schedule's recurrence expression, invocations might stop on, or before, the `EndDate` you specify. EventBridge Scheduler ignores `EndDate` for one-time schedules.

Type: Timestamp

FlexibleTimeWindow

Allows you to configure a time window during which EventBridge Scheduler invokes the schedule.

Type: FlexibleTimeWindow object

GroupName

The name of the schedule group associated with this schedule.

Type: String

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

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

KmsKeyArn

The ARN for a customer managed KMS Key that is be used to encrypt and decrypt your data.

Type: String

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

Pattern: `arn:aws(-[a-z]+)?:kms:[a-z0-9\-]+:\d{12}:(key|alias)\/[0-9a-zA-Z-_]*`

LastModificationDate

The time at which the schedule was last modified.

Type: Timestamp

Name

The name of the schedule.

Type: String

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

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

ScheduleExpression

The expression that defines when the schedule runs. The following formats are supported.

- `at` expression - `at(yyyy-mm-ddThh:mm:ss)`
- `rate` expression - `rate(value unit)`
- `cron` expression - `cron(fields)`

You can use `at` expressions to create one-time schedules that invoke a target once, at the time and in the time zone, that you specify. You can use `rate` and `cron` expressions to create recurring schedules. Rate-based schedules are useful when you want to invoke a target at regular intervals, such as every 15 minutes or every five days. Cron-based schedules are useful when you want to invoke a target periodically at a specific time, such as at 8:00 am (UTC+0) every 1st day of the month.

A `cron` expression consists of six fields separated by white spaces: `(minutes hours day_of_month month day_of_week year)`.

A `rate` expression consists of a *value* as a positive integer, and a *unit* with the following options: `minute` | `minutes` | `hour` | `hours` | `day` | `days`

For more information and examples, see Schedule types on EventBridge Scheduler in the *EventBridge Scheduler User Guide*.

Type: String

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

ScheduleExpressionTimezone

The timezone in which the scheduling expression is evaluated.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 50.

StartDate

The date, in UTC, after which the schedule can begin invoking its target. Depending on the schedule's recurrence expression, invocations might occur on, or after, the `StartDate` you specify. EventBridge Scheduler ignores `StartDate` for one-time schedules.

Type: Timestamp

State

Specifies whether the schedule is enabled or disabled.

Type: String

Valid Values: `ENABLED | DISABLED`

Target

The schedule target.

Type: Target object

Errors

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

InternalServerException

Unexpected error encountered while processing the request.

HTTP Status Code: 500

ResourceNotFoundException

The request references a resource which does not exist.

HTTP Status Code: 404

ThrottlingException

The request was denied due to request throttling.

HTTP Status Code: 429

ValidationException

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

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 V2

- AWS SDK for .NET V4
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- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

GetScheduleGroup

Retrieves the specified schedule group.

Request Syntax

```
GET /schedule-groups/Name HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

Name

The name of the schedule group to retrieve.

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

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

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

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

{
   "Arn": "string",
   "CreationDate": number,
   "LastModificationDate": number,
   "Name": "string",
   "State": "string"
}
```

Response Elements

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

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

Arn

The Amazon Resource Name (ARN) of the schedule group.

Type: String

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

Pattern: `arn:aws(-[a-z]+)?:scheduler:[a-z0-9\-]+:\d{12}:schedule-group\/[0-9a-zA-Z-_.]+`

CreationDate

The time at which the schedule group was created.

Type: Timestamp

LastModificationDate

The time at which the schedule group was last modified.

Type: Timestamp

Name

The name of the schedule group.

Type: String

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

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

State

Specifies the state of the schedule group.

Type: String

Valid Values: `ACTIVE | DELETING`

Errors

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

InternalServerException

Unexpected error encountered while processing the request.

HTTP Status Code: 500

ResourceNotFoundException

The request references a resource which does not exist.

HTTP Status Code: 404

ThrottlingException

The request was denied due to request throttling.

HTTP Status Code: 429

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- AWS SDK for Kotlin
- AWS SDK for PHP V3

- AWS SDK for Python
- AWS SDK for Ruby V3

ListScheduleGroups

Returns a paginated list of your schedule groups.

Request Syntax

```
GET /schedule-groups?MaxResults=MaxResults&NamePrefix=NamePrefix&NextToken=NextToken
 HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

MaxResults

If specified, limits the number of results returned by this operation. The operation also returns a `NextToken` which you can use in a subsequent operation to retrieve the next set of results.

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

NamePrefix

The name prefix that you can use to return a filtered list of your schedule groups.

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

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

NextToken

The token returned by a previous call to retrieve the next set of results.

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

Request Body

The request does not have a request body.

Response Syntax

```
HTTP/1.1 200
```

```
Content-type: application/json

{
   "NextToken": "string",
   "ScheduleGroups": [
      {
         "Arn": "string",
         "CreationDate": number,
         "LastModificationDate": number,
         "Name": "string",
         "State": "string"
      }
   ]
}
```

Response Elements

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

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

NextToken

Indicates whether there are additional results to retrieve. If the value is null, there are no more results.

Type: String

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

ScheduleGroups

The schedule groups that match the specified criteria.

Type: Array of ScheduleGroupSummary objects

Errors

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

InternalServerException

Unexpected error encountered while processing the request.

HTTP Status Code: 500

ThrottlingException

The request was denied due to request throttling.

HTTP Status Code: 429

ValidationException

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

HTTP Status Code: 400

See Also

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

ListSchedules

Returns a paginated list of your EventBridge Scheduler schedules.

Request Syntax

```
GET /schedules?
MaxResults=MaxResults&NamePrefix=NamePrefix&NextToken=NextToken&ScheduleGroup=GroupName&State=S
 HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

GroupName

If specified, only lists the schedules whose associated schedule group matches the given filter.

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

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

MaxResults

If specified, limits the number of results returned by this operation. The operation also returns a `NextToken` which you can use in a subsequent operation to retrieve the next set of results.

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

NamePrefix

Schedule name prefix to return the filtered list of resources.

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

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

NextToken

The token returned by a previous call to retrieve the next set of results.

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

State

If specified, only lists the schedules whose current state matches the given filter.

Valid Values: ENABLED | DISABLED

Request Body

The request does not have a request body.

Response Syntax

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

{
   "NextToken": "string",
   "Schedules": [
      {
         "Arn": "string",
         "CreationDate": number,
         "GroupName": "string",
         "LastModificationDate": number,
         "Name": "string",
         "State": "string",
         "Target": {
            "Arn": "string"
         }
      }
   ]
}
```

Response Elements

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

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

NextToken

Indicates whether there are additional results to retrieve. If the value is null, there are no more results.

Type: String

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

Schedules

The schedules that match the specified criteria.

Type: Array of ScheduleSummary objects

Errors

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

InternalServerException

Unexpected error encountered while processing the request.

HTTP Status Code: 500

ResourceNotFoundException

The request references a resource which does not exist.

HTTP Status Code: 404

ThrottlingException

The request was denied due to request throttling.

HTTP Status Code: 429

ValidationException

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

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 V2

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

ListTagsForResource

Lists the tags associated with the Scheduler resource.

Request Syntax

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

URI Request Parameters

The request uses the following URI parameters.

ResourceArn

The ARN of the EventBridge Scheduler resource for which you want to view tags.

Length Constraints: Minimum length of 1. Maximum length of 1011.

Pattern: `arn:aws(-[a-z]+)?:scheduler:[a-z0-9\-]+:\d{12}:schedule-group\/[0-9a-zA-Z-_.]+`

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

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

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

```
}
```

Response Elements

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

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

Tags

The list of tags associated with the specified resource.

Type: Array of Tag objects

Array Members: Minimum number of 0 items. Maximum number of 200 items.

Errors

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

InternalServerException

Unexpected error encountered while processing the request.

HTTP Status Code: 500

ResourceNotFoundException

The request references a resource which does not exist.

HTTP Status Code: 404

ThrottlingException

The request was denied due to request throttling.

HTTP Status Code: 429

ValidationException

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

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

TagResource

Assigns one or more tags (key-value pairs) to the specified EventBridge Scheduler resource. You can only assign tags to schedule groups.

Request Syntax

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

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

URI Request Parameters

The request uses the following URI parameters.

ResourceArn

The Amazon Resource Name (ARN) of the schedule group that you are adding tags to.

Length Constraints: Minimum length of 1. Maximum length of 1011.

Pattern: `arn:aws(-[a-z]+)?:scheduler:[a-z0-9\-]+:\d{12}:schedule-group\/[0-9a-zA-Z-_.]+`

Required: Yes

Request Body

The request accepts the following data in JSON format.

Tags

The list of tags to associate with the schedule group.

Type: Array of Tag objects

Array Members: Minimum number of 0 items. Maximum number of 200 items.

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 Error Types.

ConflictException

Updating or deleting the resource can cause an inconsistent state.

HTTP Status Code: 409

InternalServerException

Unexpected error encountered while processing the request.

HTTP Status Code: 500

ResourceNotFoundException

The request references a resource which does not exist.

HTTP Status Code: 404

ThrottlingException

The request was denied due to request throttling.

HTTP Status Code: 429

ValidationException

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

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

UntagResource

Removes one or more tags from the specified EventBridge Scheduler schedule group.

Request Syntax

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

URI Request Parameters

The request uses the following URI parameters.

ResourceArn

The Amazon Resource Name (ARN) of the schedule group from which you are removing tags.

Length Constraints: Minimum length of 1. Maximum length of 1011.

Pattern: `arn:aws(-[a-z]+)?:scheduler:[a-z0-9\-]+:\d{12}:schedule-group\/[0-9a-zA-Z-_.]+`

Required: Yes

TagKeys

The list of tag keys to remove from the resource.

Array Members: Minimum number of 0 items. Maximum number of 200 items.

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

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 Error Types.

ConflictException

Updating or deleting the resource can cause an inconsistent state.

HTTP Status Code: 409

InternalServerException

Unexpected error encountered while processing the request.

HTTP Status Code: 500

ResourceNotFoundException

The request references a resource which does not exist.

HTTP Status Code: 404

ThrottlingException

The request was denied due to request throttling.

HTTP Status Code: 429

ValidationException

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

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 V2

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

UpdateSchedule

Updates the specified schedule. When you call `UpdateSchedule`, EventBridge Scheduler uses all values, including empty values, specified in the request and overrides the existing schedule. This is by design. This means that if you do not set an optional field in your request, that field will be set to its system-default value after the update.

Before calling this operation, we recommend that you call the `GetSchedule` API operation and make a note of all optional parameters for your `UpdateSchedule` call.

Request Syntax

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

{
   "ActionAfterCompletion": "string",
   "ClientToken": "string",
   "Description": "string",
   "EndDate": number,
   "FlexibleTimeWindow": {
      "MaximumWindowInMinutes": number,
      "Mode": "string"
   },
   "GroupName": "string",
   "KmsKeyArn": "string",
   "ScheduleExpression": "string",
   "ScheduleExpressionTimezone": "string",
   "StartDate": number,
   "State": "string",
   "Target": {
      "Arn": "string",
      "DeadLetterConfig": {
         "Arn": "string"
      },
      "EcsParameters": {
         "CapacityProviderStrategy": [
            {
               "base": number,
               "capacityProvider": "string",
               "weight": number
            }
```

```
         ],
         "EnableECSManagedTags": boolean,
         "EnableExecuteCommand": boolean,
         "Group": "string",
         "LaunchType": "string",
         "NetworkConfiguration": {
            "awsvpcConfiguration": {
               "AssignPublicIp": "string",
               "SecurityGroups": [ "string" ],
               "Subnets": [ "string" ]
            }
         },
         "PlacementConstraints": [
            {
               "expression": "string",
               "type": "string"
            }
         ],
         "PlacementStrategy": [
            {
               "field": "string",
               "type": "string"
            }
         ],
         "PlatformVersion": "string",
         "PropagateTags": "string",
         "ReferenceId": "string",
         "Tags": [
            {
               "string" : "string"
            }
         ],
         "TaskCount": number,
         "TaskDefinitionArn": "string"
      },
      "EventBridgeParameters": {
         "DetailType": "string",
         "Source": "string"
      },
      "Input": "string",
      "KinesisParameters": {
         "PartitionKey": "string"
      },
      "RetryPolicy": {
```

```
            "MaximumEventAgeInSeconds": number,
            "MaximumRetryAttempts": number
         },
         "RoleArn": "string",
         "SageMakerPipelineParameters": {
            "PipelineParameterList": [
               {
                  "Name": "string",
                  "Value": "string"
               }
            ]
         },
         "SqsParameters": {
            "MessageGroupId": "string"
         }
      }
}
```

URI Request Parameters

The request uses the following URI parameters.

Name

The name of the schedule that you are updating.

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

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

Required: Yes

Request Body

The request accepts the following data in JSON format.

ActionAfterCompletion

Specifies the action that EventBridge Scheduler applies to the schedule after the schedule completes invoking the target.

Type: String

Valid Values: `NONE | DELETE`

Required: No

ClientToken

Unique, case-sensitive identifier you provide to ensure the idempotency of the request. If you do not specify a client token, EventBridge Scheduler uses a randomly generated token for the request to ensure idempotency.

Type: String

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

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

Required: No

Description

The description you specify for the schedule.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 512.

Required: No

EndDate

The date, in UTC, before which the schedule can invoke its target. Depending on the schedule's recurrence expression, invocations might stop on, or before, the `EndDate` you specify. EventBridge Scheduler ignores `EndDate` for one-time schedules.

Type: Timestamp

Required: No

FlexibleTimeWindow

Allows you to configure a time window during which EventBridge Scheduler invokes the schedule.

Type: FlexibleTimeWindow object

Required: Yes

GroupName

The name of the schedule group with which the schedule is associated. You must provide this value in order for EventBridge Scheduler to find the schedule you want to update. If you omit this value, EventBridge Scheduler assumes the group is associated to the default group.

Type: String

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

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

Required: No

KmsKeyArn

The ARN for the customer managed KMS key that that you want EventBridge Scheduler to use to encrypt and decrypt your data.

Type: String

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

Pattern: `arn:aws(-[a-z]+)?:kms:[a-z0-9\-]+:\d{12}:(key|alias)\/[0-9a-zA-Z-_]*`

Required: No

ScheduleExpression

The expression that defines when the schedule runs. The following formats are supported.

- `at` expression - `at(yyyy-mm-ddThh:mm:ss)`
- `rate` expression - `rate(value unit)`
- `cron` expression - `cron(fields)`

You can use `at` expressions to create one-time schedules that invoke a target once, at the time and in the time zone, that you specify. You can use `rate` and `cron` expressions to create recurring schedules. Rate-based schedules are useful when you want to invoke a target at regular intervals, such as every 15 minutes or every five days. Cron-based schedules are useful

when you want to invoke a target periodically at a specific time, such as at 8:00 am (UTC+0) every 1st day of the month.

A `cron` expression consists of six fields separated by white spaces: `(minutes hours day_of_month month day_of_week year)`.

A `rate` expression consists of a *value* as a positive integer, and a *unit* with the following options: `minute` | `minutes` | `hour` | `hours` | `day` | `days`

For more information and examples, see Schedule types on EventBridge Scheduler in the *EventBridge Scheduler User Guide*.

Type: String

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

Required: Yes

ScheduleExpressionTimezone

The timezone in which the scheduling expression is evaluated.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 50.

Required: No

StartDate

The date, in UTC, after which the schedule can begin invoking its target. Depending on the schedule's recurrence expression, invocations might occur on, or after, the `StartDate` you specify. EventBridge Scheduler ignores `StartDate` for one-time schedules.

Type: Timestamp

Required: No

State

Specifies whether the schedule is enabled or disabled.

Type: String

Valid Values: `ENABLED | DISABLED`

Required: No

Target

The schedule target. You can use this operation to change the target that your schedule invokes.

Type: Target object

Required: Yes

Response Syntax

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

{
   "ScheduleArn": "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.

ScheduleArn

The Amazon Resource Name (ARN) of the schedule that you updated.

Type: String

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

Pattern: `arn:aws(-[a-z]+)?:scheduler:[a-z0-9\-]+:\d{12}:schedule\/[0-9a-zA-Z-_.]+\/[0-9a-zA-Z-_.]+`

Errors

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

ConflictException

Updating or deleting the resource can cause an inconsistent state.

HTTP Status Code: 409

InternalServerException

Unexpected error encountered while processing the request.

HTTP Status Code: 500

ResourceNotFoundException

The request references a resource which does not exist.

HTTP Status Code: 404

ThrottlingException

The request was denied due to request throttling.

HTTP Status Code: 429

ValidationException

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

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

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

Data Types

The Amazon EventBridge Scheduler 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:

- AwsVpcConfiguration
- CapacityProviderStrategyItem
- DeadLetterConfig
- EcsParameters
- EventBridgeParameters
- FlexibleTimeWindow
- KinesisParameters
- NetworkConfiguration
- PlacementConstraint
- PlacementStrategy
- RetryPolicy
- SageMakerPipelineParameter
- SageMakerPipelineParameters
- ScheduleGroupSummary
- ScheduleSummary
- SqsParameters
- Tag
- Target
- TargetSummary

AwsVpcConfiguration

This structure specifies the VPC subnets and security groups for the task, and whether a public IP address is to be used. This structure is relevant only for ECS tasks that use the awsvpc network mode.

Contents

Subnets

Specifies the subnets associated with the task. These subnets must all be in the same VPC. You can specify as many as 16 subnets.

Type: Array of strings

Array Members: Minimum number of 1 item. Maximum number of 16 items.

Length Constraints: Minimum length of 1. Maximum length of 1000.

Required: Yes

AssignPublicIp

Specifies whether the task's elastic network interface receives a public IP address. You can specify `ENABLED` only when `LaunchType` in `EcsParameters` is set to `FARGATE`.

Type: String

Valid Values: `ENABLED | DISABLED`

Required: No

SecurityGroups

Specifies the security groups associated with the task. These security groups must all be in the same VPC. You can specify as many as five security groups. If you do not specify a security group, the default security group for the VPC is used.

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 1000.

Required: No

See Also

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

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

CapacityProviderStrategyItem

The details of a capacity provider strategy.

Contents

capacityProvider

The short name of the capacity provider.

Type: String

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

Required: Yes

base

The base value designates how many tasks, at a minimum, to run on the specified capacity provider. Only one capacity provider in a capacity provider strategy can have a base defined. If no value is specified, the default value of `0` is used.

Type: Integer

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

Required: No

weight

The weight value designates the relative percentage of the total number of tasks launched that should use the specified capacity provider. The weight value is taken into consideration after the base value, if defined, is satisfied.

Type: Integer

Valid Range: Minimum value of 0. Maximum value of 1000.

Required: No

See Also

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

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

DeadLetterConfig

An object that contains information about an Amazon SQS queue that EventBridge Scheduler uses as a dead-letter queue for your schedule. If specified, EventBridge Scheduler delivers failed events that could not be successfully delivered to a target to the queue.

Contents

Arn

The Amazon Resource Name (ARN) of the SQS queue specified as the destination for the dead-letter queue.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1600.

Pattern: `arn:aws(-[a-z]+)?:sqs:[a-z0-9\-]+:\d{12}:[a-zA-Z0-9\-_]+`

Required: No

See Also

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

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

EcsParameters

The templated target type for the Amazon ECS RunTask API operation.

Contents

TaskDefinitionArn

The Amazon Resource Name (ARN) of the task definition to use if the event target is an Amazon ECS task.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1600.

Required: Yes

CapacityProviderStrategy

The capacity provider strategy to use for the task.

Type: Array of CapacityProviderStrategyItem objects

Array Members: Minimum number of 0 items. Maximum number of 6 items.

Required: No

EnableECSManagedTags

Specifies whether to enable Amazon ECS managed tags for the task. For more information, see Tagging Your Amazon ECS Resources in the *Amazon ECS Developer Guide*.

Type: Boolean

Required: No

EnableExecuteCommand

Whether or not to enable the execute command functionality for the containers in this task. If true, this enables execute command functionality on all containers in the task.

Type: Boolean

Required: No

Group

Specifies an ECS task group for the task. The maximum length is 255 characters.

Type: String

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

Required: No

LaunchType

Specifies the launch type on which your task is running. The launch type that you specify here must match one of the launch type (compatibilities) of the target task. The `FARGATE` value is supported only in the Regions where Fargate with Amazon ECS is supported. For more information, see AWS Fargate on Amazon ECS in the *Amazon ECS Developer Guide*.

Type: String

Valid Values: `EC2 | FARGATE | EXTERNAL`

Required: No

NetworkConfiguration

This structure specifies the network configuration for an ECS task.

Type: NetworkConfiguration object

Required: No

PlacementConstraints

An array of placement constraint objects to use for the task. You can specify up to 10 constraints per task (including constraints in the task definition and those specified at runtime).

Type: Array of PlacementConstraint objects

Array Members: Minimum number of 0 items. Maximum number of 10 items.

Required: No

PlacementStrategy

The task placement strategy for a task or service.

Type: Array of PlacementStrategy objects

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

Required: No

PlatformVersion

Specifies the platform version for the task. Specify only the numeric portion of the platform version, such as `1.1.0`.

Type: String

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

Required: No

PropagateTags

Specifies whether to propagate the tags from the task definition to the task. If no value is specified, the tags are not propagated. Tags can only be propagated to the task during task creation. To add tags to a task after task creation, use Amazon ECS's `TagResource` API action.

Type: String

Valid Values: `TASK_DEFINITION`

Required: No

ReferenceId

The reference ID to use for the task.

Type: String

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

Required: No

Tags

The metadata that you apply to the task to help you categorize and organize them. Each tag consists of a key and an optional value, both of which you define. For more information, see `RunTask` in the *Amazon ECS API Reference*.

Type: Array of string to string maps

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

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

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

Required: No

TaskCount

The number of tasks to create based on `TaskDefinition`. The default is 1.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 10.

Required: No

See Also

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

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

EventBridgeParameters

The templated target type for the EventBridge PutEvents API operation.

Contents

DetailType

A free-form string, with a maximum of 128 characters, used to decide what fields to expect in the event detail.

Type: String

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

Required: Yes

Source

The source of the event.

Type: String

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

Pattern: `(?=[/\.\-_A-Za-z0-9]+)((?!aws\.).*)|(\$(\.[\w_-]+(\[(\d+|\*)\])*)*)`

Required: Yes

See Also

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

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

FlexibleTimeWindow

Allows you to configure a time window during which EventBridge Scheduler invokes the schedule.

Contents

Mode

Determines whether the schedule is invoked within a flexible time window.

Type: String

Valid Values: `OFF | FLEXIBLE`

Required: Yes

MaximumWindowInMinutes

The maximum time window during which a schedule can be invoked.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 1440.

Required: No

See Also

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

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

KinesisParameters

The templated target type for the Amazon Kinesis `PutRecord` API operation.

Contents

PartitionKey

Specifies the shard to which EventBridge Scheduler sends the event. For more information, see Amazon Kinesis Data Streams terminology and concepts in the *Amazon Kinesis Streams Developer Guide*.

Type: String

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

Required: Yes

See Also

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

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

NetworkConfiguration

Specifies the network configuration for an ECS task.

Contents

awsvpcConfiguration

Specifies the Amazon VPC subnets and security groups for the task, and whether a public IP address is to be used. This structure is relevant only for ECS tasks that use the awsvpc network mode.

Type: AwsVpcConfiguration object

Required: No

See Also

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

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

PlacementConstraint

An object representing a constraint on task placement.

Contents

expression

A cluster query language expression to apply to the constraint. You cannot specify an expression if the constraint type is `distinctInstance`. For more information, see Cluster query language in the *Amazon ECS Developer Guide*.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 2000.

Required: No

type

The type of constraint. Use `distinctInstance` to ensure that each task in a particular group is running on a different container instance. Use `memberOf` to restrict the selection to a group of valid candidates.

Type: String

Valid Values: `distinctInstance | memberOf`

Required: No

See Also

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

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

PlacementStrategy

The task placement strategy for a task or service.

Contents

field

The field to apply the placement strategy against. For the spread placement strategy, valid values are `instanceId` (or `instanceId`, which has the same effect), or any platform or custom attribute that is applied to a container instance, such as `attribute:ecs.availability-zone`. For the binpack placement strategy, valid values are `cpu` and `memory`. For the random placement strategy, this field is not used.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 255.

Required: No

type

The type of placement strategy. The random placement strategy randomly places tasks on available candidates. The spread placement strategy spreads placement across available candidates evenly based on the field parameter. The binpack strategy places tasks on available candidates that have the least available amount of the resource that is specified with the field parameter. For example, if you binpack on memory, a task is placed on the instance with the least amount of remaining memory (but still enough to run the task).

Type: String

Valid Values: `random | spread | binpack`

Required: No

See Also

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

- AWS SDK for C++

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

RetryPolicy

A `RetryPolicy` object that includes information about the retry policy settings, including the maximum age of an event, and the maximum number of times EventBridge Scheduler will try to deliver the event to a target.

Contents

MaximumEventAgeInSeconds

The maximum amount of time, in seconds, to continue to make retry attempts.

Type: Integer

Valid Range: Minimum value of 60. Maximum value of 86400.

Required: No

MaximumRetryAttempts

The maximum number of retry attempts to make before the request fails. Retry attempts with exponential backoff continue until either the maximum number of attempts is made or until the duration of the `MaximumEventAgeInSeconds` is reached.

Type: Integer

Valid Range: Minimum value of 0. Maximum value of 185.

Required: No

See Also

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

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

SageMakerPipelineParameter

The name and value pair of a parameter to use to start execution of a SageMaker Model Building Pipeline.

Contents

Name

Name of parameter to start execution of a SageMaker Model Building Pipeline.

Type: String

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

Pattern: `[A-Za-z0-9\-_]*`

Required: Yes

Value

Value of parameter to start execution of a SageMaker Model Building Pipeline.

Type: String

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

Required: Yes

See Also

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

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

SageMakerPipelineParameters

The templated target type for the Amazon SageMaker `StartPipelineExecution` API operation.

Contents

PipelineParameterList

List of parameter names and values to use when executing the SageMaker Model Building Pipeline.

Type: Array of SageMakerPipelineParameter objects

Array Members: Minimum number of 0 items. Maximum number of 200 items.

Required: No

See Also

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

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

ScheduleGroupSummary

The details of a schedule group.

Contents

Arn

The Amazon Resource Name (ARN) of the schedule group.

Type: String

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

Pattern: `arn:aws(-[a-z]+)?:scheduler:[a-z0-9\-]+:\d{12}:schedule-group\/[0-9a-zA-Z-_.]+`

Required: No

CreationDate

The time at which the schedule group was created.

Type: Timestamp

Required: No

LastModificationDate

The time at which the schedule group was last modified.

Type: Timestamp

Required: No

Name

The name of the schedule group.

Type: String

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

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

Required: No

State

Specifies the state of the schedule group.

Type: String

Valid Values: `ACTIVE | DELETING`

Required: No

See Also

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

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

ScheduleSummary

The details of a schedule.

Contents

Arn

The Amazon Resource Name (ARN) of the schedule.

Type: String

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

Pattern: `arn:aws(-[a-z]+)?:scheduler:[a-z0-9\-]+:\d{12}:schedule\/[0-9a-zA-Z-_.]+\/[0-9a-zA-Z-_.]+`

Required: No

CreationDate

The time at which the schedule was created.

Type: Timestamp

Required: No

GroupName

The name of the schedule group associated with this schedule.

Type: String

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

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

Required: No

LastModificationDate

The time at which the schedule was last modified.

Type: Timestamp

Required: No

Name

The name of the schedule.

Type: String

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

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

Required: No

State

Specifies whether the schedule is enabled or disabled.

Type: String

Valid Values: `ENABLED | DISABLED`

Required: No

Target

The schedule's target details.

Type: TargetSummary object

Required: No

See Also

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

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

SqsParameters

The templated target type for the Amazon SQS SendMessage API operation. Contains the message group ID to use when the target is a FIFO queue. If you specify an Amazon SQS FIFO queue as a target, the queue must have content-based deduplication enabled. For more information, see Using the Amazon SQS message deduplication ID in the *Amazon SQS Developer Guide*.

Contents

MessageGroupId

The FIFO message group ID to use as the target.

Type: String

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

Required: No

See Also

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

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

Tag

Tag to associate with a schedule group.

Contents

Key

The key for the tag.

Type: String

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

Required: Yes

Value

The value for the tag.

Type: String

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

Required: Yes

See Also

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

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

Target

The schedule's target. EventBridge Scheduler supports templated target that invoke common API operations, as well as universal targets that you can customize to invoke over 6,000 API operations across more than 270 services. You can only specify one templated or universal target for a schedule.

Contents

Arn

The Amazon Resource Name (ARN) of the target.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1600.

Required: Yes

RoleArn

The Amazon Resource Name (ARN) of the IAM role that EventBridge Scheduler will use for this target when the schedule is invoked.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1600.

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

Required: Yes

DeadLetterConfig

An object that contains information about an Amazon SQS queue that EventBridge Scheduler uses as a dead-letter queue for your schedule. If specified, EventBridge Scheduler delivers failed events that could not be successfully delivered to a target to the queue.

Type: DeadLetterConfig object

Required: No

EcsParameters

The templated target type for the Amazon ECS `RunTask` API operation.

Type: EcsParameters object

Required: No

EventBridgeParameters

The templated target type for the EventBridge `PutEvents` API operation.

Type: EventBridgeParameters object

Required: No

Input

The text, or well-formed JSON, passed to the target. If you are configuring a templated Lambda, AWS Step Functions, or Amazon EventBridge target, the input must be a well-formed JSON. For all other target types, a JSON is not required. If you do not specify anything for this field, EventBridge Scheduler delivers a default notification to the target. The maximum size of the `Input` field is 256 KB.

Type: String

Length Constraints: Minimum length of 1.

Required: No

KinesisParameters

The templated target type for the Amazon Kinesis `PutRecord` API operation.

Type: KinesisParameters object

Required: No

RetryPolicy

A `RetryPolicy` object that includes information about the retry policy settings, including the maximum age of an event, and the maximum number of times EventBridge Scheduler will try to deliver the event to a target.

Type: RetryPolicy object

Required: No

SageMakerPipelineParameters

The templated target type for the Amazon SageMaker `StartPipelineExecution` API operation.

Type: SageMakerPipelineParameters object

Required: No

SqsParameters

The templated target type for the Amazon SQS `SendMessage` API operation. Contains the message group ID to use when the target is a FIFO queue. If you specify an Amazon SQS FIFO queue as a target, the queue must have content-based deduplication enabled. For more information, see Using the Amazon SQS message deduplication ID in the *Amazon SQS Developer Guide*.

Type: SqsParameters object

Required: No

See Also

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

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

TargetSummary

The details of a target.

Contents

Arn

The Amazon Resource Name (ARN) of the target.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1600.

Required: Yes

See Also

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

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

Common Parameters

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

X-Amz-Algorithm

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

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

Type: string

Valid Values: `AWS4-HMAC-SHA256`

Required: Conditional

X-Amz-Credential

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

For more information, see Create a signed AWS API request in the *IAM User Guide*.

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

Type: string

Required: Conditional

X-Amz-Date

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

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

Type: string

Required: Conditional

X-Amz-Security-Token

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

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

Type: string

Required: Conditional

X-Amz-Signature

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

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

Type: string

Required: Conditional

X-Amz-SignedHeaders

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

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

Type: string

Required: Conditional

Common Error Types

This section lists common error types that this AWS service may return. Not all services return all error types listed here. For errors specific to an API action for this service, see the topic for that API action.

AccessDeniedException

You don't have permission to perform this action. Verify that your IAM policy includes the required permissions.

HTTP Status Code: 403

ExpiredTokenException

The security token included in the request has expired. Request a new security token and try again.

HTTP Status Code: 403

IncompleteSignature

The request signature doesn't conform to AWS standards. Verify that you're using valid AWS credentials and that your request is properly formatted. If you're using an SDK, ensure it's up to date.

HTTP Status Code: 403

InternalFailure

The request can't be processed right now because of an internal server issue. Try again later. If the problem persists, contact AWS Support.

HTTP Status Code: 500

MalformedHttpRequestException

The request body can't be processed. This typically happens when the request body can't be decompressed using the specified content encoding algorithm. Verify that the content encoding header matches the compression format used.

HTTP Status Code: 400

NotAuthorized

You don't have permissions to perform this action. Verify that your IAM policy includes the required permissions.

HTTP Status Code: 401

OptInRequired

Your AWS account needs a subscription for this service. Verify that you've enabled the service in your account.

HTTP Status Code: 403

RequestAbortedException

The request was aborted before a response could be returned. This typically happens when the client closes the connection.

HTTP Status Code: 400

RequestEntityTooLargeException

The request entity is too large. Reduce the size of the request body and try again.

HTTP Status Code: 413

RequestTimeoutException

The request timed out. The server didn't receive the complete request within the expected time frame. Try again.

HTTP Status Code: 408

ServiceUnavailable

The service is temporarily unavailable. Try again later.

HTTP Status Code: 503

ThrottlingException

Your request rate is too high. The AWS SDKs automatically retry requests that receive this exception. Reduce the frequency of requests.

HTTP Status Code: 400

UnknownOperationException

The action or operation isn't recognized. Verify that the action name is spelled correctly and that it's supported by the API version you're using.

HTTP Status Code: 404

UnrecognizedClientException

The X.509 certificate or AWS access key ID you provided doesn't exist in our records. Verify that you're using valid credentials and that they haven't expired.

HTTP Status Code: 403

ValidationError

The input doesn't meet the required format or constraints. Check that all required parameters are included and that values are valid.

HTTP Status Code: 400