Amazon EventBridge: API Reference
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Amazon EventBridge API Reference

Amazon EventBridge is a serverless event bus service that makes it easy to connect your applications with data from a variety of sources.

EventBridge was formerly known as Amazon CloudWatch Events. EventBridge expands on the capabilities of CloudWatch Events, adding support for processing events from software-as-a-service (SaaS) partner applications and making it easier for you to process events from your own applications. EventBridge starts with the same set of APIs as CloudWatch Events and adds new APIs. EventBridge also offers more functionality both in the API and on the console.

Use the following links to get started using the EventBridge API:

- **Actions (p. 2):** An alphabetical list of all EventBridge actions
- **Data Types (p. 101):** An alphabetical list of all EventBridge data types
- **Common Parameters (p. 137):** Parameters that all Query actions can use
- **Common Errors (p. 139):** Client and server errors that all actions can return
- **Regions and Endpoints:** Supported Regions and endpoints for all AWS products

Alternatively, you can use one of the **AWS SDKs** to access EventBridge using an API that is tailored to your programming language or platform.

Developers in the AWS developer community also provide their own libraries, which you can find at the following AWS developer centers:

- Java Developer Center
- JavaScript Developer Center
- AWS Mobile Services
- PHP Developer Center
- Python Developer Center
- Ruby Developer Center
- Windows and .NET Developer Center
Actions

The following actions are supported:

- ActivateEventSource (p. 3)
- CreateEventBus (p. 5)
- CreatePartnerEventSource (p. 8)
- DeactivateEventSource (p. 11)
- DeleteEventBus (p. 13)
- DeletePartnerEventSource (p. 15)
- DeleteRule (p. 17)
- DescribeEventBus (p. 20)
- DescribeEventSource (p. 23)
- DescribePartnerEventSource (p. 26)
- DescribeRule (p. 28)
- DisableRule (p. 32)
- EnableRule (p. 35)
- ListEventBuses (p. 38)
- ListEventSources (p. 40)
- ListPartnerEventSourceAccounts (p. 43)
- ListPartnerEventSources (p. 46)
- ListRuleNamesByTarget (p. 48)
- ListRules (p. 51)
- ListTagsForResource (p. 55)
- ListTargetsByRule (p. 58)
- PutEvents (p. 62)
- PutPartnerEvents (p. 65)
- PutPermission (p. 67)
- PutRule (p. 71)
- PutTargets (p. 76)
- RemovePermission (p. 87)
- RemoveTargets (p. 89)
- TagResource (p. 93)
- TestEventPattern (p. 96)
- UntagResource (p. 99)
ActivateEventSource

Activates a partner event source that has been deactivated. Once activated, your matching event bus will start receiving events from the event source.

Request Syntax

```
{
    "Name": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 137).

The request accepts the following data in JSON format.

Name (p. 3)

The name of the partner event source to activate.

Type: String

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

Pattern: `aws\.partner(/\.[\-_A-Za-z0-9]+){2,}`

Required: Yes

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. 139).

**ConcurrentModificationException**

There is concurrent modification on a rule or target.

HTTP Status Code: 400

**InternalException**

This exception occurs due to unexpected causes.

HTTP Status Code: 500

**InvalidStateException**

The specified state is not a valid state for an event source.

HTTP Status Code: 400
ResourceNotFoundException

An entity that you specified does not exist.

HTTP Status Code: 400

See Also

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

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

Creates a new event bus within your account. This can be a custom event bus which you can use to receive events from your custom applications and services, or it can be a partner event bus which can be matched to a partner event source.

Request Syntax

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

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 137).

The request accepts the following data in JSON format.

**EventSourceName** (p. 5)

If you are creating a partner event bus, this specifies the partner event source that the new event bus will be matched with.

Type: String

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

Pattern: `aws\.partner(/[\./\-_A-Za-z0-9]+){2,}`

Required: No

**Name** (p. 5)

The name of the new event bus.

Event bus names cannot contain the / character. You can’t use the name `default` for a custom event bus, as this name is already used for your account’s default event bus.

If this is a partner event bus, the name must exactly match the name of the partner event source that this event bus is matched to.

Type: String

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

Pattern: `/\-A-Za-z0-9`+

Required: Yes

**Tags** (p. 5)

Tags to associate with the event bus.
Type: Array of Tag (p. 131) objects

Required: No

Response Syntax

```
{
   "EventBusArn": "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.

**EventBusArn (p. 6)**

  The ARN of the new event bus.

  Type: String

Errors

For information about the errors that are common to all actions, see Common Errors (p. 139).

**ConcurrentModificationException**

  There is concurrent modification on a rule or target.

  HTTP Status Code: 400

**InternalException**

  This exception occurs due to unexpected causes.

  HTTP Status Code: 500

**InvalidStateException**

  The specified state is not a valid state for an event source.

  HTTP Status Code: 400

**LimitExceededException**

  You tried to create more rules or add more targets to a rule than is allowed.

  HTTP Status Code: 400

**ResourceAlreadyExistsException**

  The resource you are trying to create already exists.

  HTTP Status Code: 400

**ResourceNotFoundException**

  An entity that you specified does not exist.
HTTP Status Code: 400

See Also

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

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

Called by an SaaS partner to create a partner event source. This operation is not used by AWS customers.

Each partner event source can be used by one AWS account to create a matching partner event bus in that AWS account. A SaaS partner must create one partner event source for each AWS account that wants to receive those event types.

A partner event source creates events based on resources within the SaaS partner's service or application.

An AWS account that creates a partner event bus that matches the partner event source can use that event bus to receive events from the partner, and then process them using AWS Events rules and targets.

Partner event source names follow this format:

```
partner_name/event_namespace/event_name
```

`partner_name` is determined during partner registration and identifies the partner to AWS customers. `event_namespace` is determined by the partner and is a way for the partner to categorize their events. `event_name` is determined by the partner, and should uniquely identify an event-generating resource within the partner system. The combination of `event_namespace` and `event_name` should help AWS customers decide whether to create an event bus to receive these events.

Request Syntax

```
{
   "Account": "string",
   "Name": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 137).

The request accepts the following data in JSON format.

Account (p. 8)

The AWS account ID that is permitted to create a matching partner event bus for this partner event source.

Type: String

Length Constraints: Fixed length of 12.

Pattern: \d{12}

Required: Yes

Name (p. 8)

The name of the partner event source. This name must be unique and must be in the format `partner_name/event_namespace/event_name`. The AWS account that wants to use this partner event source must create a partner event bus with a name that matches the name of the partner event source.

Type: String
Length Constraints: Minimum length of 1. Maximum length of 256.
Pattern: aws\.partner(/\[\./\-A-Za-z0-9\]+){2,}
Required: Yes

Response Syntax

```json
{
    "EventSourceArn": "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.

**EventSourceArn (p. 9)**

The ARN of the partner event source.
Type: String

Errors

For information about the errors that are common to all actions, see Common Errors (p. 139).

**ConcurrentModificationException**

There is concurrent modification on a rule or target.
HTTP Status Code: 400

**InternalException**

This exception occurs due to unexpected causes.
HTTP Status Code: 500

**LimitExceededException**

You tried to create more rules or add more targets to a rule than is allowed.
HTTP Status Code: 400

**ResourceAlreadyExistsException**

The resource you are trying to create already exists.
HTTP Status Code: 400

See Also

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

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

You can use this operation to temporarily stop receiving events from the specified partner event source. The matching event bus is not deleted.

When you deactivate a partner event source, the source goes into PENDING state. If it remains in PENDING state for more than two weeks, it is deleted.

To activate a deactivated partner event source, use ActivateEventSource (p. 3).

Request Syntax

```json
{
    "Name": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 137).

The request accepts the following data in JSON format.

Name (p. 11)

The name of the partner event source to deactivate.

Type: String

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

Pattern: `aws\.partner(/[\=./-_A-Za-z0-9]+){2,}`

Required: Yes

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. 139).

ConcurrentModificationException

There is concurrent modification on a rule or target.

HTTP Status Code: 400

InternalException

This exception occurs due to unexpected causes.

HTTP Status Code: 500
InvalidStateException

The specified state is not a valid state for an event source.

HTTP Status Code: 400

ResourceNotFoundException

An entity that you specified does not exist.

HTTP Status Code: 400

See Also

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

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

Deletes the specified custom event bus or partner event bus. All rules associated with this event bus need to be deleted. You can’t delete your account’s default event bus.

Request Syntax

```
{
  "Name": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 137).

The request accepts the following data in JSON format.

Name (p. 13)

The name of the event bus to delete.

Type: String

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

Pattern: [ /\._-_A-Za-z0-9]+

Required: Yes

Response Elements

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

Errors

For information about the errors that are common to all actions, see Common Errors (p. 139).

ConcurrentModificationException

There is concurrent modification on a rule or target.

HTTP Status Code: 400

InternalException

This exception occurs due to unexpected causes.

HTTP Status Code: 500

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:
• AWS Command Line Interface
• AWS SDK for .NET
• AWS SDK for C++
• AWS SDK for Go
• AWS SDK for Java
• AWS SDK for JavaScript
• AWS SDK for PHP V3
• AWS SDK for Python
• AWS SDK for Ruby V3
DeletePartnerEventSource

This operation is used by SaaS partners to delete a partner event source. This operation is not used by AWS customers.

When you delete an event source, the status of the corresponding partner event bus in the AWS customer account becomes DELETED.

Request Syntax

```
{
    "Account": "string",
    "Name": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 137).

The request accepts the following data in JSON format.

**Account (p. 15)**

The AWS account ID of the AWS customer that the event source was created for.

Type: String

Length Constraints: Fixed length of 12.

Pattern: \d{12}

Required: Yes

**Name (p. 15)**

The name of the event source to delete.

Type: String

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

Pattern: aws\.partner(/[\./_\-_A-Za-z0-9]+){2,}\}

Required: Yes

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. 139).

**ConcurrentModificationException**

There is concurrent modification on a rule or target.
HTTP Status Code: 400

**InternalException**

This exception occurs due to unexpected causes.

HTTP Status Code: 500

**See Also**

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

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

Deletes the specified rule.

Before you can delete the rule, you must remove all targets, using RemoveTargets (p. 89).

When you delete a rule, incoming events might continue to match to the deleted rule. Allow a short period of time for changes to take effect.

Managed rules are rules created and managed by another AWS service on your behalf. These rules are created by those other AWS services to support functionality in those services. You can delete these rules using the Force option, but you should do so only if you are sure the other service is not still using that rule.

Request Syntax

```
{
  "EventBusName": "string",
  "Force": boolean,
  "Name": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 137).

The request accepts the following data in JSON format.

**EventBusName (p. 17)**

The event bus associated with the rule. If you omit this, the default event bus is used.

Type: String

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

Pattern: [/\._-A-Za-z0-9]+

Required: No

**Force (p. 17)**

If this is a managed rule, created by an AWS service on your behalf, you must specify Force as True to delete the rule. This parameter is ignored for rules that are not managed rules. You can check whether a rule is a managed rule by using DescribeRule or ListRules and checking the ManagedBy field of the response.

Type: Boolean

Required: No

**Name (p. 17)**

The name of the rule.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.
Pattern: [\._-A-Za-z0-9]+  
Required: Yes

Response Elements

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

Errors

For information about the errors that are common to all actions, see Common Errors (p. 139).

**ConcurrentModificationException**

There is concurrent modification on a rule or target.

HTTP Status Code: 400

**InternalException**

This exception occurs due to unexpected causes.

HTTP Status Code: 500

**ManagedRuleException**

This rule was created by an AWS service on behalf of your account. It is managed by that service. If you see this error in response to DeleteRule or RemoveTargets, you can use the Force parameter in those calls to delete the rule or remove targets from the rule. You cannot modify these managed rules by using DisableRule, EnableRule, PutTargets, PutRule, TagResource, or UntagResource.

HTTP Status Code: 400

**ResourceNotFoundException**

An entity that you specified does not exist.

HTTP Status Code: 400

Example

Deletes a rule named "test"

The following is an example of a DeleteRule request.

**Sample Request**

```plaintext
POST / HTTP/1.1
Host: events.<region>.<domain>
x-amz-Date: <Date>
Authorization: AWS4-HMAC-SHA256 Credential=<Credential>, SignedHeaders=content-type;date;host;user-agent;x-amz-date;x-amz-target;x-amzn-requestid, Signature=<Signature>
User-Agent: <UserAgentString>
Content-Type: application/x-amz-json-1.1
Content-Length: <PayloadSizeBytes>
Connection: Keep-Alive
X-Amz-Target: AWSEvents.DeleteRule
```
See Also

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

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

Displays details about an event bus in your account. This can include the external AWS accounts that are permitted to write events to your default event bus, and the associated policy. For custom event buses and partner event buses, it displays the name, ARN, policy, state, and creation time.

To enable your account to receive events from other accounts on its default event bus, use PutPermission (p. 67).

For more information about partner event buses, see CreateEventBus (p. 5).

Request Syntax

```json
{
   "Name": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 137).

The request accepts the following data in JSON format.

Name (p. 20)

The name of the event bus to show details for. If you omit this, the default event bus is displayed.

Type: String

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

Pattern: `/\._-A-Za-z0-9]+`

Required: No

Response Syntax

```json
{
   "Arn": "string",
   "Name": "string",
   "Policy": "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 (p. 20)

The Amazon Resource Name (ARN) of the account permitted to write events to the current account.
Errors

For information about the errors that are common to all actions, see Common Errors (p. 139).

InternalException

This exception occurs due to unexpected causes.

HTTP Status Code: 500

ResourceNotFoundException

An entity that you specified does not exist.

HTTP Status Code: 400

Examples

Example

The following example is run in account 444455556666, which has granted permission to AWS account 111122223333 to send events to 444455556666.

Sample Request

```
POST / HTTP/1.1
Host: events.<region>.<domain>
x-amz-Date: <Date>
Authorization: AWS4-HMAC-SHA256 Credential=<Credential>, SignedHeaders=content-type;date;host;user-agent;x-amz-date;x-amz-target;x-amzn-requestid, Signature=<Signature>
User-Agent: <UserAgentString>
Content-Type: application/x-amz-json-1.1
Content-Length: <PayloadSizeBytes>
Connection: Keep-Alive
X-Amz-Target: AWSEvents.DescribeEventBus
```

Example

Sample Response

```
HTTP/1.1 200 OK
x-amzn-RequestId: <RequestId>
Content-Type: application/x-amz-json-1.1
```
Content-Length: <PayloadSizeBytes>
Date: <Date>

{
    "Policy":
    {
        "Version": "2012-10-17",
        "Statement": [
            {
                "Sid": "mysid",
                "Effect": "Allow",
                "Principal": {
                    "AWS": "arn:aws:iam::111122223333:root"
                },
                "Action": "events:PutEvents",
                "Resource": "arn:aws:events:us-east-1:444455556666:event-bus/default"
            }
        ],
        "Name": "default",
        "Arn": "arn:aws:events:us-east-1:444455556666:event-bus/default"
    }
}

See Also

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

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

This operation lists details about a partner event source that is shared with your account.

Request Syntax

```
{
    "Name": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 137).

The request accepts the following data in JSON format.

**Name (p. 23)**

The name of the partner event source to display the details of.

Type: String

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

Pattern: aws\.partner(\/[\.-_A-Za-z0-9]+){2,}

Required: Yes

Response Syntax

```
{
    "Arn": "string",
    "CreatedBy": "string",
    "CreationTime": number,
    "ExpirationTime": 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 (p. 23)**

The ARN of the partner event source.

Type: String

**CreatedBy (p. 23)**

The name of the SaaS partner that created the event source.
Type: String

CreationTime (p. 23)

The date and time that the event source was created.

Type: Timestamp

ExpirationTime (p. 23)

The date and time that the event source will expire if you do not create a matching event bus.

Type: Timestamp

Name (p. 23)

The name of the partner event source.

Type: String

State (p. 23)

The state of the event source. If it is ACTIVE, you have already created a matching event bus for this event source, and that event bus is active. If it is PENDING, either you haven't yet created a matching event bus, or that event bus is deactivated. If it is DELETED, you have created a matching event bus, but the event source has since been deleted.

Type: String

Valid Values: PENDING | ACTIVE | DELETED

Errors

For information about the errors that are common to all actions, see Common Errors (p. 139).

InternalException

This exception occurs due to unexpected causes.

HTTP Status Code: 500

ResourceNotFoundException

An entity that you specified does not exist.

HTTP Status Code: 400

See Also

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

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

An SaaS partner can use this operation to list details about a partner event source that they have created. AWS customers do not use this operation. Instead, AWS customers can use DescribeEventSource (p. 23) to see details about a partner event source that is shared with them.

Request Syntax

```json
{
   "Name": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 137).

The request accepts the following data in JSON format.

Name (p. 26)

The name of the event source to display.

Type: String

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

Pattern: `aws\.partner(/[\.-_\-_A-Za-z0-9]+){2,}`

Required: Yes

Response Syntax

```json
{
   "Arn": "string",
   "Name": "string"
}
```

Response Elements

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

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

Arn (p. 26)

The ARN of the event source.

Type: String

Name (p. 26)

The name of the event source.

Type: String
Errors

For information about the errors that are common to all actions, see Common Errors (p. 139).

InternalException

This exception occurs due to unexpected causes.

HTTP Status Code: 500

ResourceNotFoundException

An entity that you specified does not exist.

HTTP Status Code: 400

See Also

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

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

Describes the specified rule.

DescribeRule does not list the targets of a rule. To see the targets associated with a rule, use ListTargetsByRule (p. 58).

Request Syntax

```json
{
    "EventBusName": "string",
    "Name": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 137).

The request accepts the following data in JSON format.

**EventBusName (p. 28)**

- The event bus associated with the rule. If you omit this, the default event bus is used.
- Type: String
- Pattern: [/\._-A-Za-z0-9]+
- Required: No

**Name (p. 28)**

- The name of the rule.
- Type: String
- Length Constraints: Minimum length of 1. Maximum length of 64.
- Pattern: [/\._-A-Za-z0-9]+
- Required: Yes

Response Syntax

```json
{
    "Arn": "string",
    "Description": "string",
    "EventBusName": "string",
    "EventPattern": "string",
    "ManagedBy": "string",
    "Name": "string",
    "RoleArn": "string",
    "ScheduleExpression": "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 (p. 28)**

The Amazon Resource Name (ARN) of the rule.

Type: String


**Description (p. 28)**

The description of the rule.

Type: String

Length Constraints: Maximum length of 512.

**EventBusName (p. 28)**

The event bus associated with the rule.

Type: String

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

Pattern: [/\._-A-Za-z0-9]+

**EventPattern (p. 28)**

The event pattern. For more information, see Events and Event Patterns in the Amazon EventBridge User Guide.

Type: String

**ManagedBy (p. 28)**

If this is a managed rule, created by an AWS service on your behalf, this field displays the principal name of the AWS service that created the rule.

Type: String


**Name (p. 28)**

The name of the rule.

Type: String

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

Pattern: [/\._-A-Za-z0-9]+

**RoleArn (p. 28)**

The Amazon Resource Name (ARN) of the IAM role associated with the rule.
Type: String

**ScheduleExpression (p. 28)**

The scheduling expression. For example, "cron(0 20 * * ? *)", "rate(5 minutes)".

Type: String
Length Constraints: Maximum length of 256.

**State (p. 28)**

Specifies whether the rule is enabled or disabled.

Type: String
Valid Values: ENABLED | DISABLED

**Errors**

For information about the errors that are common to all actions, see Common Errors (p. 139).

**InternalException**

This exception occurs due to unexpected causes.

HTTP Status Code: 500

**ResourceNotFoundException**

An entity that you specified does not exist.

HTTP Status Code: 400

**Example**

**Describes a rule named "test"**

The following is an example of a DescribeRule request and response.

**Sample Request**

```plaintext
POST / HTTP/1.1
Host: events.<region>.<domain>
x-amz-Date: <Date>
Authorization: AWS4-HMAC-SHA256 Credential=<Credential>, SignedHeaders=content-type;date;host;user-agent;x-amz-date;x-amz-target;x-amzn-requestid, Signature=<Signature>
User-Agent: <UserAgentString>
Content-Type: application/x-amz-json-1.1
Content-Length: <PayloadSizeBytes>
Connection: Keep-Alive
X-Amz-Target: AWSEvents.DescribeRule

{
   "Name": "test"
}
```
Sample Response

HTTP/1.1 200 OK
x-amzn-RequestId: <RequestId>
Content-Type: application/x-amz-json-1.1
Content-Length: <PayloadSizeBytes>
Date: <Date>

{
    "Name": "test",
    "EventPattern": "{"source\\u201a[\\u201caws.autoscaling\\u201d],\\u201cdetail-type\\u201a:[\\u201cEC2 Instance Launch Successful\\u201d,\\u201cEC2 Instance Terminate Successful\\u201d,\\u201cEC2 Instance Launch Unsuccessful\\u201d,\\u201cEC2 Instance Terminate Unsuccessful\\u201d]\\u201d",
    "State": "ENABLED",
    "Arn": "arn:aws:events:us-east-1:123456789012:rule/test",
    "Description": "Test rule for Auto Scaling events"
}

See Also

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

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

Disables the specified rule. A disabled rule won't match any events, and won't self-trigger if it has a schedule expression.

When you disable a rule, incoming events might continue to match to the disabled rule. Allow a short period of time for changes to take effect.

Request Syntax

```json
{
   "EventBusName": "string",
   "Name": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 137).

The request accepts the following data in JSON format.

**EventBusName (p. 32)**

The event bus associated with the rule. If you omit this, the default event bus is used.

Type: String

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

Pattern: [\./\-_A-Za-z0-9]+

Required: No

**Name (p. 32)**

The name of the rule.

Type: String

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

Pattern: [\./\-_A-Za-z0-9]+

Required: Yes

Response Elements

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

Errors

For information about the errors that are common to all actions, see Common Errors (p. 139).

**ConcurrentModificationException**

There is concurrent modification on a rule or target.
HTTP Status Code: 400

**InternalException**

This exception occurs due to unexpected causes.

HTTP Status Code: 500

**ManagedRuleException**

This rule was created by an AWS service on behalf of your account. It is managed by that service. If you see this error in response to `DeleteRule` or `RemoveTargets`, you can use the `Force` parameter in those calls to delete the rule or remove targets from the rule. You cannot modify these managed rules by using `DisableRule`, `EnableRule`, `PutTargets`, `PutRule`, `TagResource`, or `UntagResource`.

HTTP Status Code: 400

**ResourceNotFoundException**

An entity that you specified does not exist.

HTTP Status Code: 400

**Example**

Disables a rule named "test"

The following is an example of a `DisableRule` request.

**Sample Request**

```plaintext
POST / HTTP/1.1
Host: events.<region>.<domain>
x-amz-Date: <Date>
Authorization: AWS4-HMAC-SHA256 Credential=<Credential>, SignedHeaders=content-type;date;host;user-agent;x-amz-date;x-amz-target;x-amzn-requestid, Signature=<Signature>
User-Agent: <UserAgentString>
Content-Type: application/x-amz-json-1.1
Content-Length: <PayloadSizeBytes>
Connection: Keep-Alive
X-Amz-Target: AWSEvents.DisableRule

{
  "Name": "test"
}
```

**Sample Response**

```
HTTP/1.1 200 OK
x-amzn-RequestId: <RequestId>
Content-Type: application/x-amz-json-1.1
Content-Length: <PayloadSizeBytes>
Date: <Date>
```

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:
• AWS Command Line Interface
• AWS SDK for .NET
• AWS SDK for C++
• AWS SDK for Go
• AWS SDK for Java
• AWS SDK for JavaScript
• AWS SDK for PHP V3
• AWS SDK for Python
• AWS SDK for Ruby V3
EnableRule

Enables the specified rule. If the rule does not exist, the operation fails.

When you enable a rule, incoming events might not immediately start matching to a newly enabled rule. Allow a short period of time for changes to take effect.

Request Syntax

```json
{
   "EventBusName": "string",
   "Name": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 137).

The request accepts the following data in JSON format.

**EventBusName (p. 35)**

The event bus associated with the rule. If you omit this, the default event bus is used.

Type: String

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

Pattern: `/\.[-_A-Za-z0-9]+`

Required: No

**Name (p. 35)**

The name of the rule.

Type: String

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

Pattern: `/\.[-_A-Za-z0-9]+`

Required: Yes

Response Elements

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

Errors

For information about the errors that are common to all actions, see Common Errors (p. 139).

**ConcurrentModificationException**

There is concurrent modification on a rule or target.
HTTP Status Code: 400

**InternalException**

This exception occurs due to unexpected causes.

HTTP Status Code: 500

**ManagedRuleException**

This rule was created by an AWS service on behalf of your account. It is managed by that service. If you see this error in response to `DeleteRule` or `RemoveTargets`, you can use the `Force` parameter in those calls to delete the rule or remove targets from the rule. You cannot modify these managed rules by using `DisableRule`, `EnableRule`, `PutTargets`, `PutRule`, `TagResource`, or `UntagResource`.

HTTP Status Code: 400

**ResourceNotFoundException**

An entity that you specified does not exist.

HTTP Status Code: 400

### Example

**Enables a rule named "test"**

The following is an example of an `EnableRule` request.

#### Sample Request

```
POST / HTTP/1.1
Host: events.<region>.<domain>
x-amz-Date: <Date>
Authorization: AWS4-HMAC-SHA256 Credential=<Credential>, SignedHeaders=content-type;date;host;user-agent;x-amz-date;x-amz-target;x-amzn-requestid, Signature=<Signature>
User-Agent: <UserAgentString>
Content-Type: application/x-amz-json-1.1
Content-Length: <PayloadSizeBytes>
Connection: Keep-Alive
X-Amz-Target: AWSEvents.EnableRule

{
  "Name": "test"
}
```

#### Sample Response

```
HTTP/1.1 200 OK
x-amzn-RequestId: <RequestId>
Content-Type: application/x-amz-json-1.1
Content-Length: <PayloadSizeBytes>
Date: <Date>
```

### See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:
• AWS Command Line Interface
• AWS SDK for .NET
• AWS SDK for C++
• AWS SDK for Go
• AWS SDK for Java
• AWS SDK for JavaScript
• AWS SDK for PHP V3
• AWS SDK for Python
• AWS SDK for Ruby V3
ListEventBuses

Lists all the event buses in your account, including the default event bus, custom event buses, and partner event buses.

Request Syntax

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

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 137).

The request accepts the following data in JSON format.

**Limit** (p. 38)

Specifying this 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.

Type: Integer

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

Required: No

**NamePrefix** (p. 38)

Specifying this limits the results to only those event buses with names that start with the specified prefix.

Type: String

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

Pattern: [\/\._-A-Za-z0-9]+ 

Required: No

**NextToken** (p. 38)

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

Type: String

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

Required: No

Response Syntax

```
{
}
```
"EventBuses": [
    {
        "Arn": "string",
        "Name": "string",
        "Policy": "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.

EventBuses (p. 38)

This list of event buses.

Type: Array of EventBus (p. 109) objects

NextToken (p. 38)

A token you can use in a subsequent operation to retrieve the next set of results.

Type: String

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

Errors

For information about the errors that are common to all actions, see Common Errors (p. 139).

InternalException

This exception occurs due to unexpected causes.

HTTP Status Code: 500

See Also

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

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

You can use this to see all the partner event sources that have been shared with your AWS account. For more information about partner event sources, see CreateEventBus (p. 5).

Request Syntax

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

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 137).

The request accepts the following data in JSON format.

**Limit (p. 40)**

Specifying this 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.

Type: Integer

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

Required: No

**NamePrefix (p. 40)**

Specifying this limits the results to only those partner event sources with names that start with the specified prefix.

Type: String

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

Pattern: [/\._-A-Za-z0-9]+

Required: No

**NextToken (p. 40)**

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

Type: String

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

Required: No

Response Syntax

```json
{
}
```


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.

**EventSources (p. 40)**

The list of event sources.

Type: Array of EventSource (p. 110) objects

**NextToken (p. 40)**

A token you can use in a subsequent operation to retrieve the next set of results.

Type: String

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

Errors

For information about the errors that are common to all actions, see Common Errors (p. 139).

**InternalException**

This exception occurs due to unexpected causes.

HTTP Status Code: 500

See Also

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

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

An SaaS partner can use this operation to display the AWS account ID that a particular partner event source name is associated with. This operation is not used by AWS customers.

Request Syntax

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

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 137).

The request accepts the following data in JSON format.

**EventSourceName (p. 43)**

The name of the partner event source to display account information about.

Type: String

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

Pattern: `aws\.partner(/[^.\-_A-Za-z0-9]+){2,}`

Required: Yes

**Limit (p. 43)**

Specifying this 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.

Type: Integer

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

Required: No

**NextToken (p. 43)**

The token returned by a previous call to this operation. Specifying this retrieves the next set of results.

Type: String

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

Required: No

Response Syntax

```json
{
}
```
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. 43)**

A token you can use in a subsequent operation to retrieve the next set of results.

Type: String

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

**PartnerEventSourceAccounts (p. 43)**

The list of partner event sources returned by the operation.

Type: Array of PartnerEventSourceAccount (p. 117) objects

Errors

For information about the errors that are common to all actions, see Common Errors (p. 139).

**InternalException**

This exception occurs due to unexpected causes.

HTTP Status Code: 500

**ResourceNotFoundException**

An entity that you specified does not exist.

HTTP Status Code: 400

See Also

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

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

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

An SaaS partner can use this operation to list all the partner event source names that they have created. This operation is not used by AWS customers.

**Request Syntax**

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

**Request Parameters**

For information about the parameters that are common to all actions, see Common Parameters (p. 137).

The request accepts the following data in JSON format.

**Limit (p. 46)**

Specifying this 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.

Type: Integer

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

Required: No

**NamePrefix (p. 46)**

If you specify this, the results are limited to only those partner event sources that start with the string you specify.

Type: String

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

Pattern: `aws\.partner/\.[\._A-Za-z0-9]+/[\./\._A-Za-z0-9]*`

Required: Yes

**NextToken (p. 46)**

The token returned by a previous call to this operation. Specifying this retrieves the next set of results.

Type: String

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

Required: No

**Response Syntax**

```json
{
}
```
"NextToken": "string",
"PartnerEventSources": [
    {
        "Arn": "string",
        "Name": "string"
    }
]

Response Elements

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

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

**NextToken (p. 46)**

A token you can use in a subsequent operation to retrieve the next set of results.

Type: String

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

**PartnerEventSources (p. 46)**

The list of partner event sources returned by the operation.

Type: Array of PartnerEventSource (p. 116) objects

Errors

For information about the errors that are common to all actions, see Common Errors (p. 139).

**InternalException**

This exception occurs due to unexpected causes.

HTTP Status Code: 500

See Also

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

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

Lists the rules for the specified target. You can see which of the rules in Amazon EventBridge can invoke a specific target in your account.

Request Syntax

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

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 137).

The request accepts the following data in JSON format.

**EventBusName (p. 48)**

Limits the results to show only the rules associated with the specified event bus.

Type: String

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

Pattern: [/\._-A-Za-z0-9]+

Required: No

**Limit (p. 48)**

The maximum number of results to return.

Type: Integer

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

Required: No

**NextToken (p. 48)**

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

Type: String

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

Required: No

**TargetArn (p. 48)**

The Amazon Resource Name (ARN) of the target resource.

Type: String

Required: Yes

Response Syntax

```json
{
    "NextToken": "string",
    "RuleNames": [ "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. 49)

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

Type: String

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

RuleNames (p. 49)

The names of the rules that can invoke the given target.

Type: Array of strings

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

Pattern: \[\ .\ _\-\A-Za-z0-9\]+

Errors

For information about the errors that are common to all actions, see Common Errors (p. 139).

InternalException

This exception occurs due to unexpected causes.

HTTP Status Code: 500

ResourceNotFoundException

An entity that you specified does not exist.

HTTP Status Code: 400

Example

Lists rule names by target with the specified ARN

The following is an example of a ListRuleNamesByTarget request and response.
Sample Request

POST / HTTP/1.1
Host: events.<region>.<domain>
x-amz-Date: <Date>
Authorization: AWS4-HMAC-SHA256 Credential=<Credential>, SignedHeaders=content-type;date;host;user-agent;x-amz-date;x-amz-target;x-amzn-requestid, Signature=<Signature>
User-Agent: <UserAgentString>
Content-Type: application/x-amz-json-1.1
Content-Length: <PayloadSizeBytes>
Connection: Keep-Alive
X-Amz-Target: AWSEvents.ListRuleNamesByTarget

{
    "NextToken": "",
    "Limit": 0
}

Sample Response

HTTP/1.1 200 OK
x-amzn-RequestId: <RequestId>
Content-Type: application/x-amz-json-1.1
Content-Length: <PayloadSizeBytes>
Date: <Date>

{
    "RuleNames": [
        "test1",
        "test2",
        "test3",
        "test4",
        "test5"
    ]
}

See Also

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

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

Lists your Amazon EventBridge rules. You can either list all the rules or you can provide a prefix to match to the rule names.

ListRules does not list the targets of a rule. To see the targets associated with a rule, use ListTargetsByRule (p. 58).

Request Syntax

```
{
   "EventBusName": "string",
   "Limit": number,
   "NamePrefix": "string",
   "NextToken": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 137).

The request accepts the following data in JSON format.

EventBusName (p. 51)

Limits the results to show only the rules associated with the specified event bus.

Type: String

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

Pattern: [/\._-A-Za-z0-9]+

Required: No

Limit (p. 51)

The maximum number of results to return.

Type: Integer

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

Required: No

NamePrefix (p. 51)

The prefix matching the rule name.

Type: String

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

Pattern: [/\._-A-Za-z0-9]+

Required: No

NextToken (p. 51)

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

```
{
   "NextToken": "string",
   "Rules": [
      {
         "Arn": "string",
         "Description": "string",
         "EventBusName": "string",
         "EventPattern": "string",
         "ManagedBy": "string",
         "Name": "string",
         "RoleArn": "string",
         "ScheduleExpression": "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 (p. 52)**

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

Type: String

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

**Rules (p. 52)**

The rules that match the specified criteria.

Type: Array of Rule (p. 126) objects

Errors

For information about the errors that are common to all actions, see Common Errors (p. 139).

**InternalException**

This exception occurs due to unexpected causes.

HTTP Status Code: 500

**ResourceNotFoundException**

An entity that you specified does not exist.
HTTP Status Code: 400

Example

Lists all the rules that start with the letter "t" with a page size of 1

The following is an example of a ListRules request and response.

Sample Request

POST / HTTP/1.1
Host: events.<region>.<domain>
x-amz-Date: <Date>
Authorization: AWS4-HMAC-SHA256 Credential=<Credential>, SignedHeaders=content-type;date:host;user-agent;x-amz-date;x-amz-target;x-amzn-requestid, Signature=<Signature>
User-Agent: <UserAgentString>
Content-Type: application/x-amz-json-1.1
Content-Length: <PayloadSizeBytes>
Connection: Keep-Alive
X-Amz-Target: AWSEvents.ListRules

{
  "NamePrefix": "t",
  "Limit": 1
}

Sample Response

HTTP/1.1 200 OK
x-amzn-RequestId: <RequestId>
Content-Type: application/x-amz-json-1.1
Content-Length: <PayloadSizeBytes>
Date: <Date>

{
  "Rules": [
    {
      "EventPattern": "{ "source": ["aws.autoscaling"], "detail-type": ["EC2 Instance Launch Successful", "EC2 Instance Terminate Successful", "EC2 Instance Launch Unsuccessful", "EC2 Instance Terminate Unsuccessful"] },
      "State": "DISABLED",
      "Name": "test",
      "Arn": "arn:aws:events:us-east-1:123456789012:rule/test",
      "Description": "Test rule for Auto Scaling events"
    }
  ],
  "NextToken": "ABCDEgAAAAAAAAAAACXtD8i7XlyFv5XFKH8GrudAAAAQIo0Q+7qXp63vQf1pvVklfHFd+p2QgY16pfIAgSsarkWh07TePaCoeJqN80+jbou66Uhph7huA9r01Y9rjdt/3vsAeAAAAAAAF5MZk1llmMuLd9gUjryM4sL9EG5IkcPUm60Vq1tzYw=="
}

See Also

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

• AWS Command Line Interface
See Also

- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
ListTagsForResource

Displays the tags associated with an EventBridge resource. In EventBridge, rules and event buses can be tagged.

Request Syntax

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

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 137).

The request accepts the following data in JSON format.

**ResourceARN (p. 55)**

  - The ARN of the EventBridge resource for which you want to view tags.
  - Type: String
  - Required: Yes

Response Syntax

```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 (p. 55)**

  - The list of tag keys and values associated with the resource you specified
  - Type: Array of Tag (p. 131) objects

Errors

For information about the errors that are common to all actions, see Common Errors (p. 139).
InternalException
This exception occurs due to unexpected causes.
HTTP Status Code: 500

ResourceNotFoundException
An entity that you specified does not exist.
HTTP Status Code: 400

Example
Removes two tags from an EventBridge rule
The following is an example of a UntagResource request.

Sample Request

```
POST / HTTP/1.1
Host: events.<region>.<domain>
x-amz-Date: <Date>
Authorization: AWS4-HMAC-SHA256 Credential=<Credential>, SignedHeaders=content-type;date;host;user-agent;x-amz-date;x-amz-target;x-amzn-requestid, Signature=<Signature>
User-Agent: <UserAgentString>
Content-Type: application/x-amz-json-1.1
Content-Length: <PayloadSizeBytes>
Connection: Keep-Alive

x-Amz-Target: AWSEvents.ListTagsForResource
{
}
```

Sample Response

```
HTTP/1.1 200 OK
x-amzn-RequestId: <RequestId>
Content-Type: application/x-amz-json-1.1
Content-Length: <PayloadSizeBytes>

Date: <Date>
{
  "Tags": [
    {
      "Key": "Stack",
      "Value": "Prod"
    },
    {
      "Key": "CostCenter",
      "Value": "12345"
    }
  ]
}
```

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

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

Lists the targets assigned to the specified rule.

Request Syntax

```
{
  "EventBusName": "string",
  "Limit": number,
  "NextToken": "string",
  "Rule": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 137).

The request accepts the following data in JSON format.

EventBusName (p. 58)

The event bus associated with the rule. If you omit this, the default event bus is used.

Type: String

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

Pattern: [/\._-A-Za-z0-9]+

Required: No

Limit (p. 58)

The maximum number of results to return.

Type: Integer

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

Required: No

NextToken (p. 58)

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

Type: String

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

Required: No

Rule (p. 58)

The name of the rule.

Type: String

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

Pattern: [/\._-A-Za-z0-9]+

Required: Yes
Response Syntax

```
{
    "NextToken": "string",
    "Targets": [
        {
            "Arn": "string",
            "BatchParameters": {
                "ArrayProperties": {
                    "Size": number
                },
                "JobDefinition": "string",
                "JobName": "string",
                "RetryStrategy": {
                    "Attempts": number
                }
            },
            "EcsParameters": {
                "Group": "string",
                "LaunchType": "string",
                "NetworkConfiguration": {
                    "awsvpcConfiguration": {
                        "AssignPublicIp": "string",
                        "SecurityGroups": [ "string" ],
                        "Subnets": [ "string" ]
                    }
                },
                "PlatformVersion": "string",
                "TaskCount": number,
                "TaskDefinitionArn": "string"
            },
            "Id": "string",
            "Input": "string",
            "InputPath": "string",
            "InputTransformer": {
                "InputPathsMap": {
                    "string": "string"
                },
                "InputTemplate": "string"
            },
            "KinesisParameters": {
                "PartitionKeyPath": "string"
            },
            "RoleArn": "string",
            "RunCommandParameters": {
                "RunCommandTargets": [
                    {
                        "Key": "string",
                        "Values": [ "string" ]
                    }
                ],
            },
            "SqsParameters": {
                "MessageGroupId": "string"
            }
        }
    ]
}
```

Response Elements

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

For information about the errors that are common to all actions, see Common Errors (p. 139).

**InternalException**

This exception occurs due to unexpected causes.

HTTP Status Code: 500

**ResourceNotFoundException**

An entity that you specified does not exist.

HTTP Status Code: 400

Example

Lists the targets associated with a rule named "test"

The following is an example of a ListTargetsByRule request and response.

**Sample Request**

```
POST / HTTP/1.1
Host: events.<region>.<domain>
X-amz-Date: <Date>
Authorization: AWS4-HMAC-SHA256 Credential=<Credential>, SignedHeaders=content-type;date;host;user-agent;x-amz-date;x-amz-target;x-amzn-requestid, Signature=<Signature>
User-Agent: <UserAgentString>
Content-Type: application/x-amz-json-1.1
Content-Length: <PayloadSizeBytes>
Connection: Keep-Alive
X-Amz-Target: AWSEvents.ListTargetsByRule
{
   "Rule": "test"
}
```
Sample Response

HTTP/1.1 200 OK
x-amzn-RequestId: <RequestId>
Content-Type: application/x-amz-json-1.1
Content-Length: <PayloadSizeBytes>
Date: <Date>

{
   "Targets": [
   {
      "Id": "MyTargetId",
      "Arn": "arn:aws:lambda:us-east-1:123456789012:function:MyFunction"
   }
   ]
}

See Also

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

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

Sends custom events to Amazon EventBridge so that they can be matched to rules.

Request Syntax

```json
{
    "Entries": [
        {
            "Detail": "string",
            "DetailType": "string",
            "EventBusName": "string",
            "Resources": [ "string" ],
            "Source": "string",
            "Time": number
        }
    ]
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 137).

The request accepts the following data in JSON format.

Entries (p. 62)

The entry that defines an event in your system. You can specify several parameters for the entry such as the source and type of the event, resources associated with the event, and so on.

Type: Array of PutEventsRequestEntry (p. 118) objects

Array Members: Minimum number of 1 item. Maximum number of 10 items.

Required: Yes

Response Syntax

```json
{
    "Entries": [
        {
            "ErrorCode": "string",
            "ErrorMessage": "string",
            "EventId": "string"
        }
    ],
    "FailedEntryCount": 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.
Entries (p. 62)
The successfully and unsuccessfully ingested events results. If the ingestion was successful, the entry has the event ID in it. Otherwise, you can use the error code and error message to identify the problem with the entry.
Type: Array of PutEventsResultEntry (p. 120) objects

FailedEntryCount (p. 62)
The number of failed entries.
Type: Integer

Errors
For information about the errors that are common to all actions, see Common Errors (p. 139).

InternalException
This exception occurs due to unexpected causes.
HTTP Status Code: 500

Example
Sends two custom events
The following is an example of a PutEvents request and response.

Sample Request

```
POST / HTTP/1.1
Host: events.<region>.<domain>
x-amz-Date: <Date>
Authorization: AWS4-HMAC-SHA256 Credential=<Credential>, SignedHeaders=content-type;date;host;user-agent;x-amz-date;x-amz-target;x-amzn-requestid, Signature=<Signature>
User-Agent: <UserAgentString>
Content-Type: application/x-amz-json-1.1
Content-Length: <PayloadSizeBytes>
Connection: Keep-Alive
X-Amz-Target: AWSEvents.PutEvents

{
  "Entries": [
    {
      "Source": "com.mycompany.myapp",
      "Detail": "{ "key1": "value1", "key2": "value2" }",
      "Resources": [
        "resource1",
        "resource2"
      ],
      "DetailType": "myDetailType"
    },
    {
      "Source": "com.mycompany.myapp",
      "Detail": "{ "key1": "value3", "key2": "value4" }",
      "Resources": [
        "resource1",
        "resource2"
      ],
      "DetailType": "myDetailType"
    }
  ]
}
```
Sample Response

HTTP/1.1 200 OK
x-amzn-RequestId: <RequestId>
Content-Type: application/x-amz-json-1.1
Content-Length: <PayloadSizeBytes>
Date: <Date>

{
    "FailedEntryCount": 0,
    "Entries": [
        {
            "EventId": "11710aed-b79e-4468-a20b-bb3c0c3b4860"
        },
        {
            "EventId": "d804d26a-88db-4b66-9eaf-9a11c708ae82"
        }
    ]
}

See Also

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

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

This is used by SaaS partners to write events to a customer's partner event bus. AWS customers do not use this operation.

Request Syntax

```
{
  "Entries": [
    {
      "Detail": "string",
      "DetailType": "string",
      "Resources": ["string"],
      "Source": "string",
      "Time": number
    }
  ]
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 137).

The request accepts the following data in JSON format.

Entries (p. 65)

The list of events to write to the event bus.

Type: Array of PutPartnerEventsRequestEntry (p. 121) objects

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

Required: Yes

Response Syntax

```
{
  "Entries": [
    {
      "ErrorCode": "string",
      "ErrorMessage": "string",
      "EventId": "string"
    }
  ],
  "FailedEntryCount": 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.
Errors

For information about the errors that are common to all actions, see Common Errors (p. 139).

InternalException

This exception occurs due to unexpected causes.

HTTP Status Code: 500

See Also

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

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

Running PutPermission permits the specified AWS account or AWS organization to put events to the specified event bus. CloudWatch Events rules in your account are triggered by these events arriving to an event bus in your account.

For another account to send events to your account, that external account must have an EventBridge rule with your account's event bus as a target.

To enable multiple AWS accounts to put events to your event bus, run PutPermission once for each of these accounts. Or, if all the accounts are members of the same AWS organization, you can run PutPermission once specifying Principal as "*" and specifying the AWS organization ID in Condition, to grant permissions to all accounts in that organization.

If you grant permissions using an organization, then accounts in that organization must specify a RoleArn with proper permissions when they use PutTarget to add your account's event bus as a target. For more information, see Sending and Receiving Events Between AWS Accounts in the Amazon EventBridge User Guide.

The permission policy on the default event bus cannot exceed 10 KB in size.

Request Syntax

```json
{
   "Action": "string",
   "Condition": {
      "Key": "string",
      "Type": "string",
      "Value": "string"
   },
   "EventBusName": "string",
   "Principal": "string",
   "StatementId": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 137).

The request accepts the following data in JSON format.

**Action (p. 67)**

The action that you are enabling the other account to perform. Currently, this must be `events:PutEvents`.

Type: String

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

Pattern: `events:[a-zA-Z]+`

Required: Yes

**Condition (p. 67)**

This parameter enables you to limit the permission to accounts that fulfill a certain condition, such as being a member of a certain AWS organization. For more information about AWS Organizations, see What Is AWS Organizations in the AWS Organizations User Guide.
If you specify `Condition` with an AWS organization ID, and specify "+" as the value for `Principal`, you grant permission to all the accounts in the named organization.

The `Condition` is a JSON string which must contain `Type`, `Key`, and `Value` fields.

Type: `Condition (p. 106)` object

Required: No

**EventBusName (p. 67)**

The event bus associated with the rule. If you omit this, the default event bus is used.

Type: String

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

Pattern: `[\.-_A-Za-z0-9]+`

Required: No

**Principal (p. 67)**

The 12-digit AWS account ID that you are permitting to put events to your default event bus. Specify "+" to permit any account to put events to your default event bus.

If you specify "+" without specifying `Condition`, avoid creating rules that may match undesirable events. To create more secure rules, make sure that the event pattern for each rule contains an `account` field with a specific account ID from which to receive events. Rules with an account field do not match any events sent from other accounts.

Type: String


Pattern: `(\d{12})\*`  

Required: Yes

**StatementId (p. 67)**

An identifier string for the external account that you are granting permissions to. If you later want to revoke the permission for this external account, specify this `StatementId` when you run `RemovePermission (p. 87)`.

Type: String

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

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

Required: Yes

**Response Elements**

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

**Errors**

For information about the errors that are common to all actions, see `Common Errors (p. 139)`.
ConcurrentModificationException

There is concurrent modification on a rule or target.

HTTP Status Code: 400

InternalException

This exception occurs due to unexpected causes.

HTTP Status Code: 500

PolicyLengthExceededException

The event bus policy is too long. For more information, see the limits.

HTTP Status Code: 400

ResourceNotFoundException

An entity that you specified does not exist.

HTTP Status Code: 400

Examples

The following example enables the current account to receive events from account 111122223333.

Example

Sample Request

```
POST / HTTP/1.1
Host: events.<region>.<domain>
x-amz-Date: <Date>
Authorization: AWS4-HMAC-SHA256 Credential=<Credential>, SignedHeaders=content-type;date;host;user-agent;x-amz-date;x-amz-target;x-amzn-requestid, Signature=<Signature>
User-Agent: <UserAgentString>
Content-Type: application/x-amz-json-1.1
Content-Length: <PayloadSizeBytes>
Connection: Keep-Alive
X-Amz-Target: AWSEvents.PutPermission
{
    "Action": "events:PutEvents"
    "Principal": "111122223333"
    "StatementId": "MyStatement"
}
```

Example

The following example grants permissions to all accounts in the organization with an ID of o-1234567890

Sample Request

```
POST / HTTP/1.1
Host: events.<region>.<domain>
x-amz-Date: <Date>
```
Authorization: AWS4-HMAC-SHA256 Credential=<Credential>, SignedHeaders=content-type;date;host;user-agent;x-amz-date;x-amz-target;x-amzn-requestid, Signature=<Signature>
User-Agent: <UserAgentString>
Content-Type: application/x-amz-json-1.1
Content-Length: <PayloadSizeBytes>
Connection: Keep-Alive
X-Amz-Target: AWSEvents.PutPermission

{
    "Action":"events:PutEvents"
    "Principal":"*
    "Condition": '{"Type" : "StringEquals", "Key": "aws:PrincipalOrgID", "Value": "o-1234567890"}'
    "StatementId":"MyStatement"
}

See Also

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

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

Creates or updates the specified rule. Rules are enabled by default, or based on value of the state. You can disable a rule using DisableRule (p. 32).

A single rule watches for events from a single event bus. Events generated by AWS services go to your account’s default event bus. Events generated by SaaS partner services or applications go to the matching partner event bus. If you have custom applications or services, you can specify whether their events go to your default event bus or a custom event bus that you have created. For more information, see CreateEventBus (p. 5).

If you are updating an existing rule, the rule is replaced with what you specify in this PutRule command. If you omit arguments in PutRule, the old values for those arguments are not kept. Instead, they are replaced with null values.

When you create or update a rule, incoming events might not immediately start matching to new or updated rules. Allow a short period of time for changes to take effect.

A rule must contain at least an EventPattern or ScheduleExpression. Rules with EventPatterns are triggered when a matching event is observed. Rules with ScheduleExpressions self-trigger based on the given schedule. A rule can have both an EventPattern and a ScheduleExpression, in which case the rule triggers on matching events as well as on a schedule.

When you initially create a rule, you can optionally assign one or more tags to the rule. 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 rules with certain tag values. To use the PutRule operation and assign tags, you must have both the events:PutRule and events:TagResource permissions.

If you are updating an existing rule, any tags you specify in the PutRule operation are ignored. To update the tags of an existing rule, use TagResource (p. 93) and UntagResource (p. 99).

Most services in AWS treat : or / as the same character in Amazon Resource Names (ARNs). However, EventBridge uses an exact match in event patterns and rules. Be sure to use the correct ARN characters when creating event patterns so that they match the ARN syntax in the event you want to match.

In EventBridge, it is possible to create rules that lead to infinite loops, where a rule is fired repeatedly. For example, a rule might detect that ACLs have changed on an S3 bucket, and trigger software to change them to the desired state. If the rule is not written carefully, the subsequent change to the ACLs fires the rule again, creating an infinite loop.

To prevent this, write the rules so that the triggered actions do not re-fire the same rule. For example, your rule could fire only if ACLs are found to be in a bad state, instead of after any change.

An infinite loop can quickly cause higher than expected charges. We recommend that you use budgeting, which alerts you when charges exceed your specified limit. For more information, see Managing Your Costs with Budgets.

Request Syntax

```json
{
  "Description": "string",
  "EventBusName": "string",
  "EventPattern": "string",
  "Name": "string",
  "RoleArn": "string",
  "ScheduleExpression": "string",
  "State": "string",
  "Tags": [
```
Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 137).

The request accepts the following data in JSON format.

**Description (p. 71)**

A description of the rule.

- **Type**: String
- **Length Constraints**: Maximum length of 512.
- **Required**: No

**EventBusName (p. 71)**

The event bus to associate with this rule. If you omit this, the default event bus is used.

- **Type**: String
- **Length Constraints**: Minimum length of 1. Maximum length of 256.
- **Pattern**: [/\._-A-Za-z0-9]+
- **Required**: No

**EventPattern (p. 71)**

The event pattern. For more information, see Events and Event Patterns in the Amazon EventBridge User Guide.

- **Type**: String
- **Required**: No

**Name (p. 71)**

The name of the rule that you are creating or updating.

- **Type**: String
- **Length Constraints**: Minimum length of 1. Maximum length of 64.
- **Pattern**: [/\._-A-Za-z0-9]+
- **Required**: Yes

**RoleArn (p. 71)**

The Amazon Resource Name (ARN) of the IAM role associated with the rule.

- **Type**: String
- **Length Constraints**: Minimum length of 1. Maximum length of 1600.
Required: No

**ScheduleExpression (p. 71)**

The scheduling expression. For example, "cron(0 20 * * ? ") or "rate(5 minutes)".

Type: String

Length Constraints: Maximum length of 256.

Required: No

**State (p. 71)**

Indicates whether the rule is enabled or disabled.

Type: String

Valid Values: ENABLED | DISABLED

Required: No

**Tags (p. 71)**

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

Type: Array of Tag (p. 131) objects

Required: No

---

### Response Syntax

```
{
  "RuleArn": "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.

**RuleArn (p. 73)**

The Amazon Resource Name (ARN) of the rule.

Type: String


---

### Errors

For information about the errors that are common to all actions, see *Common Errors (p. 139).*

**ConcurrentModificationException**

There is concurrent modification on a rule or target.

HTTP Status Code: 400
**InternalException**

This exception occurs due to unexpected causes.

HTTP Status Code: 500

**InvalidEventPatternException**

The event pattern is not valid.

HTTP Status Code: 400

**LimitExceededException**

You tried to create more rules or add more targets to a rule than is allowed.

HTTP Status Code: 400

**ManagedRuleException**

This rule was created by an AWS service on behalf of your account. It is managed by that service. If you see this error in response to `DeleteRule` or `RemoveTargets`, you can use the `Force` parameter in those calls to delete the rule or remove targets from the rule. You cannot modify these managed rules by using `DisableRule`, `EnableRule`, `PutTargets`, `PutRule`, `TagResource`, or `UntagResource`.

HTTP Status Code: 400

**ResourceNotFoundException**

An entity that you specified does not exist.

HTTP Status Code: 400

---

**Example**

Creates a rule named "test" that matches events from Amazon EC2. The rule is also given two tags.

The following is an example of a PutRule request and response.

**Sample Request**

```
POST / HTTP/1.1
Host: events.<region>.<domain>
x-amz-Date: <Date>
Authorization: AWS4-HMAC-SHA256 Credential=<Credential>, SignedHeaders=content-type;date;host;user-agent;x-amz-date;x-amz-target;x-amzn-requestid, Signature=<Signature>
User-Agent: <UserAgentString>
Content-Type: application/x-amz-json-1.1
Content-Length: <PayloadSizeBytes>
Connection: Keep-Alive
X-Amz-Target: AWSEvents.PutRule

{
  "Name": "test",
  "EventPattern": "{ "source": ["aws.ec2"] }",
  "Tags": [
    {
      "Key": "Stack",
      "Value": "Prod"
    }
  ]
}
```
Sample Response

HTTP/1.1 200 OK
x-amzn-RequestId: <RequestId>
Content-Type: application/x-amz-json-1.1
Content-Length: <PayloadSizeBytes>
Date: <Date>

{
    "RuleArn": "arn:aws:events:us-east-1:123456789012:rule/test"
}

See Also

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

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

Add the specified targets to the specified rule, or updates the targets if they are already associated with the rule.

Targets are the resources that are invoked when a rule is triggered.

You can configure the following as targets for Events:

- EC2 instances
- SSM Run Command
- SSM Automation
- AWS Lambda functions
- Data streams in Amazon Kinesis Data Streams
- Data delivery streams in Amazon Kinesis Data Firehose
- Amazon ECS tasks
- AWS Step Functions state machines
- AWS Batch jobs
- AWS CodeBuild projects
- Pipelines in AWS CodePipeline
- Amazon Inspector assessment templates
- Amazon SNS topics
- Amazon SQS queues, including FIFO queues
- The default event bus of another AWS account

Creating rules with built-in targets is supported only in the AWS Management Console. The built-in targets are EC2 CreateSnapshot API call, EC2 RebootInstances API call, EC2 StopInstances API call, and EC2 TerminateInstances API call.

For some target types, PutTargets provides target-specific parameters. If the target is a Kinesis data stream, you can optionally specify which shard the event goes to by using the KinesisParameters argument. To invoke a command on multiple EC2 instances with one rule, you can use the RunCommandParameters field.

To be able to make API calls against the resources that you own, Amazon CloudWatch Events needs the appropriate permissions. For AWS Lambda and Amazon SNS resources, EventBridge relies on resource-based policies. For EC2 instances, Kinesis data streams, and AWS Step Functions state machines, EventBridge relies on IAM roles that you specify in the RoleARN argument in PutTargets. For more information, see Authentication and Access Control in the Amazon EventBridge User Guide.

If another AWS account is in the same region and has granted you permission (using PutPermission), you can send events to that account. Set that account's event bus as a target of the rules in your account. To send the matched events to the other account, specify that account's event bus as the Arn value when you run PutTargets. If your account sends events to another account, your account is charged for each sent event. Each event sent to another account is charged as a custom event. The account receiving the event is not charged. For more information, see Amazon CloudWatch Pricing.

Note
Input, InputPath, and InputTransformer are not available with PutTarget if the target is an event bus of a different AWS account.

If you are setting the event bus of another account as the target, and that account granted permission to your account through an organization instead of directly by the account ID, then you must specify
a RoleArn with proper permissions in the Target structure. For more information, see Sending and Receiving Events Between AWS Accounts in the Amazon EventBridge User Guide.

For more information about enabling cross-account events, see PutPermission (p. 67).

Input, InputPath, and InputTransformer are mutually exclusive and optional parameters of a target. When a rule is triggered due to a matched event:

- If none of the following arguments are specified for a target, then the entire event is passed to the target in JSON format (unless the target is Amazon EC2 Run Command or Amazon ECS task, in which case nothing from the event is passed to the target).
- If Input is specified in the form of valid JSON, then the matched event is overridden with this constant.
- If InputPath is specified in the form of JSONPath (for example, $.detail), then only the part of the event specified in the path is passed to the target (for example, only the detail part of the event is passed).
- If InputTransformer is specified, then one or more specified JSONPaths are extracted from the event and used as values in a template that you specify as the input to the target.

When you specify InputPath or InputTransformer, you must use JSON dot notation, not bracket notation.

When you add targets to a rule and the associated rule triggers soon after, new or updated targets might not be immediately invoked. Allow a short period of time for changes to take effect.

This action can partially fail if too many requests are made at the same time. If that happens, FailedEntryCount is non-zero in the response and each entry in FailedEntries provides the ID of the failed target and the error code.

Request Syntax

```
{
  "EventBusName": "string",
  "Rule": "string",
  "Targets": [
    {
      "Arn": "string",
      "BatchParameters": {
        "ArrayProperties": {
          "Size": number
        },
        "JobDefinition": "string",
        "JobName": "string",
        "RetryStrategy": {
          "Attempts": number
        }
      },
      "EcsParameters": {
        "Group": "string",
        "LaunchType": "string",
        "NetworkConfiguration": {
          "awsvpcConfiguration": {
            "AssignPublicIp": "string",
            "SecurityGroups": [ "string" ],
            "Subnets": [ "string" ]
          }
        }
      }
    },
  "PlatformVersion": "string",
  "TaskCount": number,
  "TaskDefinitionArn": "string"
}
```
Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 137).

The request accepts the following data in JSON format.

**EventBusName (p. 77)**

The name of the event bus associated with the rule. If you omit this, the default event bus is used.

Type: String

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

Pattern: [\/_.-A-Za-z0-9]+

Required: No

**Rule (p. 77)**

The name of the rule.

Type: String

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

Pattern: [\/_.-A-Za-z0-9]+

Required: Yes

**Targets (p. 77)**

The targets to update or add to the rule.
Response Syntax

```
{
  "FailedEntries": [
    {
      "ErrorCode": "string",
      "ErrorMessage": "string",
      "TargetId": "string"
    }
  ],
  "FailedEntryCount": 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.

**FailedEntries (p. 79)**

The failed target entries.

Type: Array of PutTargetsResultEntry (p. 124) objects

**FailedEntryCount (p. 79)**

The number of failed entries.

Type: Integer

Errors

For information about the errors that are common to all actions, see Common Errors (p. 139).

**ConcurrentModificationException**

There is concurrent modification on a rule or target.

HTTP Status Code: 400

**InternalException**

This exception occurs due to unexpected causes.

HTTP Status Code: 500

**LimitExcededException**

You tried to create more rules or add more targets to a rule than is allowed.

HTTP Status Code: 400
ManagedRuleException

This rule was created by an AWS service on behalf of your account. It is managed by that service. If you see this error in response to DeleteRule or RemoveTargets, you can use the Force parameter in those calls to delete the rule or remove targets from the rule. You cannot modify these managed rules by using DisableRule, EnableRule, PutTargets, PutRule, TagResource, or UntagResource.

HTTP Status Code: 400

ResourceNotFoundException

An entity that you specified does not exist.

HTTP Status Code: 400

Examples

Adds a target to a Lambda function with the ID "MyTargetId" to the rule named "test"

The following is an example of a PutTargets request.

Sample Request

```
POST / HTTP/1.1
Host: events.<region>.<domain>
X-amz-Date: <Date>
Authorization: AWS4-HMAC-SHA256 Credential=<Credential>, SignedHeaders=content-type;date;host;user-agent;x-amz-date;x-amz-target;x-amzn-requestid, Signature=<Signature>
User-Agent: <UserAgentString>
Content-Type: application/x-amz-json-1.1
Content-Length: <PayloadSizeBytes>
Connection: Keep-Alive
X-Amz-Target: AWSEvents.PutTargets

{
   "Rule": "test",
   "Targets": [
      {
         "Id": "MyTargetId",
         "Arn": "arn:aws:lambda:us-east-1:123456789012:function:MyFunction"
      }
   ]
}
```

Sample Response

```
HTTP/1.1 200 OK
x-amzn-RequestId: <RequestId>
Content-Type: application/x-amz-json-1.1
Content-Length: <PayloadSizeBytes>
Date: <Date>

{
   "FailedEntries": [],
   "FailedEntryCount": 0
}
```
Use Input Transformer to extract data from an event and input that data to the target

This example extracts the instance and state from an event, puts them into a simple text template, and passes this data to a Lambda function called MyFunction.

Sample Request

```
POST / HTTP/1.1
Host: events.<region>.<domain>
Authorization: AWS4-HMAC-SHA256 Credential=<Credential>, SignedHeaders=content-type;date;host;user-agent;x-amz-date;x-amz-target;x-amzn-requestid, Signature=<Signature>
User-Agent: <UserAgentString>
Content-Type: application/x-amz-json-1.1
Content-Length: <PayloadSizeBytes>
Connection: Keep-Alive
X-Amz-Target: AWSEvents.PutTargets

{
  "Rule": "testrule",
  "Targets": [
    {
      "Id": "MyTargetId",
      "InputTransformer": {
        "InputPathsMap": {
          "instance": "$\.detail.instance",
          "status": "$\.detail.status"
        },
        "InputTemplate": "<instance> is in state <status>
      }
    }
  ]
}
```

Example

Here is another sample request using InputTransformer. The input to the Lambda function is in JSON format, with an array substituted. Below that sample request are examples of an event and the resulting output to the target, using this sample request.

```
POST / HTTP/1.1
Host: events.<region>.<domain>
Authorization: AWS4-HMAC-SHA256 Credential=<Credential>, SignedHeaders=content-type;date;host;user-agent;x-amz-date;x-amz-target;x-amzn-requestid, Signature=<Signature>
User-Agent: <UserAgentString>
Content-Type: application/x-amz-json-1.1
Content-Length: <PayloadSizeBytes>
Connection: Keep-Alive
X-Amz-Target: AWSEvents.PutTargets

{
  "Rule": "testrule",
  "Targets": [
    {
      "Id": "MyTargetId",
      "InputTransformer": {
        "InputPathsMap": {
          "commandsToRun": "$\.detail.commands"
        }
      }
    }
  ]
}
```
"InputTemplate": "\"commands\": <commandsToRun>\"}
]
}

Incoming event:
{
  "Time": 1225864800,
  "Source": "foo",
  "Resources": ["foo", "foo"],
  "DetailType": "foo",
  "Detail": {
    "commands": ["ls -lrt", "echo HelloWorld!"]
  }
}

Output sent to the target:
{
  "commands": ["ls -lrt", "echo HelloWorld!"]
}

Sends a command to a list of EC2 instances specified by InstanceIds, using Amazon EC2 Run Command

POST / HTTP/1.1
Host: events.<region>.<domain>
User-Agent: <UserAgentString>
Content-Type: application/x-amz-json-1.1
Content-Length: <PayloadSizeBytes>
Connection: Keep-Alive
X-Amz-Target: AWSEvents.PutTargets
{
  "Rule": "testrule",
  "Targets": [
    {
      "Id": "id123456789",
      "RoleArn": "arn:aws:iam::123456789012:role/MyRoleToAccessEC2",
      "RunCommandParameters": {
        "RunCommandTargets": [
          {
            "Key": "InstanceIds",
            "Values": ["i-123456789012", "i-098765432109"]
          }
        ]
      }
    }
  ]
}
Sends a batch job command to an AWS Batch job queue

When the target is an AWS Batch job queue, the Arn field specifies the ARN of the job queue, while JobDefinition specifies the ARN of the job definition.

```
POST / HTTP/1.1
Host: events.<region>.<domain>
x-amz-Date: <Date>
Authorization: AWS4-HMAC-SHA256 Credential=<Credential>, SignedHeaders=content-type;date;host;user-agent;x-amz-date;x-amz-target;x-amzn-requestid, Signature=<Signature>
User-Agent: <UserAgentString>
Content-Type: application/x-amz-json-1.1
Content-Length: <PayloadSizeBytes>
Connection: Keep-Alive
X-Amz-Target: AWSEvents.PutTargets
{
  "Rule": "batch-job-rule",
  "Targets": [
    {
      "Id": "id123456789",
      "BatchParameters": {
        "ArrayProperties": {
          "Size": 25
        },
        "JobName": "unique-job-name",
        "RetryStrategy": {
          "Attempts": 5
        }
      }
    }
  ]
}
```

Uses KinesisParameters to control the shard assignment

In this example, KinesisParameters is used to specify that events related to status changes are sent to a shard specific to the affected instance ID.

```
POST / HTTP/1.1
Host: events.<region>.<domain>
x-amz-Date: <Date>
Authorization: AWS4-HMAC-SHA256 Credential=<Credential>, SignedHeaders=content-type;date;host;user-agent;x-amz-date;x-amz-target;x-amzn-requestid, Signature=<Signature>
User-Agent: <UserAgentString>
Content-Type: application/x-amz-json-1.1
Content-Length: <PayloadSizeBytes>
Connection: Keep-Alive
X-Amz-Target: AWSEvents.PutTargets
{
  "Rule": "StatusChangeRule",
  "Targets": [
    {
      "Id": "id123456789",
      "KinesisParameters": {
        "ShardIdExpression": "instance-id",
        "MaximumNumberOfShards": 100
      }
    }
  ]
}
```
Adds an Amazon Kinesis Data Firehose data delivery stream as a target

This example sets a Kinesis data delivery stream named target-stream-name as a target.

```
POST / HTTP/1.1
Host: events.<region>.<domain>
x-amz-Date: <Date>
Authorization: AWS4-HMAC-SHA256 Credential=<Credential>, SignedHeaders=content-type;date;host;user-agent;x-amz-date;x-amz-target;x-amzn-requestid, Signature=<Signature>
User-Agent: <UserAgentString>
Content-Type: application/x-amz-json-1.1
Content-Length: <PayloadSizeBytes>
Connection: Keep-Alive
X-Amz-Target: AWSEvents.PutTargets

{
  "Rule": "FirehoseExample",
  "Targets": [
    {
      "Id": "FirehoseStream",
    }
  ]
}
```

Adds a Step Functions state machine as a target

This example targets a state machine called "HelloWorld", and sends the input constant "Hello World!" to that target.

```
POST / HTTP/1.1
Host: events.<region>.<domain>
x-amz-Date: <Date>
Authorization: AWS4-HMAC-SHA256 Credential=<Credential>, SignedHeaders=content-type;date;host;user-agent;x-amz-date;x-amz-target;x-amzn-requestid, Signature=<Signature>
User-Agent: <UserAgentString>
Content-Type: application/x-amz-json-1.1
Content-Length: <PayloadSizeBytes>
Connection: Keep-Alive
X-Amz-Target: AWSEvents.PutTargets

{
  "Rule": "testrule",
  "Targets": [
    {
      "RoleArn": "arn:aws:iam::123456789012:role/MyRoleToAccessStepFunctions"
      "Input": "HelloWorld!"
    }
  ]
}
```
Adding a target that creates three Amazon ECS tasks based on a task definition

This example uses Amazon ECS as the target. You must have already created the task definition and cluster in Amazon ECS.

```json
POST / HTTP/1.1
Host: events.<region>.<domain>
x-amz-Date: <Date>
Authorization: AWS4-HMAC-SHA256 Credential=<Credential>, SignedHeaders=content-type;date;host;user-agent;x-amz-date;x-amz-target;x-amzn-requestid, Signature=<Signature>
User-Agent: <UserAgentString>
Content-Type: application/x-amz-json-1.1
Content-Length: <PayloadSizeBytes>
Connection: Keep-Alive
X-Amz-Target: AWSEvents.PutTargets

{
  "Rule": "test",
  "Targets": [
    {
      "Id": "Target1",
      "RoleArn": "arn:aws:iam::123456789012:role/MyRoleToAccessECS"
    },
    {
      "Id": "Target2",
      "Arn": "arn:aws:ecs:us-east-1:123456789012:cluster/example-cluster",
      "ECSParameters": {
        "TaskDefinitionArn": "arn:aws:ecs:us-east-1:123456789012:task-definition/example",
        "TaskCount": 3
      }
    }
  ]
}
```

Specifying two targets with one command

This example sets two simple targets with one command. In this example, both targets are AWS Lambda functions, but the two targets could be different AWS services as well.

Sample Request

```json
POST / HTTP/1.1
Host: events.<region>.<domain>
x-amz-Date: <Date>
Authorization: AWS4-HMAC-SHA256 Credential=<Credential>, SignedHeaders=content-type;date;host;user-agent;x-amz-date;x-amz-target;x-amzn-requestid, Signature=<Signature>
User-Agent: <UserAgentString>
Content-Type: application/x-amz-json-1.1
Content-Length: <PayloadSizeBytes>
Connection: Keep-Alive
X-Amz-Target: AWSEvents.PutTargets

{
  "Rule": "test",
  "Targets": [
    {
      "Id": "MyTargetId",
      "Arn": "arn:aws:lambda:us-east-1:123456789012:function:MyFunction"
    }
  ]
}
```
Specifying another AWS account as a target

This example shows cross-account event delivery. The target being added is the event bus of a separate AWS account, which has the AWS account ID of 444455556666.

Note

Input, InputPath, and InputTransformer are not available with PutTarget if the target is an event bus of a different AWS account.

Sample Request

POST / HTTP/1.1
Host: events.<region>.<domain>
x-amz-date: <Date>
Authorization: AWS4-HMAC-SHA256 Credential=<Credential>, SignedHeaders=content-type;date:host;user-agent;x-amz-date;x-amz-target;x-amzn-requestid, Signature=<Signature>
User-Agent: <UserAgentString>
Content-Type: application/x-amz-json-1.1
Content-Length: <PayloadSizeBytes>
Connection: Keep-Alive
X-Amz-Target: AWSEvents.PutTargets

{
    "Rule": "producer-rule",
    "Targets": [
        {
            "Id": "CrossAccountTargetId",
            "Arn": "arn:aws:events:us-east-1:444455556666:event-bus/default"
        }
    ]
}

See Also

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

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

Revokes the permission of another AWS account to be able to put events to the specified event bus. Specify the account to revoke by the StatementId value that you associated with the account when you granted it permission with PutPermission. You can find the StatementId by using DescribeEventBus (p. 20).

Request Syntax

```json
{
   "EventBusName": "string",
   "StatementId": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 137).

The request accepts the following data in JSON format.

**EventBusName** (p. 87)

The name of the event bus to revoke permissions for. If you omit this, the default event bus is used.

Type: String

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

Pattern: [\-_.A-Za-z0-9]+

Required: No

**StatementId** (p. 87)

The statement ID corresponding to the account that is no longer allowed to put events to the default event bus.

Type: String

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

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

Required: Yes

Response Elements

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

Errors

For information about the errors that are common to all actions, see Common Errors (p. 139).

**ConcurrentModificationException**

There is concurrent modification on a rule or target.
HTTP Status Code: 400

**InternalException**

This exception occurs due to unexpected causes.

HTTP Status Code: 500

**ResourceNotFoundException**

An entity that you specified does not exist.

HTTP Status Code: 400

**See Also**

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

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


RemoveTargets

Removes the specified targets from the specified rule. When the rule is triggered, those targets are no longer be invoked.

When you remove a target, when the associated rule triggers, removed targets might continue to be invoked. Allow a short period of time for changes to take effect.

This action can partially fail if too many requests are made at the same time. If that happens, FailedEntryCount is non-zero in the response and each entry in FailedEntries provides the ID of the failed target and the error code.

Request Syntax

```json
{
   "EventBusName": "string",
   "Force": boolean,
   "Ids": [ "string" ],
   "Rule": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 137).

The request accepts the following data in JSON format.

EventBusName (p. 89)

The name of the event bus associated with the rule.

Type: String

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

Pattern: [/\._-A-Za-z0-9]+

Required: No

Force (p. 89)

If this is a managed rule, created by an AWS service on your behalf, you must specify Force as True to remove targets. This parameter is ignored for rules that are not managed rules. You can check whether a rule is a managed rule by using DescribeRule or ListRules and checking the ManagedBy field of the response.

Type: Boolean

Required: No

Ids (p. 89)

The IDs of the targets to remove from the rule.

Type: Array of strings

Array Members: Minimum number of 1 item. Maximum number of 100 items.
Length Constraints: Minimum length of 1. Maximum length of 64.
Pattern: [\._-A-Za-z0-9]+  
Required: Yes

**Rule (p. 89)**

The name of the rule.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.
Pattern: [\._-A-Za-z0-9]+  
Required: Yes

---

## Response Syntax

```json
{
    "FailedEntries": [
        {
            "ErrorCode": "string",
            "ErrorMessage": "string",
            "TargetId": "string"
        }
    ],
    "FailedEntryCount": 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.

**FailedEntries (p. 90)**

The failed target entries.

Type: Array of RemoveTargetsResultEntry (p. 125) objects

**FailedEntryCount (p. 90)**

The number of failed entries.

Type: Integer

---

## Errors

For information about the errors that are common to all actions, see Common Errors (p. 139).

**ConcurrentModificationException**

There is concurrent modification on a rule or target.

HTTP Status Code: 400
**InternalException**

This exception occurs due to unexpected causes.

HTTP Status Code: 500

**ManagedRuleException**

This rule was created by an AWS service on behalf of your account. It is managed by that service. If you see this error in response to `DeleteRule` or `RemoveTargets`, you can use the `Force` parameter in those calls to delete the rule or remove targets from the rule. You cannot modify these managed rules by using `DisableRule`, `EnableRule`, `PutTargets`, `PutRule`, `TagResource`, or `UntagResource`.

HTTP Status Code: 400

**ResourceNotFoundException**

An entity that you specified does not exist.

HTTP Status Code: 400

**Example**

Removes a target with ID "MyTargetId" from a rule named "test"

The following is an example of a `RemoveTargets` request.

**Sample Request**

```
POST / HTTP/1.1
Host: events.<region>.<domain>
x-amz-Date: <Date>
Authorization: AWS4-HMAC-SHA256 Credential=<Credential>, SignedHeaders=content-type;date;host;user-agent;x-amz-date;x-amz-target;x-amzn-requestid, Signature=<Signature>
User-Agent: <UserAgentString>
Content-Type: application/x-amz-json-1.1
Content-Length: <PayloadSizeBytes>
Connection: Keep-Alive
X-Amz-Target: AWSEvents.RemoveTargets

{
    "Rule": "test",
    "Ids": [
        "MyTargetId"
    ]
}
```

**Sample Response**

```
HTTP/1.1 200 OK
x-amzn-RequestId: <RequestId>
Content-Type: application/x-amz-json-1.1
Content-Length: <PayloadSizeBytes>
Date: <Date>

{
    "FailedEntries": [],
    "FailedEntryCount": 0
}
```
See Also

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

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

Assigns one or more tags (key-value pairs) to the specified EventBridge resource. 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. In EventBridge, rules and event buses can be tagged.

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, this tag is appended to the list of tags associated with the resource. 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.

Request Syntax

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

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 137).

The request accepts the following data in JSON format.

ResourceARN (p. 93)

The ARN of the EventBridge resource that you’re adding tags to.

Type: String


Required: Yes

Tags (p. 93)

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

Type: Array of Tag (p. 131) objects

Required: Yes

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. 139).

ConcurrentModificationException

There is concurrent modification on a rule or target.

HTTP Status Code: 400

InternalException

This exception occurs due to unexpected causes.

HTTP Status Code: 500

ManagedRuleException

This rule was created by an AWS service on behalf of your account. It is managed by that service.
If you see this error in response to DeleteRule or RemoveTargets, you can use the Force parameter in those calls to delete the rule or remove targets from the rule. You cannot modify these managed rules by using DisableRule, EnableRule, PutTargets, PutRule, TagResource, or UntagResource.

HTTP Status Code: 400

ResourceNotFoundException

An entity that you specified does not exist.

HTTP Status Code: 400

Example

Adds two tags to a EventBridge rule

The following is an example of a TagResource request.

Sample Request

```plaintext
POST / HTTP/1.1
Host: events.<region>.<domain>
x-amz-date: <Date>
Authorization: AWS4-HMAC-SHA256 Credential=<Credential>, SignedHeaders=content-type;date;host;user-agent;x-amz-date;x-amz-target;x-amzn-requestid, Signature=<Signature>
User-Agent: <UserAgentString>
Content-Type: application/x-amz-json-1.1
Content-Length: <PayloadSizeBytes>
Connection: Keep-Alive
X-Amz-Target: AWSEvents.TagResource

{
    "Tags": [
        {
            "Key": "Stack",
            "Value": "Prod"
        },
        {
            "Key": "Team",
            "Value": "Green"
        }
    ]
}
```
See Also

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

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

Tests whether the specified event pattern matches the provided event.

Most services in AWS treat : or / as the same character in Amazon Resource Names (ARNs). However, EventBridge uses an exact match in event patterns and rules. Be sure to use the correct ARN characters when creating event patterns so that they match the ARN syntax in the event you want to match.

Request Syntax

```json
{
   "Event": "string",
   "EventPattern": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 137).

The request accepts the following data in JSON format.

**Event (p. 96)**

The event, in JSON format, to test against the event pattern.

Type: String

Required: Yes

**EventPattern (p. 96)**

The event pattern. For more information, see Events and Event Patterns in the Amazon EventBridge User Guide.

Type: String

Required: Yes

Response Syntax

```json
{
   "Result": boolean
}
```

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.

**Result (p. 96)**

Indicates whether the event matches the event pattern.
Errors

For information about the errors that are common to all actions, see Common Errors (p. 139).

InternalException

This exception occurs due to unexpected causes.

HTTP Status Code: 500

InvalidEventPatternException

The event pattern is not valid.

HTTP Status Code: 400

Example

Tests that a given event matches a given event pattern

The following is an example of a TestEventPattern request and response.

Sample Request

POST / HTTP/1.1
Host: events.<region>.<domain>
x-amz-Date: <Date>
Authorization: AWS4-HMAC-SHA256 Credential=<Credential>, SignedHeaders=content-type;date;host;user-agent;x-amz-date;x-amz-target;x-amzn-requestid, Signature=<Signature>
User-Agent: <UserAgentString>
Content-Type: application/x-amz-json-1.1
Content-Length: <PayloadSizeBytes>
Connection: Keep-Alive
X-Amz-Target: AWSEvents.TestEventPattern

{
    "EventPattern": "{"source": ["com.mycompany.myapp"]},
    "Event": "{"id": "e006c66cb-fe7a-4fca-81ad-58eb60f5d96b"}, "detail-type": "myDetailType", "source": "com.mycompany.myapp", "account": "123456789012", "time": "2016-01-10T01:29:23Z", "region": "us-east-1", "resources": ["resource1", "resource2"], "detail": {{"key1": "value1", "key2": "value2"}}
}

Sample Response

HTTP/1.1 200 OK
x-amzn-RequestId: <RequestId>
Content-Type: application/x-amz-json-1.1
Content-Length: <PayloadSizeBytes>
Date: <Date>

{
    "Result": true
}
See Also

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

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

Removes one or more tags from the specified EventBridge resource. In CloudWatch Events, rules and event buses can be tagged.

Request Syntax

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

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 137).

The request accepts the following data in JSON format.

**ResourceARN (p. 99)**

  The ARN of the EventBridge resource from which you are removing tags.
  
  Type: String
  
  
  Required: Yes

**TagKeys (p. 99)**

  The list of tag keys to remove from the resource.
  
  Type: Array of strings
  
  
  Required: Yes

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. 139).

**ConcurrentModificationException**

  There is concurrent modification on a rule or target.

  HTTP Status Code: 400

**InternalException**

  This exception occurs due to unexpected causes.
HTTP Status Code: 500

**ManagedRuleException**

This rule was created by an AWS service on behalf of your account. It is managed by that service. If you see this error in response to DeleteRule or RemoveTargets, you can use the Force parameter in those calls to delete the rule or remove targets from the rule. You cannot modify these managed rules by using DisableRule, EnableRule, PutTargets, PutRule, TagResource, or UntagResource.

HTTP Status Code: 400

**ResourceNotFoundException**

An entity that you specified does not exist.

HTTP Status Code: 400

Example

Removes two tags from an EventBridge rule

The following is an example of an UntagResource request.

**Sample Request**

```
POST / HTTP/1.1
Host: events.<region>.<domain>
x-amz-Date: <Date>
Authorization: AWS4-HMAC-SHA256 Credential=<Credential>, SignedHeaders=content-type;date;host;user-agent;x-amz-date;x-amz-target;x-amzn-requestid, Signature=<Signature>
User-Agent: <UserAgentString>
Content-Type: application/x-amz-json-1.1
Content-Length: <PayloadSizeBytes>
Connection: Keep-Alive
X-Amz-Target: AWSEvents.UntagResource

{
    "TagKeys": ["CostCenter", "Team"]
}
```

See Also

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

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

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Data Types

The Amazon EventBridge 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` (p. 102)
- `BatchArrayProperties` (p. 103)
- `BatchParameters` (p. 104)
- `BatchRetryStrategy` (p. 105)
- `Condition` (p. 106)
- `EcsParameters` (p. 107)
- `EventBus` (p. 109)
- `EventSource` (p. 110)
- `InputTransformer` (p. 112)
- `KinesisParameters` (p. 114)
- `NetworkConfiguration` (p. 115)
- `PartnerEventSource` (p. 116)
- `PartnerEventSourceAccount` (p. 117)
- `PutEventsRequestEntry` (p. 118)
- `PutEventsResultEntry` (p. 120)
- `PutPartnerEventsRequestEntry` (p. 121)
- `PutPartnerEventsResultEntry` (p. 123)
- `PutTargetsResultEntry` (p. 124)
- `RemoveTargetsResultEntry` (p. 125)
- `Rule` (p. 126)
- `RunCommandParameters` (p. 128)
- `RunCommandTarget` (p. 129)
- `SqsParameters` (p. 130)
- `Tag` (p. 131)
- `Target` (p. 132)
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

**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
- **Required:** No

**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
- **Required:** Yes

### See Also

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

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

The array properties for the submitted job, such as the size of the array. The array size can be between 2 and 10,000. If you specify array properties for a job, it becomes an array job. This parameter is used only if the target is an AWS Batch job.

Contents

Size

The size of the array, if this is an array batch job. Valid values are integers between 2 and 10,000.

Type: Integer
Required: No

See Also

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

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

The custom parameters to be used when the target is an AWS Batch job.

Contents

ArrayProperties

The array properties for the submitted job, such as the size of the array. The array size can be between 2 and 10,000. If you specify array properties for a job, it becomes an array job. This parameter is used only if the target is an AWS Batch job.

Type: BatchArrayProperties (p. 103) object

Required: No

JobDefinition

The ARN or name of the job definition to use if the event target is an AWS Batch job. This job definition must already exist.

Type: String

Required: Yes

JobName

The name to use for this execution of the job, if the target is an AWS Batch job.

Type: String

Required: Yes

RetryStrategy

The retry strategy to use for failed jobs, if the target is an AWS Batch job. The retry strategy is the number of times to retry the failed job execution. Valid values are 1–10. When you specify a retry strategy here, it overrides the retry strategy defined in the job definition.

Type: BatchRetryStrategy (p. 105) object

Required: No

See Also

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

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

The retry strategy to use for failed jobs, if the target is an AWS Batch job. If you specify a retry strategy here, it overrides the retry strategy defined in the job definition.

Contents

Attempts

The number of times to attempt to retry, if the job fails. Valid values are 1–10.

Type: Integer

Required: No

See Also

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

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

A JSON string which you can use to limit the event bus permissions you are granting to only accounts that fulfill the condition. Currently, the only supported condition is membership in a certain AWS organization. The string must contain Type, Key, and Value fields. The Value field specifies the ID of the AWS organization. Following is an example value for Condition:

'{"Type" : "StringEquals", "Key": "aws:PrincipalOrgID", "Value": "o-1234567890"}"

Contents

Key

Specifies the key for the condition. Currently the only supported key is aws:PrincipalOrgID.

Type: String
Required: Yes

Type

Specifies the type of condition. Currently the only supported value is StringEquals.

Type: String
Required: Yes

Value

Specifies the value for the key. Currently, this must be the ID of the organization.

Type: String
Required: Yes

See Also

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

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

The custom parameters to be used when the target is an Amazon ECS task.

Contents

Group

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

- Type: String
- 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 AWS Fargate with Amazon ECS is supported. For more information, see AWS Fargate on Amazon ECS in the Amazon Elastic Container Service Developer Guide.

- Type: String
- Valid Values: EC2 | FARGATE
- Required: No

NetworkConfiguration

Use this structure if the ECS task uses the awsvpc network mode. This structure specifies the VPC subnets and security groups associated with the task, and whether a public IP address is to be used. This structure is required if LaunchType is FARGATE because the awsvpc mode is required for Fargate tasks.

If you specify NetworkConfiguration when the target ECS task does not use the awsvpc network mode, the task fails.

- Type: NetworkConfiguration (p. 115) object
- Required: No

PlatformVersion

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

This structure is used only if LaunchType is FARGATE. For more information about valid platform versions, see AWS Fargate Platform Versions in the Amazon Elastic Container Service Developer Guide.

- Type: String
- Required: No

TaskCount

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

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

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

Type: String


Required: Yes

See Also

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

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

An event bus receives events from a source and routes them to rules associated with that event bus. Your account’s default event bus receives rules from AWS services. A custom event bus can receive rules from AWS services as well as your custom applications and services. A partner event bus receives events from an event source created by an SaaS partner. These events come from the partners services or applications.

Contents

Arn
   The ARN of the event bus.
   Type: String
   Required: No

Name
   The name of the event bus.
   Type: String
   Required: No

Policy
   The permissions policy of the event bus, describing which other AWS accounts can write events to this event bus.
   Type: String
   Required: No

See Also

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

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

A partner event source is created by an SaaS partner. If a customer creates a partner event bus that matches this event source, that AWS account can receive events from the partner's applications or services.

Contents

Arn

The ARN of the event source.

Type: String

Required: No

CreatedBy

The name of the partner that created the event source.

Type: String

Required: No

CreationTime

The date and time the event source was created.

Type: Timestamp

Required: No

ExpirationTime

The date and time that the event source will expire, if the AWS account doesn't create a matching event bus for it.

Type: Timestamp

Required: No

Name

The name of the event source.

Type: String

Required: No

State

The state of the event source. If it is ACTIVE, you have already created a matching event bus for this event source, and that event bus is active. If it is PENDING, either you haven't yet created a matching event bus, or that event bus is deactivated. If it is_DELETED, you have created a matching event bus, but the event source has since been deleted.

Type: String

Valid Values: PENDING | ACTIVE | DELETED

Required: No
See Also

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

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

Contains the parameters needed for you to provide custom input to a target based on one or more pieces of data extracted from the event.

Contents

InputPathsMap

Map of JSON paths to be extracted from the event. You can then insert these in the template in InputTemplate to produce the output you want to be sent to the target.

InputPathsMap is an array key-value pairs, where each value is a valid JSON path. You can have as many as 10 key-value pairs. You must use JSON dot notation, not bracket notation.

The keys cannot start with "AWS."

Type: String to string map

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

Key Pattern: [A-Za-z0-9\-_]+

Value Length Constraints: Maximum length of 256.

Required: No

InputTemplate

Input template where you specify placeholders that will be filled with the values of the keys from InputPathsMap to customize the data sent to the target. Enclose each InputPathsMaps value in brackets: <value> The InputTemplate must be valid JSON.

If InputTemplate is a JSON object (surrounded by curly braces), the following restrictions apply:
• The placeholder cannot be used as an object key.
• Object values cannot include quote marks.

The following example shows the syntax for using InputPathsMap and InputTemplate.

"InputTransformer":

{
  "InputPathsMap": {
    "instance": "$.detail.instance",
    "status": "$.detail.status"
  },
  "InputTemplate": "<instance> is in state <status>"
}

To have the InputTemplate include quote marks within a JSON string, escape each quote marks with a slash, as in the following example:

"InputTransformer":

{
  "InputPathsMap": {
    "instance": "$.detail.instance",
    "status": "$.detail.status"
  }
}
"InputTemplate": "<instance> is in state "<status>""

)  
Type: String  
Required: Yes

See Also

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

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

This object enables you to specify a JSON path to extract from the event and use as the partition key for the Amazon Kinesis data stream, so that you can control the shard to which the event goes. If you do not include this parameter, the default is to use the eventId as the partition key.

Contents

PartitionKeyPath

The JSON path to be extracted from the event and used as the partition key. For more information, see Amazon Kinesis Streams Key Concepts in the Amazon Kinesis Streams Developer Guide.

Type: String
Length Constraints: 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 Go
- AWS SDK for Java
- AWS SDK for Ruby V3
NetworkConfiguration

This structure specifies the network configuration for an ECS task.

Contents

awsVpcConfiguration

Use this structure to specify 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.

Type: AwsVpcConfiguration (p. 102) object

Required: No

See Also

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

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

A partner event source is created by an SaaS partner. If a customer creates a partner event bus that matches this event source, that AWS account can receive events from the partner's applications or services.

Contents

Arn

The ARN of the partner event source.

Type: String

Required: No

Name

The name of the partner event source.

Type: String

Required: No

See Also

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

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

The AWS account that a partner event source has been offered to.

Contents

Account

The AWS account ID that the partner event source was offered to.

Type: String

Length Constraints: Fixed length of 12.

Pattern: \d{12}

Required: No

CreationTime

The date and time the event source was created.

Type: Timestamp

Required: No

ExpirationTime

The date and time that the event source will expire, if the AWS account doesn't create a matching event bus for it.

Type: Timestamp

Required: No

State

The state of the event source. If it is ACTIVE, you have already created a matching event bus for this event source, and that event bus is active. If it is PENDING, either you haven't yet created a matching event bus, or that event bus is deactivated. If it is DELETED, you have created a matching event bus, but the event source has since been deleted.

Type: String

Valid Values: PENDING | ACTIVE | DELETED

Required: No

See Also

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

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

Represents an event to be submitted.

Contents

Detail
A valid JSON string. There is no other schema imposed. The JSON string may contain fields and nested subobjects.
Type: String
Required: No

DetailType
Free-form string used to decide what fields to expect in the event detail.
Type: String
Required: No

EventBusName
The event bus that will receive the event. Only the rules that are associated with this event bus will be able to match the event.
Type: String
Length Constraints: Minimum length of 1. Maximum length of 256.
Pattern: [\-_.A-Za-z0-9]+
Required: No

Resources
AWS resources, identified by Amazon Resource Name (ARN), which the event primarily concerns. Any number, including zero, may be present.
Type: Array of strings
Required: No

Source
The source of the event.
Type: String
Required: No

Time
The time stamp of the event, per RFC3339. If no time stamp is provided, the time stamp of the PutEvents (p. 62) call is used.
Type: Timestamp
Required: No
See Also

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

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

Represents an event that failed to be submitted.

Contents

ErrorCode
The error code that indicates why the event submission failed.
Type: String
Required: No

ErrorMessage
The error message that explains why the event submission failed.
Type: String
Required: No

EventId
The ID of the event.
Type: String
Required: No

See Also

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

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

The details about an event generated by an SaaS partner.

Contents

Detail

A valid JSON string. There is no other schema imposed. The JSON string may contain fields and nested subobjects.

Type: String
Required: No

DetailType

A free-form string used to decide what fields to expect in the event detail.

Type: String
Required: No

Resources

AWS resources, identified by Amazon Resource Name (ARN), which the event primarily concerns. Any number, including zero, may be present.

Type: Array of strings
Required: No

Source

The event source that is generating the entry.

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

Pattern: aws\..partner(/\.[\-_A-Za-z0-9]+){2,}
Required: No

Time

The date and time of the event.

Type: Timestamp
Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java

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- AWS SDK for Ruby V3
PutPartnerEventsResultEntry

Represents an event that a partner tried to generate, but failed.

Contents

**ErrorCode**

The error code that indicates why the event submission failed.

Type: String

Required: No

**ErrorMessage**

The error message that explains why the event submission failed.

Type: String

Required: No

**EventId**

The ID of the event.

Type: String

Required: No

See Also

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

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

Represents a target that failed to be added to a rule.

Contents

ErrorCode

The error code that indicates why the target addition failed. If the value is ConcurrentModificationException, too many requests were made at the same time.

Type: String
Required: No

ErrorMessage

The error message that explains why the target addition failed.

Type: String
Required: No

TargetId

The ID of the target.

Type: String

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

Pattern: [\-.\-_A-Za-z0-9]+

Required: No

See Also

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

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

Represents a target that failed to be removed from a rule.

Contents

ErrorCode

The error code that indicates why the target removal failed. If the value is ConcurrentModificationException, too many requests were made at the same time.

Type: String
Required: No

ErrorMessage

The error message that explains why the target removal failed.

Type: String
Required: No

TargetId

The ID of the target.

Type: String
Length Constraints: Minimum length of 1. Maximum length of 64.
Pattern: [\-._A-Za-z0-9]+
Required: No

See Also

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

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

Contains information about a rule in Amazon EventBridge.

Contents

Arn

The Amazon Resource Name (ARN) of the rule.

Type: String


Required: No

Description

The description of the rule.

Type: String

Length Constraints: Maximum length of 512.

Required: No

EventBusName

The event bus associated with the rule.

Type: String

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

Pattern: [/\ .\-_A-Za-z0-9]+

Required: No

EventPattern

The event pattern of the rule. For more information, see Events and Event Patterns in the Amazon EventBridge User Guide.

Type: String

Required: No

ManagedBy

If the rule was created on behalf of your account by an AWS service, this field displays the principal name of the service that created the rule.

Type: String


Required: No

Name

The name of the rule.

Type: String
Length Constraints: Minimum length of 1. Maximum length of 64.
Pattern: [\ .\-_A-Za-z0-9]+  
Required: No

**RoleArn**

The Amazon Resource Name (ARN) of the role that is used for target invocation.
Type: String

Required: No

**ScheduleExpression**

The scheduling expression. For example, "cron(0 20 * * ? *)", "rate(5 minutes)".
Type: String

Length Constraints: Maximum length of 256.
Required: No

**State**

The state of the rule.
Type: String

Valid Values: ENABLED  |  DISABLED
Required: No

See Also

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

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

This parameter contains the criteria (either InstanceIds or a tag) used to specify which EC2 instances are
to be sent the command.

Contents

RunCommandTargets

Currently, we support including only one RunCommandTarget block, which specifies either an array
of InstanceIds or a tag.

Type: Array of RunCommandTarget (p. 129) objects

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

Required: Yes

See Also

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

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

Information about the EC2 instances that are to be sent the command, specified as key-value pairs. Each RunCommandTarget block can include only one key, but this key may specify multiple values.

Contents

Key

Can be either tag: tag-key or InstanceIds.

Type: String


Pattern: ^[\p{L}\p{Z}\p{N}_.:/=+-@]*$

Required: Yes

Values

If Key is tag: tag-key, Values is a list of tag values. If Key is InstanceIds, Values is a list of Amazon EC2 instance IDs.

Type: Array of strings

Array Members: Minimum number of 1 item. Maximum number of 50 items.

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

This structure includes the custom parameter to be used when the target is an SQS FIFO queue.

Contents

MessageGroupId

The FIFO message group ID to use as the target.

Type: String

Required: No

See Also

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

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

A key-value pair associated with an AWS resource. In EventBridge, rules and event buses support tagging.

Contents

Key

A string you can use to assign a value. The combination of tag keys and values can help you organize and categorize your resources.

Type: String


Required: Yes

Value

The value for the specified tag key.

Type: String

Length Constraints: Minimum length of 0. 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 Go
- AWS SDK for Java
- AWS SDK for Ruby V3
Target

Targets are the resources to be invoked when a rule is triggered. For a complete list of services and resources that can be set as a target, see PutTargets (p. 76).

If you are setting the event bus of another account as the target, and that account granted permission to your account through an organization instead of directly by the account ID, then you must specify a RoleArn with proper permissions in the Target structure. For more information, see Sending and Receiving Events Between AWS Accounts in the Amazon EventBridge User Guide.

Contents

Arn

The Amazon Resource Name (ARN) of the target.

Type: String


Required: Yes

BatchParameters

If the event target is an AWS Batch job, this contains the job definition, job name, and other parameters. For more information, see Jobs in the AWS Batch User Guide.

Type: BatchParameters (p. 104) object

Required: No

EcsParameters

Contains the Amazon ECS task definition and task count to be used, if the event target is an Amazon ECS task. For more information about Amazon ECS tasks, see Task Definitions in the Amazon EC2 Container Service Developer Guide.

Type: EcsParameters (p. 107) object

Required: No

Id

The ID of the target.

Type: String

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

Pattern: \[\._-A-Za-z0-9 \]+

Required: Yes

Input

Valid JSON text passed to the target. In this case, nothing from the event itself is passed to the target. For more information, see The JavaScript Object Notation (JSON) Data Interchange Format.

Type: String

Length Constraints: Maximum length of 8192.

Required: No
InputPath

The value of the JSONPath that is used for extracting part of the matched event when passing it to the target. You must use JSON dot notation, not bracket notation. For more information about JSON paths, see JSONPath.

Type: String
Length Constraints: Maximum length of 256.
Required: No

InputTransformer

Settings to enable you to provide custom input to a target based on certain event data. You can extract one or more key-value pairs from the event and then use that data to send customized input to the target.

Type: InputTransformer (p. 112) object
Required: No

KinesisParameters

The custom parameter you can use to control the shard assignment, when the target is a Kinesis data stream. If you do not include this parameter, the default is to use the `eventId` as the partition key.

Type: KinesisParameters (p. 114) object
Required: No

RoleArn

The Amazon Resource Name (ARN) of the IAM role to be used for this target when the rule is triggered. If one rule triggers multiple targets, you can use a different IAM role for each target.

Type: String
Required: No

RunCommandParameters

Parameters used when you are using the rule to invoke Amazon EC2 Run Command.

Type: RunCommandParameters (p. 128) object
Required: No

SqsParameters

Contains the message group ID to use when the target is a FIFO queue.

If you specify an SQS FIFO queue as a target, the queue must have content-based deduplication enabled.

Type: SqsParameters (p. 130) object
Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:
• AWS SDK for C++
• AWS SDK for Go
• AWS SDK for Java
• AWS SDK for Ruby V3
Making API Requests

Query requests used with CloudWatch Events are HTTP or HTTPS requests that use the HTTP verb GET or POST and a Query parameter named Action or Operation. This documentation uses Action, although Operation is supported for backward compatibility.

CloudWatch Events Endpoints

An endpoint is a URL that serves as an entry point for a web service. You can select a regional endpoint when you make your requests to reduce latency. For information about the endpoints used with CloudWatch Events, see Regions and Endpoints in the Amazon Web Services General Reference.

Query Parameters

Each query request must include some common parameters to handle authentication and selection of an action. For more information, see Common Parameters (p. 137).

Some API operations take lists of parameters. These lists are specified using the following notation: param.member.n. Values of n are integers starting from 1. All lists of parameters must follow this notation, including lists that contain only one parameter. For example, a Query parameter list looks like this:

```
&attribute.member.1=this
&attribute.member.2=that
```

Request Identifiers

In every response from an AWS Query API, there is a ResponseMetadata element, which contains a RequestId element. This string is a unique identifier that AWS assigns to provide tracking information. Although RequestId is included as part of every response, it is not listed on the individual API documentation pages to improve readability and to reduce redundancy.

Query API Authentication

You can send query requests over either HTTP or HTTPS. Regardless of which protocol you use, you must include a signature in every query request. For more information about creating and including a signature, see Signing AWS API Requests in the Amazon Web Services General Reference.

Available Libraries

AWS provides libraries, sample code, tutorials, and other resources for software developers who prefer to build applications using language-specific APIs instead of the command-line tools and Query API. These libraries provide basic functions (not included in the APIs), such as request authentication, request
retries, and error handling so that it is easier to get started. Libraries and resources are available for the following languages and platforms:

- AWS Mobile SDK for Android
- AWS SDK for Go
- AWS Mobile SDK for iOS
- AWS SDK for Java 2.x
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for JavaScript in Node.js
- AWS SDK for .NET
- AWS SDK for PHP
- AWS SDK for Python (Boto)
- AWS SDK for Ruby

For libraries and sample code in all languages, see Sample Code & Libraries.
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/XXXXXX/region/service/aws4_request.
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

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